## APPENDIX J – Multi a.i. Bibliography

Chlorothalonil Multi-AI Bibliography Accepted Papers

- Al-Dosari, S. A.; Cranshaw, W. S., and Schweissing, F. C. Effects on Control of Onion Thrips from Co-Application of Onion Pesticides. POPENV; 1996; 21, (1): 49-54. Rec #: 10 Call Number: LITE EVAL CODED(CTN,Maneb),OK(LCYT,MLX),OK TARGET(CYP),NO MIXTURE(CuOH) Notes: EcoReference No.: 90255 Chemical of Concern: CYP,CTN,LCYT,Maneb,MLX,CuOH
- 2. ---. Effects on Control of Onion Thrips from Co-Application of Onion Pesticides. POPENV; 1996; 21, (1): 49-54. Rec #: 450
   Call Number: LITE EVAL CODED (CTN,LCYT,MMM,Maneb), NO MIXTURE (CuOH), OK (MLX), TARGET (CYP)
   Notes: EcoReference No.: 90255
   Chemical of Concern: CTN,CYP,CuOH,LCYT,MLX,MMM,Maneb
- Baird, R. E.; Nankam, C.; Moghaddam, P. F., and Pataky, J. K. Evaluation of Seed Treatments on Shrunken-2 Sweet Corn. GRO,POP. Dep. Plant Pathol., Univ. Ga., RDC, Tifton, GA 31794, USA////: SOIL,ENV,MIXTURE; 1994; 78, (8): 817-821. Rec #: 510
   Call Number: LITE EVAL CODED (CTN), NO EFED CHEM (CZE,ILL), NO EFFECT (ACR,ATZ,CZE,EPTC), NO MIXTURE (CBX,Captan,THM), OK (FNZ,MLX,TDF), TARGET (ACR,ATZ,EPTC)
   Notes: EcoReference No.: 111316
   Chemical of Concern: ACR,ATZ,CBX,CTN,CZE,Captan,EPTC,FNZ,ILL,MLX,TDF,THM
- Bellas, J. Prediction and Assessment of Mixture Toxicity of Compounds in Antifouling Paints Using the Sea-Urchin Embryo-Larval Bioassay. GROAQUA,MIXTURE; 2008; 88, (4): 308-315. Rec #: 730 Call Number: LITE EVAL CODED (CTN) Notes: EcoReference No.: 114608 Chemical of Concern: CTN
- Benson, D. M. Control of Rhizoctonia Stem Rot of Poinsettia During Propagation with Fungicides that Prevent Colonization of Rooting Cubes by Rhizoctonia solani. PHY,GRO,POPAQUA,ENV; 1991; 75, (4): 394-398. Rec #: 90 Call Number: LITE EVAL CODED(CTN),OK(BMY,FTL,IPD,PNB),NO MIXTURE(TPM,MLX) Notes: EcoReference No.: 70300 Chemical of Concern: FTL,BMY,CTN,IPD,TPM,PNB,MLX
- 6. ---. Fungicides as Foliar Sprays or Rooting Cube Soaks in Propagation of Poinsettia. GROSOIL,ENV,MIXTURE; 1992; 27, (9): 1006-1008. Rec #: 560 Call Number: LITE EVAL CODED (BMY,CTN,FTL,IPD,MLX) Notes: EcoReference No.: 91954 Chemical of Concern: BMY,CTN,FTL,IPD,MLX
- 7. Bernard, M. B.; Cole, P.; Kobelt, A.; Horne, P. A.; Altmann, J.; Wratten, S. D., and Yen, A. L. Reducing the

Impact of Pesticides on Biological Control in Australian Vineyards: Pesticide Mortality and Fecundity Effects on an Indicator Species, the Predatory Mite Euseius victoriensis (Acari: Phytoseiidae). MOR,REP. [Bernard, MB] Univ Melbourne, Dept Zool, Parkville, Vic 3010, Australia [Kobelt, A//: ENV,MIXTURE; 2010; 103, (6): 2061-2071. Rec #: 1150 Call Number: LITE EVAL CODED (CTN), NO EFED CHEM (CYD,HCZ,IDC,KBC,PRC,SS,TDM,TFX), OK (AZX,BMY,CBD,Captan,CuOH,FDX,FRM,GYP,IPD,MLX,MYC,MZB), TARGET (CNOL,EMMB,SFR,TUZ) Notes: EcoReference No.: 156426 Chemical of Concern: AZX,BMY,CBD,CNOL,CTN,CYD,Captan,CuOH,EMMB,FDX,FRM,GYP,HCZ,IDC,IPD,KBC,M LX,MYC,MZB,PRC,SFR,SS,TDM,TFX,TUZ

- Bhatia, J. N. and Gangopadhyay, S. Studies on Chemical Control of White Rust Disease of Mustard. POP,GRO,PHYSOIL,ENV,MIXTURE; 1996; 42, (1): 61-65. Rec #: 100 Call Number: LITE EVAL CODED(CTN,MZB,Captan),OK(TDF,IPD,CBD,MLX),NO COC(MCPP1) Notes: EcoReference No.: 83226 Chemical of Concern: Captan,TDF,IPD,CBD,MLX,CTN,MZB
- Bhattacharyya, S. K.; Singh, B. P.; Singh, P. H., and Ram, S. Retardation of Potato Late Blight by Fungicides with Eradicant and Protectant Properties. POPSOIL,ENV,MIXTURE; 1987; 5, (2): 169-177. Rec #: 800 Call Number: LITE EVAL CODED (CTN,MZB), NO EFED CHEM (ODL), NO MIXTURE (ZnS) Notes: EcoReference No.: 92221 Chemical of Concern: CTN,MZB,ODL,ZnS
- Brenneman, T. B.; Sumner, H. R., and Harrison, G. W. Deposition and Retention of Chlorothalonil Applied to Peanut Foliage: Effects of Application Methods, Fungicide Formulations and Oil Additives. ACC. Dep. Plant Pathol., Univ. Ga., Coastal Plain Exp. Stn., Tifton, Ga. 31793.//: SOIL,ENV; 1990; 17, (2): 80-84. Rec #: 1050 Call Number: LITE EVAL CODED (CTN), NO MIXTURE (ALSV,CuOH,MOIL) Notes: EcoReference No.: 156233 Chemical of Concern: ALSV,CTN,CuOH,MOIL
- Choate, J.; Wehtje, G., and Bowen, K. L. Interaction of Paraquat-Based Weed Control with Chlorothalonil-Based Disease Control in Peanut. PHY,POP. kbowen@acesag.auburn.edu//: SOIL,ENV,MIXTURE; 1998; 11, (2): 151-152, 191-195. Rec #: 660 Call Number: LITE EVAL CODED (CTN), OK (24DB,BT,PAQT,PQT) Notes: EcoReference No.: 63773 Chemical of Concern: 24DB,BT,CTN,PAQT,PQT
- 12. Chongo, G.; Buchwaldt, L.; Gossen, B. D.; LaFond, G. P.; May, W. E.; Johnson, E. N., and Hogg, T. Foliar Fungicides to Manage Ascochyta Blight (Ascochyta rabiei) of Chickpea in Canada. POP. G. Chongo, Department of Plant Sciences, University of Saskatchewan, 51 Campus Drive, Saskatoon, Sask. S7N 5A8, Canada//: SOIL,ENV,MIXTURE; 2003; 25, (2): 135-142. Rec #: 530
  Call Number: LITE EVAL CODED (CTN), OK (AZX,MZB) Notes: EcoReference No.: 81489
  Chemical of Concern: AZX,CTN,MZB
- 13. Cook, R. J. and Hayward, C. F. Effect of Fungicide and Spray Timing on Control of Septoria tritici on Wheat.

GRO,POPSOIL,ENV; 1988; 9, 42-43. Rec #: 160 Call Number: LITE EVAL CODED(CTN),NO MIXTURE(CAP,Maneb) Notes: EcoReference No.: 91155 Chemical of Concern: TDM,CAP,CTN,CBD,Maneb

- Cowgill, W. P. Jr.; Maletta, M. H.; Manning, T.; Tietjen, W. H.; Johnston, S. A., and Nitzsche, P. J. Early Blight Forecasting Systems: Evaluation, Modification, and Validation for Use in Fresh-Market Tomato Production in Northern New Jersey. POPSOIL, ENV, MIXTURE; 2005; 40, (1): 85-93. Rec #: 320
  Call Number: LITE EVAL CODED (CTN), NO MIXTURE (AZX, CuS, SFR), OK (CuOH) Notes: EcoReference No.: 104091
  Chemical of Concern: AZX, CTN, CuOH, CuS, SFR
- Culbreath, A. K.; Minton, N. A.; Brenneman, T. B., and Mullinix, B. G. Response of Florunner and Southern Runner Peanut Cultivars to Chemical Management of Late Leaf Spot, Southern Stem Rot, and Nematodes. POPSOIL,ENV,MIXTURE; 1992; 76, (12): 1199-1203. Rec #: 770 Call Number: LITE EVAL CODED (ADC,CTN,FTL) Notes: EcoReference No.: 92097 Chemical of Concern: ADC,CTN,FTL
- 16. Davies, P. E. and White, R. W. G. The Toxicology and Metabolism of Chlorothalonil in Fish. I. Lethal Levels for Salmo gairdneri, Galaxias maculatus, G. truttaceus and G. auratus and the Fate of 14C-TCIN in S. gairdneri. MOR,ACC,PHY,BEHWATER,AQUA,MIXTURE; 1985; 7, (1/2): 93-105. Rec #: 180 Call Number: LITE EVAL CODED(CTN),NO MIXTURE(ACP) Notes: EcoReference No.: 87454 Chemical of Concern: ACP,CTN
- 17. ---. The Toxicology and Metabolism of Chlorothalonil in Fish. I. Lethal Levels for Salmo gairdneri, Galaxias maculatus, G. truttaceus and G. auratus and the Fate of 14C-TCIN in S. gairdneri. ACC,MORAQUA,MIXTURE; 1985; 7, (1-2): 93-105. Rec #: 910
   Call Number: LITE EVAL CODED (CTN), NO MIXTURE (ACP) Notes: EcoReference No.: 87454
   Chemical of Concern: ACP,CTN
- DeLorenzo, M. E. and Serrano, L. Individual and Mixture Toxicity of Three Pesticides; Atrazine, Chlorpyrifos, and Chlorothalonil to the Marine Phytoplankton Species Dunaliella tertiolecta. POP. M.E. DeLorenzo, Ctr. for Coast. Environ. Hlth./B. R., US Department of Commerce/NOAA, National Ocean Service, 219 Fort Johnson Road, Charleston, SC 29412: WATER,AQUA,MIXTURE; 2003; 38, (5): 529-538. Rec #: 230 Call Number: LITE EVAL CODED(CTN,ATZ),OK(CPY) Notes: EcoReference No.: 81619 Chemical of Concern: ATZ,CPY,CTN
- DeLorenzo, M. E. and Serrano, L. Mixture Toxicity of the Antifouling Compound Irgarol to the Marine Phytoplankton Species Dunaliella tertiolecta. POPAQUA,MIXTURE; 2006; 41, (8): 1349-1360. Rec #: 680 Call Number: LITE EVAL CODED (24D,24DXY,ATZ,CTN,IRG) Notes: EcoReference No.: 92068 Chemical of Concern: 24D,24DXY,ATZ,CTN,IRG
- 20. Dobson, S. C. and Clarkson, J. D. S. Comparison of Fungicides for the Control of White Tip (Phytophthora

porri) on Leeks. POPSOIL,ENV; 1989; 10, 42-43. Rec #: 250 Call Number: LITE EVAL CODED(CAP,CTN),NO MIXTURE(MZB,MLX) Notes: EcoReference No.: 91173 Chemical of Concern: CAP,CTN,MLX,MZB

- 21. Faria, M.; Lopez, M. A.; Fernandez-Sanjuan, M.; Lacorte, S., and Barata, C. Comparative Toxicity of Single and Combined Mixtures of Selected Pollutants Among Larval Stages of the Native Freshwater Mussels (Unio elongatulus) and the Invasive Zebra Mussel (Dreissena polymorpha). BEH,GRO. cbmqam@cid.csic.es//IDAEA CSIC, Dept Environm Chem, Jordi Girona 18, Barcelona 08034, Spain //: AQUA,MIXTURE; 2010; 408, (12): 2452-2458. Rec #: 970
  Call Number: LITE EVAL CODED (CTN,CuCl,HgCl2,IRG,TBTCl), NO EFED CHEM (HgCl2,TBTCl) Notes: EcoReference No.: 156417 Chemical of Concern: CTN,CuCl,HgCl2,IRG,TBTCl
- Gruber, B. R.; Davies, L. R. R.; Kruger, E. L., and McManus, P. S. Effects of Copper-Based Fungicides on Foliar Gas Exchange in Tart Cherry. PHY. psm@plantpath.wisc.edu//: SOIL,ENV,MIXTURE; 2009; 93, (5): 512-518.
  Rec #: 390
  Call Number: LITE EVAL CODED (CTN,TEZ,TFX), NO EFED CHEM (TFX), NO MIXTURE (CuOH)
  Notes: EcoReference No.: 117819
  Chemical of Concern: CTN,CuOH,TEZ,TFX
- 23. Hashim, I. B.; Koehler, P. E., and Kvien, C. K. Fatty Acid Composition, Mineral Content, and Flavor Quality of Southern Runner Peanuts Treated with Herbicides and Fungicides. BCM,POPSOIL,ENV,MIXTURE,Unspecified; 1993; 20, (2): 106-111. Rec #: 520 Call Number: LITE EVAL CODED (CTN,MTL), NO EFED CHEM (VNT), OK (ACR,BFL,CRME,IMQ,PQT) Notes: EcoReference No.: 73925 Chemical of Concern: ACR,BFL,CRME,CTN,IMQ,MTL,PQT,VNT
- 24. Herbert, D. A. Jr. Effect of Leafspot Fungicides on Twospotted Spider Mite in Virginia Peanut, 1995. POPENV; 1996; 21, 278 (No. 113F). Rec #: 370
  Call Number: LITE EVAL CODED(CTN),OK(CuOH),NO MIXTURE(FZN) Notes: EcoReference No.: 89789
  Chemical of Concern: CTN,CuOH,FZN
- 25. Hernando, M. D.; Fernandez-Alba, A. R.; Tauler, R., and Barcelo, D. Toxicity Assays Applied to Wastewater Treatment. PHY,POPAQUA,MIXTURE; 2005; 65, (2): 358-366. Rec #: 30 Call Number: LITE EVAL CODED (CBF,CTN,CYR,DU,FMP,FTT,IRG,TBT,TCMTB), NO CONTROL (CBF,CYR,ES,FMP,FTT,OXF), NO DURATION (ES,OXF), NO EFED CHEM (TBT), NO ENDPOINT (ES,OXF) Notes: EcoReference No.: 152874 Chemical of Concern: CBF,CTN,CYR,DU,ES,FMP,FTT,IRG,OXF,TBT,TCMTB
- 26. James, D. G. and Rayner, M. Toxicity of Viticultural Pesticides to the Predatory Mites Amblyseius victoriensis and Typhlodromus doreenae. MOR. D.G.James, Yanco Agricultural Institute, NSW Agriculture, Yanco, 2703, Australia: ENV,MIXTURE; 1995; 10, (3): 99-102. Rec #: 440 Call Number: LITE EVAL CODED(CaPS,CTN,MZB),OK(ALL CHEMS),OK

TARGET(DZ,AZ,CBL,MLN) Notes: EcoReference No.: 67984 Chemical of Concern: CaPS,BMY,CBD,CTN,MZB,FRM,IPD,MLX,Cu,PCZ,TDM,VCZ,Zineb,Ziram,CuOH,AZ,CBL,CP Y,DZ,DMT,ES,MLN,MDT,DCF

- 27. Jansen, J.-P. Effects of Wheat Foliar Fungicides on the Aphid Endoparasitoid Aphidius rhopalosiphi DeStefani-Perez (Hym., Aphidiidae) on Glass Plates and on Plants. REP,MOR. J.-P. Jansen, Agronomic Research Centre, Biol. Ctrl. Plant Genet. Rsrc. Dept., Chemin de Liroux, 2, 5030-Gembloux, Belgium.: ENV,MIXTURE; 1999; 123, (4): 217-223. Rec #: 450 Call Number: LITE EVAL CODED(CTN),OK(ALL CHEMS) Notes: EcoReference No.: 64665 Chemical of Concern: CBD,CTN,CPZ,FUZ,PCZ,TEZ
- Johnson III, W. C.; Mullinix, B. G. Jr., and Brown, S. M. Phytotoxicity of Chlorimuron and Tank Mixtures on Peanut (Arachis hypogaea). GRO,PHY,POP. Res. Agron., USDA-ARS, Agric. Res. Stn., Ext. Agron.-Weed Sci., Coastal Plain Exp. Stn., Tifton, Ga. 31793-0748.//: SOIL,ENV,MIXTURE; 1992; 6, (2): 404-408. Rec #: 1070 Call Number: LITE EVAL CODED (CTN), NO MIXTURE (SFR), OK (24DB,CRM,EFV) Notes: EcoReference No.: 156479 Chemical of Concern: 24DB,CRM,CTN,EFV,SFR
- 29. Kennelly, M. M.; Todd, T. C.; Settle, D. M., and Fry, J. D. Moss Control on Creeping Bentgrass Greens with Standard and Alternative Approaches. POPSOIL,ENV,MIXTURE; 2010; 45, (4): 654-659. Rec #: 980
  Call Number: LITE EVAL CODED (CFE,CTN,NaCO), NO EFED CHEM (NaCO), NO MIXTURE (MZB,THM)
  Notes: EcoReference No.: 150900
  Chemical of Concern: CFE,CTN,MZB,NaCO,THM
- 30. Koutsaftis, A. and Aoyama, I. Toxicity of Four Antifouling Biocides and Their Mixtures on the Brine Shrimp Artemia salina. MORAQUA,MIXTURE; 2007; 387, (1-3): 166-174. Rec #: 920 Call Number: LITE EVAL CODED (CTN,DU) Notes: EcoReference No.: 101947 Chemical of Concern: CTN,DU
- 31. Lee, D. J. Population Dynamics of Rhizoctonia Species in Tall Fescue and Creeping Bentgrass in Response to Disease Control Programs. BCM,PHY,POPSOIL,ENV,MIXTURE; 2004: 100 p. (UMI #3137119). Rec #: 40 Call Number: LITE EVAL CODED (AZX,CTN,DZ,FSTAL,FTL,IPD,MZB,TEZ) Notes: EcoReference No.: 150982 Chemical of Concern: AZX,CTN,DZ,FSTAL,FTL,IPD,MZB,TEZ

32. Lo, P. L. Toxicity of Pesticides to Halmus chalybeus (Coleoptera: Coccinellidae) and the Effect of Three Fungicides on Their Densities in a Citrus Orchard. POPENV,MIXTURE; 2004; 32, (1): 69-76. Rec #: 930
Call Number: LITE EVAL CODED (CTN), NO EFED CHEM (BPZ), OK (BMY,CPY,CuOH,IPD,MZB), TARGET (ALSV,FVL,MOIL,TFR) Notes: EcoReference No.: 78126
Chemical of Concern: ALSV,BMY,BPZ,CPY,CTN,CuOH,FVL,IPD,MOIL,MZB,TFR

33. Lo, P. L. and Blank, R. H. Effect of Pesticides on Predation of Soft Wax Scale by the Steel-Blue Ladybird. BEH,MORENV,ORAL; 1992: 99-102.

Rec #: 370 Call Number: LITE EVAL CODED (ALSV,CTN,Captan,CuOH,DZ,IPD,MOIL,MZB,SFR,TFR), NO EFED CHEM (BPZ) Notes: EcoReference No.: 120808 Chemical of Concern: ALSV,BPZ,CTN,Captan,CuOH,DZ,IPD,MOIL,MZB,SFR,TFR

- Lodovici, M. ; Casalini, C.; Briani, C., and Dolara, P. Oxidative Liver DNA Damage in Rats Treated with Pesticide Mixtures. CELORAL; 1997; 117, (1): 55-60. Rec #: 580 Call Number: LITE EVAL CODED(CTN),NO MIXTURE(BMY,MDT,CPYM,MP,CPP,PRN,VCZ),OK(TBA,FRM,DPA) Notes: EcoReference No.: 90067 Chemical of Concern: BMY,MDT,CPYM,MP,CPP,PRN,VCZ,TBA,FRM,DPA,CTN
- 35. Lotstein, R. J. and Davis, D. D. Influence of Chronic Sulfur Dioxide Exposures on Early Blight of Tomato. ACC,GRO,PHY. Dep. Plant Pathol., Univ. California, Berkeley 94720////: SOIL,ENV,MIXTURE; 1983; 67, (7): 797-800. Rec #: 610 Call Number: LITE EVAL CODED (CTN,SO2) Notes: EcoReference No.: 92098 Chemical of Concern: CTN,SO2
- 36. Lynch, R. E. Peanut Fungicides: Effect on Survival and Development of the Corn Earworm, Fall Armyworm, and Velvetbean Caterpillar. GRO,MORENV,MIXTURE; 1996; 23, (2): 116-123. Rec #: 590 Call Number: LITE EVAL CODED(CTN),OK(TEZ),NO COC(MOM) Notes: EcoReference No.: 90193 Chemical of Concern: CTN,TEZ
- Mani, M. Relative Toxicity of Different Pesticides to Campoletis chlorideae Uchida (Hym., Ichneumonidae). MORENV,MIXTURE; 1994; 8, (1): 18-22. Rec #: 620 Call Number: LITE EVAL CODED(CTN,MZB),OK TARGET(CBL,MOM,MLN),OK(ALL CHEMS) Notes: EcoReference No.: 62600 Chemical of Concern: ZINEB,DINO,DCF,Cu,ES,MOM,CBL,FNV,PHSL,CYP,DM,DMT,MLN,CPY,MP,FNTH,DDVP,P PHD,FVL,ACP,MZB,CBD
- Mayfield, A. H. Efficacies of Fungicides for Control of Stem Rust of Wheat. POP,GRO,PHYSOIL,ENV; 1985; 25, (2): 440-443. Rec #: 630 Call Number: LITE EVAL CODED(TCMTB,CTN),OK(TDF,PCZ,FRM),NO MIXTURE(CAP) Notes: EcoReference No.: 80370 Chemical of Concern: TCMTB,PCZ,FRM,CTN,CAP,TDF
- McCarter, S. M. Effects of Bactericide Treatments on Bacterial Spot Severity and Yield of Different Pepper Genotypes and on Populations of Certain Insects. POPSOIL,ENV; 1992; 76, (10): 1042-1045. Rec #: 640 Call Number: LITE EVAL CODED(MZB,CTN),OK(CuOH),NO MIXTURE(Maneb) Notes: EcoReference No.: 90311 Chemical of Concern: MZB,CTN,CuOH,Maneb
- 40. Nieves-Puigdoller, K. Physiological Effects of Pesticides on Different Life Stages of Atlantic Salmon (Salmo salar). BCM,GRO,MOR,PHYAQUA,MIXTURE; 2007: 129 p. (Pulb in Part As 93473). Rec #: 700

Call Number: LITE EVAL CODED (ATZ,CTN,HXZ,PSM) Notes: EcoReference No.: 112625 Chemical of Concern: ATZ,CTN,HXZ,PSM

- 41. O'Brien, R. G. Control of Onion Downy Mildew in the Presence of Phenylamide-Resistant Strains of Peronospora destructor (Berk.) Caspary. GRO,POPENV,MULTIPLE; 1992; 32, (5): 669-674. Rec #: 290
  Call Number: LITE EVAL CODED (CTN,CuOH,FSTAL,MLX,MZB), NO CONC (MMM) Notes: EcoReference No.: 93999
  Chemical of Concern: CTN,CuOH,FSTAL,MLX,MMM,MZB
- 42. Oliver, J. B.; Reding, M. E.; Moyseenko, J. J.; Klein, M. G.; Mannion, C. M., and Bishop, B. Survival of Adult Tiphia vernalis (Hymenoptera: Tiphiidae) After Insecticide, Fungicide, and Herbicide Exposure in Laboratory Bioassays. MORENV,MIXTURE; 2006; 99, (2): 288-294. Rec #: 850
  Call Number: LITE EVAL CODED (BFT,CBL,CPY,CTN,HFZ,IMC,OYZ,PDM), NO EFED CHEM (TPM), NO MIXTURE (24D,24DXY,DMB,MCPP1) Notes: EcoReference No.: 95857
  Chemical of Concern: 24D,24DXY,BFT,CBL,CPY,CTN,DMB,HFZ,IMC,MCPP1,OYZ,PDM,TPM
- 43. Osuji, G. O. and Braithwaite, C. Signaling by Glutamate Dehydrogenase in Response to Pesticide Treatment and Nitrogen Fertilization of Peanut (Arachis hypogaea L.). BCM,POP. CARC, Prairie View A&M University, Texas 77446, USA. Godson\_Osuji@PVAMU.edu//: SOIL,ENV,MIXTURE; 1999; 47, (8): 3332-3344. Rec #: 1060 Call Number: LITE EVAL CODED (BT,CBL,CTN,NHCl), NO EFED CHEM (NHCl) Notes: EcoReference No.: 156436 Chemical of Concern: BT,CBL,CTN,NHCl
- Pariseau, J.; Saint-Louis, R.; Delaporte, M.; El Khair, M. A.; McKenna, P.; Tremblay, R.; Davidson, T. J.; Pelletier, E., and Berthe, F. C. J. Potential Link Between Exposure to Fungicides Chlorothalonil and Mancozeb and Haemic Neoplasia Development in the Soft-Shell Clam Mya arenaria: A Laboratory Experiment. ACC,BCM,MOR,PHYAQUA,MIXTURE; 2009; 58, (4): 503-514. Rec #: 720 Call Number: LITE EVAL CODED (CTN,MZB) Notes: EcoReference No.: 117388 Chemical of Concern: CTN,MZB
- 45. Porter, D. M. The Effect of Chlorothalonil and Benomyl on the Severity of Sclerotinia Blight of Peanuts. POPSOIL,ENV,MIXTURE; 1977; 61, (12): 995-998. Rec #: 70 Call Number: LITE EVAL CODED (CTN), OK (BMY,DMZ) Notes: EcoReference No.: 156701 Chemical of Concern: BMY,CTN,DMZ
- 46. Reicher, Z. J. and Throssell, C. S. Effect of Repeated Fungicide Applications on Creeping Bentgrass Turf. POP,BCM,PHY. Z.J. Reicher, Dep. of Agronomy, Purdue Univ., West Lafayette, IN 47907-1150, United States: SOIL,ENV,MIXTURE; 1997; 37, (3): 910-915. Rec #: 750 Call Number: LITE EVAL CODED(CTN),OK(BMY,PCZ,IPD) Notes: EcoReference No.: 64250 Chemical of Concern: CTN,BMY,PCZ,IPD
- 47. Ruano-Rossil, J. M. Suppression of Entomopathogenic Fungi of Green Peach Aphid, Myzus persicae (Sulzer), by Late Blight Fungicides. GRO, PHY, POPENV, MIXTURE; 2001: 98 p. (UMI#9994524). Rec #: 990

Call Number: LITE EVAL CODED (CTN,IMC,MEM,MZB), NO EFED CHEM (CMX,TPTH), NO MIXTURE (AZX) Notes: EcoReference No.: 150987 Chemical of Concern: AZX,CMX,CTN,IMC,MEM,MZB,TPTH

- 48. Sahab, A. F.; Osman, A. R.; Soleman, N. K., and Mikhail, M. S. Studies on Root-Rot of Lupin in Egypt and Its Control. POP,PHYSOIL,ENV; 1985; 17, (1): 23-36. Rec #: 770 Call Number: LITE EVAL CODED(Captan,CTN),OK(THM,PNB,BMY,),NO MIXTURE(CBX) Notes: EcoReference No.: 70580 Chemical of Concern: CBX,BMY,Captan,CTN,THM,PNB
- 49. Schupbach-Ningen, S. L.; Cole, J. C.; Cole, J. T., and Conway, K. E. Chlorothalonil, Trifloxystrobin, and Mancozeb Decrease Anthracnose Symptoms on Three Cultivars of Wintercreeper Euonymus. PHYSOIL,ENV,MIXTURE; 2006; 16, (2): 211-215. Rec #: 790 Call Number: LITE EVAL CODED(CTN,MZB),OK(TFX) Notes: EcoReference No.: 86956 Chemical of Concern: CTN,MZB,TFX
- 50. Sharma, K. K. Fungicidal Spray Schedule and Its Economics for Potato Late Blight Management in North Western Plains. POPSOIL,ENV,MIXTURE; 1994: 197-199. Rec #: 100 Call Number: LITE EVAL CODED (CTN,MZB), NO MIXTURE (MMM) Notes: EcoReference No.: 151196 Chemical of Concern: CTN,MMM,MZB
- 51. Siranidou, E. and Buchenauer, H. Chemical Control of Fusarium Head Blight on Wheat. BCM,GRO,POPSOIL,ENV,MIXTURE; 2001; 108, (3): 231-243. Rec #: 250 Call Number: LITE EVAL CODED (CTN,MCZ,PPB), OK (AZX,PPB,TEZ) Notes: EcoReference No.: 92162 Chemical of Concern: AZX,CTN,MCZ,PPB,TEZ

52. Stephenson, G. R.; Phatak, S. C.; Makowski, R. I., and Bouw, W. J. Phytotoxic Interactions Involving Metribuzin and Other Pesticides in Tomatoes. GRO,POPSOIL,ENV,MIXTURE; 1980; 60, 167-175. Rec #: 710 Call Number: LITE EVAL CODED (CBF,CTN,DZ,ES,MLN), NO EFED CHEM (DEM), OK (CAP,MEM,MVP,MZB,Maneb), TARGET (CBL,MBZ,TFN) Notes: EcoReference No.: 26089 Chemical of Concern: CAP,CBF,CBL,CTN,DEM,DZ,ES,MBZ,MEM,MLN,MVP,MZB,Maneb,TFN

- 53. Stoffella, P. J. and Sonoda, R. M. Reduction of Onion Yields by Chlorothalonil. GRO,POPSOIL,ENV,MIXTURE; 1982; 17, (4): 628-629. Rec #: 750 Call Number: LITE EVAL CODED (CTN,MZB) Notes: EcoReference No.: 25831 Chemical of Concern: CTN,MZB
- Sugha, S. K. and Singh, B. M. Fungitoxic Management of Phytophthora Fruit Rot of Eggplant. POPSOIL,ENV,MIXTURE; 1992; 22, (3): 271-273. Rec #: 120 Call Number: LITE EVAL CODED (CTN,FSTAL,MZB), NO EFED CHEM (ODL), NO MIXTURE (MLX)

Notes: EcoReference No.: 151018 Chemical of Concern: CTN,FSTAL,MLX,MZB,ODL

- 55. Sumner, D. R. and Phatak, S. C. Control of Foliar Diseases of Cucumber with Resistant Cultivars and Fungicides. PHY,POPSOIL,ENV,MIXTURE; 1987; 2, (5): 324-329. Rec #: 130
  Call Number: LITE EVAL CODED (CTN,MLX,MZB) Notes: EcoReference No.: 151128
  Chemical of Concern: CTN,MLX,MZB
- 56. Takahashi, Y.; Kojimoto, T.; Nagaoka, H.; Takagi, Y., and Oikawa, M. Tests for Evaluating the Side Effects of Chlorothalonil (TPN) and Spinosad on the Parasitic Wasp (Aphidius colemani). MORENV,MIXTURE,ORAL,TOP; 2005; 30, (1): 11-16. Rec #: 1100 Call Number: LITE EVAL CODED (CTN,SS), NO EFED CHEM (SS) Notes: EcoReference No.: 156145 Chemical of Concern: CTN,SS
- 57. Teather, K.; Jardine, C., and Gormley, K. Behavioral and Sex Ratio Modification of Japanese Medaka (Oryzias latipes) in Response to Environmentally Relevant Mixtures of Three Pesticides. MOR,GRO,BEH,POP. kteather@upei.ca: WATER,AQUA,MIXTURE; 2005; 20, (1): 110-117. Rec #: 830 Call Number: LITE EVAL CODED(CTN),OK(AZ,ES) Notes: EcoReference No.: 89788 Chemical of Concern: AZ,CTN,ES
- 58. Vulsteke, G. and Meeus, P. Control of Peronospora viciae (Berk.) De Bary f.sp. pisi in Peas. POPSOIL,ENV,MIXTURE; 1985; 50, (3b): 1205-1216. Rec #: 170 Call Number: LITE EVAL CODED (CTN,MLX,MZB,Maneb), NO EFED CHEM (CMX), NO MIXTURE (Captan,MEM) Notes: EcoReference No.: 151202 Chemical of Concern: CMX,CTN,Captan,MEM,MLX,MZB,Maneb
- 59. Welty, R. E. Effect of Fungicides Applied Singly and in Combination on Seed Yield and Three Leaf Spot Diseases in Orchardgrass. PHY,POPSOIL,ENV,MIXTURE; 1991; 75, (10): 1004-1008. Rec #: 900 Call Number: LITE EVAL CODED(PCZ,CTN,CAP) Notes: EcoReference No.: 76484 Chemical of Concern: PCZ,CTN,CAP,Captan
- 60. ---. Effect of Fungicides Applied Singly and in Combination on Seed Yield and Three Leaf Spot Diseases in Orchardgrass. PHY,POP,REPSOIL,ENV,MIXTURE; 1991; 75, (10): 1004-1008. Rec #: 360
   Call Number: LITE EVAL CODED (CAP,CTN,PCZ,PPCP,PPCP2011), OK (Captan) Notes: EcoReference No.: 76484
   Chemical of Concern: CAP,CTN,Captan,PCZ,PPCP

61. Wojdyla, A. T. Chemical Control of Rose Diseases V. Effectiveness of Fungicides in the Control of Powdery Mildew on Rose cv Mercedes in Greenhouse. ACC,GRO,PHY,POP. Research Institute of Pomology and Floriculture,Skierniewice,Pol// //: SOIL,ENV,MIXTURE; 1999; 7, (1): 47-54. Rec #: 260
Call Number: LITE EVAL CODED
(CBD,CTN,FRM,FUZ,Folpet,MYC,MZB,TCZ,TDF,TFR,TFZ), NO EFED CHEM
(BTN,DFC,TDM,TPM)
Notes: EcoReference No.: 75966

Chemical of Concern: BTN,CBD,CTN,DFC,FRM,FUZ,Folpet,MYC,MZB,TCZ,TDF,TDM,TFR,TFZ,TPM

- 62. ---. Development of Puccinia horiana on Chrysanthemum Leaves in Relation to Chemical Compounds and Time of Their Application. GRO,POPSOIL,ENV,MIXTURE; 2004; 44, (2): 91-102. Rec #: 310
   Call Number: LITE EVAL CODED (AZX,CBD,CTN,FRM,Folpet,MZB), NO EFED CHEM (TPM) Notes: EcoReference No.: 110565
   Chemical of Concern: AZX,CBD,CTN,FRM,Folpet,MZB,TPM
- 63. Yelverton, F. H. Managing Silvery Thread Moss in Creeping Bentgrass Greens. PHY,POPSOIL,ENV,MIXTURE; 2005; 73, 103-107. Rec #: 1180 Call Number: LITE EVAL CODED (CTN,ODZ), NO EFED CHEM (NHSO4,ODZ), NO MIXTURE (FeRS,NHSO4) Notes: EcoReference No.: 156675 Chemical of Concern: CTN,FeRS,NHSO4,ODZ

Chlorothalonil Multi-AI Bibliography Not Accepted and Excluded Papers

1. Letter From Lockheed Missiles & Space Company to Usepa Regarding Information on the Substantial Risk of Hx-999 Mixture With Attachments.

Rec #: 2887

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: A study of case reports of 80 workers occupationally exposed to Exotherm, a mixture containing 4,4'-diaminodiphenyl sulfone and tetraglycidyl methylenedianiline, revealed a common pattern. Immediate symptoms included irritation to the skin and mucous membranes, cephalgia, vertigo, nausea, chest pain, increased perspiration, and sudden cessation of salivation; these were followed by neurologic complaints associated with fatigue (abnormal sleep patterns, increased irritability, memory dysfunction, diminution of mentation), anorexia, and loose stools. Laboratory comparison of tissues from 26 significantly exposed persons to those o

ABSTRACT: btained from 54 workers who had negligible to moderate exposure (serving as a control group) showed exposure related effects in the liver, kidneys, and hemopoietic tissues. Overall, 29 persons showed a toxic neurologic disorder, 39 had minor dermatologic, mucous-membrane irritation cephalgia, or nausea from exposure to the fumes, and 17 had no illness. KEYWORDS: LOCKHEED MISSILES & SPACE CO

KEYWORDS: HX-999 MIXTURE KEYWORDS: HEALTH EFFECTS

KEYWORDS: EPIDEMIOLOGY

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 Acevedo, C. G.; Huambachano, A.; Perez, E.; Rojas, S.; Bravo, I., and Contreras, E. Effect of Ethanol on Human Placental Transport and Metabolism of Adenosine. 1997; 18, (5-6): 387-392. Rec #: 2511

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. It has been suggested that adenosine is involved in the acute effects of ethanol in a number of tissues. The present study was undertaken to evaluate the role of adenosine on the vascular responses of perfused isolated human placental cotyledons after the acute administration of ethanol. The possibility that ethanol may effect the uptake and metabolism adenosine was also investigated. Uptake of adenosine was studied using the single-circulation paired-tracer dilution technique. Both adenosine and ethanol caused a doserelated increase in perfusion pressure of placental lobules. Pharmacologically relevant concentrations of ethanol (10-65 mM) significantly inhibited the uptake of (3H)adenosine between 25 and 50 per cent. Thin-layer chromatographic analysis of the perfusate after the administration of ethanol showed in a 17.9 | 0.6 per cent reduction of (3H)adenosine metabolism. These findings support the working hypothesis that placental adenosine, at least partially, med MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES** MESH HEADINGS: PROTEINS MESH HEADINGS: AMINO ACIDS/METABOLISM MESH HEADINGS: PEPTIDES/METABOLISM MESH HEADINGS: PROTEINS/METABOLISM MESH HEADINGS: DIAGNOSIS MESH HEADINGS: GENITALIA MESH HEADINGS: REPRODUCTION MESH HEADINGS: GENITALIA/PATHOLOGY MESH HEADINGS: GENITALIA/\*PHYSIOPATHOLOGY MESH HEADINGS: REPRODUCTION **MESH HEADINGS: FEMALE** MESH HEADINGS: GONADS MESH HEADINGS: MALE MESH HEADINGS: PLACENTA MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: ANIMAL MESH HEADINGS: EMBRYO MESH HEADINGS: FETAL DISEASES MESH HEADINGS: HUMAN MESH HEADINGS: LARVA MESH HEADINGS: EMBRYOLOGY MESH HEADINGS: ABNORMALITIES MESH HEADINGS: EMBRYOLOGY MESH HEADINGS: HOMINIDAE **KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Proteins KEYWORDS:** Metabolism-Proteins

**KEYWORDS: Reproductive System-General** 

KEYWORDS: Reproductive System-Pathology KEYWORDS: Endocrine System-Gonads and Placenta KEYWORDS: Toxicology-General KEYWORDS: Developmental Biology-Embryology-Pathological KEYWORDS: Developmental Biology-Embryology-Descriptive Teratology and Teratogenesis KEYWORDS: Hominidae LANGUAGE: eng

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5. Adams, G. C. Epidemiology and Control of Cyclaneusma-Minus Needlecast of Scotch Pine in Michigan Usa. 1990; 80, (10): 976-977. Rec #: 1250 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT PINUS-SYLVESTRIS CHLOROTHALONIL FUNGICIDE PRECIPITATION PLANT FUNGUS FORESTRY **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: TREES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Forestry and Forest Products KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Coniferopsida LANGUAGE: eng

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 Adams, P. B. and Wong, J. A. L. The Effect of Chemical Pesticides on the Infection of Sclerotia of Sclerotinia minor by the Biocontrol Agent Sporidesmium sclerotivorum. POPENV,MIXTURE; 1991; 81, (10): 1340-1343.

> Rec #: 1680 Call Number: NO EFED CHEM (ANZ,CHD,ETN,FBM,NPM,TBA,TPM,TZL,Zineb), NO MIXTURE (Zn), OK (ACR,CBL,DCPA,DMT,DU,DZ,EP,EPTC,MOM,PQT,TFN), TARGET (13DPE,BMY,CAP,CLNB,CTN,Captan,DCNA,DOD,DPDP,IPD,Maneb,PNB,THM,VCZ,Zn) Notes: EcoReference No.: 70656 Chemical of Concern: 13DPE,ACR,ANZ,BMY,CAP,CBL,CHD,CLNB,CTN,Captan,DCNA,DCPA,DMT,DOD,DPDP,

DU,DZ,EP,EPTC,ETN,FBM,IPD,MOM,Maneb,NPM,PNB,PQT,TBA,TFN,THM,TPM,TZL,VCZ ,Zineb,Zn

 Adin, A.; Soffer, Y., and Aim, R. B. Effluent Pretreatment by Iron Coagulation Applying Various Dose-Ph Combinations for Optimum Particle Separation. 1998; 38, (6): 27-34. Rec #: 2346

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Wastewater reuse often requires particle destabilization and removal to protect water transport system and membranes from clogging. Flocculation process of activated sludge effluent applying ferric chloride is examined and comparison with alum (aluminium sulfate) application is made in this work. Optimum flocculation conditions are determined based on the removal efficiency of different particle size groups and on turbidity as a function of coagulant dosage and pH. Results show that the best removal for ferric chloride coagulant occurs at pH 4-5 and dosage of 20-30 mgl-1. Settled water total particle count (TPC) of particle size \ 2mu was reduced by more than 99%, while turbidity removal reached 86%. Zeta potential measurements and visual observations indicate domination of adsorption and charge neutralization mechanisms. Best removal with alum occurred at pH 6-7 while dosing 30 mgl-1 and higher. Destabilization mechanism of adsorption and sweep coagulation is proposed. MH - ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: SANITATION MESH HEADINGS: SEWAGE **KEYWORDS: Ecology** 

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 Al-Dahmani, J. H.; Abbasi, P. A.; Miller, S. A., and Hoitink, H. A. J. Suppression of Bacterial Spot of Tomato With Foliar Sprays of Compost Extracts Under Greenhouse and Field Conditions. 2003. Rec #: 208

Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ISSN: 0191-2917 Descriptors: Benzothiadiazole Descriptors: Biological control Descriptors: Chlorothalonil Descriptors: Compost-induced systemic resistance

Descriptors: Compost tea

Abstract: The efficacy of foliar sprays with compost water extracts (compost extracts) in reducing the severity of bacterial spot of tomato caused by Xanthomonas vesicatoria was investigated. Extracts prepared from composted cow manure, composted pine bark, an organic farm compost, or composted yard waste, applied as foliar sprays on tomato transplants, resulted in a moderate but statistically significant reduction in the severity of bacterial spot. The population of X. vesicatoria in infected leaves was reduced significantly by extracts prepared from composted cow manure. Efficacy of the water extracts was not affected by oxygen concentrations in the suspension during extraction, compost maturity, or sterilization by filtration or autoclaving. The degree of control provided by foliar sprays with the most effective compost extracts did not differ from that obtained with the plant activator acibenzolar-S-methyl. In the field in two growing seasons, foliar sprays with compost water extracts did not reduce the severity of foliar diseases, including bacterial spot. During the 1997 season, when the severity of bacterial spot in the field was high, foliar sprays with compost water extracts significantly reduced the incidence of bacterial spot on tomato fruit. Amending plot soil with several rates of composted yard waste did not lead to additional control of fruit disease over those only spraved with extracts. Foliar sprays with a mixture of chlorothalonil and copper hydroxide or with acibenzolar-S-methyl reduced the severity

of bacterial spot as well as incidence of spot on fruit. 37 refs. English Publication Type: Journal Publication Type: Article Country of Publication: United States Classification: 92.10.4.4 CROP SCIENCE: Crop Protection: Bacteria and viruses Classification: 92.11.1.3 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Bacteria Plant Science

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 Albanis, T. A.; Lambropoulou, D. A.; Sakkas, V. A., and Konstantinou, I. K. Antifouling Paint Booster Biocide Contamination in Greek Marine Sediments. 2002; 48, (5): 475-485. Rec #: 576

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Organic booster biocides were recently introduced as alternatives to organotin compounds in antifouling products, after restrictions imposed on the use of tributyltin in 1987. In this study, the concentrations of three biocides commonly used as antifoulants, Irgarol 1051 (2-methylthio-4-tertiary-butylamino-6-cyclopropylamino-s-triazine), dichlofluanid (N-

dichlorofluoromethylthio-N',N'-dimethyl-N-phenyl sulphamide) and chlorothalonil (2,4,5,6tetrachloro isophthalonitrile) were determined in sediments from ports and marinas of Greece. Piraeus (Central port, Mikrolimano and Pasalimani marinas), Thessaloniki (Central port and marina), Patras (Central port and marina), Elefsina, Igoumenitsa, Aktio and Chalkida marinas were chosen as representative study sites for comparison with previous monitoring surveys of biocides in coastal sediments from other European countries. Samples were collected at the end of one boating season (October 1999), as well before and during the 2000 boating season. All the compounds monitored were detected at most of sites and seasonal dependence of biocide concentrations were found, with maxima during the period June-September, while the winter period (December-February) lower values were encountered. The concentrations levels ranged from 3 to 690 ng/g dw (dry weight). Highest levels of the biocides were found in marinas (690, 195 and 165 ng/g dw, for Irgarol, dichlofluanid and chlorothalonil respectively) while in ports lower concentrations were observed. Antifouling paints are implicated as the likely sources of biocides since agricultural applications possibly contributed for chlorothalonil and dichlofluanid inputs in a few sampling sites.

MESH HEADINGS: Aniline Compounds/\*analysis MESH HEADINGS: Environmental Monitoring MESH HEADINGS: Geologic Sediments/\*chemistry MESH HEADINGS: Greece MESH HEADINGS: Molluscacides/\*analysis MESH HEADINGS: Nitriles/\*analysis MESH HEADINGS: Paint MESH HEADINGS: Seasons MESH HEADINGS: Ships MESH HEADINGS: Triazines/\*analysis MESH HEADINGS: Water Pollutants, Chemical/\*analysis LANGUAGE: eng

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MESH HEADINGS: Molluscacides/\*analysis

MESH HEADINGS: Nitriles/\*analysis MESH HEADINGS: Paint MESH HEADINGS: Seasons MESH HEADINGS: Ships MESH HEADINGS: Triazines/\*analysis MESH HEADINGS: Water Pollutants, Chemical/\*analysis LANGUAGE: eng

14. Alho, C. Jr and Vieira, L. M. Fish and Wildlife Resources in the Pantanal Wetlands of Brazil and Potential Disturbances From the Release of Environmental Contaminants. 1997; 16, (1): 71-74. Rec #: 2662 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The Pantanal is one of the world's largest wetland ecosystems, encompassing 140,000 km2. The region is a breeding ground for waterfowl, and enormous rookeries of storks, herons, egrets, and ibises indicate a vast abundance of birds. The Pantanal is also one of the most important refuges for many of Brazil's threatened or endangered species, such as jaguars, giant anteaters, and swamp deer. The productive web of waters supports an important fishery industry. The Pantanal, with its extraordinary diversity and abundance of wildlife, is a threatened region. Deforestation, expanding agriculture, illegal hunting and fishing, unplanned tourism, and pollution with pesticides have caused a progressive deterioration of the natural environment, placing one of Brazil's most important ecosystems at risk. Gold mining is still common in the northern Pantanal. Along the Cuiaba river are 700 functional gold-mining dredges. In the town of Pocone, unregulated gold mines have also contamin MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIRDS **MESH HEADINGS: BIRDS** MESH HEADINGS: BIRDS MESH HEADINGS: BIRDS MESH HEADINGS: ARTIODACTYLA MESH HEADINGS: CARNIVORA MESH HEADINGS: XENARTHRA **KEYWORDS: Ecology KEYWORDS: Ecology** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Ciconiiformes **KEYWORDS:** Falconiformes **KEYWORDS:** Gruiformes **KEYWORDS:** Pelecaniformes **KEYWORDS:** Cervidae **KEYWORDS:** Felidae KEYWORDS: Myrmecophagidae LANGUAGE: eng

 ---. Fish and Wildlife Resources in the Pantanal Wetlands of Brazil and Potential Disturbances From the Release of Environmental Contaminants. 1997; 16, (1): 71-74. Rec #: 2662

Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The Pantanal is one of the world's largest wetland ecosystems, encompassing 140,000 km2. The region is a breeding ground for waterfowl, and enormous rookeries of storks, herons, egrets, and ibises indicate a vast abundance of birds. The Pantanal is also one of the most important refuges for many of Brazil's threatened or endangered species, such as jaguars, giant anteaters, and swamp deer. The productive web of waters supports an important fishery industry. The Pantanal, with its extraordinary diversity and abundance of wildlife, is a threatened region. Deforestation, expanding agriculture, illegal hunting and fishing, unplanned tourism, and pollution with pesticides have caused a progressive deterioration of the natural environment, placing one of Brazil's most important ecosystems at risk. Gold mining is still common in the northern Pantanal. Along the Cuiaba river are 700 functional gold-mining dredges. In the town of Pocone, unregulated gold mines have also contamin MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIRDS MESH HEADINGS: BIRDS MESH HEADINGS: BIRDS MESH HEADINGS: BIRDS MESH HEADINGS: ARTIODACTYLA MESH HEADINGS: CARNIVORA MESH HEADINGS: XENARTHRA **KEYWORDS: Ecology KEYWORDS: Ecology** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Ciconiiformes **KEYWORDS:** Falconiformes **KEYWORDS:** Gruiformes **KEYWORDS:** Pelecaniformes **KEYWORDS:** Cervidae **KEYWORDS:** Felidae **KEYWORDS:** Myrmecophagidae LANGUAGE: eng

 Alvarez, A. M. and Nelson, M. G. Control of Phytophthora palmivora in Papaya Orchards with Weekly Sprays of Chlorothalonil. POPSOIL,ENV; 1982; 66, (1): 37-39. Rec #: 10 Call Number: EFFICACY (CTN), TARGET (CTN) Notes: EcoReference No.: 156669 Chemical of Concern: CTN

17. Anema, B. P.; Bouwman, J. J., and De Vlugt, J. Fluazinam: A New Broad Spectrum Fungicide for Use in Bulbs. POPSOIL,ENV,TOP; 1988; 53, (2b): 635-642. Rec #: 630 Call Number: NO EFED CHEM (Zineb), NO ENDPOINT (CAP,Captan,FNZ,MZB), NO MIXTURE (BMY,CTN,Maneb,VCZ) Notes: EcoReference No.: 109345 Chemical of Concern: BMY,CAP,CTN,Captan,FNZ,MZB,Maneb,VCZ,Zineb  Anil, Kondreddy and Podile, Appa Rao. HarpinPss-mediated enhancement in growth and biological control of late leaf spot in groundnut by a chlorothalonil-tolerant Bacillus thuringiensis SFC24. 2012 Apr 20-; 167, (4): 194-198.

Rec #: 710

Keywords: BIOLOGICAL TOXICANT

Notes: Chemical of Concern: CTN

Abstract: Chemical and biological approaches have been adopted to increase the growth and yield of crops and reduce loss due to diseases. We have adopted an integrated approach, where both direct antagonism and induced resistance were combined to reduce the incidence of late leaf spot (LLS) disease in groundnut caused by Phaeoisariopsis personata. Chitinolytic chlorothalonil-tolerant soil bacterium Bacillus thuringiensis SFC24 (Bt SFC24) was manipulated in vitro to express secretable form of elicitor protein harpinPss of Pseudomonas syringae pv. syringae. Severity of the LLS decreased by 65% when the leaves were sprayed with B. thuringiensis expressing harpinPss (Bt-pss). As seed treatment, there was an increase in growth of groundnut. Bt and Bt-pss accounted to 13% and 36% increase in shoot length. Expression of a secretable form of harpinPss thus improved the ability of B. thuringiensis SFC24 to promote growth and control LLS in groundnut. In this new approach a chlorothalonil-tolerant chitinolytic bacterium was genetically engineered to secrete elicitor harpinPss for dual benefit of growth promotion and disease control. Bacillus thuringiensis/ Groundnut late leaf spot/ HarpinPss/ Biological control/ Growth promotion

19. Anklam, E.; Berg, H.; Mathiasson, L.; Sharman, M., and Ulberth, F. Supercritical Fluid Extraction Sef in Food Analysis a Review. 1998; 15, (6): 729-750.

Rec #: 1516

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM LITERATURE REVIEW SUPERCRITICAL FLUID EXTRACTION CARBON DIOXIDE SUPERCRITICAL FLUID LIPIDS STEROIDS VITAMINS FLAVOR COMPOUNDS SPICES AROMA COMPOUNDS FRUITS VEGETABLES CEREALS MYCOTOXINS FOOD CONTAMINANT PESTICIDES ENVIRONMENTAL CONTAMINANTS ANTIOXIDANTS FOODS METHODOLOGY FOOD ANALYSIS EXTRACTION METHOD HERBS AND SPICES FRUIT VEGETABLE GRAIN PRODUCT

MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Food Technology-General KEYWORDS: Toxicology-General KEYWORDS: Pest Control LANGUAGE: eng

20. ---. Supercritical Fluid Extraction Sef in Food Analysis a Review. 1998; 15, (6): 729-750.

Rec #: 1516

Keywords: METHODS

Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM LITERATURE REVIEW SUPERCRITICAL FLUID EXTRACTION CARBON DIOXIDE SUPERCRITICAL FLUID LIPIDS STEROIDS VITAMINS FLAVOR COMPOUNDS SPICES AROMA COMPOUNDS FRUITS VEGETABLES CEREALS MYCOTOXINS FOOD CONTAMINANT PESTICIDES ENVIRONMENTAL CONTAMINANTS ANTIOXIDANTS FOODS METHODOLOGY FOOD

ANALYSIS EXTRACTION METHOD HERBS AND SPICES FRUIT VEGETABLE GRAIN PRODUCT MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD TECHNOLOGY **MESH HEADINGS: POISONING** MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS:** Food Technology-General **KEYWORDS:** Toxicology-General **KEYWORDS:** Pest Control LANGUAGE: eng

21. Anon. The Japan-Israel Workshop on Novel Approaches for Controlling Insect Pests and Plant Diseases, the Binational Plant Protection Cooperation, Kibbutz Ma'ala Hahamisha, Israel, July 12-17, 1997. 1997; 25, (4): 345-366. Rec #: 2539 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This meeting contains abstracts of 38 papers, written in English, covering insecticides with novel modes of action, biocontrol agents against insect pests, weeds, etc., sex, aggregation and marking pheromones: Their mechanisms and applications, novel fungicides, biocontrol agents and physical procedures against plant diseases, and induced plant and insect resistance against diseases. MESH HEADINGS: BOTANY/ECONOMICS MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS MESH HEADINGS: INSECTS **KEYWORDS:** Economic Botany KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-General and Miscellaneous **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-General **KEYWORDS: Economic Entomology-Biological Control** KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Plantae-Unspecified

KEYWORDS: Tracheophyta KEYWORDS: Insecta-Unspecified LANGUAGE: eng

 ---. The Japan-Israel Workshop on Novel Approaches for Controlling Insect Pests and Plant Diseases, the Binational Plant Protection Cooperation, Kibbutz Ma'ala Hahamisha, Israel, July 12-17, 1997. 1997; 25, (4): 345-366.

Rec #: 2539

Keywords: ABSTRACT

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This meeting contains abstracts of 38 papers, written in English, covering insecticides with novel modes of action, biocontrol agents against insect pests, weeds, etc., sex, aggregation and marking pheromones: Their mechanisms and applications, novel fungicides, biocontrol agents and physical procedures against plant diseases, and induced plant and insect resistance against diseases.

MESH HEADINGS: BOTANY/ECONOMICS

MESH HEADINGS: IMMUNITY, NATURAL

MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS

MESH HEADINGS: ARACHNIDA

MESH HEADINGS: ENTOMOLOGY/ECONOMICS

MESH HEADINGS: PEST CONTROL, BIOLOGICAL

MESH HEADINGS: ARACHNIDA

MESH HEADINGS: ENTOMOLOGY/ECONOMICS

MESH HEADINGS: INSECTICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

- MESH HEADINGS: PLANTS
- MESH HEADINGS: PLANTS

MESH HEADINGS: INSECTS

KEYWORDS: Economic Botany

KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-General and Miscellaneous

KEYWORDS: Pest Control

KEYWORDS: Economic Entomology-General

KEYWORDS: Economic Entomology-Biological Control

KEYWORDS: Economic Entomology-Chemical and Physical Control

KEYWORDS: Plantae-Unspecified

KEYWORDS: Tracheophyta

KEYWORDS: Insecta-Unspecified

LANGUAGE: eng

23. Aplada-Sarlis, P.; Malatou, P. T.; Miliadis, G. E., and Liapis, K. S. Residues of Organophosphorous and Organochlorine Pesticides in Raw Agricultural Products of Plant Origin Imported in Greece. 1997; 18, (1): 41-52. Rec #: 2605 Keywords: NO SPECIES (DEAD) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In 360 raw agricultural products imported in our country from countries non members of the European Union (245 of them were potatoes originating from Egypt) chemical analyses were performed for the determination of

organophosphorus and organochlorine pesticide residues. In 14% of the samples, residues of organophosphorus and organochlorine pesticides were detected, while 1.7% of the samples contained residues above the Maximum Residue Limits (MRLs) which have been established from European Union or other International Organizations. The analytical methods used include gas-chromatography and GC-Mass spectrometry, and were assessed for efficiency, accuracy, repeatability as well as for the succeeded sensitivity of the above pesticides. MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS:** Toxicology-Foods **KEYWORDS: Pest Control** LANGUAGE: eng

24. ---. Residues of Organophosphorous and Organochlorine Pesticides in Raw Agricultural Products of Plant Origin Imported in Greece. 1997; 18, (1): 41-52.

Rec #: 2605

Keywords: NO SPECIES (DEAD)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In 360 raw agricultural products imported in our country from countries non members of the European Union (245 of them were potatoes originating from Egypt) chemical analyses were performed for the determination of organophosphorus and organochlorine pesticide residues. In 14% of the samples, residues of organophosphorus and organochlorine pesticides were detected, while 1.7% of the samples contained residues above the Maximum Residue Limits (MRLs) which have been established from European Union or other International Organizations. The analytical methods used include gas-chromatography and GC-Mass spectrometry, and were assessed for efficiency, accuracy, repeatability as well as for the succeeded sensitivity of the above pesticides. MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PEST CONTR MESH HEADINGS: PESTICIDES

KEVWODDU D. 1 . . .

KEYWORDS: Biophysics-General Biophysical Techniques

KEYWORDS: Toxicology-Foods

KEYWORDS: Pest Control

LANGUAGE: eng

 25. Aprea, Cristina; Centi, Letizia; Lunghini, Liana; Banchi, Bruno; Forti, Maria Aurelia, and Sciarra, Gianfranco. Evaluation of Respiratory and Cutaneous Doses of Chlorothalonil During Re-Entry in Greenhouses. 2002 Oct 5; 778, (1-2): 131-145. Rec #: 41 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: Five female workers were monitored for 5 consecutive days during re-entry into a greenhouse containing ornamental plants. Skin contamination (excluding hands) was evaluated with nine pads of filter paper placed on the skin. Hand contamination was assessed by washing with 95% ethanol. Respiratory exposure was evaluated by personal air sampling. The respiratory dose was based on a lung ventilation of 15 l/min. The doses absorbed were estimated assuming 10% skin absorption and 100% lung retention. Dislodgeable foliar residue was determined on days of re-entry to evaluate the decay of chlorothalonil. Chlorothalonil was analysed in the different matrices by GC-MS. Respiratory exposure was less than skin contamination, being 11.4+/-5.1% (mean+/-SD) of total exposure. The estimated total absorbed dose did not exceed the acceptable daily intake of 0.03 mg/kg body mass. The hands and unexposed skin of all workers were always found to be contaminated. Greater precautions are therefore needed to reduce skin exposure (clean gloves and suitable clean clothing every day). Chlorothalonil http://www.sciencedirect.com/science/article/B6X0P-4790643-8/2/383ddd1474706156da0a5a2cdaf0dd04

26. ---. Evaluation of Respiratory and Cutaneous Doses of Chlorothalonil During Re-Entry in Greenhouses. 2002 Oct 5; 778, (1-2): 131-145.

Rec #: 41

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: Five female workers were monitored for 5 consecutive days during re-entry into a greenhouse containing ornamental plants. Skin contamination (excluding hands) was evaluated with nine pads of filter paper placed on the skin. Hand contamination was assessed by washing with 95% ethanol. Respiratory exposure was evaluated by personal air sampling. The respiratory dose was based on a lung ventilation of 15 l/min. The doses absorbed were estimated assuming 10% skin absorption and 100% lung retention. Dislodgeable foliar residue was determined on days of re-entry to evaluate the decay of chlorothalonil. Chlorothalonil was analysed in the different matrices by GC-MS. Respiratory exposure was less than skin contamination, being 11.4+/-5.1% (mean+/-SD) of total exposure. The estimated total absorbed dose did not exceed the acceptable daily intake of 0.03 mg/kg body mass. The hands and unexposed skin of all workers were always found to be contaminated. Greater precautions are therefore needed to reduce skin exposure (clean gloves and suitable clean clothing every day). Chlorothalonil http://www.sciencedirect.com/science/article/B6X0P-4790643-

8/2/383ddd1474706156da0a5a2cdaf0dd04

 Archibald, S. O. and Winter, C. K. Pesticides in Our Food Assessing the Risks. 1990; London, england, uk. Illus. Maps. Isbn 0-442-00421-4.; 0, (0): 1-50.

Rec #: 1741 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM HUMAN HERBICIDE CARCINOGENIC RISK USAGE REGULATIONS UNITED STATES DEPARTMENT OF AGRICULTURE FDA CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE CALIFORNIA USA MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY **MESH HEADINGS: BEHAVIOR** MESH HEADINGS: HUMAN MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NUTRITION MESH HEADINGS: NUTRITIONAL STATUS MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING

MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: PUBLIC HEALTH ADMINISTRATION **MESH HEADINGS: STATISTICS** MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: DISEASE RESERVOIRS **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS:** General Biology-Institutions KEYWORDS: Behavioral Biology-Human Behavior **KEYWORDS: Biochemical Studies-General KEYWORDS:** Nutrition-General Studies **KEYWORDS:** Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Public Health-Public Health Administration and Statistics KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Public Health: Disease Vectors-Inanimate **KEYWORDS:** Pest Control **KEYWORDS:** Hominidae LANGUAGE: eng

28. ---. Pesticides in Our Food Assessing the Risks. 1990; London, england, uk. Illus. Maps. Isbn 0-442-00421-4.; 0, (0): 1-50. Rec #: 1741 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM HUMAN HERBICIDE CARCINOGENIC RISK USAGE REGULATIONS UNITED STATES DEPARTMENT OF AGRICULTURE FDA CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE CALIFORNIA USA MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: BEHAVIOR MESH HEADINGS: HUMAN MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NUTRITION MESH HEADINGS: NUTRITIONAL STATUS MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: PUBLIC HEALTH ADMINISTRATION

MESH HEADINGS: STATISTICS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: DISEASE RESERVOIRS MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS:** General Biology-Institutions KEYWORDS: Behavioral Biology-Human Behavior **KEYWORDS: Biochemical Studies-General KEYWORDS:** Nutrition-General Studies **KEYWORDS:** Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Public Health-Public Health Administration and Statistics KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Public Health: Disease Vectors-Inanimate **KEYWORDS: Pest Control KEYWORDS:** Hominidae LANGUAGE: eng

- 29. Arts, G. H.; Buijse-Bogdan, L. L.; Belgers, J. D. M.; Van Rhenen-Kersten, C. H.; Van Wijngaarden, R. P.; Roessink, I.; Maund, S. J.; Van den Brink, P. J., and Brock, T. C. Ecological Impact in Ditch Mesocosms of Simulated Spray Drift from a Crop Protection Program for Potatoes. 2006; 2, (2): 105-125. Rec #: 50 Keywords: MIXTURE Call Number: NO MIXTURE(ALL CHEMS) Notes: Chemical of Concern: FZN,MBZ,LCYT,CTN
- 30. Ashwell, J.; Dark, R.; Grant, R.; Jones, R., and Tattersfield, L. Outdoor Microcosm Study to Assess the Effects of Chlorothalonil on Aquatic Organisms. 2002. Rec #: 1400 Keywords: NO SOURCE Notes: Chemical of Concern: CTN
- 31. ---. Outdoor Microcosm Study to Assess the Effects of Chlorothalonil on Aquatic Organisms. 2002275960. Rec #: 9162 Keywords: NO SOURCE Notes: Chemical of Concern: CTN
- 32. Aslani, M. M.; Badami, N.; Mahmoodi, M., and Bouzari, S. Verotoxin-Producing Escherichia Coli (Vtec) Infection in Randomly Selected Population of Ilam Province (Iran). 1998; 30, (5): 473-476. Rec #: 2621 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In a randomly selected population, 2,008 fecal samples were screened for presence of Verotoxin producing Escherichia coli (VTEC) by colony sweep polymyxin-B extraction method. Non-sorbitol fermentation (NSF) phenotype and slide agglutination with O157:H7 antisera were used for screening and detection of this serotype. Ninety-eight (4.9%) fecal samples were found to be VTEC-positives and none of them belonged to the O157:H7 serotype. In rural areas, most individuals carrying VTEC isolates were as ymptomatic, whereas in urban areas, a significant association was found between VTEC isolation and diarrhoea (p < 0.01).</li>

MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA MESH HEADINGS: COMMUNICABLE DISEASES MESH HEADINGS: ENTEROBACTERIACEAE MESH HEADINGS: HOMINIDAE KEYWORDS: Toxicology-General KEYWORDS: Medical and Clinical Microbiology-Bacteriology KEYWORDS: Public Health: Epidemiology-Communicable Diseases KEYWORDS: Enterobacteriaceae (1992- ) KEYWORDS: Hominidae LANGUAGE: eng

 ---. Verotoxin-Producing Escherichia Coli (Vtec) Infection in Randomly Selected Population of Ilam Province (Iran). 1998; 30, (5): 473-476.

Rec #: 2621

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In a randomly selected population, 2,008 fecal samples were screened for presence of Verotoxin producing Escherichia coli (VTEC) by colony sweep polymyxin-B extraction method. Non-sorbitol fermentation (NSF) phenotype and slide agglutination with O157:H7 antisera were used for screening and detection of this serotype. Ninety-eight (4.9%) fecal samples were found to be VTEC-positives and none of them belonged to the O157:H7 serotype. In rural areas, most individuals carrying VTEC isolates were as ymptomatic, whereas in urban areas, a significant association was found between VTEC isolation and diarrhoea (p < 0.01). MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA MESH HEADINGS: COMMUNICABLE DISEASES MESH HEADINGS: ENTEROBACTERIACEAE MESH HEADINGS: HOMINIDAE **KEYWORDS:** Toxicology-General **KEYWORDS:** Medical and Clinical Microbiology-Bacteriology KEYWORDS: Public Health: Epidemiology-Communicable Diseases KEYWORDS: Enterobacteriaceae (1992-) **KEYWORDS:** Hominidae

- LANGUAGE: eng
- 34. Atkinson, J.; Morand, P.; Arnason, J. T.; Campos, F.; Niemeyer, H. M., and Bravo, H. Analogues of Cyclic Hydroxamic Acids From Gramineae Unimolecular Decomposition and Reaction With Thiols. 1990; 199, (1-2): Agro 35. Rec #: 1691 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT OSTRINIA-NUBILALIS CORN RESISTANCE 2 4 DIHYDROXY-7-METHOXYBENZOXAZIN-3-ONE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: BIOPHYSICS
  - MESH HEADINGS: PLANTS/CHEMISTRY

MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: GRASSES MESH HEADINGS: LEPIDOPTERA KEYWORDS: General Biology-Symposia **KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-Molecular Properties and Macromolecules **KEYWORDS:** Plant Physiology KEYWORDS: Phytopathology-Parasitism and Resistance **KEYWORDS: Pest Control** KEYWORDS: Economic Entomology-Biological Control **KEYWORDS:** Gramineae **KEYWORDS:** Lepidoptera LANGUAGE: eng

35. ---. Analogues of Cyclic Hydroxamic Acids From Gramineae Unimolecular Decomposition and Reaction With Thiols. 1990; 199, (1-2): Agro 35. Rec #: 1691 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT OSTRINIA-NUBILALIS CORN RESISTANCE 2 4 DIHYDROXY-7-METHOXYBENZOXAZIN-3-ONE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/CHEMISTRY MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: GRASSES MESH HEADINGS: LEPIDOPTERA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS:** Plant Physiology KEYWORDS: Phytopathology-Parasitism and Resistance **KEYWORDS:** Pest Control **KEYWORDS: Economic Entomology-Biological Control** 

KEYWORDS: Gramineae KEYWORDS: Lepidoptera LANGUAGE: eng

- 36. Auger, J.; Birkett, M. A.; Coats, J.; Cohen, S. Z.; Hawkes, T. R.; Lucca, P.; Narayanan, K. S.; Potrykus, I., and Robertson, A. All Specialisations Were Catered for at the Iupac Conference (London, Uk: August, 1998; Iupac). 1998; 40, (6): 204-207. Rec #: 2390 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Though it is obviously impossible to report on the vast number of papers and posters given at the IUPAC Congress in London in August, this small selection which caught the editor's eye shows that there was something for everyone, whatever his or her specialisation: food and pesticides; genetically engineered crops; natural pesticides and fumigants; formulation technology, resistance; and fate of pesticides. MESH HEADINGS: PLANTS/CYTOLOGY MESH HEADINGS: PLANTS/GENETICS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: GRASSES **KEYWORDS:** Genetics and Cytogenetics-Plant **KEYWORDS:** Food Technology-General **KEYWORDS:** Agronomy-General **KEYWORDS: Horticulture-General KEYWORDS: Pest Control KEYWORDS:** Gramineae LANGUAGE: eng
- 37. ---. All Specialisations Were Catered for at the Iupac Conference (London, Uk: August, 1998; Iupac). 1998; 40, (6): 204-207.

Rec #: 2390 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Though it is obviously impossible to report on the vast number of papers and posters given at the IUPAC Congress in London in August, this small selection which caught the editor's eye shows that there was something for everyone, whatever his or her specialisation: food and pesticides; genetically engineered crops; natural pesticides and fumigants; formulation technology, resistance; and fate of pesticides. MESH HEADINGS: PLANTS/CYTOLOGY MESH HEADINGS: PLANTS/GENETICS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: GRASSES **KEYWORDS:** Genetics and Cytogenetics-Plant KEYWORDS: Food Technology-General **KEYWORDS:** Agronomy-General

KEYWORDS: Horticulture-General KEYWORDS: Pest Control KEYWORDS: Gramineae LANGUAGE: eng

 Augusto, J.; Brenneman, T. B.; Culbreath, A. K., and Sumner, P. Night Spraying Peanut Fungicides II. Application Timings and Spray Deposition in the Lower Canopy. 2010; 94, (6): 683-689. Rec #: 12012 Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: Chemical control of soilborne peanut (Arachis hypogaea) diseases requires deposition of fungicide on plant tissues near the soil. Four applications of a protectant fungicide, chlorothalonil (1.26 kg a.i./ha), or a systemic, azoxystrobin (0.21 kg a.i./ha), pyraclostrobin (0.21 kg a.i./ha), or prothioconazole (0.08 kg a.i./ha) plus tebuconazole (0.15 kg a.i./ha), were sprayed either (i) early in the morning (3:00 to 5:00 A.M., with folded and wet leaves), (ii) during daylight (10:00 A.M. to 12:00 P.M., with unfolded and dry leaves), or (iii) in the evening (9:00 to 10:00 P.M., with folded and dry leaves). All timings of systemic fungicides provided similar control of foliar diseases. Early-morning applications of pyraclostrobin and prothioconazole plus tebuconazole decreased stem rot (caused by Sclerotium rolfsii) at digging compared with day and evening applications. All systemic fungicides increased yield when applied at early-morning compared with day applications. Spray coverage, density, and droplet size were higher with night than day applications made early in the morning to folded, wet leaves can improve spray penetration of peanut canopies, thus improving stem rot control and increasing yield. Keywords: azoxystrobin

Includes references 1022992921

39. Badawy, M. I. Use and Impact of Pesticides in Egypt. 1998; 8, (3): 223-239.

Rec #: 2633

Keywords: SURVEY

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Pesticides used in Egypt are of different types such as organochlorine, organophosphorus, carbamates, ureas, anilides and pyrethroid. The four general categories of these pesticides are insecticides, fungicides, herbicides and bactericides. Organophosphorus insecticides are of great significance in pest control and increasingly used instead of organochlorine insecticides. Organophosphorus insecticides represent more than 80% of total insecticides used during 1995. Fungicides account for 65.5% of pesticides used in Egypt during the period 1994-95 and agricultural use constitutes the majority of applications. Herbicides account for less than 4% of the pesticides used during 1995 in Egypt. The residue levels of some organochlorine insecticides (OCIs) and polychlorinated biphenyls (PCBs) in water, sediment and fish samples collected from the River Nile, lakes, drains and irrigation canals were determined. The highest concentration of OCI was found in samples collected from MESH HEADINGS: ECOLOGY

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: COMMUNITY HEALTH SERVICES

MESH HEADINGS: FISHES

MESH HEADINGS: HOMINIDAE

**KEYWORDS:** Ecology

**KEYWORDS: Biochemical Studies-General** 

KEYWORDS: Toxicology-Environmental and Industrial Toxicology

KEYWORDS: Public Health-Health Services and Medical Care

**KEYWORDS:** Pisces-Unspecified

KEYWORDS: Hominidae

LANGUAGE: eng

40. ---. Use and Impact of Pesticides in Egypt. 1998; 8, (3): 223-239.

Rec #: 2633

Keywords: SURVEY

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Pesticides used in Egypt are of different types such as organochlorine, organophosphorus, carbamates, ureas, anilides and pyrethroid. The four general categories of these pesticides are insecticides, fungicides, herbicides and bactericides. Organophosphorus insecticides are of great significance in pest control and increasingly used instead of organochlorine insecticides. Organophosphorus insecticides represent more than 80% of total insecticides used during 1995. Fungicides account for 65.5% of pesticides used in Egypt during the period 1994-95 and agricultural use constitutes the majority of applications. Herbicides account for less than 4% of the pesticides used during 1995 in Egypt. The residue levels of some organochlorine insecticides (OCIs) and polychlorinated biphenyls (PCBs) in water, sediment and fish samples collected from the River Nile, lakes, drains and irrigation canals were determined. The highest concentration of OCI was found in samples collected from MESH HEADINGS: ECOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: COMMUNITY HEALTH SERVICES

MESH HEADINGS: FISHES

MESH HEADINGS: HOMINIDAE

KEYWORDS: Ecology

KEYWORDS: Biochemical Studies-General

KEYWORDS: Toxicology-Environmental and Industrial Toxicology

KEYWORDS: Public Health-Health Services and Medical Care

KEYWORDS: Pisces-Unspecified

KEYWORDS: Hominidae

LANGUAGE: eng

41. Baier-Anderson, C. and Anderson, R. S. Characterization of the Immunotoxicity of Chlorothalonil to Striped Bass Phagocytes Following in Vitro Exposure. 1998; 46, (1-5): 337-340. Rec #: 923 Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING PAPER MORONE-SAXATILUS STRIPED BASS CHLOROTHALONIL FUNGICIDE IN VITRO EXPOSURE IMMUNOTOXIN PHAGOCYTES IMMUNOTOXICITY KIDNEY TOXICOLOGY PHAGOCYTOSIS REACTIVE OXYGEN SPECIES PRODUCTION ROS NADPH IMMUNE SYSTEM IMMUNE SYSTEM EXCRETORY SYSTEM CHESAPEAKE BAY ATLANTIC OCEAN MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BODY FLUIDS/CHEMISTRY MESH HEADINGS: HEMATOPOIETIC SYSTEM MESH HEADINGS: URINE/CHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: IMMUNITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **MESH HEADINGS: FISHES KEYWORDS:** General Biology-Symposia

KEYWORDS: Blood

KEYWORDS: Urinary System and External Secretions-General

KEYWORDS: Toxicology-General KEYWORDS: Immunology and Immunochemistry-General KEYWORDS: Pest Control KEYWORDS: Osteichthyes LANGUAGE: eng

 ---. Characterization of the Immunotoxicity of Chlorothalonil to Striped Bass Phagocytes Following in Vitro Exposure. 1998; 46, (1-5): 337-340.

Rec #: 923 Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING PAPER MORONE-SAXATILUS STRIPED BASS CHLOROTHALONIL FUNGICIDE IN VITRO EXPOSURE IMMUNOTOXIN PHAGOCYTES IMMUNOTOXICITY KIDNEY TOXICOLOGY PHAGOCYTOSIS REACTIVE OXYGEN SPECIES PRODUCTION ROS NADPH IMMUNE SYSTEM IMMUNE SYSTEM EXCRETORY SYSTEM CHESAPEAKE BAY ATLANTIC OCEAN MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BODY FLUIDS/CHEMISTRY MESH HEADINGS: HEMATOPOIETIC SYSTEM MESH HEADINGS: URINE/CHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: IMMUNITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: FISHES **KEYWORDS:** General Biology-Symposia **KEYWORDS: Blood KEYWORDS: Urinary System and External Secretions-General KEYWORDS:** Toxicology-General KEYWORDS: Immunology and Immunochemistry-General **KEYWORDS: Pest Control KEYWORDS:** Osteichthyes LANGUAGE: eng

 43. ---. Evaluation of the Immunotoxicity of Chlorothalonil to Striped Bass Phagocytes Following in Vitro Exposure. 1998; 17, (8): 1546-1551.

Rec #: 743

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The fungicide chlorothalonil (TCIN), with both agricultural and horticultural applications, is a common aquatic pollutant. The immunotoxic potential of TCIN was investigated following a 20-h in vitro exposure of striped bass (Morone saxatilus) macrophages to a range of sublethal concentrations. Cells from the anterior kidney were separated by density-gradient centrifugation to obtain a macrophage-enriched cell population. Following TCIN exposure, reactive oxygen species (ROS) production was evaluated using luminol-augmented chemiluminescence; phagocytic capacity was measured by the ingestion of fluorescein isothiocyanate-conjugated yeast; and NADPH production was estimated by monitoring the reduction of a water-soluble tetrazolium, 3-(4,5-dimethylthiazol-2-yl)-5-(3-carboxymethoxyphenyl)-2-(4-sulfophenyl)-2H-tetrazolium, inner salt. Results indicate that TCIN, at concentrations > 250 mug, decreased ROS production in both zymosan- and phorbol myristate acetate (PMA)-sti

MESH HEADINGS: HEMATOLOGIC DISEASES/PATHOLOGY

MESH HEADINGS: HEMATOLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY MESH HEADINGS: UROLOGIC DISEASES/PATHOLOGY MESH HEADINGS: UROLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: IN VITRO MESH HEADINGS: TISSUE CULTURE MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES MESH HEADINGS: FISHES KEYWORDS: Blood KEYWORDS: Blood KEYWORDS:** Urinary System and External Secretions-Pathology **KEYWORDS:** Toxicology-General **KEYWORDS:** In Vitro Studies KEYWORDS: Immunology and Immunochemistry-Immunopathology **KEYWORDS:** Pest Control **KEYWORDS:** Osteichthyes LANGUAGE: eng

44. ---. Evaluation of the Immunotoxicity of Chlorothalonil to Striped Bass Phagocytes Following in Vitro Exposure. 1998; 17, (8): 1546-1551.

Rec #: 743

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The fungicide chlorothalonil (TCIN), with both agricultural and horticultural applications, is a common aquatic pollutant. The immunotoxic potential of TCIN was investigated following a 20-h in vitro exposure of striped bass (Morone saxatilus) macrophages to a range of sublethal concentrations. Cells from the anterior kidney were separated by density-gradient centrifugation to obtain a macrophage-enriched cell population. Following TCIN exposure, reactive oxygen species (ROS) production was evaluated using luminol-augmented chemiluminescence; phagocytic capacity was measured by the ingestion of fluorescein isothiocyanate-conjugated yeast; and NADPH production was estimated by monitoring the reduction of a water-soluble tetrazolium, 3-(4,5-dimethylthiazol-2-yl)-5-(3-carboxymethoxyphenyl)-2-(4-sulfophenyl)-2H-tetrazolium, inner salt. Results indicate that TCIN, at concentrations > 250 mug, decreased ROS production in both zymosan- and phorbol myristate acetate (PMA)-sti MESH HEADINGS: HEMATOLOGIC DISEASES/PATHOLOGY MESH HEADINGS: HEMATOLOGIC DISEASES/PATHOLOGY MESH HEADINGS: HEMATOLOGIC DISEASES/PATHOLOGY

MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOPATHOLOGY

MESH HEADINGS: LYMPHATIC DISEASES/PATHOLOGY

MESH HEADINGS: LYMPHATIC DISEASES/PHYSIOPATHOLOGY

MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY MESH HEADINGS: UROLOGIC DISEASES/PATHOLOGY MESH HEADINGS: UROLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: IN VITRO MESH HEADINGS: TISSUE CULTURE MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES MESH HEADINGS: FISHES KEYWORDS: Blood KEYWORDS: Blood KEYWORDS:** Urinary System and External Secretions-Pathology **KEYWORDS:** Toxicology-General **KEYWORDS:** In Vitro Studies KEYWORDS: Immunology and Immunochemistry-Immunopathology **KEYWORDS:** Pest Control **KEYWORDS:** Osteichthyes LANGUAGE: eng

 45. Baier-Anderson, Cal and Anderson, Robert S. Characterization of the Immunotoxicity of Chlorothalonil to Striped Bass Phagocytes Following in Vitro Exposure: Pollutant Responses in Marine Organisms. 1998; 46, (1-5): 337-340. Rec #: 75

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: The fungicide chorothalonil (TCIN), with both agricultural and horticultural applications, is a common aquatic pollutant in the Chesapeake Bay and its tributaries. The immunotoxic potential of TCIN was investigated following 20 h in vitro exposure of striped bass (Morone saxatilus) macrophages to a range of sublethal concentrations. Cells from the anterior kidney were separated by density-gradient centrifugation to obtain phagocytes. Following TCIN exposure, reactive oxygen species (ROS) production was evaluated using luminol-augmented chemiluminescence; phagocytic capacity was measured by ingestion of FITC-conjugated yeast; and NADPH production was estimated by monitoring the reduction of a water-soluble tetrazolium, MTS. Results indicate that TCIN decreased ROS production in both zymosan- and phorbol myristate acetate (PMA)-stimulated cells in a dose-dependent manner. Significant decreases were observed with both stimulants at or above 0.9 [mu]M. PMA-stimulated NADPH production coincident with the respiratory burst was also decreased at or above 0.9 [mu]M. TCIN did not appear to alter phagocytic ability. Taken together, these results indicate that the mechanism of toxicity affects the activation or function of the NADPH oxidase, but not the uptake of particles by phagocytosis, and that these effects can probably be localized to the signal transduction pathway or the assemblage of NADPH oxidase. http://www.sciencedirect.com/science/article/B6V7H-3WTP2B0-3V/2/5f57446cd3765ff6a7f739b439e827b5

46. ---. Characterization of the Immunotoxicity of Chlorothalonil to Striped Bass Phagocytes Following in Vitro Exposure: Pollutant Responses in Marine Organisms. 1998; 46, (1-5): 337-340. Rec #: 75
 Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: The fungicide chorothalonil (TCIN), with both agricultural and horticultural applications, is a common aquatic pollutant in the Chesapeake Bay and its tributaries. The immunotoxic potential of TCIN was investigated following 20 h in vitro exposure of striped bass (Morone saxatilus) macrophages to a range of sublethal concentrations. Cells from the anterior kidney were separated by density-gradient centrifugation to obtain phagocytes. Following TCIN exposure, reactive oxygen species (ROS) production was evaluated using luminol-augmented chemiluminescence; phagocytic capacity was measured by ingestion of FITC-conjugated yeast; and NADPH production was estimated by monitoring the reduction of a water-soluble tetrazolium, MTS. Results indicate that TCIN decreased ROS production in both zymosan- and phorbol myristate acetate (PMA)-stimulated cells in a dose-dependent manner. Significant decreases were observed with both stimulants at or above 0.9 [mu]M. PMA-stimulated NADPH production coincident with the respiratory burst was also decreased at or above 0.9 [mu]M. TCIN did not appear to alter phagocytic ability. Taken together, these results indicate that the mechanism of toxicity affects the activation or function of the NADPH oxidase, but not the uptake of particles by phagocytosis, and that these effects can probably be localized to the signal transduction pathway or the assemblage of NADPH oxidase. http://www.sciencedirect.com/science/article/B6V7H-3WTP2B0-3V/2/5f57446cd3765ff6a7f739b439e827b5

47. Baird, R. E.; Huber, D. M., and Mansfield, C. W. Evaluation of Four Fungicides and a Biological Agent to Control Two Winter Pathogens of Wheat. 1992; 82, (9): 990. Rec #: 1646 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT TRITICUM-AESTIVUM RHIZOCTONIA-CEREALIS FUSARIUM-GRAMINEARUM PLANT FUNGUS FLUAZINAM BAYLETON TILT BRAVO 720 CROP INDUSTRY AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: CEREALS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: GRASSES **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Agronomy-Grain Crops KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Gramineae LANGUAGE: eng

 48. ---. Evaluation of Four Fungicides and a Biological Agent to Control Two Winter Pathogens of Wheat. 1992; 82, (9): 990. Rec #: 1646 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT TRITICUM-AESTIVUM RHIZOCTONIA-CEREALIS FUSARIUM-GRAMINEARUM PLANT FUNGUS FLUAZINAM BAYLETON TILT BRAVO 720 CROP INDUSTRY AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: CEREALS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: GRASSES KEYWORDS: General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS: Agronomy-Grain Crops** KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Gramineae LANGUAGE: eng

- 49. Bajer-Anderson, Cal and Anderson, Robert S. Fp 2 Chlorothalonil Inhibits Reactive Oxygen Species Production, but Not Phagocytosis in Fish (Morone Saxatilus) Phagocytes and Oyster (Crassostrea Virginica) Hemocytes: The 7th Congress of The International Society of Developmental and Comparative Immunology. 1997; 21, (2): 127. Rec #: 84 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: http://www.sciencedirect.com/science/article/B6T5X-3WBPRHR-52/2/4da19cd0d2429b336b376bf0ed498d50
- 50. ---. Fp 2 Chlorothalonil Inhibits Reactive Oxygen Species Production, but Not Phagocytosis in Fish (Morone Saxatilus) Phagocytes and Oyster (Crassostrea Virginica) Hemocytes: The 7th Congress of The International Society of Developmental and Comparative Immunology. 1997; 21, (2): 127. Rec #: 84 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: http://www.sciencedirect.com/science/article/B6T5X-3WBPRHR-52/2/4da19cd0d2429b336b376bf0ed498d50
- 51. Bakale, G. and McCreary, R. D. Response of the ke Test to NCI/NTP-Screened Chemicals: I. Nongenotoxic Carcinogens and Genotoxic Non-carcinogens. 1990; 11, (10): 1811-1818. Rec #: 60 Keywords: BACTERIA Call Number: NO BACTERIA Notes: Chemical of Concern: DMT,DDVP,CHD,CTN,DCF,HPT,CET,ISO,BNZ,MP
- 52. ---. Response of the Ke Test to Nci/Ntp-Screened Chemicals: I. Non-Genotoxic Carcinogens and
Genotoxic Non-Carcinogens. 1990; 11, (10): 1811-1818. Rec #: 3008 Keywords: BACTERIA Notes: Chemical of Concern: DMT,DDVP,CHD,CTN,DCF,HPT,CET,ISO,BNZ,MP Abstract: Abstract: 11/11/04

- 53. ---. Response of the Ke Test to Nci/Ntp-Screened Chemicals: I. Non-Genotoxic Carcinogens and Genotoxic Non-Carcinogens. 1990; 11, (10): 1811-1818. Rec #: 3008 Keywords: BACTERIA Notes: Chemical of Concern: DMT,DDVP,CHD,CTN,DCF,HPT,CET,ISO,BNZ,MP Abstract: Abstract: 11/11/04
- Bakale, G. and Mccreary, R. D. Response of the Ke Test to Nci-Screened Chemicals: I. Nongenotoxic Carcinogens and Genotoxic Non-Carcinogens. 1990; 11, (10): 1811-1818. Rec #: 1232

Keywords: BACTERIA Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The responses of a physicochemical carcinogen-screening test, the ke test, to 46 rodent carcinogens and 20 putative noncarcinogens that had been screened in long-term two-species bioassays by the National Cancer Instituteational Toxicology Program are reported. All of the chemicals screened are those that yield mutagenicity responses in the Ames Samonella/microsome test that are either equivocal or contrary to the rodent carcinogenicity responses. The electron attachment rate constants, kes of the test chemicals in cyclohexane at 21ę C were measured using a pulse-conductivity technique. The kes of 27 of the 46 rodent carcinogens (59%) are equal or greater than the diffusion-controlled ke of carbon tetrachloride, which is regarded as the boundary between a positive and negative response; the kes of 8 of the 20 mutagenic non-carcinogens (40%) are less than diffusioncontrolled. If the boundary between positive and negative ke responses is decreased to half the diffusion-

MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: DIGESTIVE SYSTEM DISEASES/PATHOLOGY MESH HEADINGS: DIGESTIVE SYSTEM/PATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: CARCINOGENS MESH HEADINGS: BACTERIA/GENETICS MESH HEADINGS: VIRUSES/GENETICS MESH HEADINGS: MICROBIOLOGICAL TECHNIQUES MESH HEADINGS: ENTEROBACTERIACEAE MESH HEADINGS: RODENTIA **KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS:** Digestive System-Pathology **KEYWORDS:** Toxicology-General KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis **KEYWORDS:** Genetics of Bacteria and Viruses **KEYWORDS:** Microbiological Apparatus KEYWORDS: In Vitro Studies KEYWORDS: Enterobacteriaceae (1979-) **KEYWORDS:** Rodentia-Unspecified LANGUAGE: eng

55. ---. Response of the Ke Test to Nci-Screened Chemicals: I. Nongenotoxic Carcinogens and Genotoxic Non-Carcinogens. 1990; 11, (10): 1811-1818.

Rec #: 1232 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The responses of a physicochemical carcinogen-screening test, the ke test, to 46 rodent carcinogens and 20 putative noncarcinogens that had been screened in long-term two-species bioassays by the National Cancer Instituteational Toxicology Program are reported. All of the chemicals screened are those that yield mutagenicity responses in the Ames Samonella/microsome test that are either equivocal or contrary to the rodent carcinogenicity responses. The electron attachment rate constants, kes of the test chemicals in cyclohexane at 21e C were measured using a pulse-conductivity technique. The kes of 27 of the 46 rodent carcinogens (59%) are equal or greater than the diffusion-controlled ke of carbon tetrachloride, which is regarded as the boundary between a positive and negative response; the kes of 8 of the 20 mutagenic non-carcinogens (40%) are less than diffusioncontrolled. If the boundary between positive and negative ke responses is decreased to half the diffusion-MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: DIGESTIVE SYSTEM DISEASES/PATHOLOGY MESH HEADINGS: DIGESTIVE SYSTEM/PATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY **MESH HEADINGS: CARCINOGENS** MESH HEADINGS: BACTERIA/GENETICS MESH HEADINGS: VIRUSES/GENETICS MESH HEADINGS: MICROBIOLOGICAL TECHNIQUES MESH HEADINGS: ENTEROBACTERIACEAE MESH HEADINGS: RODENTIA **KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS:** Digestive System-Pathology **KEYWORDS:** Toxicology-General KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis **KEYWORDS:** Genetics of Bacteria and Viruses **KEYWORDS:** Microbiological Apparatus

- **KEYWORDS:** In Vitro Studies
- KEYWORDS: Enterobacteriaceae (1979-)
- KEYWORDS: Rodentia-Unspecified
- LANGUAGE: eng
- 56. Barnes, J. S.; Csinos, A. S., and Branch, W. D. Sensitivity of Rhizoctonia solani Isolates to Fungicides and Evaluation of Peanut Cultivars to Rhizoctonia Limb Rot. POPENV; 1990; 17, (2): 62-65. Rec #: 860
  Call Number: NO CONTROL (CTN,PNB,TEZ), NO EFED CHEM (CPZ), TARGET (PNB,TEZ) Notes: EcoReference No.: 70709
  Chemical of Concern: CPZ,CTN,PNB,TEZ
- 57. Barnett, G. The Increased Yield Response of Winter Wheat to low Pesticide Input Programmes with a Vegetable Oil Based Carrier Adjuvant. SOIL; 1990; 55, (3, Pt.b): 1343-1348. Rec #: 150 Keywords: MIXTURE Call Number: NO EFED CHEM (TDM), NO MIXTURE (CBD,CTN,FUZ,MCPP1,MTSM,Maneb,PDM,TDF) Notes: Chemical of Concern: CBD,CTN,FUZ,MCPP1,MTSM,Maneb,PDM,TDF,TDM
- 58. ---. The Increased Yield Response of Winter Wheat to Low Pesticide Input Programmes With a Vegetable Oil Based Carrier Adjuvant. 1990; 55, (3, Pt.b): 1343-1348. 136666.

Rec #: 5592 Keywords: MIXTURE Notes: Chemical of Concern: CBD,CTN,FUZ,MCPP1,MTSM,Maneb,PDM,TDF,TDM Abstract: NO MIXTURE Mededelingen van de Faculteit Landbouwwetenschappen, Rijksuniversiteit Gent (Communications of the Faculty of Agricultural Sciences, State University of Ghent)//ISSN: 0368-9697//

59. Barnett, G. The Increased Yield Response of Winter Wheat to Low Pesticide Input Programs With a Vegetable Oil Based Carrier Adjuvant. 1990; 55, (3 part b): 1343-1348. Rec #: 1791 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM HERBICIDE FUNGICIDE PLANT GROWTH REGULATOR MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANT GROWTH REGULATORS/PHARMACOLOGY MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: PLANTS/DRUG EFFECTS MESH HEADINGS: CEREALS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: GRASSES/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: GRASSES KEYWORDS: General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Plant Physiology **KEYWORDS:** Plant Physiology **KEYWORDS:** Agronomy-Grain Crops **KEYWORDS:** Agronomy-Weed Control **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Gramineae LANGUAGE: eng

 60. ---. The Increased Yield Response of Winter Wheat to Low Pesticide Input Programs With a Vegetable Oil Based Carrier Adjuvant. 1990; 55, (3 part b): 1343-1348. Rec #: 1791 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM HERBICIDE FUNGICIDE PLANT GROWTH REGULATOR MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANT GROWTH REGULATORS/PHARMACOLOGY MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: PLANTS/DRUG EFFECTS MESH HEADINGS: CEREALS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: GRASSES/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: GRASSES **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Plant Physiology **KEYWORDS:** Plant Physiology **KEYWORDS:** Agronomy-Grain Crops **KEYWORDS:** Agronomy-Weed Control KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Gramineae LANGUAGE: eng

 Barr, Dana Boyd; Ananth, Cande V.; Yan, Xiaoyong; Lashley, Susan; Smulian, John C.; Ledoux, Thomas A.; Hore, Paromita, and Robson, Mark G. Pesticide concentrations in maternal and umbilical cord sera and their relation to birth outcomes in a population of pregnant women and newborns in New Jersey. 2010; 408, (4): 790-795.

Rec #: 12022

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: We evaluated in utero exposures to pesticides by measuring maternal and cord serum biomarkers in a New Jersey cohort of pregnant women and the birth outcomes of their neonates. The study was based on 150 women that underwent an elective cesarean delivery at term in a hospital in central New Jersey. We evaluated the following pesticide compounds in both maternal and umbilical cord sera: chlorpyrifos, diazinon, carbofuran, chlorothalonil, dacthal, metolachlor, trifluralin and diethyl-m-toluamide (DEET). Of these compounds, chlorpyrifos, carbofuran, chlorothalonil, trifluralin, metolachlor and DEET were the pesticides most frequently detected in the serum samples. We found high ( $\hat{a}$ %A75th percentile) metolachlor concentrations in cord blood that were related to birth weight (3605g in upper quartile vs 3399g; p =0.05). We also observed an increase in abdominal circumference with increasing cord dichloran concentrations (p =0.031). These observations suggest that in utero exposures to certain pesticides may alter birth outcomes.

Keywords: Internet resource

[Amsterdam; New York]: Elsevier Science

- 62. Basallote-Ureba, M. J.; Prados-Ligero, A. M., and Melero-Vara, J. M. Effectiveness of Tebuconazole and Procymidone in the Control of Stemphylium Leaf Spots in Garlic. POP,REP,GRO,CELSOIL,ENV; 1998; 17, (6): 491-495. Rec #: 100 Call Number: OK(TEZ,FSTAI,THM),NO MIXTURE(CTN,CuOH) Notes: EcoReference No.: 89790 Chemical of Concern: TEZ,FSTAI,THM,CTN,CuOH
- Bauza, D. E. Mirabo Fm; Thomas, A. C.; Rubi, E.; Forteza, R., and Cerda, V. Sequential Injection Analysis System for Determination of Mercury by Cold-Vapor Atomic Absorption Spectroscopy. 1997; 355, (2-3): 203-210. Rec #: 2567

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In the present work a sequential injection analysis system is proposed for the determination of mercury by cold vapor atomic absorption spectrometry. Both the sample and the reagent are sequentially aspirated using a Crison automatic Compact Titrator and impelled into a gas-liquid separation cell. Once there, a N2 flow sweeps the reduced mercury into a measuring cell of an atomic absorption spectrometer. The system proposed allows the detection of mercury in addition to data acquisition and treatment in an automatic way. The linear calibration range ranges between 2 and 50 mug l-1, the 3sigmab/5 detection limit being 0.34 mug l-1. The relative standard deviation of the method is 0.95% when 0.8 ml of 25 mug l-1 Hg standard solution is aspirated. The sampling rate allowed by this method is 30 injections per hour. The proposed method has been applied to different certified fish and marine sediment samples for which satisfactory results have been obtained. MH -

MINERALS/ANALYSIS MESH HEADINGS: MINERALS

MESH HEADINGS: POISONING

MESH HEADINGS: ANIMALS, LABORATORY

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: FREEZING

MESH HEADINGS: PRESERVATION, BIOLOGICAL

- MESH HEADINGS: AIR POLLUTION
- MESH HEADINGS: SOIL POLLUTANTS

MESH HEADINGS: WATER POLLUTION

KEYWORDS: Biochemical Methods-Minerals

KEYWORDS: Biochemical Studies-Minerals

KEYWORDS: Toxicology-General

KEYWORDS: Toxicology-Environmental and Industrial Toxicology

KEYWORDS: Temperature: Its Measurement

KEYWORDS: Public Health: Environmental Health-Air

LANGUAGE: eng

64. ---. Sequential Injection Analysis System for Determination of Mercury by Cold-Vapor Atomic Absorption Spectroscopy. 1997; 355, (2-3): 203-210.

Rec #: 2567

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In the present work a sequential injection analysis system is proposed for the determination of mercury by cold vapor atomic absorption spectrometry. Both the sample and the reagent are sequentially aspirated using a Crison automatic Compact Titrator and impelled into a gas-liquid separation cell. Once there, a N2 flow sweeps the reduced mercury into a measuring cell of an atomic absorption spectrometer. The system proposed allows the detection of mercury in addition to data acquisition and treatment in an automatic way. The linear calibration range ranges between 2 and 50 mug l-1, the 3sigmab/5

detection limit being 0.34 mug l-1. The relative standard deviation of the method is 0.95% when 0.8 ml of 25 mug l-1 Hg standard solution is aspirated. The sampling rate allowed by this method is 30 injections per hour. The proposed method has been applied to different certified fish and marine sediment samples for which satisfactory results have been obtained. MH -MINERALS/ANALYSIS MESH HEADINGS: MINERALS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: FREEZING MESH HEADINGS: PRESERVATION, BIOLOGICAL MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **KEYWORDS:** Biochemical Methods-Minerals **KEYWORDS: Biochemical Studies-Minerals KEYWORDS:** Toxicology-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Temperature: Its Measurement KEYWORDS: Public Health: Environmental Health-Air LANGUAGE: eng

65. Behe, B. K. and Bowen, K. L. The Use of Film-Forming Antitranspirants to Control Rose Blackspot Disease Au - Roark Rs. 1997; 32, (4): 590. Rec #: 2507 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT ROSE FILM-FORMING ANTITRANSPIRANTS BLACKSPOT HORTICULTURAL OIL CHLOROTHALONIL FUNGICIDE EFFECTIVITY PEST MANAGEMENT HORTICULTURE FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS, MEDICINAL KEYWORDS: General Biology-Symposia **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Pest Control **KEYWORDS:** Rosaceae LANGUAGE: eng

66. ---. The Use of Film-Forming Antitranspirants to Control Rose Blackspot Disease Au - Roark Rs. 1997; 32, (4): 590.
Rec #: 2507
Keywords: ABSTRACT
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT
ROSE FILM-FORMING ANTITRANSPIRANTS BLACKSPOT HORTICULTURAL OIL
CHLOROTHALONIL FUNGICIDE EFFECTIVITY PEST MANAGEMENT HORTICULTURE

FUNGAL DISEASE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT **MESH HEADINGS: FUNGI** MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS, MEDICINAL **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Pest Control **KEYWORDS:** Rosaceae LANGUAGE: eng

67. Benigni, R. Rodent Tumor Profiles, Salmonella Mutagenicity and Risk Assessment. 1990; 244, (1): 79-92. Rec #: 1693 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The tumorigenesis profiles of 116 chemicals, which proved to induce cancer in the NCI experimentation, were studied by multivariate data analysis methods. Three main patterns of tumor induction were evident. One chemical (benzene) was not classifiable in any of the 3 clusters of chemicals. The carcinogen classes based on patterns of tumor induction did not reflect a repartition betwen Ames-positive and Ames-negative chemicals. Therefore any classification of carcinogens as either 'primary' (genotoxic, hence assumed to pose a greater risk) or 'secondary' (presumably carcinogenic via non-genotoxic mechanisms) would seem to be a subject for research and speculation, and, for the present, an unsuitable basis for risk assessment. MESH HEADINGS: ANIMALS MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: ANIMALS/GENETICS **MESH HEADINGS: MATHEMATICS** MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: CARCINOGENS MESH HEADINGS: BACTERIA/CYTOLOGY MESH HEADINGS: BACTERIA/GENETICS MESH HEADINGS: VIRUSES/GENETICS MESH HEADINGS: ENTEROBACTERIACEAE **KEYWORDS:** Cytology and Cytochemistry-Animal **KEYWORDS:** Genetics and Cytogenetics-Animal **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS:** Biochemical Studies-General **KEYWORDS:** Toxicology-General KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis **KEYWORDS:** Morphology and Cytology of Bacteria **KEYWORDS:** Genetics of Bacteria and Viruses KEYWORDS: Enterobacteriaceae (1979-) LANGUAGE: eng

- 68. Benigni, R. Rodent Tumor Profiles, Salmonella Mutagenicity and Risk Assessment. 1990; 244, (1): 79-91. Rec #: 160 Keywords: REFS CHECKED, REVIEW Call Number: NO EFED CHEM (3CE, AN, AND, BNZ, CHD, DXN, HPT, ISO, TCDD, TXP), NO REFS CHECKED (13DPA, ASCN, CTN, Captan, DCF, DPDP, MEL, TFN, TVP, Ziram), NO REVIEW (13DPA, ASCN, CTN, Captan, DCF, DPDP, MEL, TFN, TVP, Ziram) Notes: Chemical of Concern: 13DPA, 3CE, AN, AND, ASCN, BNZ, CHD, CTN, Captan, DCF, DPDP, DXN, HPT, ISO, MEL, TCDD, TFN, TVP, TXP, Ziram
- 69. Benigni, R. Rodent Tumor Profiles, Salmonella Mutagenicity and Risk Assessment. 1990; 244, (1): 79-92. Rec #: 1693

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The tumorigenesis profiles of 116 chemicals, which proved to induce cancer in the NCI experimentation, were studied by multivariate data analysis methods. Three main patterns of tumor induction were evident. One chemical (benzene) was not classifiable in any of the 3 clusters of chemicals. The carcinogen classes based on patterns of tumor induction did not reflect a repartition betwen Ames-positive and Ames-negative chemicals. Therefore any classification of carcinogens as either 'primary' (genotoxic, hence assumed to pose a greater risk) or 'secondary' (presumably carcinogenic via non-genotoxic mechanisms) would seem to be a subject for research and speculation, and, for the present, an unsuitable basis for risk assessment.

MESH HEADINGS: ANIMALS

MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY

MESH HEADINGS: ANIMALS/GENETICS

MESH HEADINGS: MATHEMATICS

MESH HEADINGS: STATISTICS

MESH HEADINGS: BIOLOGY

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: POISONING

MESH HEADINGS: ANIMALS, LABORATORY

MESH HEADINGS: CARCINOGENS

MESH HEADINGS: BACTERIA/CYTOLOGY MESH HEADINGS: BACTERIA/GENETICS

- MESH HEADINGS: VIRUSES/GENETICS
- MESH HEADINGS: UNCOSED, OLIVETICS MESH HEADINGS: ENTEROBACTERIACEAE

KEYWORDS: Cytology and Cytochemistry-Animal

KEYWORDS: Genetics and Cytogenetics-Animal

**KEYWORDS:** Mathematical Biology and Statistical Methods

KEYWORDS: Biochemical Studies-General

**KEYWORDS:** Toxicology-General

KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis

- KEYWORDS: Morphology and Cytology of Bacteria
- KEYWORDS: Genetics of Bacteria and Viruses

KEYWORDS: Enterobacteriaceae (1979-)

LANGUAGE: eng

70. Benigni, R. Rodent Tumor Profiles, Salmonella Mutagenicity and Risk Assessment. 1990; 244, (1): 79-91. 137198. Rec #: 5602 Keywords: REFS CHECKED, REVIEW Notes: Chemical of Concern: 13DPA, 3CE, AN, AND, ASCN, BNZ, CHD, CTN, Captan, DCF, DPDP, DXN, HPT, ISO, MEL, TCDD, TFN, TVP, TXP, Ziram Abstract: NO REFS CHECKED, NO REVIEW Author Affiliation: Ist. Superiore Sanita, Lab. Tossicologia Comparata Ecotossicologia, Viale Regina Elena 229, I-00161 Rome//Searched FY08 GEE -COMPLETED 12/07//

 Berry, M. R.; Johnson, L. S.; Jones, J. W.; Rader, J. I.; Kendall, D. C., and Sheldon, L. S. Dietary Characterizations in a Study of Human Exposures in the Lower Rio Grande Valley: I. Foods and Beverages. 1997; 23, (5): 675-692.

Rec #: 2541

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The Lower Rio Grande Valley Environmental Study (LRGVES), a cooperative effort between various federal and state agencies, responded to concerns of the local community about possible adverse health effects related to environmental conditions. The LRGVES pilot project, conducted during the spring and summer of 1993, was designed as a range-finding or scoping study to evaluate multiple forms of exposure to nine Valley residents in preparation for possible expanded studies. Potential dietary exposures were characterized by the use of food diaries and questionnaires and the collections and analysis of foods, beverages, and drinking water consumed by the participants. This publication describes the results obtained for foods and beverages. Results for drinking water are described in a companion publication. A duplicate-diet collection procedure was used to obtain food and beverage samples. Participants prepared duplicate portions of solid foods and beverages which were compo

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: DIET SURVEYS MESH HEADINGS: DIET MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: PUBLIC HEALTH ADMINISTRATION MESH HEADINGS: STATISTICS **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Biochemical Studies-General KEYWORDS:** Nutrition-General Dietary Studies **KEYWORDS:** Toxicology-Foods KEYWORDS: Public Health-Public Health Administration and Statistics **KEYWORDS: Pest Control** LANGUAGE: eng

72. ---. Dietary Characterizations in a Study of Human Exposures in the Lower Rio Grande Valley: I. Foods and Beverages. 1997; 23, (5): 675-692.

Rec #: 2541

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The Lower Rio Grande Valley Environmental Study (LRGVES), a cooperative effort between various federal and state agencies, responded to concerns of the local community about possible adverse health effects related to environmental conditions. The LRGVES pilot project, conducted during the spring and summer of 1993, was designed as a range-finding or scoping study to evaluate multiple forms of exposure to nine Valley residents in preparation for possible expanded studies. Potential dietary exposures were characterized by the use of food diaries and questionnaires and the collections and analysis of foods, beverages, and drinking water consumed by the participants. This publication describes the results obtained for foods and beverages. Results for drinking water are described in a companion publication. A duplicate-diet collection procedure was used to obtain food and beverage samples. Participants prepared duplicate portions of solid foods and beverages which were compo

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: DIET SURVEYS MESH HEADINGS: DIET MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: PUBLIC HEALTH ADMINISTRATION **MESH HEADINGS: STATISTICS** MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Studies-General KEYWORDS:** Nutrition-General Dietary Studies **KEYWORDS:** Toxicology-Foods KEYWORDS: Public Health-Public Health Administration and Statistics **KEYWORDS:** Pest Control LANGUAGE: eng

- 73. Best, G. R. and Jordan, V. W. L. Evaluation of Fungicides for Control of Septoria nodorum in Winter Wheat. POPSOIL,ENV; 1985(6): 74-75. Rec #: 1110 Call Number: NO EFED CHEM (TDM), NO MIXTURE (CAP,TDF), TARGET (CTN,PCZ,PPCP,PPCP2011,TDF) Notes: EcoReference No.: 90982 Chemical of Concern: CAP,CTN,PCZ,PPCP,TDF,TDM
- 74. ---. Evaluation of Fungicides for Control of Septoria nodorum in Winter Wheat. POPSOIL,ENV; 1985(6): 74-75. Rec #: 40 Call Number: OK TARGET(PCZ,CTN),NO MIXTURE(TARGET-TDF,CAP) Notes: EcoReference No.: 90982 Chemical of Concern: PCZ,TDF,CTN,CAP,TDM
- 75. Beute, M. K.; Porter, D. M., and Hadley, B. A. Sclerotinia Blight of Peanut in North Carolina and Virginia and Its Chemical Control. PHY,POPSOIL,ENV; 1975; 59, (9): 697-701. Rec #: 1590 Call Number: EFFICACY (BMY,CTN,CuS,PNB), LITE EVAL CODED (DCNA), TARGET (BMY,CTN,CuS,PNB) Notes: EcoReference No.: 72286 Chemical of Concern: BMY,CTN,CuS,DCNA,PNB
- 76. ---. Sclerotinia Blight of Peanut in North Carolina and Virginia and Its Chemical Control. PHY,POPSOIL,ENV; 1975; 59, (9): 697-701. Rec #: 50
   Call Number: LITE EVAL CODED(DCNA),OK(PNB,CuS,BMY),NO CROP(CTN) Notes: EcoReference No.: 72286
   Chemical of Concern: PNB,DCNA,CuS,CTN,BMY
- 77. Biratu, T.; Hulluka, M., and Hindorf, H. In-Vitro Evaluation of Fungicides Against Coffee Berry Disease

Cbd Colletotrichum-Coffeanum. 1990; 55, (3 part a): 975-982. Rec #: 1296 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM COFFEA-ARABICA GROWTH SPORULATION CONIDIA GERMINATION ORTHO DIFOLATAN CHLOROTHALONIL RESISTANCE ETHIOPIA EAST AFRICA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/ANATOMY & HISTOLOGY MESH HEADINGS: REPRODUCTION MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: TROPICAL CLIMATE MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Plant Physiology **KEYWORDS:** Plant Physiology **KEYWORDS:** Horticulture-Tropical and Subtropical Fruits and Nuts KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Rubiaceae LANGUAGE: eng

- 78. Blain, L.; Lachapelle, P., and Molotchnikoff, S. The Effect of Acute Trichloroethylene Exposure on Electroretinogram Components. PHYINJECT; 1990; 12, (6): 633-636. Rec #: 110 Call Number: NO COC(CTN),OK(3CE) Notes: EcoReference No.: 90240 Chemical of Concern: 3CE
- 79. Blazquez, C. H. Corynespora Leaf Spot of Cucumber. POPSOIL, ENV, MIXTURE; 1968; 80, 177-182. Rec #: 770 Call Number: EFFICACY (CTN, CuS, MZB, Maneb, OXT), NO EFED CHEM (ANZ), NO

MIXTURE (ANZ,Maneb), TARGET (CTN,CuS,MZB,Maneb,OXT) Notes: EcoReference No.: 105924 Chemical of Concern: ANZ,CTN,CuS,MZB,Maneb,OXT

80. Blenis, P. V.; Nadeau, L. B.; Knowles, N. R., and Logue, G. Evaluation of Fungicides and Surfactants for Control of Fairy Rings Caused by Marasmius oreades (Bolt ex. Fr.) Fr. POP. P.V. Blenis, Dept. of Renewable Resources, Univ. of Alberta, Edmonton, Alta. T6G 2H1, Canada.: SOIL,ENV; 1997; 32, (6): 1077-1084. Rec #: 120 Call Number: NO ENDPOINT(ALL CHEMS) Notes: EcoReference No.: 63033 Chemical of Concern: Cu,Folpet,CTN,Maneb,FBR,TFR,ANZ,THM

81. Bohorova, N.; Cabrera, M.; Abarca, C.; Quintero, R.; Maciel, A. M.; Brito, R. M.; Hoisington, D., and Bravo, A. Susceptibility of Four Tropical Lepidopteran Maize Pests to Bacillus Thuringiensis Cryi-Type Insecticidal Toxins. 1997; 90, (2): 412-415. Rec #: 2831 Keywords: BIOLOGICAL TOXICANT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The relative susceptibility of 4 tropical maize pests, Spodoptera frugiperda (J. E. Smith), Diatraea grandiosella Dyar, D. saccharalis (F.), and Helicoverpa zea (Boddie), to the lepidopteran-specific CryI-type proteins produced by B. thuringiensis is presented. The toxin with the highest potency against H. zea larvae was the CryIAc toxin. S. frugiperda larvae were susceptible to CryID and CryIF toxins. The CryIB toxin showed to be highly toxic against D. grandiosella and D. saccharalis. This information will establish a basis for selecting B. thuringiensis strains producing the appropriate CryI proteins to be used for the biological control of these tropical pests. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES** MESH HEADINGS: PROTEINS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: LEPIDOPTERA **KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Proteins** KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Biological Control KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Invertebrata **KEYWORDS:** Lepidoptera

LANGUAGE: eng

82. ---. Susceptibility of Four Tropical Lepidopteran Maize Pests to Bacillus Thuringiensis Cryi-Type Insecticidal Toxins. 1997; 90, (2): 412-415. Rec #: 2831 Keywords: BIOLOGICAL TOXICANT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The relative susceptibility of 4 tropical maize pests, Spodoptera frugiperda (J. E. Smith), Diatraea grandiosella Dyar, D. saccharalis (F.), and Helicoverpa zea (Boddie), to the lepidopteran-specific CryI-type proteins produced by B. thuringiensis is presented. The toxin with the highest potency against H. zea larvae was the CryIAc toxin. S. frugiperda larvae were susceptible to CryID and CryIF toxins. The CryIB toxin showed to be highly toxic against D. grandiosella and D. saccharalis. This information will establish a basis for selecting B. thuringiensis strains producing the appropriate CryI proteins to be used for the biological control of these tropical pests. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS **MESH HEADINGS: INSECTICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: LEPIDOPTERA **KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Proteins** KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Pest Control **KEYWORDS: Economic Entomology-Biological Control** KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Invertebrata **KEYWORDS:** Lepidoptera LANGUAGE: eng

83. Boulter, J. I.; Boland, G. J., and Trevors, J. T. Evaluation of Composts for Suppression of Dollar Spot (Sclerotinia Homoeocarpa) of Turfgrass. 2002. Rec #: 228 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 0191-2917 Descriptors: Agrostis palustris Descriptors: Creeping bentgrass Descriptors: Organic amendments Descriptors: Turf

Abstract: The use of composts in turfgrass disease management allows for a reduction in pesticide use in chemical control practices. Disease suppressive properties of composts rely on a number of factors including microbial activity, microbial population dynamics, nutrient concentrations, and other associated chemical and physical factors. Five composts were evaluated for suppression of dollar spot caused by Sclerotinia homoeocarpa. The dollar spot disease suppressive properties of selected compost formulations prepared in different years was evaluated. A third objective was to examine the effects of storage of compost (1 year) on the suppression of dollar spot. Field experiments were conducted in 1998 with compost prepared in 1997 to 1998. Applications of compost every 3 weeks throughout the season suppressed dollar spot of turf to levels not significantly different than applications of chlorothalonil fungicide applied at the manufacturer's lowest recommended preventative rate of 38.4 ml a.i./100 m<inf>2</inf> every 2 weeks (P = 0.05). Single applications of composts at the start of the 1998 season were not effective in reducing disease. Field experiments in 1999 evaluated batches of two selected compost formulations, one batch produced in 1998 to 1999, another stored since production in 1997 to 1998. Composts were effective in suppressing disease to levels not significantly different than the fungicide controls, which showed up to 33% disease in 1998 and up to 31% disease in 1999 (P =0.05). Storage of composts for up to 1 year did not affect their ability to reduce dollar spot severity (P = 0.05). The use of composts as plant disease suppressants is not likely to replace the use of commercial fungicides in dollar spot management. However, multiple applications of compost may reduce incidence and severity of dollar spot to levels at which chemical control may be reduced or eliminated for a significant portion of the season. 42 refs. English Publication Type: Journal Publication Type: Article Country of Publication: United States

Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi general Plant Science

84. Bowen, K. L. and Roark, R. S. Control of Rose Blackspot Disease With Winter Treatment. 1998; 88, (9 suppl.): S9-s10. Rec #: 2640 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT ROSE HOST PHYTOPATHOLOGY ROSE BLACKSPOT WINTER DISEASE CONTROL DORMANCY HORTICULTURAL OIL FUNGAL CONTROL AGENT CHLOROTHALONIL FUNGICIDE CYPROCONAZOLE TRIFORINE PEST MANAGEMENT INFECTION HORTICULTURE FUNGAL DISEASE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: PLANTS, MEDICINAL **KEYWORDS:** General Biology-Symposia **KEYWORDS: Ecology** 

KEYWORDS: Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Rosaceae LANGUAGE: eng

- 85. Bowen, K. L. and Roark, R. S. Management of Black Spot of Rose with Winter Fungicide Treatment. GRO,PHY,POP,REPSOIL,ENV; 2001; 85, (4): 393-398. Rec #: 740
  Call Number: LITE EVAL CODED (TFR), NO EFED CHEM (CPZ), NO MIXTURE (CTN), OK (ALSV,MOIL,MYC) Notes: EcoReference No.: 90064
  Chemical of Concern: ALSV,CPZ,CTN,MOIL,MYC,TFR
- Bradley, K. W. and Sweets, L. E. Influence of Glyphosate and Fungicide Coapplications on Weed Control, Spray Penetration, Soybean Response, and Yield in Glyphosate-Resistant Soybean. POPSOIL,ENV,MIXTURE; 2008; 100, (5): 1360-1365. Rec #: 30
  Call Number: EFFICACY (AZX,GYP,MCZ,MYC,PCZ,PPCP,PPCP2011,TCZ,TEZ), NO EFED CHEM (BSC,PRC,TFX), NO MIXTURE (AZX,CTN,MCZ,MYC,PCZ,PPCP,PPCP2011,TCZ,TEZ) Notes: EcoReference No.: 151392
  Chemical of Concern: AZX,BSC,CTN,GYP,MCZ,MYC,PCZ,PPCP,PRC,TCZ,TEZ,TFX
- Braman, S. K.; Oetting, R. D., and Florkowski, W. Assessment of Pesticide Use by Commercial Landscape Maintenance and Lawn Care Firms in Georgia. 1997; 32, (4): 403-411. Rec #: 2565

Keywords: NO TOX DATA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Questionnaires on pesticide use and pest management practices were mailed to landscape maintenance/lawn care firms in the metro-Atlanta area; 25.4% or 350 firms responded. Of these firms, 159 provide pest management services for turfgrass or ornamentals or both. Responding professionals purchased 13,210 kg AI of insecticides, 93,447 kg AI herbicide, and 3,867 kg AI of fungicides during 1993. Total area serviced by these firms was 14,770 ha. The most commonly-purchased insecticides included products containing hydramethylnon, acephate, chlorpyrifos, carbaryl, and horticultural oil. Frequently-purchased herbicides included products that contain pendimethalin, 2,4-D, glyphosate, MCPP, dicamba, oryzalin, benefin, and oxadiazon. Fungicidal products purchased by the most respondents were chlorothalonill thiophanate-methyl, oxazoladinadione, matalayl, and triadimefon. Insecticides were most frequently applied to ornamentals (65%), while herbicides were the primary pesticide use

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: TREES MESH HEADINGS: WOOD MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL MESH HEADINGS: ARACHNIDA MESH HEADINGS: ARACHNIDA MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS MESH HEADINGS: GRASSES KEYWORDS: Biochemical Studies-General KEYWORDS: Horticulture-Flowers and Ornamentals KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Economic Entomology-Trees KEYWORDS: Economic Entomology-Integrated Control KEYWORDS: Economic Entomology-Chemical and Physical Control KEYWORDS: Tracheophyta KEYWORDS: Gramineae LANGUAGE: eng

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Rec #: 2565

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Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Questionnaires on pesticide use and pest management practices were mailed to landscape maintenance/lawn care firms in the metro-Atlanta area; 25.4% or 350 firms responded. Of these firms, 159 provide pest management services for turfgrass or ornamentals or both. Responding professionals purchased 13,210 kg AI of insecticides, 93,447 kg AI herbicide, and 3,867 kg AI of fungicides during 1993. Total area serviced by these firms was 14,770 ha. The most commonly-purchased insecticides included products containing hydramethylnon, acephate, chlorpyrifos, carbaryl, and horticultural oil. Frequently-purchased herbicides included products that contain pendimethalin, 2,4-D, glyphosate, MCPP, dicamba, oryzalin, benefin, and oxadiazon. Fungicidal products purchased by the most respondents were chlorothalonill thiophanate-methyl, oxazoladinadione, matalayl, and triadimefon. Insecticides were most frequently applied to ornamentals (65%), while herbicides were the primary pesticide use MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: TREES MESH HEADINGS: WOOD MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS **MESH HEADINGS: INSECTICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS MESH HEADINGS: GRASSES **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals **KEYWORDS:** Pest Control

KEYWORDS: Economic Entomology-Trees

KEYWORDS: Economic Entomology-Integrated Control

KEYWORDS: Economic Entomology-Chemical and Physical Control KEYWORDS: Tracheophyta KEYWORDS: Gramineae LANGUAGE: eng

- 89. Brandenburg, R. L. and Royals, B. M. Caterpillar Control on Peanuts, North Carolina, 1995. POPENV; 1996; 21, 275 (109F). Rec #: 170 Call Number: OK(CYH),NO MIXTURE(CTN) Notes: EcoReference No.: 89803 Chemical of Concern: CTN,CYH
- 90. ---. Control of Twospotted Spider Mite in Peanuts, 1994. POPENV; 1995; 20, 220-221 (No. 93F). Rec #: 160
   Call Number: OK(CYH,FPP),OK TARGET(BFT),NO MIXTURE(CTN,CuOH) Notes: EcoReference No.: 89795
   Chemical of Concern: BFT,CYH,CTN,CuOH,FPP

91. Bravo, A. Phylogenetic Relationships of Bacillus Thuringiensis Delta-Endotoxin Family Proteins and Their Functional Domains. 1997; 179, (9): 2793-2801. Rec #: 2465 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM LITERATURE REVIEW BACILLUS-THURINGIENSIS BIOCHEMISTRY AND BIOPHYSICS PEST MANAGEMENT TOXICOLOGY DELTA-ENDOTOXIN FAMILY PROTEINS FUNCTIONAL DOMAINS PHYLOGENETIC RELATIONSHIPS INSECTICIDAL CRYSTAL PROTEINS BIOINSECTICIDES MESH HEADINGS: EVOLUTION MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: AMINO ACIDS/ANALYSIS MESH HEADINGS: PEPTIDES/ANALYSIS MESH HEADINGS: PROTEINS/ANALYSIS MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/PHYSIOLOGY MESH HEADINGS: BACTERIA/METABOLISM MESH HEADINGS: BACTERIA MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA **KEYWORDS: Evolution KEYWORDS:** Comparative Biochemistry **KEYWORDS: Biochemical Methods-Proteins KEYWORDS: Biochemical Studies-Proteins** 

KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS: Toxicology-General KEYWORDS: Physiology and Biochemistry of Bacteria KEYWORDS: Medical and Clinical Microbiology-Bacteriology KEYWORDS: Economic Entomology-Biological Control KEYWORDS: Invertebrata KEYWORDS: Endospore-forming Gram-Positives (1992- ) LANGUAGE: eng

92. ---. Phylogenetic Relationships of Bacillus Thuringiensis Delta-Endotoxin Family Proteins and Their Functional Domains. 1997; 179, (9): 2793-2801. Rec #: 2465 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM LITERATURE REVIEW BACILLUS-THURINGIENSIS BIOCHEMISTRY AND BIOPHYSICS PEST MANAGEMENT TOXICOLOGY DELTA-ENDOTOXIN FAMILY PROTEINS FUNCTIONAL DOMAINS PHYLOGENETIC RELATIONSHIPS INSECTICIDAL CRYSTAL PROTEINS BIOINSECTICIDES MESH HEADINGS: EVOLUTION MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: AMINO ACIDS/ANALYSIS MESH HEADINGS: PEPTIDES/ANALYSIS MESH HEADINGS: PROTEINS/ANALYSIS MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/PHYSIOLOGY MESH HEADINGS: BACTERIA/METABOLISM **MESH HEADINGS: BACTERIA** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA **KEYWORDS: Evolution KEYWORDS:** Comparative Biochemistry **KEYWORDS: Biochemical Methods-Proteins KEYWORDS: Biochemical Studies-Proteins KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS:** Toxicology-General **KEYWORDS:** Physiology and Biochemistry of Bacteria KEYWORDS: Medical and Clinical Microbiology-Bacteriology **KEYWORDS: Economic Entomology-Biological Control KEYWORDS:** Invertebrata KEYWORDS: Endospore-forming Gram-Positives (1992-) LANGUAGE: eng

93. Bravo, A.; Ceron, J.; Galan, L., and Quintero, R. Identification of Plasmids That Harbor the S Endotoxin Gene From Different Bacillus-Thuringiensis Strains With Different Toxicity Against Lepidopteran Insects. 1990; 28, (6): 603. Rec #: 1227 Keywords: BIOLOGICAL TOXICANT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: DNA REPLICATION MESH HEADINGS: TRANSCRIPTION, GENETIC MESH HEADINGS: TRANSLATION, GENETIC MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/GENETICS MESH HEADINGS: VIRUSES/GENETICS MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: ANIMAL MESH HEADINGS: INSECTS/PHYSIOLOGY MESH HEADINGS: PHYSIOLOGY, COMPARATIVE MESH HEADINGS: PATHOLOGY MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: BACILLACEAE MESH HEADINGS: LEPIDOPTERA **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Comparative Biochemistry **KEYWORDS: Biochemical Studies-Proteins KEYWORDS:** Replication **KEYWORDS:** Toxicology-General **KEYWORDS:** Genetics of Bacteria and Viruses **KEYWORDS:** Pest Control **KEYWORDS: Economic Entomology-Biological Control KEYWORDS:** Invertebrata **KEYWORDS:** Invertebrata KEYWORDS: Bacillaceae (1979-) **KEYWORDS:** Lepidoptera LANGUAGE: eng

 94. ---. Identification of Plasmids That Harbor the S Endotoxin Gene From Different Bacillus-Thuringiensis Strains With Different Toxicity Against Lepidopteran Insects. 1990; 28, (6): 603. Rec #: 1227 Keywords: BIOLOGICAL TOXICANT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT

MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: DNA REPLICATION MESH HEADINGS: TRANSCRIPTION, GENETIC MESH HEADINGS: TRANSLATION, GENETIC MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/GENETICS MESH HEADINGS: VIRUSES/GENETICS MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: ANIMAL MESH HEADINGS: INSECTS/PHYSIOLOGY MESH HEADINGS: PHYSIOLOGY, COMPARATIVE MESH HEADINGS: PATHOLOGY MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: BACILLACEAE MESH HEADINGS: LEPIDOPTERA **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Comparative Biochemistry **KEYWORDS: Biochemical Studies-Proteins KEYWORDS:** Replication **KEYWORDS:** Toxicology-General **KEYWORDS:** Genetics of Bacteria and Viruses **KEYWORDS:** Pest Control **KEYWORDS: Economic Entomology-Biological Control KEYWORDS:** Invertebrata **KEYWORDS:** Invertebrata KEYWORDS: Bacillaceae (1979-) **KEYWORDS:** Lepidoptera LANGUAGE: eng

95. Bravo, A.; Lorence, A.; Sanchez, J.; Flores, H.; Guereca, L., and Nunez, M. E. The Insecticidal Crystal Protein Family From Bacillus Thuringiensis. 1998; 36, (9): 1299. Rec #: 2639 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MEETING POSTER BACILLUS-THURINGIENSIS INSECTICIDAL CRYSTAL PROTEIN BIOCIDAL ACTIVITY TOXIN TOXICOLOGY BIOCHEMISTRY AND BIOPHYSICS BACTERIOLOGY MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/CLASSIFICATION MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA KEYWORDS: General Biology-Symposia KEYWORDS: Biochemical Studies-General KEYWORDS: Toxicology-General KEYWORDS: Bacteriology KEYWORDS: Endospore-forming Gram-Positives (1992- ) LANGUAGE: eng

96. ---. The Insecticidal Crystal Protein Family From Bacillus Thuringiensis. 1998; 36, (9): 1299. Rec #: 2639 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MEETING POSTER BACILLUS-THURINGIENSIS INSECTICIDAL CRYSTAL PROTEIN BIOCIDAL ACTIVITY TOXIN TOXICOLOGY BIOCHEMISTRY AND BIOPHYSICS BACTERIOLOGY MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/CLASSIFICATION MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-General **KEYWORDS:** Bacteriology KEYWORDS: Endospore-forming Gram-Positives (1992-) LANGUAGE: eng

97. Bravo, A.; Sarabia, S.; Lopez, L.; Ontiveros, H.; Abarca, C.; Ortiz, A.; Ortiz, M.; Lina, L.; Villalobos, F. J.; PeÑ A, G.; NuÑ Ez-Valdez, M. E.; SoberÓ N, M., and Quintero, R. Characterization of Cry Genes in a Mexican Bacillus Thuringiensis Strain Collection. 1998; 64, (12): 4965-4972. Rec #: 869 Keywords: BACTERIA Notes: Chemical of Concern: CTN

> Abstract: ABSTRACT: Mexico is located in a transition zone between the Nearctic and Neotropical biogeographical regions and contains a rich and unique biodiversity. A total of 496 Bacillus thuringiensis strains were isolated from 503 soil samples collected from the five macroregions of the country. The characterization of the strain collection provided useful information on the ecological patterns of distribution of B. thuringiensis and opportunities for the selection of strains to develop novel bioinsecticidal products. The analysis of the strains was based on multiplex PCR with novel general and specific primers that could detect the cry1, cry3, cry5, cry7, cry8, cry9, cry11, cry12, cry13, cry14, cry21, and cyt genes. The proteins belonging to the Cry1 and Cry9 groups are toxic for lepidopteran insects. The Cry3, Cry7, and Cry8 proteins are active against coleopteran insects. The Cry5, Cry12, Cry13, and Cry14 proteins are nematocidal. The Cry11, Cry21, and Cyt proteins are toxic for dipteran insects. Six pairs of general primers are used in this method. Strains for which unique PCR product profiles were obtained with the general primers were further characterized by additional PCRs with specific primers. Strains containing cry1 genes were the most abundant in our collection (49.5%). Thirty-three different cry1-type profiles were identified. B. thuringiensis strains harboring cry3 genes represented 21.5% of the strains, and 7.9% of the strains contained cry11 and cyt genes. cry7, cry8, and cry9 genes were found in 0.6, 2.4, and 2.6% of the strains, respectively. No strains carrying cry5, cry12, cry13,

cry14, or cry21 genes were found. Finally, 14% of the strains did not give any PCR product and did not react with any polyclonal antisera. Our results indicate the presence of strains that may harbor potentially novel Cry proteins as well as strains with combinations of less frequently observed cry genes. **MESH HEADINGS: Animals** MESH HEADINGS: Bacillus thuringiensis/classification/\*genetics/isolation & amp **MESH HEADINGS: purification** MESH HEADINGS: Bacterial Proteins/\*genetics **MESH HEADINGS: \*Bacterial Toxins MESH HEADINGS: Base Sequence MESH HEADINGS: DNA Primers** MESH HEADINGS: Endotoxins/\*genetics **MESH HEADINGS: Hemolysin Proteins MESH HEADINGS: Larva** MESH HEADINGS: Pest Control, Biological **MESH HEADINGS: Polymerase Chain Reaction** MESH HEADINGS: Soil Microbiology MESH HEADINGS: Spodoptera LANGUAGE: eng

98. ---. Characterization of Cry Genes in a Mexican Bacillus Thuringiensis Strain Collection. 1998; 64, (12): 4965-4972.

Rec #: 869

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Mexico is located in a transition zone between the Nearctic and Neotropical biogeographical regions and contains a rich and unique biodiversity. A total of 496 Bacillus thuringiensis strains were isolated from 503 soil samples collected from the five macroregions of the country. The characterization of the strain collection provided useful information on the ecological patterns of distribution of B. thuringiensis and opportunities for the selection of strains to develop novel bioinsecticidal products. The analysis of the strains was based on multiplex PCR with novel general and specific primers that could detect the cry1, cry3, cry5, cry7, cry8, cry9, cry11, cry12, cry13, cry14, cry21, and cyt genes. The proteins belonging to the Cry1 and Cry9 groups are toxic for lepidopteran insects. The Cry3, Cry7, and Cry8 proteins are active against coleopteran insects. The Cry5, Cry12, Cry13, and Cry14 proteins are nematocidal. The Cry11, Cry21, and Cyt proteins are toxic for dipteran insects. Six pairs of general primers are used in this method. Strains for which unique PCR product profiles were obtained with the general primers were further characterized by additional PCRs with specific primers. Strains containing cry1 genes were the most abundant in our collection (49.5%). Thirty-three different cry1-type profiles were identified. B. thuringiensis strains harboring cry3 genes represented 21.5% of the strains, and 7.9% of the strains contained cry11 and cyt genes. cry7, cry8, and cry9 genes were found in 0.6, 2.4, and 2.6% of the strains, respectively. No strains carrying cry5, cry12, cry13, cry14, or cry21 genes were found. Finally, 14% of the strains did not give any PCR product and did not react with any polyclonal antisera. Our results indicate the presence of strains that may harbor potentially novel Cry proteins as well as strains with combinations of less frequently observed cry genes.

**MESH HEADINGS: Animals** 

MESH HEADINGS: Bacillus thuringiensis/classification/\*genetics/isolation & amp MESH HEADINGS: purification MESH HEADINGS: Bacterial Proteins/\*genetics MESH HEADINGS: \*Bacterial Toxins MESH HEADINGS: Base Sequence MESH HEADINGS: DNA Primers MESH HEADINGS: Endotoxins/\*genetics

MESH HEADINGS: Hemolysin Proteins

MESH HEADINGS: Larva

MESH HEADINGS: Pest Control, Biological MESH HEADINGS: Polymerase Chain Reaction MESH HEADINGS: Soil Microbiology MESH HEADINGS: Spodoptera LANGUAGE: eng

- Bravo-a, H. and Urone, P. The Altitude a Fundamental Parameter in the Use of Air Quality Standards. 1981; 31, (3): 264-265. Rec #: 2753 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: HEEP COPYRIGHT: BIOL ABS. NOTE HUMAN RESPIRATION CAPILLARY AIR POLLUTION MEXICO LANGUAGE: eng
- 100. ---. The Altitude a Fundamental Parameter in the Use of Air Quality Standards. 1981; 31, (3): 264-265. Rec #: 2753 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: HEEP COPYRIGHT: BIOL ABS. NOTE HUMAN RESPIRATION CAPILLARY AIR POLLUTION MEXICO LANGUAGE: eng
- Bravo Cuellar, A.; Homo-Delarche, F., and Orbach-Arbouys, S. Phospholipase A2, an In Vivo Immunomodulator. CEL,BCMINJECT; 1990; 40, (1): 31-38. Rec #: 180 Call Number: NO COC(CTN) Notes: EcoReference No.: 90245

## 102. Bravo-DÍ Az, C.; Gonz&Aacute, and Lez-Romero, E. Monitoring Dediazoniation Product Formation by High-Performance Liquid Chromatography After Derivatization. Rec #: 2825 Keywords: CHEM METHODS

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Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: A derivatization protocol that exploits the rapid reaction between arenediazonium ions and a suitable coupling agent followed by high-performance liquid chromatography analyses of the reaction mixture was employed to determine the product distribution, the rate constants for product formation and the association constant of 4nitrobenzenediazonium, PNBD, ion with beta-cyclodextrin, beta-CD. The derivatization of PNBD with the coupling agent leads to the formation of a stable azo dye that prevents by-side reactions of PNBD with the solvents of the mobile phase, including water, or the metallic parts of the chromatographic system that would eventually lead to erroneous identification and quantification of dediazoniation products. The results show that in the presence of beta-CD, nitrobenzene is formed at the expense of 4-nitrophenol, which is the major product in its absence. The observed rate constants for the interaction between PNBD and beta-CD increase upon increasing [beta-CD] showing a saturation profile indicative of the formation of an inclusion complex between PNBD and beta-CD. By fitting the experimental data to a simplified Lineaweaver-Burk equation, the corresponding association constant and the maximum acceleration rate of beta-CD towards PNBD were estimated. The protocol is applicable under a variety of experimental conditions provided that the rate of the coupling reaction is much faster than that of dediazoniation. MESH HEADINGS: Chromatography, High Pressure Liquid/\*methods MESH HEADINGS: Cyclodextrins/chemistry MESH HEADINGS: Diazonium Compounds/\*chemistry MESH HEADINGS: Hydrogen-Ion Concentration **MESH HEADINGS: Kinetics** MESH HEADINGS: Spectrophotometry, Ultraviolet

MESH HEADINGS: \*beta-Cyclodextrins LANGUAGE: eng

103. ---. Monitoring Dediazoniation Product Formation by High-Performance Liquid Chromatography After Derivatization.

Rec #: 2825

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: A derivatization protocol that exploits the rapid reaction between arenediazonium ions and a suitable coupling agent followed by high-performance liquid chromatography analyses of the reaction mixture was employed to determine the product distribution, the rate constants for product formation and the association constant of 4nitrobenzenediazonium, PNBD, ion with beta-cyclodextrin, beta-CD. The derivatization of PNBD with the coupling agent leads to the formation of a stable azo dye that prevents by-side reactions of PNBD with the solvents of the mobile phase, including water, or the metallic parts of the chromatographic system that would eventually lead to erroneous identification and quantification of dediazoniation products. The results show that in the presence of beta-CD, nitrobenzene is formed at the expense of 4-nitrophenol, which is the major product in its absence. The observed rate constants for the interaction between PNBD and beta-CD increase upon increasing [beta-CD] showing a saturation profile indicative of the formation of an inclusion complex between PNBD and beta-CD. By fitting the experimental data to a simplified Lineaweaver-Burk equation, the corresponding association constant and the maximum acceleration rate of beta-CD towards PNBD were estimated. The protocol is applicable under a variety of experimental conditions provided that the rate of the coupling reaction is much faster than that of dediazoniation. MESH HEADINGS: Chromatography, High Pressure Liquid/\*methods MESH HEADINGS: Cyclodextrins/chemistry MESH HEADINGS: Diazonium Compounds/\*chemistry MESH HEADINGS: Hydrogen-Ion Concentration **MESH HEADINGS: Kinetics** MESH HEADINGS: Spectrophotometry, Ultraviolet MESH HEADINGS: \*beta-Cyclodextrins

104. Bravo, I.; Carvalho, G. S.; Barbosa, M. A., and De Sousa M. Differential Effects of Eight Metal Ions on Lymphocyte Differentiation Antigens in Vitro. 1990; 24, (8): 1059-1068. Rec #: 1218

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In vitro studies were conducted to determine the effects of metal ions known to be released from metallic implants in vivo on the expression of lymphocyte surface antigens. Normal human peripheral blood lymphocytes were exposed to various concentrations of metals ions (Fe3+, Ni2+, Co2+, Mo6+, V5+, Cr6+, Cr3+, and Ti3+) for 30 min at 37eC in a 5% CO2 atmosphere, and then analyzed for their ability to form rosettes with sheep red blood cells. Following this preliminary analysis, lymphocytes were exposed to the metal ions found to inhibit the E-rosette reaction (Fe3+, Ni2+, and Co2+) in order to determine which of the following surface antigens were affected: CD2, CD3, CD4, CD8, CD1, CD22, CD10, and HLA-DR. Our results showed that the in vitro treatment of lymphocytes with Fe3+ or Co2+ caused inhibition of CD2 only, whereas Ni2+ caused inhibition of both CD2 and CD3 antigens. These findings suggest that Fe3+, Co2+, and Ni2+ ions may interfere with T cell activation since MH - CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: HUMAN MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: MINERALS

LANGUAGE: eng

MESH HEADINGS: BIOMEDICAL ENGINEERING MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENGINEERING MESH HEADINGS: ANATOMY MESH HEADINGS: SURGERY MESH HEADINGS: ANATOMY, COMPARATIVE MESH HEADINGS: HISTOLOGY, COMPARATIVE MESH HEADINGS: REGENERATION MESH HEADINGS: TRANSPLANTATION MESH HEADINGS: HEMATOLOGIC DISEASES/PATHOLOGY MESH HEADINGS: HEMATOLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY MESH HEADINGS: ADIPOSE TISSUE MESH HEADINGS: BONE AND BONES MESH HEADINGS: CONNECTIVE TISSUE MESH HEADINGS: DIAGNOSIS MESH HEADINGS: FASCIA **MESH HEADINGS: JOINTS** MESH HEADINGS: DENTAL EQUIPMENT MESH HEADINGS: DENTAL INSTRUMENTS MESH HEADINGS: DENTISTRY/METHODS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HOMINIDAE **KEYWORDS:** Cytology and Cytochemistry-Human **KEYWORDS: Biochemical Studies-Proteins KEYWORDS: Biochemical Studies-Minerals KEYWORDS:** Biophysics-Bioengineering **KEYWORDS:** Anatomy and Histology **KEYWORDS:** Anatomy and Histology **KEYWORDS: Blood KEYWORDS: Blood KEYWORDS:** Bones **KEYWORDS:** Dental and Oral Biology-General **KEYWORDS:** Toxicology-General KEYWORDS: Immunology and Immunochemistry-Immunopathology KEYWORDS: Hominidae LANGUAGE: eng

105. ---. Differential Effects of Eight Metal Ions on Lymphocyte Differentiation Antigens in Vitro. 1990; 24, (8): 1059-1068.
 Rec #: 1218
 Keywords: HUMAN HEALTH
 Notes: Chemical of Concern: CTN
 Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In vitro studies were conducted to

determine the effects of metal ions known to be released from metallic implants in vivo on the expression of lymphocyte surface antigens. Normal human peripheral blood lymphocytes were exposed to various concentrations of metals ions (Fe3+, Ni2+, Co2+, Mo6+, V5+, Cr6+, Cr3+, and Ti3+) for 30 min at 37eC in a 5% CO2 atmosphere, and then analyzed for their ability to form rosettes with sheep red blood cells. Following this preliminary analysis, lymphocytes were exposed to the metal ions found to inhibit the E-rosette reaction (Fe3+, Ni2+, and Co2+) in order to determine which of the following surface antigens were affected: CD2, CD3, CD4, CD8, CD1, CD22, CD10, and HLA-DR. Our results showed that the in vitro treatment of lymphocytes with Fe3+ or Co2+ caused inhibition of CD2 only, whereas Ni2+ caused inhibition of both CD2 and CD3 antigens. These findings suggest that Fe3+, Co2+, and Ni2+ ions may interfere with T cell activation since MH - CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: HUMAN MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: MINERALS MESH HEADINGS: BIOMEDICAL ENGINEERING MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENGINEERING MESH HEADINGS: ANATOMY MESH HEADINGS: SURGERY MESH HEADINGS: ANATOMY, COMPARATIVE MESH HEADINGS: HISTOLOGY, COMPARATIVE MESH HEADINGS: REGENERATION MESH HEADINGS: TRANSPLANTATION MESH HEADINGS: HEMATOLOGIC DISEASES/PATHOLOGY MESH HEADINGS: HEMATOLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY MESH HEADINGS: ADIPOSE TISSUE MESH HEADINGS: BONE AND BONES MESH HEADINGS: CONNECTIVE TISSUE MESH HEADINGS: DIAGNOSIS MESH HEADINGS: FASCIA **MESH HEADINGS: JOINTS** MESH HEADINGS: DENTAL EQUIPMENT MESH HEADINGS: DENTAL INSTRUMENTS MESH HEADINGS: DENTISTRY/METHODS **MESH HEADINGS: POISONING** MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HOMINIDAE **KEYWORDS:** Cytology and Cytochemistry-Human **KEYWORDS: Biochemical Studies-Proteins KEYWORDS: Biochemical Studies-Minerals KEYWORDS:** Biophysics-Bioengineering

KEYWORDS: Anatomy and Histology KEYWORDS: Anatomy and Histology KEYWORDS: Blood KEYWORDS: Blood KEYWORDS: Bones KEYWORDS: Dental and Oral Biology-General KEYWORDS: Toxicology-General KEYWORDS: Immunology and Immunochemistry-Immunopathology KEYWORDS: Hominidae LANGUAGE: eng

106. Bravo, I.; Reguera, B.; Martinez, A., and Fraga, S. First Report of Gymnodinium-Catenatum Graham on the Spanish Mediterranean Coast. 1990: 449-452. Rec #: 1699 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM VENUS-VERRUCOSA CALLISTA-CHIONE SAXITOXIN SHELLFISH HARVESTING MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES MESH HEADINGS: ECOLOGY MESH HEADINGS: MARINE BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: PLANTS MESH HEADINGS: ALGAE MESH HEADINGS: MOLLUSCA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Foods **KEYWORDS:** Botany **KEYWORDS:** Plant Physiology KEYWORDS: Pyrrophyta **KEYWORDS:** Pelecypoda

 107. ---. First Report of Gymnodinium-Catenatum Graham on the Spanish Mediterranean Coast. 1990: 449-452. Rec #: 1699 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM VENUS-VERRUCOSA CALLISTA-CHIONE SAXITOXIN SHELLFISH HARVESTING MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY

LANGUAGE: eng

MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES MESH HEADINGS: ECOLOGY MESH HEADINGS: MARINE BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: PLANTS MESH HEADINGS: ALGAE MESH HEADINGS: MOLLUSCA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Foods **KEYWORDS:** Botany **KEYWORDS:** Plant Physiology **KEYWORDS:** Pyrrophyta **KEYWORDS:** Pelecypoda LANGUAGE: eng

 Bravo, L.; Escolar, G.; Navarro, C.; Fontarnau, R., and Bulbena, O. Effect of Zinc Acexamate on Gastric Lesions Induced by Aspirin: A Morphological Study. 1990; 190, (1/2): 59-65. Rec #: 120 Keywords: HUMAN HEALTH Call Number: NO COC(CTN) Notes: Chemical of Concern: CTN

109. Bravo, L.; Monte, R.; Silva, M.; Ramirez, M.; Garcia, B.; Fernandez, A.; Rossolini, G., and Guglielmetti, P. Acute Diarrhea Associated With Heat-Stable Enteroxin Producing Strains of Vibrio Cholerae Non-01 First Report From Cuba. 1998; 93, (2): 235-256. Rec #: 2582 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CASE STUDY VIBRIO-CHOLERAE HUMAN PATHOGEN STRAIN-NON-O1 INFANT MALE HEAT-STABLE ENTEROTOXIN ACUTE DIARRHEA INFECTION PEDIATRICS DIAGNOSIS VOMITING FEVER DIGESTIVE SYSTEM DISEASE CUBA WEST INDIES MESH HEADINGS: DIAGNOSIS MESH HEADINGS: PATHOLOGY MESH HEADINGS: INFLAMMATION/PATHOLOGY MESH HEADINGS: DIGESTIVE SYSTEM DISEASES/PATHOLOGY MESH HEADINGS: DIGESTIVE SYSTEM/PATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: CHILD DEVELOPMENT MESH HEADINGS: PEDIATRICS MESH HEADINGS: BACTERIA/PHYSIOLOGY MESH HEADINGS: BACTERIA/METABOLISM MESH HEADINGS: BACTERIA MESH HEADINGS: VIBRIONACEAE MESH HEADINGS: HOMINIDAE **KEYWORDS:** Pathology

KEYWORDS: Pathology KEYWORDS: Digestive System-Pathology KEYWORDS: Toxicology-General KEYWORDS: Pediatrics KEYWORDS: Physiology and Biochemistry of Bacteria KEYWORDS: Medical and Clinical Microbiology-Bacteriology KEYWORDS: Vibrionaceae (1992- ) KEYWORDS: Hominidae LANGUAGE: eng

110. ---. Acute Diarrhea Associated With Heat-Stable Enteroxin Producing Strains of Vibrio Cholerae Non-01 First Report From Cuba. 1998; 93, (2): 235-256. Rec #: 2582 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CASE STUDY VIBRIO-CHOLERAE HUMAN PATHOGEN STRAIN-NON-O1 INFANT MALE HEAT-STABLE ENTEROTOXIN ACUTE DIARRHEA INFECTION PEDIATRICS DIAGNOSIS VOMITING FEVER DIGESTIVE SYSTEM DISEASE CUBA WEST INDIES MESH HEADINGS: DIAGNOSIS MESH HEADINGS: PATHOLOGY MESH HEADINGS: INFLAMMATION/PATHOLOGY MESH HEADINGS: DIGESTIVE SYSTEM DISEASES/PATHOLOGY MESH HEADINGS: DIGESTIVE SYSTEM/PATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: CHILD DEVELOPMENT MESH HEADINGS: PEDIATRICS MESH HEADINGS: BACTERIA/PHYSIOLOGY MESH HEADINGS: BACTERIA/METABOLISM MESH HEADINGS: BACTERIA MESH HEADINGS: VIBRIONACEAE MESH HEADINGS: HOMINIDAE **KEYWORDS:** Pathology **KEYWORDS:** Pathology **KEYWORDS:** Digestive System-Pathology **KEYWORDS:** Toxicology-General **KEYWORDS:** Pediatrics **KEYWORDS:** Physiology and Biochemistry of Bacteria KEYWORDS: Medical and Clinical Microbiology-Bacteriology KEYWORDS: Vibrionaceae (1992-) **KEYWORDS:** Hominidae LANGUAGE: eng

Bravo, M.; Lespes, G.; De Gregori, I.; Pinochet, H., and Gautier, M. P. Determination of Organotin Compounds by Headspace Solid-Phase Microextraction-Gas Chromatography-Pulsed Flame-Photometric Detection (Hs-Spme-Gc-Pfpd). Rec #: 1122 Keywords: METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: A method based on Headspace solid-phase microextraction (HS-SPME, with a 100 mum PDMS-fiber) in combination with gas-chromatography and pulsed flamephotometric detection (GC-PFPD) has been investigated for simultaneous determination of eight organotin compounds. Monobutyltin (MBT), dibutyltin (DBT), tributyltin (TBT), monophenyltin (MPhT), and the semi-volatile diphenyltin (DPhT), triphenyltin (TPhT), monooctyltin (MOcT), and dioctyltin (DOcT) were determined after derivatization with sodium tetraethylborate. The conditions used for the extraction and preconcentration step were optimised by experimental design methodology. Tripropyltin (TPrT) and diheptyltin (DHepT) were used as internal standards for quantification of volatile and semi-volatile organotin compounds, respectively. The analytical precision (RSD) for ten successive injections of a standard mixture containing all the organic tin compounds ranged between 2 and 11%. The limits of detection for all the organotin compounds were sub ng (Sn) L(-1) in water and close to ng (Sn) kg(-1) in sediments. The accuracy of the method was evaluated by analysis of two certified reference material (CRM) sediment samples. The HS-SPME-GC-PFPD was then applied to the analysis of three harbour sediment samples. The results showed that headspace SPME is an attractive tool for analysis of organotin compounds in solid environmental matrices. MESH HEADINGS: Chromatography, Gas/methods MESH HEADINGS: Flame Ionization MESH HEADINGS: Gas Chromatography-Mass Spectrometry/instrumentation/\*methods

MESH HEADINGS: Organotin Compounds/\*analysis

- MESH HEADINGS: Reference Standards
- MESH HEADINGS: Reproducibility of Results

MESH HEADINGS: Sensitivity and Specificity

MESH HEADINGS: Time Factors

MESH HEADINGS: Trialkyltin Compounds/analysis

MESH HEADINGS: Volatilization

MESH HEADINGS: Water Pollutants, Chemical/\*analysis

LANGUAGE: eng

112. ---. Determination of Organotin Compounds by Headspace Solid-Phase Microextraction-Gas Chromatography-Pulsed Flame-Photometric Detection (Hs-Spme-Gc-Pfpd).

Rec #: 1122

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: A method based on Headspace solid-phase microextraction (HS-SPME, with a 100 mum PDMS-fiber) in combination with gas-chromatography and pulsed flamephotometric detection (GC-PFPD) has been investigated for simultaneous determination of eight organotin compounds. Monobutyltin (MBT), dibutyltin (DBT), tributyltin (TBT), monophenyltin (MPhT), and the semi-volatile diphenyltin (DPhT), triphenyltin (TPhT), monooctyltin (MOcT), and dioctyltin (DOcT) were determined after derivatization with sodium tetraethylborate. The conditions used for the extraction and preconcentration step were optimised by experimental design methodology. Tripropyltin (TPrT) and diheptyltin (DHepT) were used as internal standards for quantification of volatile and semi-volatile organotin compounds, respectively. The analytical precision (RSD) for ten successive injections of a standard mixture containing all the organic tin compounds ranged between 2 and 11%. The limits of detection for all the organotin compounds were sub ng (Sn) L(-1) in water and close to ng (Sn) kg(-1) in sediments. The accuracy of the method was evaluated by analysis of two certified reference material (CRM) sediment samples. The HS-SPME-GC-PFPD was then applied to the analysis of three harbour sediment samples. The results showed that headspace SPME is an attractive tool for analysis of organotin compounds in solid environmental matrices.

MESH HEADINGS: Chromatography, Gas/methods

MESH HEADINGS: Electrochemistry

MESH HEADINGS: Flame Ionization

MESH HEADINGS: Gas Chromatography-Mass Spectrometry/instrumentation/\*methods

MESH HEADINGS: Organotin Compounds/\*analysis

MESH HEADINGS: Reference Standards

MESH HEADINGS: Reproducibility of Results

- MESH HEADINGS: Sensitivity and Specificity
- MESH HEADINGS: Time Factors
- MESH HEADINGS: Trialkyltin Compounds/analysis

MESH HEADINGS: Volatilization

MESH HEADINGS: Water Pollutants, Chemical/\*analysis LANGUAGE: eng

113. Bravo, M. P.; Espinosa, J., and Del, R. A. Y. Calero J. Occupational Risk Factors for Cancer of the Larynx in Spain. 1990; 37, (4): 477-482.

Rec #: 1725

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Spain is one of the countries with the highest incidence of laryngeal cancer and, together with France, is the country with the lowest percentage of women with this disease. In order to identify the occupational risk factors associated with laryngeal cancer in this country a case-control study was performed. Cases included 85 patients with epidermoid carcinoma of the larynx diagnosed in "La Paz" Hospital, Madrid, between 1985 and 1987. A sample of 170 patients from the same hospital was used as control. The results of the study revealed that 56.5% of larynx cancer patients had a sedentary occupation working in the service sector. Exposure to insecticides or silica were strongest risk factor for laryngeal cancer. An association between laryngeal cancer and exposure to fumes, chemical products, mineral dust, or wood dust was not found.

MESH HEADINGS: HUMAN

MESH HEADINGS: SOCIAL BEHAVIOR

MESH HEADINGS: ECOLOGY MESH HEADINGS: GASES

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: MINERALS

MESH HEADINGS: RESPIRATORY TRACT DISEASES/PHYSIOPATHOLOGY

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: CARCINOGENS

MESH HEADINGS: PUBLIC HEALTH ADMINISTRATION

MESH HEADINGS: STATISTICS

MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES

MESH HEADINGS: AIR POLLUTION

MESH HEADINGS: SOIL POLLUTANTS

MESH HEADINGS: WATER POLLUTION

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE

KEYWORDS: Social Biology

KEYWORDS: Biochemistry-Gases (1970-)

KEYWORDS: Biochemical Studies-General

KEYWORDS: Biochemical Studies-Minerals

KEYWORDS: Respiratory System-Pathology

KEYWORDS: Toxicology-Environmental and Industrial Toxicology

KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis

KEYWORDS: Public Health-Public Health Administration and Statistics

KEYWORDS: Public Health: Environmental Health-Occupational Health

KEYWORDS: Public Health: Environmental Health-Air

KEYWORDS: Pest Control

KEYWORDS: Economic Entomology-Chemical and Physical Control KEYWORDS: Hominidae

LANGUAGE: eng

 114. ---. Occupational Risk Factors for Cancer of the Larynx in Spain. 1990; 37, (4): 477-482. Rec #: 1725 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Spain is one of the countries with the highest incidence of laryngeal cancer and, together with France, is the country with the lowest percentage of women with this disease. In order to identify the occupational risk factors associated with laryngeal cancer in this country a case-control study was performed. Cases included 85 patients with epidermoid carcinoma of the larynx diagnosed in "La Paz" Hospital, Madrid, between 1985 and 1987. A sample of 170 patients from the same hospital was used as control. The results of the study revealed that 56.5% of larynx cancer patients had a sedentary occupation working in the service sector. Exposure to insecticides or silica were strongest risk factor for laryngeal cancer. An association between laryngeal cancer and exposure to fumes, chemical products, mineral dust, or wood dust was not found. MESH HEADINGS: HUMAN MESH HEADINGS: SOCIAL BEHAVIOR MESH HEADINGS: ECOLOGY MESH HEADINGS: GASES MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: MINERALS MESH HEADINGS: RESPIRATORY TRACT DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: PUBLIC HEALTH ADMINISTRATION MESH HEADINGS: STATISTICS MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS: Social Biology** KEYWORDS: Biochemistry-Gases (1970-) **KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Minerals KEYWORDS:** Respiratory System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis **KEYWORDS:** Public Health-Public Health Administration and Statistics KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Hominidae LANGUAGE: eng

- Brecht, M. O.; Datnoff, L. E.; Kucharek, T. A., and Nagata, R. T. Influence of Silicon and Chlorothalonil on the Suppression of Gray Leaf Spot and Increase Plant Growth in St. Augustinegrass. BCM,POPSOIL,ENV,MIXTURE; 2004; 88, (4): 338-344. Rec #: 1380 Call Number: TARGET (CTN) Notes: EcoReference No.: 92028 Chemical of Concern: CTN
- 116. Brenneman, T. B. and Sumner, D. R. Effects of Tractor Traffic and Chlorothalonil Applied via Ground Sprays or Center Pivot Irrigation Systems on Peanut Diseases and Pod Yields. POP. Dep. Plant

Pathol., Univ. Ga., Coastal Plain Exp. Stn., Tifton 31793-0748.//: SOIL,ENV; 1990; 74, (4): 277-279. Rec #: 1830 Call Number: EFFICACY (CTN), TARGET (CTN) Notes: EcoReference No.: 156720 Chemical of Concern: CTN

 Briggs, J.; Whitwell, T.; Fernandez, R. T., and Riley, M. B. Effect of Integrated Pest Management Strategies on Chlorothalonil, Metalaxyl, and Thiophanate-Methyl Runoff at a Container Nursery. 2002. Rec #: 236 Keywords: FATE

Notes: Chemical of Concern: CTN Abstract: ISSN: 0003-1062 Descriptors: Container plant production Descriptors: Fungicide Descriptors: Runoff water

Abstract: Field research was conducted at a container nursery to investigate fungicide movement in runoff water. Fungicides were applied as either a preventative treatment to all container plants, or as a component of an integrated pest management (IPM) program in which fungicides were only applied to plants showing signs of pathogen infestation. Thiophanate-methyl and chlorothalonil were applied in July and August 1998, and metalaxyl was applied in September 1998. Runoff water was sampled on the day after application (first irrigation after pesticide application) through three pulse irrigation cycles. Total amounts of thiophanate-methyl and chlorothalonil in runoff water were 7% and 4%, respectively, of applied amount in July. In August, 2% and 4% of thiophanate-methyl and chlorothalonil were found from the preventative treatment. Of the applied metalaxyl, 25% was detected in runoff water for the first irrigation event after application from the preventative treatment. Metalaxyl is a highly water soluble pesticide and nontarget losses from the granular application contributed to the large amounts detected. Total amounts of thiophanate-methyl, chlorothalonil and metalaxyl detected in runoff from the IPM treatment were 25% of amounts from the preventative treatment. No treatment differences were found in container plant salability or in the number of culls at the end of the study. 35 refs.

English

Publication Type: Journal

Publication Type: Article

Country of Publication: United States

Classification: 92.10.4.9 CROP SCIENCE: Crop Protection: Chemical residues Classification: 92.10.4.6 CROP SCIENCE: Crop Protection: Integrated pest management Plant Science

1998. Runoff water was sampled on the day after application (first irrigation after pesticide

118. ---. Effect of Integrated Pest Management Strategies on Chlorothalonil, Metalaxyl, and Thiophanate-Methyl Runoff at a Container Nursery. 2002.

Rec #: 236 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ISSN: 0003-1062 Descriptors: Container plant production Descriptors: Fungicide Descriptors: Runoff water Abstract: Field research was conducted at a container nursery to investigate fungicide movement in runoff water. Fungicides were applied as either a preventative treatment to all container plants, or as a component of an integrated pest management (IPM) program in which fungicides were only applied to plants showing signs of pathogen infestation. Thiophanate-methyl and chlorothalonil were applied in July and August 1998, and metalaxyl was applied in September

application) through three pulse irrigation cycles. Total amounts of thiophanate-methyl and chlorothalonil in runoff water were 7% and 4%, respectively, of applied amount in July. In August, 2% and 4% of thiophanate-methyl and chlorothalonil were found from the preventative treatment. Of the applied metalaxyl, 25% was detected in runoff water for the first irrigation event after application from the preventative treatment. Metalaxyl is a highly water soluble pesticide and nontarget losses from the granular application contributed to the large amounts detected. Total amounts of thiophanate-methyl, chlorothalonil and metalaxyl detected in runoff from the IPM treatment were 25% of amounts from the preventative treatment. No treatment differences were found in container plant salability or in the number of culls at the end of the study. 35 refs. English Publication Type: Journal Publication Type: Article **Country of Publication: United States** Classification: 92.10.4.9 CROP SCIENCE: Crop Protection: Chemical residues Classification: 92.10.4.6 CROP SCIENCE: Crop Protection: Integrated pest management Plant Science

- Briz, O.; El-Mir, M. Y.; Bravo, P.; Villanueva, G. R., and Marin, J. J. G. Fetal Excretion of the Fluorescent Bile Acid Derivative Cholylglycylamido-Fluorescein (FITC-GC) by the Rat Placenta-Maternal Liver Tandem. ACC,PHYINJECT; 1998; 19, (1): 119-126. Rec #: 220 Call Number: NO COC(CTN) Notes: EcoReference No.: 89806
- Brophy, T. F. and Laing, M. D. Screening of Fungicides for the Control of Downy Mildew on Container-Grown Cabbage Seedlings. 1992; 11, (2): 160-164. Rec #: 97

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Eleven fungicides were screened, over three seasons, for efficacy against **crucifer downy mildew**, Peronospora parasitica, on cabbage seedlings grown in 24-modular polystyrene trays. Starting 10 days after emergence, seedlings were treated with weekly foliar applications of fungicide formulations. Percentage disease severity was assessed weekly using a visual rating scale; the area under the disease progress curve (AUDPC) was calculated for each treatment. A single assessment of final disease severity was an inadequate parameter for comparison of fungicide efficacy. However, AUDPC facilitated clear separation of treatments and provided an integrated measure of disease control. The mixture of cymoxanil and mancozeb was consistently found to be the most effective fungicide against crucifer downy mildew. Other fungicides that provided control included systemics (oxadixyl as a mixture with mancozeb and propamocarb) and protectants (mancozeb, chlorothalonil and cupric hydroxide). All metalaxyl-based fungicides were ineffective. Peronospora parasitica/ fungicides/ cabbage/ seedlings/ cymoxanil/ oxadixyl/ propamocarb/ metalaxyl/ resistance http://www.sciencedirect.com/science/article/B6T5T-49N94JF-2J/2/6e2581492fba1f28b1f67e5f819fc2d7

- Brouwer, D. H.; De Haan, M.; Leenheers, L. H.; De Vreede, S. A. F., and Van Hemmen, J. J. Half-Lives of Pesticides on Greenhouse Crops. 1997; 58, (6): 976-984. Rec #: 140 Keywords: REVIEW Call Number: NO REVIEW Notes: EcoReference No.: 73579 Chemical of Concern: MOM,BTN,CTN,DDVP,MZB,MCB,PPX,TPM
- 122. ---. Half-Lives of Pesticides on Greenhouse Crops. SOIL; 1997; 58, (6): 976-984. Rec #: 1240 Keywords: REVIEW

Call Number: NO EFED CHEM (BTN,TPM), NO REVIEW (CTN,DDVP,MCB,MOM,MZB,PPX) Notes: EcoReference No.: 73579 Chemical of Concern: BTN,CTN,DDVP,MCB,MOM,MZB,PPX,TPM

- 123. ---. Half-Lives of Pesticides on Greenhouse Crops. 1997; 58, (6): 976-984. 215816. Rec #: 8312 Keywords: REVIEW Notes: Chemical of Concern: BTN,CTN,DDVP,MCB,MOM,MZB,PPX,TPM Abstract: NO REVIEW
- Buck, J. W. and Burpee, L. L. The Effects of Fungicides on the Phylloplane Yeast Populations of Creeping Bentgrass. 2002; 48, (6): 522-529. Rec #: 150 Keywords: YEAST Call Number: NO SPECIES(ALL CHEMS),NO YEAST Notes: Chemical of Concern: MYC,PCZ,FTL,IPD,VCZ,TPM,CTN,MZB,AZX
- Bulbena, O.; Culat, J., and Bravo, M. L. Cytoprotective Activity in the Gastric Mucosa of Rats Exposed to Carbon Tetrachloride-Induced Liver Injury. BCM,PHY,CEL,GRO,MORINJECT; 1997; 21, (5): 475-488. Rec #: 230 Call Number: NO COC(CTN),OK(CTC) Notes: EcoReference No.: 89759 Chemical of Concern: CTC
- Burpee, L. L. Control of Dollar Spot of Creeping Bentgrass Caused by an Isolate of Sclerotinia homoeocarpa Resistant to Benzimidazole and Demethylation-Inhibitor Fungicides. POPSOIL,ENV,MIXTURE; 1997; 81, (11): 1259-1263. Rec #: 700 Call Number: TARGET (BMY,CTN,FRM,IPD,PCZ,PPCP,PPCP2011,TDF) Notes: EcoReference No.: 94206 Chemical of Concern: BMY,CTN,FRM,IPD,PCZ,PPCP,TDF

127. Burpee, L. L. Control of Dollar Spot of Creeping Bentgrass Caused by an Isolate of Sclerotinia Homoeocarpa Resistant to Benzimidazole and Demethylation-Inhibitor Fungicides. 1997; 81, (11): 1259-1263. Rec #: 2544 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The effects of fungicides were studied on two isolates of Sclerotinia homoeocarpa that differed in fungicide sensitivity. Concentrations of benzimidazole (benomyl and thiophanate-methyl), demethylation inhibitor (fenarimol, propiconazole, and triadimefon), and nitrile (chlorothalonil) fungicides required to inhibit mycelial growth in vitro by 50 and 90% (effective concentration; EC50,90) were significantly greater for isolate S088 than for isolate S084. No differences were observed in the EC50,90 values of a pyridylaniline (fluazinam) or dicarboximide (iprodione) fungicide. In field tests conducted on creeping bentgrass, S088 had a significantly shorter incubation period than S084 in plots treated with propiconazole applied at 0.2 or 0.8 kg a.i. ha-1 in 1994 or 0.4 kg a.i. ha-1 in 1995, thiophanate-methyl applied at 1.5 or 3.0 kg a.i. ha-1 in 1994 and 1995, or a tank-mix of propiconazole and iprodione applied at 1.6 + 0.8 kg a.i. ha-1 in 1994. No differences in incubat MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE

MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: GRASSES KEYWORDS: Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Ascomycetes KEYWORDS: Gramineae LANGUAGE: eng

 Byrne, J. M.; Hausbeck, M. K., and Latin, R. X. Efficacy and Economics of Management Strategies to Control Anthracnose Fruit Rot in Processing Tomatoes in the Midwest. 1997; 81, (10): 1167-1172.

Rec #: 349 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 0191-2917 Descriptors: AUDPC Descriptors: FAST Descriptors: Fruit quality Descriptors: Fungicide residue Descriptors: Integrated pest management

Abstract: Anthracnose (Colletotrichum coccodes) is the major fungal disease affecting processing tomato fruit in the midwestern United States. Currently available disease management strategies evaluated for controlling anthracnose fruit rot (AFR) on processing tomatoes include genetic resistance and the fungicide chlorothalonil applied according to conventional schedules or a disease-forecasting system (Tom-Cast). Experimental field plots were established in West Lafayette, Indiana, and East Lansing, Michigan, in 1993 to 1995. Chlorothalonil was applied every 7, 10, or 14 days or according to Tom-Cast with a threshold of 20 disease severity values, and was not applied to the control. In Michigan, Phytophthora infestans (1993) and C. coccodes (1993 to 1994) caused 91.8% (1993) and 30.7% (1994) fruit rot in the unsprayed plot. In Indiana, C. coccodes caused 69.8% (1993) and 39.0% (1994) AFR in the unsprayed plot. In 1995, Ohio 8245 (Michigan and Indiana), considered to be less prone to anthracnose, and Ohio 7814 were integrated into the conventional and Tom-Cast-prompted spray programs. Cultivar did not affect the incidence of AFR or foliar blight caused by Septoria lycopersici and Alternaria solani in either location. In 1993 and 1994, chlorothalonil applied at 10-day intervals in Indiana resulted in the highest benefit per hectare (BPH) and return per fungicide dollar (RPFD). In 1995, the highest BPH and RPFD resulted from chlorothalonil applied every 14 days to Ohio 8245 (Michigan). Chlorothalonil applied according to the Tom-Cast program resulted in a level of AFR that was generally not statistically different from the 7-day treatment but was high enough to result in crop rejection and high economic loss in 2 of the 3 years the study was conducted. Based on data from this study, it is not commercially feasible to grow processing tomatoes in Michigan and Indiana without chlorothalonil to protect against AFR even when a resistant cultivar is used. 36 refs.

English

Publication Type: Journal

Publication Type: Article

Country of Publication: United States

Classification: 92.1.1.9 BIOCHEMISTRY: Molecular Biology: Plant/microbe interactions Classification: 92.9.1.1 BIOTECHNOLOGY: Biotechnology and Bioengineering: Genetic engineering

Classification: 92.10.2.4 CROP SCIENCE: Agronomy and Horticulture: Vegetables Classification: 92.10.4.5 CROP SCIENCE: Crop Protection: Biological control Plant Science
- 129. Camel, V. The Determination of Pesticide Residues and Metabolites Using Supercritical Fluid Extraction. 1997; 16, (6): 351-369. Rec #: 170 Keywords: REVIEW Notes: Chemical of Concern: MXC,PN,BPCB,HCB,DS,DMT,AZ,CMPH,FNT,FMP,PRN,CPY,ETN,MP,PIRM,MTM,MVP,EP ,PRT,OMT,TBO,PPHD,MDT,PSM,FNF,CTN,DCPA,ES,DDE,DDT
- 130. ---. The Determination of Pesticide Residues and Metabolites Using Supercritical Fluid Extraction. 1997; 16, (6): 351-369. 139298. Rec #: 8062 Keywords: REFS CHECKED,REVIEW Notes: Chemical of Concern: AZ,CMPH,CPY,CTN,DCPA,DDE,DDT,DMT,DS,EP,EPRN,ES,ETN,FMP,FNF,FNT,HCB,MDT ,MP,MTM,MVP,MXC,OMT,PIRM,PN,PPHD,PRN,PRT,PSM,TBO Abstract: NO REFS CHECKED,NO REVIEW Inst. Natl. Agron. Paris-Grignon, 75231 Paris Cedex 05, France//Trends in analytical chemistry//NO TITLES//
- 131. Canto-Cavalheiro, M. M.; Echevarria, A.; Araujo, C. A. C.; Bravo, M. F.; Santos, L. H. S.; Jansen, A. M., and Leon, L. L. The Potential Effects of New Synthetic Drugs Against Leishmania amazonensis and Trypanosoma cruzi. POPWATER, AQUA; 1997; 90, (362): 51-60. Rec #: 240 Call Number: NO COC(CTN) Notes: EcoReference No.: 89891
- 132. Cantonwine, E. G.; Culbreath, A. K.; Stevenson, K. L.; Kemerait, R. C. Jr.; Brenneman, T. B.; Smith, N. B., and Mullinix, B. G. Jr. Integrated Disease Management of Leaf Spot and Spotted Wilt of Peanut. POPSOIL,ENV,MIXTURE; 2006; 90, (4): 493-500. Rec #: 710
  Call Number: NO ENDPOINT (24DB,ACP,ALSV,BT,CLT,CTN,DFZ,EFL,GYPI,MTC) Notes: EcoReference No.: 92079 Chemical of Concern: 24DB,ACP,ALSV,BT,CLT,CTN,DFZ,EFL,GYPI,MTC
- 133. Caruso, F. L. and Kusek, C. C. Timing Bravo 720 for Cranberry Fruit Rot Control. 1987; 77, (1): 116. Rec #: 1021 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT PHYLLOSTICTA-VACCINII GLOMERELLA-CINGULATA PHYSALOSPORA-VACCINII MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FRUIT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS: Horticulture-Small Fruits**

KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Ascomycetes KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Ericaceae LANGUAGE: eng

134. ---. Timing Bravo 720 for Cranberry Fruit Rot Control. 1987; 77, (1): 116. Rec #: 1021 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT PHYLLOSTICTA-VACCINII GLOMERELLA-CINGULATA PHYSALOSPORA-VACCINII MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FRUIT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS: Horticulture-Small Fruits** KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Ericaceae LANGUAGE: eng

135. Castillo, L. E.; De, L. A. Cruz E, and Ruepert, C. Ecotoxicology and Pesticides in Tropical Aquatic Ecosystems of Central America. 1997; 16, (1): 41-51. Rec #: 2663
Keywords: REVIEW
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Although pesticide use is high in the Central American region, few studies concerning environmental levels and effects of pesticides in aquatic ecosystems have been conducted. In this review 18 studies were identified, most of which deal exclusively with organochlorine residues, but other chemical groups also were studied and found in tropical aquatic ecosystems. Only five studies considered effects of pesticides on aquatic organisms, four of these examined both the presence of pesticides in environmental substrates and field effects. Major research needs include studies on fate and degradation in tropical conditions; acute and chronic toxicity to native species; effects of temperature, humidity, and other characteristics of tropical conditions on toxicity, as well as effects of pesticides on tropical ecosystems.

MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

 136. ---. Ecotoxicology and Pesticides in Tropical Aquatic Ecosystems of Central America. 1997; 16, (1): 41-51. Rec #: 2663

Keywords: REVIEW

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Although pesticide use is high in the Central American region, few studies concerning environmental levels and effects of pesticides in aquatic ecosystems have been conducted. In this review 18 studies were identified, most of which deal exclusively with organochlorine residues, but other chemical groups also were studied and found in tropical aquatic ecosystems. Only five studies considered effects of pesticides on aquatic organisms, four of these examined both the presence of pesticides in environmental substrates and field effects. Major research needs include studies on fate and degradation in tropical conditions; acute and chronic toxicity to native species; effects of temperature, humidity, and other characteristics of tropical conditions on toxicity, as well as effects of pesticides on tropical ecosystems.

MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Ecology **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

137. Castillo, L. E.; Martinez, E.; Ruepert, C.; Savage, C.; Gilek, M.; Pinnock, M., and Solis, E. Water Quality and Macroinvertebrate Community Response Following Pesticide Applications in a Banana Plantation, Limon, Costa Rica. GRO,MOR,POPAQUA; 2006; 367, (1): 418-432. Rec #: 1050
Call Number: NO CONTROL (CBF,TBO), NO EFED CHEM (BTN,CDF), NO ENDPOINT (CBF,TBO), NO MIXTURE (CPY,CTN,MZB), OK (BMY,PCZ,PPCP,PPCP2011) Notes: EcoReference No.: 93203
Chemical of Concern: BMY,BTN,CBF,CDF,CPY,CTN,MZB,PCZ,PPCP,TBO

138. Castillo-Pando, M. S.; Nair, N. G.; Emmett, R. W., and Wicks, T. J. Inhibition in Pycnidial Viability of Phomopsis viticola on Canes In Situ as an Aid to Reducing Inoculum Potential of Cane and Leaf Blight Disease of Grapevines. POP. Natl. Wine Grape Ind. Cent., PO Box 588, Wagga Wagga, NSW 2678, Australia//: ENV; 1997; 26, (1): 21-25. Rec #: 40 Call Number: TARGET (BMY,CTN,CuOH,IPD,MZB) Notes: EcoReference No.: 151159 Chemical of Concern: BMY,CTN,CuOH,IPD,MZB

139. Chahal, G. S. Characterization of Biological and Physical Interactions Among Pesticides and Other Agrochemicals. GRO,POPSOIL,ENV,MIXTURE; 2011: 463 p. (UMI# 3463753). Rec #: 1100 Call Number: NO EFED CHEM (ACF,BORON,BSC,IAZ,IZT,PRC,PTBNa,THFM,TNM), NO ENDPOINT (CLT,FPP,LCF,SXD), NO MIXTURE (ACR,BT,CLNSM,CTN,DMB,DMDP,FMX,FNZ,FSF,GFSNH,GYPK,LCYT,MTC,PQT,PZL,TE Z), OK (24DB,ACP,GYP) Notes: EcoReference No.: 155384 Chemical of Concern: ACF,ACP,ACR,BORON,BSC,BT,CLNSM,CLT,CTN,DMB,DMDP,FMX,FNZ,FPP,FSF,GFSNH ,GYP,GYPK,IAZ,IZT,LCF,LCYT,MTC,PQT,PRC,PTBNa,PZL,SXD,TEZ,THFM,TNM

 140. Chapin, J. W. and Thomas, J. S. Soil Insecticide and Fungicide Treatment Effects on Lesser Cornstalk Borer Injury, White Mold Incidence, and Peanut Yield, 1993. 1994; 19, 247 (No. 97F). Rec #: 200 Keywords: MIXTURE Call Number: NO MIXTURE(CTN,CPY,FNF) Notes: Chemical of Concern: CTN,CPY,FNF

141. Chastagner, G. A. and Riley, K. Occurrence and Control of Benzimidazole and Dicarboximide Resistant Botrytis spp. on Bulb Crops in Western Washington and Oregon. POPENV; 1990; 266, 437-446. Rec #: 1480 Call Number: NO EFED CHEM (ANZ,DCZ,FBM,TPM,Zineb), TARGET (BMY,CAP,CTN,Captan,IPD,MZB,TFR,VCZ,Ziram) Notes: EcoReference No.: 94480 Chemical of Concern: ANZ,BMY,CAP,CTN,Captan,DCZ,FBM,IPD,MZB,TFR,TPM,VCZ,Zineb,Ziram

142. Chastagner, G. A. and Riley, K. Occurrence and Control of Benzimidazole and Dicarboximide Resistant Botrytis-Spp on Bulb Crops in Western Washington and Oregon Usa. 1990; 0, (266): 437-446. Rec #: 1763 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ASIATIC LILY TULIP BENOMYL IPRODIONE ANILAZINE CAPTAFOL CHLOROTHALONIL DINICONAZOLE FERBAM MANCOZEB TRIFORINE ZINEB THIOPHANE METHYL MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Liliaceae LANGUAGE: eng

143. ---. Occurrence and Control of Benzimidazole and Dicarboximide Resistant Botrytis-Spp on Bulb Crops in Western Washington and Oregon Usa. 1990; 0, (266): 437-446. Rec #: 1763 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ASIATIC LILY TULIP BENOMYL IPRODIONE ANILAZINE CAPTAFOL CHLOROTHALONIL DINICONAZOLE FERBAM MANCOZEB TRIFORINE ZINEB THIOPHANE METHYL MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Liliaceae LANGUAGE: eng

 144. Chaves, A.; Shea, D., and Cope, W. G. Environmental Fate of Chlorothalonil in a Costa Rican Banana Plantation. Rec #: 11122 Keywords: FATE Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The environmental fate of chlorothalonil (CHT) and its metabolites were studied under field-variable conditions in a commercial banana plantation in Costa Rica. Weather conditions were representative of a tropical environment and the fungicide applications were typical of those in banana production. The test plots were treated with Bravo 720 at 1.2 l ha(-1) of formulated product. Field persistence of CHT in soil and on banana leaves was measured during five consecutive months and after three aerial applications of the fungicide. Residues were analyzed in soil, sediment, water, banana leaves and drift cards by gas and liquid chromatography coupled to mass spectrometry. In soil and on the surface of banana leaves, CHT dissipated rapidly with half-lives of 2.2 and 3.9 d, respectively. Soil residues persisted and were detected 85 d after application. The main metabolite found in soil, 4-hydroxy-chlorothalonil, accounted for approximately 65% of residues detected and was measured up to 6d after application. **MESH HEADINGS: \*Agriculture** MESH HEADINGS: \*Environmental Monitoring MESH HEADINGS: Fungicides, Industrial/\*analysis MESH HEADINGS: \*Musa/chemistry MESH HEADINGS: Nitriles/\*analysis MESH HEADINGS: Plant Leaves/chemistry MESH HEADINGS: Soil/analysis **MESH HEADINGS: Time Factors** MESH HEADINGS: Tropical Climate eng

145. Cheah, L. H.; Corbin, J. B., and Hartill, W. F. T. Control of Light Leaf Spot of Brassicas (Pyrenopeziza brassicae Sutton & Rawlinson) with Fungicides. GRO,MOR,POPSOIL,ENV; 1981; 24, (3/4): 391-395.
Rec #: 720
Call Number: EFFICACY (CTN), NO EFED CHEM (BTN,DINO,FBM,ILL), OK (BMY,CAP,Captan,CuOH,DCNA,FRM,MLX,MZB,Maneb,TFR,THM), TARGET (CTN) Notes: EcoReference No.: 95657
Chemical of Concern: BMY,BTN,CAP,CTN,Captan,CuOH,DCNA,DINO,FBM,FRM,ILL,MLX,MZB,Maneb,TFR,TH M

- 146. Chin, B. H.; McGloin, J. B.; Spangler, N. L., and Heilman, R. D. Chlorothalonil Equivalents in the Blood and Urine of Rats Following Oral, Endotracheal, and Dermal Administration of 14C-Chlorothalonil. ACCORAL, TOP; 1981; 26, (2): 258-261. Rec #: 270 Call Number: NO CONTROL(CTN) Notes: EcoReference No.: 90051 Chemical of Concern: CTN
- 147. Choate, J.; Wehtje, G., and Bowen, K. L. Interaction of Paraquat-Based Weed Control with Chlorothalonil-Based Disease Control in Peanut. PHY. K.L. Bowen, Dept. of Plant Pathology, Auburn University, 209 Life Sciences Bldg., Auburn, AL 36849: SOIL,ENV; 1998; 11, (2): 151-152,191, 195.
  Rec #: 140
  Call Number: OK(PQT,24DB),NO CROP(CTN)
  Notes: EcoReference No.: 63773
  Chemical of Concern: 24DB,CTN,PQT

148. Chongo, G.; Bernier, C. C., and Buchwaldt, L. Integrated Control of Anthracnose of Lentil Using Partial Resistance and Fungicide Applications. 1998; 88, (9 suppl.): S110. Rec #: 2651 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT LENS-CULINARIS COLLETOTRICHUM-TRUNCATUM LENTIL HOST PARTIAL **RESISTANCE PLANT PATHOGEN PEST MANAGEMENT HORTICULTURE** ANTHRACNOSE CHLOROTHALONIL FUNGICIDE FUNGAL DISEASE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: LEGUMES KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control KEYWORDS: Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Leguminosae LANGUAGE: eng

 149. ---. Integrated Control of Anthracnose of Lentil Using Partial Resistance and Fungicide Applications. 1998; 88, (9 suppl.): S110. Rec #: 2651

Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT LENS-CULINARIS COLLETOTRICHUM-TRUNCATUM LENTIL HOST PARTIAL RESISTANCE PLANT PATHOGEN PEST MANAGEMENT HORTICULTURE ANTHRACNOSE CHLOROTHALONIL FUNGICIDE FUNGAL DISEASE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: LEGUMES KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Leguminosae LANGUAGE: eng

150. Chongo, G.; Buchwaldt, L.; Gossen, B. D.; LaFond, G. P.; May, W. E.; Johnson, E. N., and Hogg, T. Foliar Fungicides to Manage Ascochyta Blight [Ascochyta rabiei] of Chickpea in Canada. POP,PHY. G. Chongo, Department of Plant Sciences, University of Saskatchewan, 51 Campus Drive, Saskatoon, Sask. S7N 5A8, Canada: SOIL,ENV,MIXTURE; 2003; 25, (2): 135-142. Rec #: 150 Call Number: OK(AZX),NO CROP(MZB,CTN) Notes: EcoReference No.: 81489 Chemical of Concern: AZX,CTN,MZB

151. Clarke, E. D.; Greenhow, D. T., and Adams, D. Metabolism-Related Assays and Their Application to Agrochemical Research: Reactivity of Pesticides With Glutathione and Glutathione Transferases. 1998; 54, (4): 385-393. Rec #: 2327 Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. An HPLC-based assay system has been developed to measure the reactivity of agrochemicals with glutathione (GSH) with and without catalysis by glutathione transferases (GSTs). Metabolism-related parameters based on second-order related rate constants from non-enzymatic GSH and enzymatic GSH + GST assays have been derived for use in structure-activity and structure-reactivity relationship studies of exploratory agrochemicals. The versatility and sensitivity of the assay system has been established using a diverse range of agrochemicals and model compounds, e.g. 4-nitrobenzyl chloride, 1-chloro-2,4-dinitrobenzene, atrazine, acetochlor, fluorodifen, fluazifop-butyl, tridiphane, fluazinam, chlorothalonil and diazinon. For the enzymatic GSH + GST assay, secondorder related rate constants, ratioed to the assay standard, 4-nitrobenzyl chloride to provide a parameter independent of assay conditions, spanned five orders of magnitude, fluazinam being the most reactive and atrazin MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AMINO ACIDS

**MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: COENZYMES MESH HEADINGS: COMPARATIVE STUDY **MESH HEADINGS: ENZYMES** MESH HEADINGS: METABOLISM MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Proteins KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS:** Enzymes-General and Comparative Studies **KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Pest Control LANGUAGE: eng

 152. ---. Metabolism-Related Assays and Their Application to Agrochemical Research: Reactivity of Pesticides With Glutathione and Glutathione Transferases. 1998; 54, (4): 385-393. Rec #: 2327 Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. An HPLC-based assay system has been developed to measure the reactivity of agrochemicals with glutathione (GSH) with and without catalysis by glutathione transferases (GSTs). Metabolism-related parameters based on second-order related rate constants from non-enzymatic GSH and enzymatic GSH + GST assays have been derived for use in structure-activity and structure-reactivity relationship studies of exploratory agrochemicals. The versatility and sensitivity of the assay system has been

established using a diverse range of agrochemicals and model compounds, e.g. 4-nitrobenzyl chloride, 1-chloro-2,4-dinitrobenzene, atrazine, acetochlor, fluorodifen, fluazifop-butyl, tridiphane, fluazinam, chlorothalonil and diazinon. For the enzymatic GSH + GST assay, secondorder related rate constants, ratioed to the assay standard, 4-nitrobenzyl chloride to provide a parameter independent of assay conditions, spanned five orders of magnitude, fluazinam being the most reactive and atrazin MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AMINO ACIDS MESH HEADINGS: PEPTIDES **MESH HEADINGS: PROTEINS** MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: COENZYMES MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: ENZYMES MESH HEADINGS: METABOLISM MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Proteins KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS: Enzymes-General and Comparative Studies KEYWORDS:** Metabolism-General Metabolism **KEYWORDS: Pest Control** LANGUAGE: eng

153. Clendenen, B.; Behe, B. K., and Bowen, K. L. Disease Incidence on Old Garden Roses in the South. 1997; 32, (4): 590. Rec #: 1458 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT DIPLOCARPON ROSAE CERCOSPORA-ROSICOLA BOTRYTIS-CINEREA BLACK SPOT ROSE PLANT PATHOGEN DISEASE INCIDENCE OLD GARDEN ROSES CHLOROTHALONIL FUNGICIDE HORTICULTURAL OIL INFECTION HORTICULTURE PLANT SOUTH USA USA NORTH AMERICA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: LIPIDS/ANALYSIS MESH HEADINGS: LIPIDS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS, MEDICINAL **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Methods-Lipids KEYWORDS: Biochemical Studies-Lipids KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi

KEYWORDS: Pest Control KEYWORDS: Ascomycetes KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Rosaceae LANGUAGE: eng

154. ---. Disease Incidence on Old Garden Roses in the South. 1997; 32, (4): 590.

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155. Cobb, G. S.; Hagan, A. K.; Gilliam, C. H., and Mullen, J. M. Fungicidal Control of Entomosporium Leaf Spot on Photinia. GRO,POPSOIL,ENV,MIXTURE; 1985; 69, (8): 684-685. Rec #: 1250
Call Number: EFFICACY (BMY,IPD,VCZ), NO EFED CHEM (TPM), NO MIXTURE (Maneb,Zn), TARGET (CTN,CuOH,MZB,PCZ,PPCP,PPCP2011,TDF,TFR) Notes: EcoReference No.: 91989
Chemical of Concern: BMY,CTN,CuOH,IPD,MZB,Maneb,PCZ,PPCP,TDF,TFR,TPM,VCZ,Zn

156. Cock, L. J. Potato Blight. 1990; 0, (0): 35-58. Rec #: 1740 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM PHYTOPHTHORA-INFESTANS SYMPTOMS VARIETAL RESISTANCE SANITATION FUNGICIDES MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI

MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: PHYCOMYCETES** MESH HEADINGS: PLANTS **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control **KEYWORDS: Pest Control KEYWORDS:** Phycomycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

157. Cock, L. J. Potato Blight. 1990: 35-58. Rec #: 40 Keywords: REFS CHECKED, REVIEW Call Number: NO EFED CHEM (CMX, TPTH), NO REFS CHECKED (CAP, CTN, CuOH, MLX, MZB, Maneb, ZnO), NO REVIEW (CAP, CTN, CuOH, MLX, MZB, Maneb, ZnO) Notes: Chemical of Concern: CAP, CMX, CTN, CuOH, MLX, MZB, Maneb, TPTH, ZnO

158. Cock, L. J. Potato Blight. 1990; 0, (0): 35-58.

Rec #: 1740 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM PHYTOPHTHORA-INFESTANS SYMPTOMS VARIETAL RESISTANCE SANITATION FUNGICIDES MESH HEADINGS: BIOCHEMISTRY **MESH HEADINGS: VEGETABLES** MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control **KEYWORDS: Pest Control KEYWORDS:** Phycomycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

 159. Cock, L. J. Potato Blight. 1990: 35-58. 111010. Rec #: 5582 Keywords: REFS CHECKED, REVIEW Notes: Chemical of Concern: CAP, CMX, CTN, CuOH, MLX, MZB, Maneb, TPTH, ZnO Abstract: NO REFS CHECKED, NO REVIEW Isbn 0-948404-34-5//Searched FY11 MB//NONE TO ORDER//COMPLETED 11-22-10//

160. Cohen, S. Z.; Nickerson, S.; Maxey, R.; Dupuy, A. Jr, and Senita, J. A. A Ground Water Monitoring Study for Pesticides and Nitrates Associated With Golf Courses on Cape Cod Massachusetts Usa. 1990; 10, (1): 160-173. Rec #: 1181 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM FERTILIZER MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: MINERALS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: SOIL MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Biochemical Studies-Minerals KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-Physics and Chemistry (1970-) KEYWORDS: Soil Science-Fertility and Applied Studies (1970-) **KEYWORDS:** Pest Control LANGUAGE: eng 161. ---. A Ground Water Monitoring Study for Pesticides and Nitrates Associated With Golf Courses on Cape Cod Massachusetts Usa. 1990; 10, (1): 160-173. Rec #: 1181 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM FERTILIZER MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY

- MESH HEADINGS: MINERALS
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- MESH HEADINGS: AIR POLLUTION
- MESH HEADINGS: SOIL POLLUTANTS
- MESH HEADINGS: WATER POLLUTION
- MESH HEADINGS: SOIL
- MESH HEADINGS: FERTILIZERS
- MESH HEADINGS: SOIL
- MESH HEADINGS: HERBICIDES
- MESH HEADINGS: PEST CONTROL
- MESH HEADINGS: PESTICIDES
- **KEYWORDS:** Ecology

KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Minerals KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-Physics and Chemistry (1970- ) KEYWORDS: Soil Science-Fertility and Applied Studies (1970- ) KEYWORDS: Pest Control LANGUAGE: eng

162. Colburn, G. C. and Miller, S. A. Characterization and Management of Rhizoctonia Spp. Pathogenic on Radish. 1998; 88, (9 suppl.): S18. Rec #: 2641 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT RHIZOCTONIA-SPP RAPHANUS-SATIVUS RADISH PLANT PATHOGEN HOST PEST MANAGEMENT HORTICULTURE DAMPING OFF HYPOCOTYL ROT QUADRIS FUNGICIDE BRAVO WEATHER STICK FUNGICIDE SEED TREATMENT FUNGAL DISEASE PEST CONTROL METHOD MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Cruciferae LANGUAGE: eng

163. ---. Characterization and Management of Rhizoctonia Spp. Pathogenic on Radish. 1998; 88, (9 suppl.): S18. Rec #: 2641 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT RHIZOCTONIA-SPP RAPHANUS-SATIVUS RADISH PLANT PATHOGEN HOST PEST MANAGEMENT HORTICULTURE DAMPING OFF HYPOCOTYL ROT QUADRIS FUNGICIDE BRAVO WEATHER STICK FUNGICIDE SEED TREATMENT FUNGAL DISEASE PEST CONTROL METHOD MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE

MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia KEYWORDS: Horticulture-Vegetables KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Cruciferae LANGUAGE: eng

 Collyer, S. D.; Butler, A. J., and Higson, S. Pj. The Electrochemical Determination of N-Nitrosamines at Polymer Modified Electrodes Via an Adsorptive Stripping Voltammetric Regime. 1997; 9, (13): 985-989.

Rec #: 1482

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. An adsorptive linear sweep stripping voltammetric method has been developed for the determination of nitrosamines at polymer modified gold electrodes. N-nitroso-N-butyl-N-propylamine has been quantified over a 10-10 M to 10-6 M concentration range at Nafion modified electrodes. CA coatings inhibited the determination of N-nitroso-N-butyl-N-propylamine, while small enhancements were observed at CAB modified electrodes. This improvement may be due to the anionic butyrate groups within the CAB polymer facilitating nitrosamine sorption. It is postulated, that the insulating effect of the polymer and the incorporation of anionic moieties compete to give either a net enhancement or depreciation of analytical sensitivity. MESH HEADINGS: AMINO ACIDS/ANALYSIS

MESH HEADINGS: AMINO ACIDS/ANALYSIS MESH HEADINGS: PEPTIDES/ANALYSIS MESH HEADINGS: PROTEINS/ANALYSIS MESH HEADINGS: MINERALS/ANALYSIS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: ELECTRICITY MESH HEADINGS: GRAVITATION MESH HEADINGS: MAGNETICS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY KEYWORDS: Biochemical Methods-Proteins KEYWORDS: Biochemical Methods-Minerals KEYWORDS: Biochemical Methods-Minerals KEYWORDS: Biochemical Effects-Electric KEYWORDS: Toxicology-General LANGUAGE: eng

 165. ---. The Electrochemical Determination of N-Nitrosamines at Polymer Modified Electrodes Via an Adsorptive Stripping Voltammetric Regime. 1997; 9, (13): 985-989. Rec #: 1482 Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

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- Conway, K. E.; Motes, J. E., and Foor, C. J. Comparison of Chemical and Cultural Controls for Cercospora Blight on Asparagus and Correlations Between Disease Levels and Yield. POPSOIL,ENV; 1990; 80, (10): 1103-1108. Rec #: 600 Call Number: EFFICACY (CTN,MZB), TARGET (CTN,MZB) Notes: EcoReference No.: 93919 Chemical of Concern: CTN,MZB
- 167. Cook, R. J.; Hims, M. J., and Vaughan, T. B. Effects of Fungicide Spray Timing on Winter Wheat Disease Control. POP. R.J. Cook, ADAS, Boxworth, Cambridge CB3 8NN, United Kingdom//: SOIL,ENV,MIXTURE; 1999; 48, (1): 33-50. Rec #: 460 Call Number: NO EFED CHEM (CPZ,TDM), NO ENDPOINT (CTN), OK (FTF,PCZ,PPCP,PPCP2011) Notes: EcoReference No.: 68643 Chemical of Concern: CPZ,CTN,FTF,PCZ,PPCP,TDM
- 168. Cook, R. T. A. Control of Glomerella cingulata f. sp. camelliae with Fungicides. POPENV,MIXTURE; 1989; 38, (4): 514-519. Rec #: 710 Call Number: TARGET (BMY,CAP,CTN,Captan) Notes: EcoReference No.: 108784 Chemical of Concern: BMY,CAP,CTN,Captan

169. Cook, T.; McDonald, B., and Merrifield, K. Controlling Moss in Putting Greens: Extensive Testing Shows that Some Products Control Moss Infestation to Some Degree, but a Dense Stand of Turf is Still the Best Defense. PHY,POPENV; 2002; 70, 103-106. Rec #: 1280
Call Number: NO CONC (CTN,CuS,FeRS,FeS,ZnS), NO CONTROL (CTN,CuOH,CuS,FeRS,FeS,ZnS), NO ENDPOINT (CTN,CuOH,CuS,FeRS,FeS,ZnS) Notes: EcoReference No.: 156673
Chemical of Concern: CTN,CuOH,CuS,FeRS,FeS,ZnS

170. Coscoll+á, Clara; Colin, Patrice; Yahyaoui, Abderrazak; Petrique, Olivier; Yus+á, Vicent; Mellouki, Abdelwahid, and Pastor, Agustin. Occurrence of currently used pesticides in ambient air of Centre Region (France). 2010 Oct; 44, (32): 3915-3925. Rec #: 610 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: Ambient air samples were collected, from 2006 to 2008 at three rural and two urban sites in Centre Region (France) and analyzed for 56 currently used pesticides (CUPs), of which 41 were detected. The four CUPs most frequently detected were the herbicides trifluralin, acetochlor and pendimethalin and the fungicide chlorothalonil, which were found with frequencies ranging between 52 and 78%, and with average concentrations of 1.93, 1.32, 1.84 and 12.15 ng mFęĆ3, respectively. Among the detected pesticides, concentrations of eight fungicides (spiroxamine, fenpropimorph, cyprodinil, tolyfluanid, epoxiconazole, vinchlozolin, fluazinam, fludioxinil), two insecticides (propargite, ethoprophos), and one herbicide (oxyfluorfen) are, to our knowledge, reported for the first time in the literature. Pesticides/ Air/ Occurrence/ Temporal variations

- 171. Cranshaw, W. and Schweissing, F. Evaluation of Adjuvants and Co-Applied Pesticides on Onion Thrips Control, 1996. POPENV; 1997; 22, 139 (No. 65E). Rec #: 290 Call Number: OK(LCYT),NO MIXTURE(CTN) Notes: EcoReference No.: 90241 Chemical of Concern: CTN,LCYT
- 172. Creffield, J. W. and Chew, N. Efficacy of Chlorothalonil and Chlorothalonil plus Chlorpyrifos Against Termite Attack. BEH,MORENV,MIXTURE,ORAL; 1995; 45, (2): 46-50. Rec #: 510
   Call Number: NO EFED CHEM (TOL), NO ENDPOINT (As,CPY,CTN,Cr,Cu) Notes: EcoReference No.: 89751
   Chemical of Concern: As,CPY,CTN,Cr,Cu,TOL

173. Cripe, C. R. and Pritchard, P. H. Aquatic Test Systems for Studying the Fate of Xenobiotic Compounds. 1990; 13th symposium, atlanta, georgia, usa, april 16-18, 1989. Vii+378p. Astm: philadelphia, pennsylvania, usa. Illus. Maps. Isbn 0-8031-1460-5.; 0, (0): 29-47. Rec #: 1743 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MICROORGANISMS TOXICOLOGY BIODEGRADATION MATHEMATICAL MODEL BIOTECHNOLOGY MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY **MESH HEADINGS: MATHEMATICS** MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOMEDICAL ENGINEERING MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENGINEERING MESH HEADINGS: BIOPHYSICS MESH HEADINGS: CYBERNETICS MESH HEADINGS: METABOLISM MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: MICROBIOLOGICAL TECHNIQUES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIODEGRADATION MESH HEADINGS: INDUSTRIAL MICROBIOLOGY MESH HEADINGS: MICROBIOLOGY **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-Bioengineering KEYWORDS: Biophysics-Biocybernetics (1972-) **KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Microbiological Apparatus KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Food and Industrial Microbiology-Biodegradation and Biodeterioration **KEYWORDS:** Microorganisms-Unspecified LANGUAGE: eng

174. ---. Aquatic Test Systems for Studying the Fate of Xenobiotic Compounds. 1990; 13th symposium, atlanta, georgia, usa, april 16-18, 1989. Vii+378p. Astm: philadelphia, pennsylvania, usa. Illus. Maps. Isbn 0-8031-1460-5.; 0, (0): 29-47. Rec #: 1743 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MICROORGANISMS TOXICOLOGY BIODEGRADATION MATHEMATICAL MODEL BIOTECHNOLOGY MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY **MESH HEADINGS: MATHEMATICS** MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOMEDICAL ENGINEERING MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENGINEERING MESH HEADINGS: BIOPHYSICS MESH HEADINGS: CYBERNETICS MESH HEADINGS: METABOLISM MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: MICROBIOLOGICAL TECHNIQUES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIODEGRADATION MESH HEADINGS: INDUSTRIAL MICROBIOLOGY

MESH HEADINGS: MICROBIOLOGY

KEYWORDS: General Biology-Symposia KEYWORDS: Mathematical Biology and Statistical Methods KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-Bioengineering KEYWORDS: Biophysics-Biocybernetics (1972-) KEYWORDS: Metabolism-General Metabolism KEYWORDS: Metabolism-General Metabolism KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Microbiological Apparatus KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Food and Industrial Microbiology-Biodegradation and Biodeterioration KEYWORDS: Microorganisms-Unspecified LANGUAGE: eng

175. Cruz, Christian D.; Mills, Dennis; Paul, Pierce A., and Dorrance, Anne E. Impact of Brown Spot Caused by Septoria glycines on Soybean in Ohio. 2010; 94, (7): 820-826. Rec #: 12262

ec #: 12262

Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN

Abstract: Abstract: Brown spot, caused by Septoria glycines, is the most common foliar disease of soybean in Ohio, but its economic impact has not been assessed on modern cultivars. Therefore, the objectives of this study were to (i) evaluate the effect of S. glycines on soybean yield and (ii) evaluate the efficacy of strobilurin- and triazole-based fungicides on the control of brown spot. Yield loss associated with S. glycines was determined using weekly applications of chlorothalonil. The efficacy of azoxystrobin, pyraclostrobin, tebuconazole, and flutriafol alone and in combinations were also assessed using applications at the R3 and R5 growth stages at two locations over 3 years. Significantly different levels of brown spot developed following applications of chlorothalonil, with mean yield differences between treated and nontreated plots ranging from 196 to 293 kg/ha. Pyraclostrobin and azoxystrobin applied at the R3 growth stage significantly reduced final levels of brown spot; however, significant increases in yield occurred in only three of the six location-years. Triazoles, flutriafol and tebuconazole, applied at R3 or R5 did not significantly decrease levels of brown spot or impact yield. More data on the accurate timing of fungicides are still required to establish a long-term management program for this disease, and resistance to brown spot should be monitored in soybean cultivar development to prevent future vield losses.

Keywords: Septoria glycines Includes references 1022995701

176. Cu, R. M.; Phipps, P. M., and Stipes, R. J. A Pathogen Growth Response Model for Fungicide Application to Control Cercospora Leafspot of Peanut. 1990; 80, (7): 670.

Rec #: 1720 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT CERCOSPORA-ARACHIDICOLA FUNGUS PLANT CHLOROTHALONIL CROP INDUSTRY AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: OILS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: LEGUMES KEYWORDS: General Biology-Symposia KEYWORDS: Biochemical Studies-General KEYWORDS: Agronomy-Oil Crops KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Leguminosae LANGUAGE: eng

177. ---. A Pathogen Growth Response Model for Fungicide Application to Control Cercospora Leafspot of Peanut. 1990; 80, (7): 670.

Rec #: 1720 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT CERCOSPORA-ARACHIDICOLA FUNGUS PLANT CHLOROTHALONIL CROP INDUSTRY AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: OILS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: LEGUMES KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Agronomy-Oil Crops KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Leguminosae LANGUAGE: eng

178. Culbreath, A. K.; Brenneman, T. B.; Bondari, K.; Reynolds, K. L., and McLean, H. S. Late Leaf Spot, Southern Stem Rot, and Peanut Yield Responses to Rates of Cyproconazole and Chlorothalonil Applied Alone and in Combination. POP. Dep. Plant Pathol., Univ. Ga., Coastal Plain Experiment Station, Tifton 31793-0748, GA, USA.//: SOIL,ENV,MIXTURE; 1995; 79, (11): 1121-1125. Rec #: 1850 Call Number: EFFICACY (CTN), NO EFED CHEM (CPZ), TARGET (CTN) Notes: EcoReference No.: 156703 Chemical of Concern: CPZ,CTN

179. Culbreath, A. K.; Brenneman, T. B.; Shokes, F. M.; Csinos, A. S., and McLean, H. S. Tank-Mix Applications of Cyproconazole and Chlorothalonil for Control of Foliar and Soilborne Diseases of Peanut. POPSOIL,ENV,MIXTURE; 1992; 76, (12): 1241-1245. Rec #: 1650 Call Number: EFFICACY (CTN,PNB), NO EFED CHEM (CPZ), TARGET (CTN,PNB) Notes: EcoReference No.: 70444 Chemical of Concern: CPZ,CTN,PNB

 180. ---. Tank-Mix Applications of Cyproconazole and Chlorothalonil for Control of Foliar and Soilborne Diseases of Peanut. POP,PHYSOIL,ENV,MIXTURE; 1992; 76, (12): 1241-1245. Rec #: 180 Call Number: NO MIXTURE(CPZ,PNB),NO CROP(CTN) Notes: EcoReference No.: 70444 Chemical of Concern: CPZ,CTN,PNB

181. Culbreath, A. K.; Stevenson, K. L., and Brenneman, T. B. Management of Late Leaf Spot of Peanut With Benomyl and Chlorothalonil: a Study in Preserving Fungicide Utility. 2002. Rec #: 227

Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 0191-2917 Descriptors: Fungicide insensitivity Descriptors: Groundnut

Abstract: Recent registration of sterol biosynthesis inhibitor and strobilurin fungicides for control of early (Cercospora arachidicola) and late (Cercosporidium personatum) leaf spot diseases of peanut (Arachis hypogaea) has renewed interest in the potential for loss of disease control due to fungicide resistance. The objectives of this study were to use the systemic fungicide benomyl, the protectant fungicide chlorothalonil, and late leaf spot of peanut as a model system to compare fungicide application strategies for fungicide resistance management. Field experiments were conducted at Tifton and Plains, GA, in 1995 and 1996 to determine the effects of alternate applications, mixtures, and alternating block applications of chlorothalonil and benomyl compared with full-season applications of two rates of chlorothalonil and two rates of benomyl alone on late leaf spot of peanut and on the proportion of the pathogen population resistant to benomyl following the various regimes. Tank mix combinations of half rates of the two fungicides and alternations of the full rates of the two fungicides provided better (P (less-than or equal to) 0.05) control of late leaf spot than full-season applications of either rate of benomyl alone, and were comparable to full rates of chlorothalonil alone. Neither tank mixes nor alternating sprays prevented an increase in the relative frequency of benomyl-resistant isolates compared with other treatments in which benomyl was used. Both mixtures and alternate applications of chlorothalonil and benomyl were effective for management of leaf spot in fields where benomyl alone did not provide season-long leaf spot control.

26 refs.

English

Publication Type: Journal

Publication Type: Article

Country of Publication: United States

Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi

Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi - general Plant Science

182. Cushman, K. E.; Evans, W. B.; Ingram, D. M.; Gerard, P. D.; Straw, R. A.; Canaday, C. H.; Wyatt, J. E., and Kenty, M. M. Reduced foliar disease and increased yield of pumpkin regardless of management approach or fungicide combinations. 2007; 17, (1): 56-61. Rec #: 12292 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN

Abstract: Abstract: Small- and large-scale farmers must often decide when to begin application of fungicides, either before the onset of disease as a preventative treatment or after disease becomes evident in the field. Growers also must decide about products that claim to enhance fungicide efficacy when added to the spray mixture. A study was conducted during the summer of 2002 to investigate control of foliar diseases of vine crops (Cucurbita spp.) with low-input (LI) or highinput (HI) management approaches and six fungicide/spray combinations at four locations in southeastern United States. Fungicide applications began for LI when leaf disease first became evident and for HI about 20 days after seeding. Both approaches continued applications at 7- to 10-day intervals until harvest. Spray treatments consisted of a water-only control or one of six combinations of azoxystrobin/chlorothalonil alone or in combination with potassium bicarbonate, foliar phosphite (0N-12.2P-21.6K), or foliar nitrogen (25N-0P-0K). Azoxystrobin was applied in rotation with chlorothalonil for all treatments except the control. Seeds of 'Lil' Goblin' pumpkin (Cucurbita pepo) were planted July to August and fruit harvested October to November, depending on location. Plants were rated twice for powdery mildew (Sphaerotheca fuliginea and Erysiphe cichoracearum) and downy mildew (Pseudoperonospora cubensis). HI did not significantly increase yield compared with LI. All fungicide treatments significantly increased yield and reduced foliar diseases compared with the water-only control. The simplest of treatments, the azoxystrobin/chlorothalonil rotation without any other chemicals, can be recommended for general use where strobilurin resistance has not been documented. Keywords: high input agriculture Includes references 1022909297

183. Daayf, F. and Platt, H. W. Us-8 and Us-11 Genotypes of Phytophthora Infestans From Potato and Tomato Respond Differently to Commercial Fungicides. 2003. Rec #: 211

Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 1099-209X

Abstract: Isolates of Phytophthora infestans collected in Canada in 1997 from both potatoes and tomatoes, were tested on potato leaf discs for their response to an equal active ingredient concentration (10 (mu)g a.i./mL) of the following commercial fungicides: Acrobat MZ (Dimethomorph and Mancozeb), Ridomil Gold (metalaxyl-m), Dithane (Mancozeb), Curzate (Cymoxanil), Bravo (Chlorothalonil), and Tattoo C (Propamocarb and Chlorothalonil). Relative percent leaf infection values, estimated on fungicide-treated vs fungicide-free leaf discs, were compared among isolates from the US-8 and US-11 genotypes isolated from the two host plants. Based on an equal concentration of each fungicide's active ingredients, variations in relative percent leaf infection were recorded between US-8 and US-11 genotypes, and between potato and tomato isolates within each genotype. Bravo and Tattoo C used with similar active ingredients concentrations were the most inhibitory to all groups of isolates. Dithane and Ridomil Gold provided uniform low inhibition against P. infestans when tested on potato leaf discs. The different behavior of P. infestans isolates from potato vs tomato suggests that management of late blight in these two important crops must take such differences into consideration. In particular, the nature and concentration of the fungicides to be applied must take into account any information available about genotypes present on each crop.

15 refs.

English; Spanish

Publication Type: Journal

Publication Type: Article

Country of Publication: United States

Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi

Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi - general Plant Science

184. ---. Variability in Responses of Us-8 and Us-11 Genotypes of Potato and Tomato Isolates of Phytophthora Infestans to Commercial Fungicides in Vitro. 2002. Rec #: 239 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 1099-209X Descriptors: Late blight Descriptors: Chemical control Descriptors: Fungicide sensitivity Abstract: Isolates of Phytophthora infestans collected in Canada from potato and tomato plants from 1994 to 1998 were tested for their response in vitro to equal active ingredient concentrations (1, 2.5, and 5 (mu)g a.i./mL) of six commercial fungicides: Acrobat MZ (dimethomorph and mancozeb), Ridomil Gold (metalaxyl-m), Dithane (mancozeb), Curzate (cymoxanil), Bravo (chlorothalonil), and Tattoo C (propamocarb and chlorothalonil). Relative mycelial growth of isolates estimated on fungicide-amended vs fungicide-free media was compared among isolates of the US-8 and US-11 genotypes from the two host plants. The effects of these fungicides on spore germination of isolates from the two genotypes were also estimated. Mycelial growth of US-8 and US-11 isolates was most affected by Bravo and Tattoo C, followed by Acrobat, and then Curzate and Dithane. Ridomil Gold was not effective in inhibiting in vitro growth of US-11 isolates at the concentrations tested. Variations in sensitivity to different fungicides among isolates of the same genotype collected in different years were observed. For example, based on 2.5 and 5 (mu)g a.i./mL, potato /US-11 isolates collected from 1995 to 1997 showed increased sensitivity to Curzate and Ridomil Gold, while decreased sensitivity was recorded with Dithane. For US-8 isolates, responses to the fungicides varied according to fungicide and year. Variations were generally not significant for Acrobat, Curzate, Bravo, and Tattoo C over time. Conversely, potato/US-8 isolates from 1995 and 1998 were less sensitive to Dithane and Ridomil Gold than those from 1994, 1996, and 1997. 29 refs. English Publication Type: Journal Publication Type: Article Country of Publication: United States Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi Plant Science

## 185. Dall'Agnol, M.; Bouton, J. H., and Parrott, W. A. Screening Methods to Develop Alfalfa Germplasms Tolerant of Acid, Aluminum Toxic Soils. 11963: 1996; 36, (1): 64-70. Rec #: 240 Keywords: METHODS/ MIXTURE Call Number: NO MIXTURE, Om, Conc, Ere Notes: Chemical of Concern: Al,CTN

186. Datta, S.; Hansen, L.; McConnell, L.; Baker, J.; Lenoir, J., and Seiber, J. N. Pesticides and PCB Contaminants in Fish and Tadpoles From the Kaweah River Basin, California. 1998; 60, (6): 829-836. Rec #: 260 Keywords: SURVEY Call Number: NO CONTROL, ENDPOINT(ALL CHEMS), NO MIXTURE, EFFECT(PCB) Notes: Chemical of Concern: CPY, CTN, DDT, PCB

187. Davis, R. M.; Miyao, E. M.; Mullen, R. J.; Valencia, J.; May, D. M., and Gwynne, B. J. Benefits of Applications of Chlorothalonil for the Control of Black Mold of Tomato. 1997; 81, (6): 601-603. Rec #: 558 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Chlorothalonil was applied 2, 4, 6, 2 and 4, or 4 and 6 weeks prior to tomato harvest in fields in four counties in California over a 3year period to assess the economic benefits of chlorothalonil applications, if any, on the reduction of black mold caused by Alternaria alternata. The percentage of visually infected fruit was significantly reduced across all four sites in 2 of the 3 years. At one location, the incidence of black mold was reduced over 50% in all 3 years of the study by a single application of the fungicide. Overall, the mean yield of marketable fruit was 79.8 metric tons per hectare. An average of 5.1% of the fruit harvested in all locations and years had visible symptoms of black mold. Generally, the most effective treatment was a single application of the fungicide 6 weeks before harvest, with no further benefit from a second application of the fungicide. Based on the cost of the fungicide and its application, a single dose of chlorothalonil applied t MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

188. De Solla, S. R. and Martin, P. A. Absorption of Current Use Pesticides by Snapping Turtle (Chelydra serpentina) Eggs in Treated Soil. ACCENV,MIXTURE; 2011; 85, (5): 820-825. Rec #: 1250
 Call Number: NO CONTROL (ATZ,AZ,CBL,CPY,CTN,Captan,DMT,ES,MTL,SZ), NO ENDPOINT (ATZ,AZ,CBL,CPY,CTN,Captan,DMT,ES,MTL,SZ) Notes: EcoReference No.: 156415
 Chemical of Concern: ATZ,AZ,CBL,CPY,CTN,Captan,DMT,ES,MTL,SZ

 189. De Vreede J Af; Brouwer, D. H.; Stevenson, H., and Van Hemmen Jj. Exposure and Risk Estimation for Pesticides in High-Volume Spraying. 1998; 42, (3): 151-157. Rec #: 1510

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. During twenty applications with a spray pistol of methomyl to chrysanthemums, inhalation exposure as well as potential and actual dermal exposure were monitored using the 'whole-body' method. On the basis of the exposure data, in terms of exposure to the liquid formulation and the spray liquid, the possible health risk for methomyl and thirteen other pesticides, frequently used in ornamentals, was indicatively assessed. From the No-Observed-Adverse-Effect-Level (NOAEL) in animal experiments an Indicative Limit Value (ILV) was derived. The ILV is considered indicative for the limit of daily exposure for a worker which probably gives no rise to adverse health effects. This value is a rough approximation since the database for a proper assessment of such a value is generally incomplete. Assuming that exposure is independent of the pesticide, using a suitable format, the actual observed exposure can be compared with the ILV. To reduce the dermal exposure levels below the IL

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: HOMINIDAE KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Studies KEYWORDS: Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Hominidae LANGUAGE: eng

190. ---. Exposure and Risk Estimation for Pesticides in High-Volume Spraying. 1998; 42, (3): 151-157. Rec #: 1510

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. During twenty applications with a spray pistol of methomyl to chrysanthemums, inhalation exposure as well as potential and actual dermal exposure were monitored using the 'whole-body' method. On the basis of the exposure data, in terms of exposure to the liquid formulation and the spray liquid, the possible health risk for methomyl and thirteen other pesticides, frequently used in ornamentals, was indicatively assessed. From the No-Observed-Adverse-Effect-Level (NOAEL) in animal experiments an Indicative Limit Value (ILV) was derived. The ILV is considered indicative for the limit of daily exposure for a worker which probably gives no rise to adverse health effects. This value is a rough approximation since the database for a proper assessment of such a value is generally incomplete. Assuming that exposure is independent of the pesticide, using a suitable format, the actual observed exposure can be compared with the ILV. To reduce the dermal exposure levels below the IL

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: HOMINIDAE KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Studies KEYWORDS: Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Hominidae LANGUAGE: eng

191. De Waard, M. A. and Van Nistelrooy, J. G. M. Antagonistic and Synergistic Activities of Various Chemicals on the Toxicity of Fenarimol to Aspergillus nidulans. POPENV,MIXTURE; 1982; 13, 279-286. Rec #: 40 Call Number: NO CONTROL (BZO,CBD,CBX,CLNB,CTN,CaCl2,DOD,FRM,Folpet,HCL,Halides,MgCl2,NaCl,NaDC,NaOH, THM), NO EFED CHEM (BTN,ILL,KCl,LEC,NaLS,TBA), NO ENDPOINT (BZO,CBD,CBX,CLNB,CTN,CaCl2,DOD,FRM,Folpet,HCL,Halides,MgCl2,NaCl,NaDC,NaOH, THM), TARGET (BZO,CBD,CBX,CLNB,CTN,CaCl2,DOD,FRM,Folpet,HCL,Halides,MgCl2,NaCl,NaDC,NaOH, THM), TARGET
(BZO,CBD,CBX,CLNB,CTN,CaCl2,DOD,FRM,Folpet,HCL,Halides,MgCl2,NaCl,NaDC,NaOH, THM)
Notes: EcoReference No.: 154254 Chemical of Concern:

BTN,BZO,CBD,CBX,CLNB,CTN,CaCl2,DOD,FRM,Folpet,HCL,Halides,ILL,KCl,LEC,MgCl2,

NaCl,NaDC,NaLS,NaOH,TBA,THM

192. Deb, Debjani; Engel, Bernard a; Harbor, Jon; Hahn, Leighanne; Jae Lim, Kyoung; Zhai, Tong, and Deb, Debjani. Investigating Potential Water Quality Impacts of Fungicides Used to Combat Soybean Rust in Indiana. 2010 Mar; 207, (1-4): 273-288.

Rec #: 11702

Keywords: SURVEY Notes: Chemical of Concern: CTN

Abstract: Abstract: Asian soybean rust (ASR) is a foliar plant disease caused by the fungus Phakopsora pachyrhizi that is potentially devastating for US soybean production. It was first detected in soybean fields in the Midwestern US in October 2006 but did not cause any damage to soybean production then because most of that year's crop had been harvested by the time it appeared. In coming years, it is possible that ASR might enter soybean fields in the Midwest during the growing season and cause significant damage. The only current option for managing soybean rust is to use fungicides, many of which have been approved for use on soybeans by the US Environmental Protection Agency under emergency conditions. Since soybean fields traditionally have not received widespread applications of fungicides, it is important to understand the potential environmental impacts of using large quantities of fungicides to combat a potential ASR outbreak. Currently, the impacts of the fungicides used to combat soybean rust on surface and groundwater resources and on 'off target' species are not fully known. In this study the National Agricultural Pesticide Risk Analysis hydrologic/water quality model was used to predict fungicide concentrations at edge of field and soil water concentrations at bottom of the root zone as a result of fungicide applications to control soybean rust in Indiana. It was also used to evaluate the likelihood of exceeding threshold chronic exposure concentrations of concern for human and aquatic organism health and identify areas of Indiana that are most vulnerable to contamination by fungicides. The model outputs for the different fungicides show spatial variations of fungicide losses in edge of field runoff and to bottom of root zone soil water or shallow groundwater at 5%, 10%, 25%, and 50% probability of exceedence, indicating that some fungicides may be present in concentrations above threshold values of concern for fish and humans. This provides a basis for developing approaches to minimize potential environmental impacts of fungicides, such as prioritizing implementation of best management practices in the most vulnerable areas. Date revised - 2010-02-01. Publication date - Mar 2010. Language of summary - English. Location -USA, Indiana. Pages - 273-288. ProQuest ID - 809530044. Corporate institution author - Deb, Debjani; Engel, Bernard A; Harbor, Jon; Hahn, Leighanne; Jae Lim, Kyoung; Zhai, Tong. DOI -OB-2f543226-6e03-488f-a9cemfgefd101; 12591686; 10.1007/s11270-009-0135-4; 0049-6979; 1573-2932

193. Delvalle, T. C.; Landschoot, P. J., and Kaminski, J. E. Effects of Dew Removal and Mowing Frequency on Fungicide Performance for Dollar Spot Control. 2011; 95, (11): 1427-1432. Rec #: 14312

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: Delvalle, T. C., Landschoot, P. J., and Kaminski, J. E. 2011. Effects of dew removal and mowing frequency on fungicide performance for dollar spot control. Plant Dis. 95:1427-1432. Dollar spot (Sclerotinia homoeocarpa) is a severe disease problem on creeping bentgrass (Agrostis stolonifera) fairways. The objective of this study was to evaluate the effects of dew removal and mowing frequency on fungicide performance for dollar spot control. In 2009 and 2010, an experiment involving daily dew removal or no dew removal, mowing frequency (2, 4, and 6 days week(-1)), and fungicides (chlorothalonil, propiconazole, and iprodione) was conducted on creeping bentgrass maintained as a fairway. Daily dew removal resulted in fewer dollar spot infection centers (IC) compared with not removing dew during late summer 2009 and 2010 for all mowing-frequency and fungicide treatments. As mowing frequency increased from 2 to 6 days week(-1), dollar spot IC decreased when averaged across all fungicide treatments. For all fungicides, daily dew removal increased the number of days needed to reach a 15-IC plot(-1) point of reference when compared with fungicide treatments in which dew was not removed. The number of days required to reach 15 IC varied with fungicide, mowing frequency, and year the test

was conducted. Results demonstrate that dollar spot control with fungicides can be extended when daily dew removal is employed and, in some cases, when mowing frequency is increased on dew-covered turf. Benefits of dew-removal practices on dollar spot and fungicide performance can vary with weather conditions, fungicide, threshold level, and possibly other factors. Keywords: CREEPING BENTGRASS ISI Document Delivery No.: 836KD

194. Demirci, Fikret and Denizhan, Evsel. Paecilomyces lilacinus, a potential biocontrol agent on apple rust mite Aculus, schlechtendali and interactions with some fungicides in vitro. 2010; 38, (2): 125-132. Rec #: 12342

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Keywords: propineb

Includes references 1022992222//Abstract: The apple rust mite Aculus schlechtendali (Nal.) (Acari: Eriophyidae), is a main pest in apple-growing areas in Ankara, Turkey, and chemical control applications have some limitations. Entomopathogenic fungi have a potential for biological control of mites. In this study, an entomopathogenic fungus, Paecilomyces lilacinus (Thom) Samson (Deuteromycota: Hyphomycetes), was first isolated from the mite cadavers on Japanese crab apple leaves and pathogenicity of the fungus was observed in different inoculum densities and relative humidities. The pathogen caused up to 98.22% mortality of the mite population. The effects of some fungicides on the entomopathogenic fungus were determined in in vitro studies. Carbendazim, penconazole and tebuconazole were the most effective fungicides on mycelial growth of P. lilacinus, with EC(50) values under 3 A mu g ml(-1). In spore germination tests, captan, mancozeb, propineb were the most effective fungicides, followed by tebuconazole, penconazole, nuarimol and chlorothalonil. Sulphur could not inhibit the conidia germination totally at 5,000 A mu g ml(-1). Copper oxychloride and fosetyl-al prevented conidia formation at concentrations above 1,000 A mu g ml(-1).

ISI Document Delivery No.: 574FR

195. Desaeger, J. A.; Seebold, K. W., and Csinos, A. S. Effect of Application Timing and Method on Efficacy and Phytotoxicity of 1,3-D, Chloropicrin and Metam-Sodium Combinations in Squash Plasticulture. GRO,POPSOIL,ENV,MIXTURE; 2008; 64, (3): 230-238. Rec #: 1080 Call Number: LITE EVAL CODED (MBCP,MTAS,TC17), NO CONTROL (CTN,CuOH,EFV,GYPI,MOM,MZB,PMR), NO EFED CHEM (SS), NO ENDPOINT (CTN,CuOH,EFV,GYPI,MOM,MZB,PMR) Notes: EcoReference No.: 150365 Chemical of Concern: CTN,CuOH,EFV,GYPI,MBCP,MOM,MTAS,MZB,PMR,SS,TC17

196. Devai, I. and Delaune, R. D. Trapping Efficiency of Various Solid Adsorbents for Sampling and Quantitative Gas Chromatographic Analysis of Carbonyl Sulfide. 1997; 30, (1): 187-198. Rec #: 866
Keywords: METHODS
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The trapping efficiency of fourteen solid adsorbent tubes for sampling trace level of carbonyl sulfide was quantified. A thermal desorption gas chromatographic method for the accurate separation of carbonyl sulfide from other simultaneously collected reduced volatile sulfur gases was developed. Results demonstrated that Silica Gel and Carbotrap 301 were the best solid adsorbent material for trapping carbonyl sulfide if the sweep gas or the sampled atmosphere is dry. Molecular Sieve and Carbosieve SIII (along

with calcium chloride in a drying tube) were the best solid adsorbent for trapping carbonyl sulfide if the sweep gas contains moisture (i.e., normal field sampling conditions).

MESH HEADINGS: BIOCHEMISTRY/METHODS

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: BIOPHYSICS/METHODS

KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Techniques LANGUAGE: eng

197. ---. Trapping Efficiency of Various Solid Adsorbents for Sampling and Quantitative Gas Chromatographic Analysis of Carbonyl Sulfide. 1997; 30, (1): 187-198.

Rec #: 866 Keywords: METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The trapping efficiency of fourteen solid adsorbent tubes for sampling trace level of carbonyl sulfide was quantified. A thermal desorption gas chromatographic method for the accurate separation of carbonyl sulfide from other simultaneously collected reduced volatile sulfur gases was developed. Results demonstrated that Silica Gel and Carbotrap 301 were the best solid adsorbent material for trapping carbonyl sulfide if the sweep gas or the sampled atmosphere is dry. Molecular Sieve and Carbosieve SIII (along with calcium chloride in a drying tube) were the best solid adsorbent for trapping carbonyl sulfide if the sweep gas contains moisture (i.e., normal field sampling conditions). MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques LANGUAGE: eng

- 198. Devi, T. P. and Singh, R. H. Screening of Fungicides Against Seedling Mortality of Blackgram Caused by Macrophomina phaseolina. MOR,POPSOIL,ENV; 1997; 25, (2): 123-127. Rec #: 70
   Call Number: EFFICACY (CBD,CTN,MZB,THM), NO EFED CHEM (TPM), TARGET (CBD,CTN,MZB,THM)
   Notes: EcoReference No.: 151278
   Chemical of Concern: CBD,CTN,MZB,THM,TPM
- 199. Di, H. J. and Aylmore, L. Ag. Modeling the Probabilities of Groundwater Contamination by Pesticides. 1997; 61, (1): 17-23. Rec #: 2772 Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Field soils show significant spatial variations in properties, such as organic matter content, bulk density, and moisture content, that can affect the mobility and persistence and thus fate of organic pesticides in the soil environment. A simple model incorporating the variations in soil and pesticide parameters has been developed to assess the groundwater contamination potential of pesticides. The model is based on linear, equilibrium, and reversible sorption, first-order degradation, and steady piston flow, and allows the unsaturated soil zone to be divided into a number of layers of different thickness and properties. For each input parameter, 500 random data were generated from normal distributions that characterize the variability of the parameters. The fate of 29 pesticides were assessed using soil and environmental conditions of the Swan Coastal Plains of Western Australia and pesticide properties reported in the literature. The predicted pesticide residue fracti MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: CYBERNETICS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION

MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: SOIL MESH HEADINGS: FERTILIZERS **MESH HEADINGS: SOIL** MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Biochemical Studies-General** KEYWORDS: Biophysics-Biocybernetics (1972-) KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-Physics and Chemistry (1970-) KEYWORDS: Soil Science-Fertility and Applied Studies (1970-) **KEYWORDS:** Pest Control LANGUAGE: eng

200. ---. Modeling the Probabilities of Groundwater Contamination by Pesticides. 1997; 61, (1): 17-23.

Rec #: 2772

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Field soils show significant spatial variations in properties, such as organic matter content, bulk density, and moisture content, that can affect the mobility and persistence and thus fate of organic pesticides in the soil environment. A simple model incorporating the variations in soil and pesticide parameters has been developed to assess the groundwater contamination potential of pesticides. The model is based on linear, equilibrium, and reversible sorption, first-order degradation, and steady piston flow, and allows the unsaturated soil zone to be divided into a number of layers of different thickness and properties. For each input parameter, 500 random data were generated from normal distributions that characterize the variability of the parameters. The fate of 29 pesticides were assessed using soil and environmental conditions of the Swan Coastal Plains of Western Australia and pesticide properties reported in the literature. The predicted pesticide residue fracti MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: CYBERNETICS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: SOIL MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Biochemical Studies-General** KEYWORDS: Biophysics-Biocybernetics (1972-) **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-Physics and Chemistry (1970-) KEYWORDS: Soil Science-Fertility and Applied Studies (1970-) **KEYWORDS:** Pest Control LANGUAGE: eng

201. Dich, J.; Zahm, S. H.; Hanberg, A., and Adami, H. O. Pesticides and Cancer (NOT DUPLICATE). 1997; 8,

(3): 420-443.Rec #: 2477Keywords: HUMAN HEALTHNotes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Epidemiologic evidence on the relationship between chemical pesticides and cancer is reviewed. In animal studies, many pesticides are carcinogenic, (eg., organochlorines, creosote, and sulfallate) while others (notably, the organochlorines DDT, chlordane, and lindane) are tumor promoters. Some contaminants in commercial pesticide formulations also may pose a carcinogenic risk. In humans, arsenic compounds and insecticides used occupationally have been classified as carcinogens by the International Agency for Research on Cancer. Human data, however, are limited by the small number of studies that evaluate individual pesticides. Epidemiologic studies, although sometimes contradictory, have linked phenoxy acid herbicides or contaminants in them with soft tissue sarcoma (STS) and malignant lymphoma; organochlorine insecticides are linked with STS, non-Hodgkin's lymphoma (NHL), leukemia, and, less consistently, with cancers of the lung and breast; organophosphorous compounds MESH HEADINGS: HUMAN MESH HEADINGS: SOCIAL BEHAVIOR MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: HEMATOLOGIC DISEASES/PATHOLOGY MESH HEADINGS: HEMATOLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY MESH HEADINGS: UROLOGIC DISEASES/PATHOLOGY MESH HEADINGS: UROLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: RESPIRATORY TRACT DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: GENITALIA/PATHOLOGY MESH HEADINGS: GENITALIA/PHYSIOPATHOLOGY MESH HEADINGS: REPRODUCTION MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: NERVOUS SYSTEM DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: BLOOD MESH HEADINGS: NEOPLASMS MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM MESH HEADINGS: LEUKEMIA MESH HEADINGS: LYMPHOMA MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS:** Social Biology **KEYWORDS: Biochemical Studies-General KEYWORDS: Blood KEYWORDS: Blood KEYWORDS:** Urinary System and External Secretions-Pathology **KEYWORDS:** Respiratory System-Pathology **KEYWORDS:** Reproductive System-Pathology **KEYWORDS:** Integumentary System-Pathology **KEYWORDS:** Nervous System-Pathology **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Neoplasms and Neoplastic Agents-Blood and Reticuloendothelial Neoplasms KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Hominidae LANGUAGE: eng

202. ---. Pesticides and Cancer (NOT DUPLICATE). 1997; 8, (3): 420-443.

Rec #: 2477

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Epidemiologic evidence on the relationship between chemical pesticides and cancer is reviewed. In animal studies, many pesticides are carcinogenic, (eg., organochlorines, creosote, and sulfallate) while others (notably, the organochlorines DDT, chlordane, and lindane) are tumor promoters. Some contaminants in commercial pesticide formulations also may pose a carcinogenic risk. In humans, arsenic compounds and insecticides used occupationally have been classified as carcinogens by the International Agency for Research on Cancer. Human data, however, are limited by the small number of studies that evaluate individual pesticides. Epidemiologic studies, although sometimes contradictory, have linked phenoxy acid herbicides or contaminants in them with soft tissue sarcoma (STS) and malignant lymphoma; organochlorine insecticides are linked with STS, non-Hodgkin's lymphoma (NHL), leukemia, and, less consistently, with cancers of the lung and breast; organophosphorous compounds MESH HEADINGS: HUMAN MESH HEADINGS: SOCIAL BEHAVIOR MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: HEMATOLOGIC DISEASES/PATHOLOGY MESH HEADINGS: HEMATOLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY

MESH HEADINGS: UROLOGIC DISEASES/PATHOLOGY MESH HEADINGS: UROLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: RESPIRATORY TRACT DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: GENITALIA/PATHOLOGY MESH HEADINGS: GENITALIA/PHYSIOPATHOLOGY MESH HEADINGS: REPRODUCTION MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: NERVOUS SYSTEM DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: BLOOD MESH HEADINGS: NEOPLASMS MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM MESH HEADINGS: LEUKEMIA MESH HEADINGS: LYMPHOMA MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE **KEYWORDS:** Social Biology **KEYWORDS: Biochemical Studies-General KEYWORDS: Blood KEYWORDS: Blood** KEYWORDS: Urinary System and External Secretions-Pathology **KEYWORDS:** Respiratory System-Pathology **KEYWORDS:** Reproductive System-Pathology **KEYWORDS:** Integumentary System-Pathology **KEYWORDS:** Nervous System-Pathology **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Neoplasms and Neoplastic Agents-Blood and Reticuloendothelial Neoplasms KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Hominidae LANGUAGE: eng

203. Dickson, D. W. and Hewlett, T. E. Efficacy of Fumigant and Nonfumigant Nematicides for Control of Meloidogyne arenaria on Peanut. POPSOIL,ENV,MIXTURE; 1988; 2, 95-101. Rec #: 530
Call Number: LITE EVAL CODED (ADC), NO CONTROL (CTN,PQT), NO EFED CHEM (VNT), NO ENDPOINT (CTN,PQT), NO MIXTURE (BFL,VNT), OK (13DPE,CPY,DPDP,EP,FMP,MBCP,MITC) Notes: EcoReference No.: 87162
Chemical of Concern: 13DPE,ADC,BFL,CPY,CTN,DPDP,EP,FMP,MBCP,MITC,PQT,VNT

204. ---. Efficacy of Fumigant and Nonfumigant Nematicides for Control of Meloidogyne arenaria on Peanut.

POPSOIL,ENV,MIXTURE; 1988; 2, 95-101. Rec #: 370 Call Number: LITE EVAL CODED(ADC),OK(MB,EP,FMP,CLP),NO ENDPOINT(CPY,PAQT,TARGET-CTN) Notes: EcoReference No.: 87162 Chemical of Concern: PAQT,MB,CPY,ADC,EP,FMP,CTN,CLP

- 205. Dietrich, A. M. and Gallagher, D. L. Fate and Environmental Impact of Pesticides in Plastic Mulch Production Runoff: Field and Laboratory Studies. MORWATER, AQUA; 2002; 50, (15): 4409-4416. Rec #: 380 Keywords: FATE Call Number: OK(Cu), NO ENDPOINT(AZ, CTN) Notes: EcoReference No.: 89824 Chemical of Concern: Cu, AZ, CTN
- 206. Dillard, H. R. and Cobb, A. C. Disease Progress of Black Dot on Tomato Roots and Reduction in Incidence with Foliar Applied Fungicides. POP. HRD1@cornell.edu//H.R. Dillard, Cornell University, New York State Agrl. Experiment Stn., Department of Plant Pathology, Geneva, NY 14456, United States//: ENV; 1997; 81, (12): 1439-1442. Rec #: 810 Call Number: TARGET (CTN,MZB) Notes: EcoReference No.: 64641 Chemical of Concern: CTN,MZB
- 207. ---. Disease Progress of Black Dot on Tomato Roots and Reduction in Incidence with Foliar Applied Fungicides. PHY,POP. H.R. Dillard, Cornell University, New York State Agrl. Experiment Stn., Department of Plant Pathology, Geneva, NY 14456, United States. Email: HRD1@cornell.edu: SOIL,ENV; 1997; 81, (12): 1439-1442. Rec #: 190 Call Number: NO CROP(CTN,MZB) Notes: EcoReference No.: 64641 Chemical of Concern: CTN,MZB
- 208. Dillard, H. R.; Johnston, S. A.; Cobb, A. C., and Hamilton, G. H. An Assessment of Fungicide Benefits for the Control of Fungal Diseases of Processing Tomatoes in New York and New Jersey. POP. H.R. Dillard, Department of Plant Pathology, Cornell University, New York State Agricult. Expt. Stn., Geneva, NY 14456//: SOIL,ENV; 1997; 81, (6): 677-681. Rec #: 410 Call Number: EFFICACY (CTN,MZB), TARGET (CTN,MZB) Notes: EcoReference No.: 81432 Chemical of Concern: CTN,MZB
- 209. ---. An Assessment of Fungicide Benefits for the Control of Fungal Diseases of Processing Tomatoes in New York and New Jersey. PHY,POP. H.R. Dillard, Department of Plant Pathology, Cornell University, New York State Agricult. Expt. Stn., Geneva, NY 14456: SOIL,ENV; 1997; 81, (6): 677-681. Rec #: 200 Call Number: NO CROP(MZB,CTN), NO COC(BFT) Notes: EcoReference No.: 81432 Chemical of Concern: MZB,CTN
- 210. Dolara, P.; Torricelli, F., and Antonelli, N. Cytogenetic Effects on Human Lymphocytes of a Mixture of Fifteen Pesticides Commonly Used in Italy. 1994; 325, (1): 47-51. Rec #: 2134 Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Lymphocytes obtained from 5 healthy donors were incubated with a mixture of 15 pesticides commonly found in foods of central Italy (dithiocarbamates (20.7%), benomyl (19.6%), thiabendazole (14.9%), diphenylamine (14.4%), chlorothalonil (13.1%), procymidone (8.0%), methidathion (2.3%), chlorpyrifos-ethyl (2%), fenarimol (1.9%), parathion-methyl (1%), chlorpropham, parathion, vinchlozolin, chlorfenvinphos and pirimiphos-ethyl (< 1%)). The percent of each pesticide in the mixture was proportional to its average concentration in foods. Incubated with the lymphocytes at a concentration of 1-20 mug/ml the pesticide mixture did not induce significant variations in the number of hypodiploid, hyperdiploid and polyploid cells or in the number of chromosome and chromatid aberrations. On the contrary, we observed a dose-dependent increase in the number of nonsynchronous centromeric separations which reached the level of 37.9% at 20 mug/ml of pesticide mixture in the incubation m MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: HUMAN MESH HEADINGS: GENETICS, MEDICAL MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: DIET MESH HEADINGS: IATROGENIC DISEASE MESH HEADINGS: BLOOD CELLS/ULTRASTRUCTURE MESH HEADINGS: BLOOD CELLS/PHYSIOLOGY MESH HEADINGS: BLOOD CELLS/CHEMISTRY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS:** Cytology and Cytochemistry-Human **KEYWORDS:** Genetics and Cytogenetics-Human **KEYWORDS: Biochemical Studies-General KEYWORDS:** Nutrition-Pathogenic Diets **KEYWORDS: Blood KEYWORDS: Blood KEYWORDS:** Toxicology-Foods **KEYWORDS: Pest Control KEYWORDS:** Hominidae LANGUAGE: eng

 211. ---. Cytogenetic Effects on Human Lymphocytes of a Mixture of Fifteen Pesticides Commonly Used in Italy. 1994; 325, (1): 47-51. Rec #: 2134 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Lymphocytes obtained from 5 healthy donors were incubated with a mixture of 15 pesticides commonly found in foods of central

Italy (dithiocarbamates (20.7%), benomyl (19.6%), thiabendazole (14.9%), diphenylamine (14.4%), chlorothalonil (13.1%), procymidone (8.0%), methidathion (2.3%), chlorpyrifos-ethyl (2%), fenarimol (1.9%), parathion-methyl (1%), chlorpropham, parathion, vinchlozolin, chlorfenvinphos and pirimiphos-ethyl (< 1%)). The percent of each pesticide in the mixture was proportional to its average concentration in foods. Incubated with the lymphocytes at a concentration of 1-20 mug/ml the pesticide mixture did not induce significant variations in the number of hypodiploid, hyperdiploid and polyploid cells or in the number of chromosome and chromatid aberrations. On the contrary, we observed a dose-dependent increase in the number of nonsynchronous centromeric separations which reached the level of 37.9% at 20 mug/ml of pesticide mixture in the incubation m MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: HUMAN MESH HEADINGS: GENETICS, MEDICAL MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: DIET MESH HEADINGS: IATROGENIC DISEASE MESH HEADINGS: BLOOD CELLS/ULTRASTRUCTURE MESH HEADINGS: BLOOD CELLS/PHYSIOLOGY MESH HEADINGS: BLOOD CELLS/CHEMISTRY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS:** Cytology and Cytochemistry-Human **KEYWORDS:** Genetics and Cytogenetics-Human **KEYWORDS: Biochemical Studies-General KEYWORDS:** Nutrition-Pathogenic Diets **KEYWORDS: Blood KEYWORDS: Blood KEYWORDS:** Toxicology-Foods **KEYWORDS:** Pest Control **KEYWORDS:** Hominidae LANGUAGE: eng

212. Doster, M. A.; Milgroom, M. G., and Fry, W. E. Quantification of Factors Influencing Potato Late Blight Suppression and Selection for Metalaxyl Resistance in Phytophthora Infestans: a Simulation Approach. 1990; 80, (11): 1190-1198. Rec #: 614
Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A computer simulation model was validated and used to evaluate strategies for management of potato (Solanum tuberosum) late blight and resistance in Phytophthora infestans to the systemic fungicide metalaxyl. Subjects investigated included the frequency of metalaxyl applications (same total dosage per season),

comparison of mixtures of metalaxyl and the protectant chlorothalonil versus alternations of the two fungicides, dosages of component fungicides in a mixture, timing for a limited number of metalaxyl applications, use of host resistance, and pathogen fitness. The study investigated disease management for foci initiated by single pathogen genotypes. Metalaxyl/chlorothalonil mixtures performed better than alternating metalaxyl and chlorothalonil sprays in supressing both the metalaxyl-sensitive and resistant pathogen when the same total dosages and number of sprays were applied during the season. More frequent sprays applied at lower rates (same total amount of fungi

MESH HEADINGS: COMPUTER SYSTEMS MESH HEADINGS: BIOLOGY MESH HEADINGS: DOCUMENTATION MESH HEADINGS: INFORMATION SYSTEMS **MESH HEADINGS: MATHEMATICS MESH HEADINGS: STATISTICS** MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: CYBERNETICS MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS KEYWORDS: General Biology-Information **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Biochemical Studies-General** KEYWORDS: Biophysics-Biocybernetics (1972-) **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Phycomycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

213. Dubey, S. C. Effect of Different Doses and Sprays of Chlorothalonil on Leaf Spots of Groundnut. 1997; 27, (3): 339-340.
Rec #: 684
Call Number: TARGET (CTN)
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE
ARACHIS-HYPOGAEA CERCOSPORA-ARACHIDICOLA PHAEOISARIOPSIS-PERSONA
GROUNDNUT HOST PLANT PATHOGEN PEST MANAGEMENT AGRONOMY
CHLOROTHALONIL FUNGICIDE LEAF SPOT FUNGAL DISEASE
MESH HEADINGS: OILS
MESH HEADINGS: SOIL
MESH HEADINGS: FUNGI

MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: LEGUMES KEYWORDS: Agronomy-Oil Crops KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Leguminosae LANGUAGE: eng

 214. Dubey, T.; James, R. V., and Stevenson, W. R. The Effect of 15 Fungicides on Viability of Phytophthora Infestans Sporangia in Soil. 1998; 88, (9 suppl.): S23. Rec #: 1526

Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS POTATO PLANT PATHOGEN HOST PEST MANAGEMENT SPORANGIA POTATO TUBER DISC ASSAY CHLOROTHALONIL FUNGICIDE COPPER HYDROXIDE DIMETHOMORPH TRIPHENYLTIN HYDROXIDE TRIPHENYLTIN ACETATE HORTICULTURE VIABILITY SOIL BIOASSAY METHOD MH - CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: SOIL MICROBIOLOGY MESH HEADINGS: VEGETABLES **MESH HEADINGS: FUNGI** MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Soil Microbiology **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Phycomycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

215. ---. The Effect of 15 Fungicides on Viability of Phytophthora Infestans Sporangia in Soil. 1998; 88, (9 suppl.): S23. Rec #: 1526 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS POTATO PLANT PATHOGEN HOST PEST MANAGEMENT SPORANGIA POTATO TUBER DISC ASSAY CHLOROTHALONIL FUNGICIDE COPPER HYDROXIDE DIMETHOMORPH TRIPHENYLTIN HYDROXIDE TRIPHENYLTIN ACETATE HORTICULTURE VIABILITY SOIL BIOASSAY METHOD MH - CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI
MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia KEYWORDS: Soil Microbiology KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Phytopathology-Disease Control KEYWORDS: Phytopathology-Disease Control KEYWORDS: Solanaceae LANGUAGE: eng

 216. ---. Effect of Fungicide on Viability of Phytophthora Infestans Sporangia in Soil. 1997; 87, (6 suppl.): S26. Rec #: 2480

> Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS POTATO PLANT PATHOGEN PEST MANAGEMENT CROP INDUSTRY SPORANGIA COPPER SULFATE FUNGICIDE FLUAZINAM TRIPHENYLTIN ACETATE CHLOROTHALONIL-ZINC HORTICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Phycomycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

217. ---. Effect of Fungicide on Viability of Phytophthora Infestans Sporangia in Soil. 1997; 87, (6 suppl.): S26. Rec #: 2480 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS POTATO PLANT PATHOGEN PEST MANAGEMENT CROP INDUSTRY SPORANGIA COPPER SULFATE FUNGICIDE FLUAZINAM TRIPHENYLTIN ACETATE CHLOROTHALONIL-ZINC HORTICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Phycomycetes KEYWORDS: Solanaceae LANGUAGE: eng

218. Dunn, a M; Julien, G; Ernst, W R; Cook, a; Doe, K G; Jackman, P M, and Dunn, A M. Evaluation of Buffer Zone Effectiveness in Mitigating the Risks Associated With Agricultural Runoff in Prince Edward Island. 2011 Feb 1; 409, (5): 868-882. Rec #: 11612

Keywords: MIXTURE

Notes: Chemical of Concern: CTN

Abstract: Abstract: To minimize the risk posed by runoff from row crops, Prince Edward Island introduced buffer legislation in 2000. The legislation mandates 10-m and 20-m buffers, respectively, for moderate sloped (i.e. 5%) agricultural fields that border streams. Since 2001, Environment Canada has been evaluating the effectiveness of various buffer widths on operational farms in reducing toxicity and contaminant concentrations in runoff. Sample collectors, placed in 44 fields at the field edge (0m), 10m and at distances out to 30m, collected overland flow following rainfall-induced runoff events. Samples were collected within 24 hours of an event and analysed for seven pesticides (endosulfan, chlorothalonil, carbofuran, linuron, metribuzin, metalaxyl, mancozeb), water quality parameters and Daphnia magna toxicity. The 10-m buffer required for moderate sloped fields was effective at reducing contaminant concentrations but not always to less than lethal concentrations to Daphnia magna. Limited data beyond 10m for fields of both slope types precluded making recommendations on a suitable buffer width for shallow sloped fields and evaluating the effectiveness of 20-m buffers for steep sloped fields. When paired data were combined and statistically tested for all fields, the studied pesticides underwent a 52-98% and 68-100% reduction in aqueous and particulate concentrations within 10m and 30m, respectively. In addition, by 10m, soluble phosphorus, nitrate-nitrogen and total suspended solids were reduced by 34%, 38% and 64%, respectively. Results suggest buffer zones on operational farms are capable of achieving contaminant reductions comparable to those reported for controlled experiments. Inconsistent siting of sample collectors beyond 10m limited the evaluation of the effects of field slope and buffer width on buffer effectiveness on working farms. Future studies on buffer efficiency on operational farms should focus on building the data set beyond 10m and evaluating load reductions. Date revised - 2011-04-01. Publication date - Feb 1, 2011. Language of summary - English. Location - Canada, Prince Edward Island. Pages - 868-882. ProQuest ID -860379334. Corporate institution author - Dunn, A M; Julien, G; Ernst, W R; Cook, A; Doe, K G; Jackman, P.M. DOI - ef973e89-e460-48a6-bd18csamfg201; 14366916; CS1146295; 10.1016/j.scitotenv.2010.11.011; 0048-9697

219. Dybing, E.; Sanner, T.; Roelfzema, H.; Kroese, D., and Tennant, R. W. T25: A Simplified Carcinogenic Potency Index: Description of the System and Study of Correlations Between Carcinogenic Potency and Species/Site Specificity and Mutagenicity. 1997; 80, (6): 272-279. Rec #: 290
Keywords: REFS CHECKED/ REVIEW
Call Number: NO REVIEW(ALL CHEMS) Notes: Chemical of Concern:

CF,BNZ,EAC,ETU,FRN,PPO,TCDD,AND,ASCN,Captan,CHD,CTN,DCF,HPT,ISO,LIM,TXP,Z iram

 T25: a Simplified Carcinogenic Potency Index: Description of the System and Study of Correlations Between Carcinogenic Potency and Species/Site Specificity and Mutagenicity. 1997; 80, (6): 272-279. 142698.

> Rec #: 8072 Keywords: REFS CHECKED,REVIEW Notes: Chemical of Concern: AND,ASCN,BNZ,BPH,CF,CHD,CTN,Captan,DCF,DXN,EAC,ETU,FRN,HPT,ISO,PPO,TCDD, TXP,Ziram Abstract: NO REFS CHECKED,NO REVIEW Dep. Environ. Med., Natl. Inst. Public Health, P.O. Box 4404, Torshov, 0403 Oslo, Norway//Pharmacology & toxicology//FY07 MJH 03/02 -COMPLETED 12/07//

221. Edwards, R. J. and Contreras-Balderas, S. Historical Changes in the Ichthyofauna of the Lower Rio Grande (Rio Bravo Del Norte), Texas (Usa) and Mexico. 1991; 36, (2): 210-212.

Rec #: 812

Keywords: NO TOX DATA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Collections of fishes from the lower Rio Grande (Rio Bravo del Norte) during the past 138 years suggest two indigenous faunal assemblages. One fauna is upstream, composed of mostly freshwater species, and the other is a downstream assemblage composed of a mixture of the more abundant upstream elements and more estuarine species. Recent collections in the lower Rio Grande indicate that major alterations in these fish communities have occurred. The upstream fauna has lost many of its characteristic freshwater components; native freshwater species have been replaced by exotic (= non-native) or estuarine forms. The downstream fauna has many fewer freshwater taxa with replacement by estuarine and marine species. These faunal changes appear to be correlated with decreasing stream flows, the proliferation of exotic species, and increases in chemical pollution. Unfortunately, these factors are expected to pose even greater threats to the fishes of the Rio Grande in the future.

MESH HEADINGS: ARCHAEOLOGY MESH HEADINGS: BIOLOGY/HISTORY MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **MESH HEADINGS: FISHES KEYWORDS:** General Biology-History and Archaeology **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pisces-Unspecified LANGUAGE: eng

222. ---. Historical Changes in the Ichthyofauna of the Lower Rio Grande (Rio Bravo Del Norte), Texas (Usa) and Mexico. 1991; 36, (2): 210-212.

Rec #: 812 Keywords: NO TOX DATA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Collections of fishes from the lower Rio Grande (Rio Bravo del Norte) during the past 138 years suggest two indigenous faunal assemblages. One fauna is upstream, composed of mostly freshwater species, and the other is a downstream assemblage composed of a mixture of the more abundant upstream elements and more estuarine species. Recent collections in the lower Rio Grande indicate that major alterations in these fish communities have occurred. The upstream fauna has lost many of its characteristic freshwater components; native freshwater species have been replaced by exotic (= non-native) or estuarine forms. The downstream fauna has many fewer freshwater taxa with replacement by estuarine and marine species. These faunal changes appear to be correlated with decreasing stream flows, the proliferation of exotic species, and increases in chemical pollution. Unfortunately, these factors are expected to pose even greater threats to the fishes of the Rio Grande in the future. MESH HEADINGS: ARCHAEOLOGY MESH HEADINGS: BIOLOGY/HISTORY MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: FISHES **KEYWORDS:** General Biology-History and Archaeology **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pisces-Unspecified LANGUAGE: eng

223. Egea Gonzalez Fj; Castro Cano Ml; Martinez Vidal Jl, and Martinez Galera M. Analyses of Chlorothalonil and Dichlofluanid in Greenhouse Air. 1997; 80, (5): 1091-1097. Rec #: 674
Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A method to sample and analyze

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A method to sample and analyze chlorothalonil and dichlofluanid in greenhouse air was evaluated. Analysis was performed by gas chromatography with electron capture detection and gas chromatography-mass spectrometry. Solid sorbents such as Chromosorb 102, Porapak R, Supelpak-2, Amberlite XAD-2, Amberlite XAD-4, and polyurethane foam were studied. The use of Soxhlet extraction and solvent desorption with sonication to desorb the pesticides from these sorbents were compared. A procedure to generate atmospheres containing known concentrations of these fungicides was established to study sorption capacity and sampling conditions. Breakthrough and storage of pesticides also were studied. Dissipation of analytes in a 24 h period after application was studied

by using personal samplers in a field experiment. MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Studies **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

224. ---. Analyses of Chlorothalonil and Dichlofluanid in Greenhouse Air. 1997; 80, (5): 1091-1097.

Rec #: 674

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A method to sample and analyze chlorothalonil and dichlofluanid in greenhouse air was evaluated. Analysis was performed by gas chromatography with electron capture detection and gas chromatography-mass spectrometry. Solid sorbents such as Chromosorb 102, Porapak R, Supelpak-2, Amberlite XAD-2, Amberlite XAD-4, and polyurethane foam were studied. The use of Soxhlet extraction and solvent desorption with sonication to desorb the pesticides from these sorbents were compared. A procedure to generate atmospheres containing known concentrations of these fungicides was established to study sorption capacity and sampling conditions. Breakthrough and storage of pesticides also were studied. Dissipation of analytes in a 24 h period after application was studied by using personal samplers in a field experiment.

MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY

- MESH HEADINGS: BIOPHYSICS
- MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING
- MESH HEADINGS: OCCUPATIONAL DISEASES
- MESH HEADINGS: AIR POLLUTION
- MESH HEADINGS: SOIL POLLUTANTS
- MESH HEADINGS: WATER POLLUTION
- MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL
- MESH HEADINGS. PEST CONTRO MESH HEADINGS: PESTICIDES
- KEYWORDS: Ecology
- KEYWORDS: Biochemical Studies-General

KEYWORDS: Biophysics-General Biophysical Studies

- KEYWORDS: Toxicology-Environmental and Industrial Toxicology
- KEYWORDS: Public Health: Environmental Health-Air
- **KEYWORDS:** Pest Control

LANGUAGE: eng

225. Egel, D. S. Using Spray Pressure and Nozzle Type to Apply Chlorothalonil Efficiently to Muskmelons Infected With Alternaria Leaf Blight. 1998; 88, (9 suppl.): S25. Rec #: 919

Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT ALTERNARIA-CUCUMERINA MUSKMELON PLANT PATHOGEN HOST PEST MANAGEMENT HORTICULTURE CHLOROTHALONIL FUNGICIDE ALTERNARIA LEAF BLIGHT FLAT FAN NOZZLE HOLLOW CONE NOZZLE FUNGAL DISEASE EQUIPMENT FUNGICIDE APPLICATION MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Methods **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Cucurbitaceae LANGUAGE: eng

226. ---. Using Spray Pressure and Nozzle Type to Apply Chlorothalonil Efficiently to Muskmelons Infected With Alternaria Leaf Blight. 1998; 88, (9 suppl.): S25. Rec #: 919 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT ALTERNARIA-CUCUMERINA MUSKMELON PLANT PATHOGEN HOST PEST MANAGEMENT HORTICULTURE CHLOROTHALONIL FUNGICIDE ALTERNARIA LEAF BLIGHT FLAT FAN NOZZLE HOLLOW CONE NOZZLE FUNGAL DISEASE EQUIPMENT FUNGICIDE APPLICATION MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Methods **KEYWORDS:** Horticulture-Vegetables

KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Cucurbitaceae LANGUAGE: eng

227. Ekstrom, G. and Akerblom, M. Pesticide Management in Food and Water Safety International Contributions and National Approaches. 1990; Berlin, west germany. Illus. Isbn 0-387-97207-2; isbn 3-540-97207-2.; 0, (0): 23-56. Rec #: 1163 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM REVIEW INSECTICIDES HERBICIDES FUNGICIDES HUMAN CANCER RISK MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: GRASSES/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS:** General Biology-Institutions **KEYWORDS: Biochemical Studies-General** KEYWORDS: Food Technology-General **KEYWORDS:** Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Agronomy-Weed Control **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Hominidae LANGUAGE: eng

228. ---. Pesticide Management in Food and Water Safety International Contributions and National Approaches. 1990; Berlin, west germany. Illus. Isbn 0-387-97207-2; isbn 3-540-97207-2.; 0, (0): 23-56.

Rec #: 1163 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM REVIEW INSECTICIDES HERBICIDES FUNGICIDES HUMAN CANCER RISK MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: GRASSES/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE **KEYWORDS:** General Biology-Institutions **KEYWORDS: Biochemical Studies-General KEYWORDS:** Food Technology-General **KEYWORDS:** Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Agronomy-Weed Control **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Hominidae LANGUAGE: eng

229. Elad, Y.; Ayish, N.; Ziv, O., and Katan, J. Control of Gray Mold (Botrytis Cinerea) With Film-Forming Polymers. 1990; 39, (2): 249-254. Rec #: 1705 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Several film-forming polymers

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Several film-forming polymers reduced the amount of grey mould on various corps in a dew chamber and in a plastic house under natural conditions. The polymers wilt Pruf, Biofilm and Colfix reduced germination of conidia and germ tube length of Botrytis cinerea. The most effective inhibition of linear growth of the pathogen on potato dextrose agar was obtained by Safe Pack and Biofilm. All polymers significantly reduced grey mould on detached leaves of Capsicum, Phaseolus, tomato, cucumber, rose and pelargonium. Grey mould on rose flowers was not controlled, apparently due to latent infection. The substances Biofilm and Vapor Gard were applied either alone or with chlorothalonil fungicide on cucumbers plants in a commercial greenhouse. The polymers had no harmful effect to the host. Disease on senescing female fruits of cucumber was reduced by 46-67% with no additive effect to the mixture with fungicides. Stem infection also was reduced. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: VEGETABLES MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS MESH HEADINGS: LEGUMES** MESH HEADINGS: PLANTS, MEDICINAL MESH HEADINGS: PLANTS **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Vegetables **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Cucurbitaceae **KEYWORDS:** Geraniaceae **KEYWORDS:** Leguminosae **KEYWORDS:** Rosaceae **KEYWORDS:** Solanaceae LANGUAGE: eng

- 230. Eli Lilly and Co. Initial Submission: Acute Rat Oral Study With Nuarimol and Chlorothalonil With Cover Letter Dated 080392 and Attachment. 1992: 14 p. (NTIS/OTS0544628). 143021. Rec #: 6512 Keywords: MIXTURE Notes: Chemical of Concern: CTN Abstract: NO MIXTURE CSC holds microfiche//Microfiche processed 4/17/07//Was EcoRef # 90784// (Was ECOREF# 90784)
- 231. ---. Initial Submission: Acute Rat Oral Study With Nuarimol and Chlorothalonil With Cover Letter Dated 080392 and Attachment. 1992: 14 p. (NTIS/OTS0544627). 143022. Rec #: 6522 Keywords: MIXTURE Notes: Chemical of Concern: CTN Abstract: NO MIXTURE CSC holds microfiche//Microfiche processed 4/17/07//Was EcoRef # 90783// (Was ECOREF# 90783)
- 232. Elliott, M. L. Use of Fungicides to Control Surface Algae on Bermudagrass Putting Greens. 1997; 87, (6 suppl.): S27. Rec #: 2481 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT

LYNGBYA NOSTOC OSCILLATORIA BERMUDAGRASS NUISANCE ALGA CROP INDUSTRY PEST MANAGEMENT PUTTING GREENS FOSETYL-AL FUNGICIDE MANCOZEB CHLOROTHALONIL QUATERNARY AMMONIUM SALTS FLORIDA USA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: ALGAE MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: CYANOBACTERIA MESH HEADINGS: CYANOBACTERIA MESH HEADINGS: GRASSES **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Algae (1971-) KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control KEYWORDS: Oscillatoriales (1992-) KEYWORDS: Nostocaceae (1992-) **KEYWORDS:** Gramineae LANGUAGE: eng

 233. ---. Use of Fungicides to Control Surface Algae on Bermudagrass Putting Greens. 1997; 87, (6 suppl.): S27. Rec #: 2481 Keywords: ABSTRACT

Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT LYNGBYA NOSTOC OSCILLATORIA BERMUDAGRASS NUISANCE ALGA CROP INDUSTRY PEST MANAGEMENT PUTTING GREENS FOSETYL-AL FUNGICIDE MANCOZEB CHLOROTHALONIL QUATERNARY AMMONIUM SALTS FLORIDA USA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: ALGAE MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: CYANOBACTERIA MESH HEADINGS: CYANOBACTERIA MESH HEADINGS: GRASSES **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Algae (1971-) **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control KEYWORDS: Oscillatoriales (1992-) KEYWORDS: Nostocaceae (1992-) **KEYWORDS:** Gramineae LANGUAGE: eng

234. Elliott, V. J. and Spurr, H. W Jr. Temporal Dynamics of Chlorothalonil Residues on Peanut Foliage. 1990; 80, (10): 1041. Rec #: 1747 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT ARACHIS-HYPOGAEA PLANT FUNGICIDE CROP INDUSTRY AGRICULTURE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: CEREALS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL **MESH HEADINGS: FUNGI** MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: LEGUMES **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS: Agronomy-Grain Crops** KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Leguminosae LANGUAGE: eng

235. ---. Temporal Dynamics of Chlorothalonil Residues on Peanut Foliage. 1990; 80, (10): 1041.
 Rec #: 1747

Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT ARACHIS-HYPOGAEA PLANT FUNGICIDE CROP INDUSTRY AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: CEREALS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **MESH HEADINGS: LEGUMES KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS: Agronomy-Grain Crops** KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS: Pest Control** 

KEYWORDS: Leguminosae LANGUAGE: eng

236. Emery, K. M. and Scherm, H. Evaluation of Interactions Among Fungicides for Control of Brown Rot. 1998; 88, (9 suppl.): S26. Rec #: 2644 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MONILINIA-FRUCTICOLA PEACH PLANT PATHOGEN HOST PEST MANAGEMENT HORTICULTURE BROWN ROT FUNGICIDE INTERACTIONS PROPICONAZOLE FUNGICIDE CHLOROTHALONIL VEGETATIVE COMPATIBILITY GROUPS PESTICIDES FUNGAL DISEASE SYNERGISM ANTAGONISM GENETIC DIVERSITY **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS, MEDICINAL **KEYWORDS:** General Biology-Symposia KEYWORDS: Horticulture-Temperate Zone Fruits and Nuts KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Rosaceae LANGUAGE: eng 237. ---. Evaluation of Interactions Among Fungicides for Control of Brown Rot. 1998; 88, (9 suppl.): S26. Rec #: 2644 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MONILINIA-FRUCTICOLA PEACH PLANT PATHOGEN HOST PEST MANAGEMENT HORTICULTURE BROWN ROT FUNGICIDE INTERACTIONS PROPICONAZOLE FUNGICIDE CHLOROTHALONIL VEGETATIVE COMPATIBILITY GROUPS PESTICIDES FUNGAL DISEASE SYNERGISM ANTAGONISM GENETIC DIVERSITY MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: FUNGI

MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PREVENTIVE MEDICINE

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS, MEDICINAL KEYWORDS: General Biology-Symposia KEYWORDS: Horticulture-Temperate Zone Fruits and Nuts KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Ascomycetes KEYWORDS: Rosaceae LANGUAGE: eng

238. Emery, K. M.; Scherm, H., and Savelle, A. T. Assessment of Interactions Between Components of Fungicide Mixtures Against Monilinia Fructicola. 2002 Feb; 21, (1): 41-47. Rec #: 49

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Mixtures of fungicides with different modes of action can exhibit synergism, i.e. an inhibition of pathogen growth above that expected from independent action of the mixture components. Two-way mixtures of commercial formulations of propiconazole with either benomyl, captan, chlorothalonil, cyprodinil or vinclozolin were evaluated in vitro for potential synergism in inhibiting Monilinia fructicola, the causal agent of blossom blight and brown rot of stone fruits. Propiconazole was emphasized because of its widespread use and the recent detection of isolates of M. fructicola with reduced sensitivity to this fungicide. Experiments included each active ingredient at low, medium and high concentrations in all possible pairwise combinations. Inhibition of radial growth of two isolates of M. fructicola was not significantly different (P>0.01) from that predicted by a simple model of independent action for any of the fungicideconcentration combinations, indicating absence of synergism between active ingredients. Results were similar when mixtures of propiconazole with either benomyl, chlorothalonil or cyprodinil were evaluated on peach fruit treated with fungicide. While fungicide mixtures are useful in delaying the development of fungicide resistance, they are unlikely to be used in practice unless synergistic interactions allow for applications at reduced concentrations. The absence of synergism suggests little incentive exists for favoring propiconazole-based fungicide mixtures over a rotating schedule of fungicides for control of and resistance management in M. fructicola. Brown rot/ Fungicide mixture/ Monilinia fructicola/ Peach/ Prunus persica http://www.sciencedirect.com/science/article/B6T5T-451NH3V-6/2/850ee661725781a664ebcd462a6774ac

 Engelhard, A. W. Alternaria Pathogenicity and Control on Carnation Marigold and Dusty Miller. 1990; 80, (5): 513-514.

> Rec #: 1702 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT TAGETES-ERECTA SENECIO-CINERARIA DIANTHUS-CARYOPHYLLUS ALTERNARIA-TAGETES ALTERNARIA-DIANTHI ALTERNARIA-SP PLANT FUNGUS CHLOROTHALONIL MANCOZEB IPRODIONE BENOMYL VINCLOZOLIN FUNGICIDES CROP INDUSTRY AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: WATER/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT

MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Plant Physiology **KEYWORDS:** Horticulture-Flowers and Ornamentals **KEYWORDS:** Phytopathology-Parasitism and Resistance **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Chenopodiaceae **KEYWORDS:** Compositae LANGUAGE: eng

240. ---. Alternaria Pathogenicity and Control on Carnation Marigold and Dusty Miller. 1990; 80, (5): 513-514. Rec #: 1702

Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT TAGETES-ERECTA SENECIO-CINERARIA DIANTHUS-CARYOPHYLLUS ALTERNARIA-TAGETES ALTERNARIA-DIANTHI ALTERNARIA-SP PLANT FUNGUS CHLOROTHALONIL MANCOZEB IPRODIONE BENOMYL VINCLOZOLIN FUNGICIDES CROP INDUSTRY AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: WATER/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Plant Physiology **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Parasitism and Resistance **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS: Pest Control** 

KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Chenopodiaceae KEYWORDS: Compositae LANGUAGE: eng

241. ---. New Fungicides That Provide Control of Ascochyta Blight of Chrysanthemum. 1990; 80, (5): 514. Rec #: 1703

> Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT DIDYMELLA-CHRYSANTHEMI ASCOCHYTA-CHRYSANTHEMI PLANT FUNGUS CHLOROTHALONIL MANCOZEB IPRODIONE CROP INDUSTRY AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: GRASSES **MESH HEADINGS: PLANTS KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Gramineae **KEYWORDS:** Compositae LANGUAGE: eng

242. ---. New Fungicides That Provide Control of Ascochyta Blight of Chrysanthemum. 1990; 80, (5): 514.
 Rec #: 1703
 Keywords: ABSTRACT

Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT DIDYMELLA-CHRYSANTHEMI ASCOCHYTA-CHRYSANTHEMI PLANT FUNGUS CHLOROTHALONIL MANCOZEB IPRODIONE CROP INDUSTRY AGRICULTURE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI

MESH HEADINGS: GRASSES MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia KEYWORDS: Biochemical Studies-General KEYWORDS: Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Gramineae KEYWORDS: Compositae LANGUAGE: eng

- 243. EPA/OTS. Initial Submission: Acute Rat Oral Study with Nuarimol and Chlorothalonil with Cover Letter Dated 080392. BEH,MOR,PHYORAL; 1992: NTIS/OTS0544619. Rec #: 450 Call Number: NO CONTROL,MIXTURE(CTN) Notes: EcoReference No.: 91223 Chemical of Concern: CTN
- 244. ---. Initial Submission: Acute Rat Oral Study with Nuarimol and Chlorothalonil with Cover Letter Dated 080392 and Attachment. 1992: NTIS/OTS0544627. Rec #: 300 Keywords: MIXTURE Call Number: NO MIXTURE(CTN) Notes: Chemical of Concern: CTN
- 245. ---. Initial Submission: Acute Rat Oral Study with Nuarimol and Chlorothalonil with Cover Letter Dated 080392 and Attachment. 1992: NTIS/OTS0544628. Rec #: 310 Keywords: MIXTURE Call Number: NO MIXTURE(CTN) Notes: Chemical of Concern: CTN
- 246. ---. Initial Submission: PP523/Tridemorph/Chlorothalonil: Skin Sensitisation Study to the Guinea Pig of a 40/140/400g/L Formulation with Cover Letter Dated 082892. 1992: NTIS/OTS0538454. Rec #: 320
   Keywords: MIXTURE
   Call Number: NO MIXTURE(CTN)
   Notes: Chemical of Concern: CTN
- 247. Erstfeld, K. M. and Chen, C. Y. Comparison of Supercritical Fluid and Soxhlet Extraction Methods for the Determination of Chlorothalonil From Cranberry Bog Soils. 1998; 46, (2): 499-503. Rec #: 507
  Keywords: METHODS
  Notes: Chemical of Concern: CTN
  Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The development and validation of an analytical method to determine the concentration of chlorothalonil from cranberry bog soil using supercritical fluid extraction (SFE) are reported. A self-built supercritical fluid extractor using CO2 as the supercritical fluid (SCF) was used. The recovery of chlorothalonil was optimized by varying extraction temperature, pressure, time (static and dynamic), organic modifiers, and SCF flow rate. This method was then compared to a Soxhlet extraction procedure. SFE had more consistent performance than the Soxhlet extraction method for the recovery of chlorothalonil from the provided cleaner extracts, had shorter extraction is the source of the

times, and used less organic solvent than the Soxhlet extraction method. This result is consistent with other SFE methods for determining pesticides from various environmental matrices. Thus,

SFE is a preferred method for the extraction of chlorothalonil from cranberry bog MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS KEYWORDS:** Methods **KEYWORDS:** Comparative Biochemistry **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS: Soil Science-General** KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ericaceae LANGUAGE: eng

 248. ---. Comparison of Supercritical Fluid and Soxhlet Extraction Methods for the Determination of Chlorothalonil From Cranberry Bog Soils. 1998; 46, (2): 499-503. Rec #: 507

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The development and validation of an analytical method to determine the concentration of chlorothalonil from cranberry bog soil using supercritical fluid extraction (SFE) are reported. A self-built supercritical fluid extractor using CO2 as the supercritical fluid (SCF) was used. The recovery of chlorothalonil was optimized by varying extraction temperature, pressure, time (static and dynamic), organic modifiers, and SCF flow rate. This method was then compared to a Soxhlet extraction procedure. SFE had more consistent performance than the Soxhlet extraction method for the recovery of chlorothalonil from both fortified bog soils and field samples. SFE provided cleaner extracts, had shorter extraction times, and used less organic solvent than the Soxhlet extraction method. This result is consistent with other SFE methods for determining pesticides from various environmental matrices. Thus, SFE is a preferred method for the extraction of chlorothalonil from cranberry bog MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS **MESH HEADINGS: METHODS** MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS KEYWORDS: Methods KEYWORDS: Comparative Biochemistry KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Soil Science-General KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Ericaceae LANGUAGE: eng

249. Eugster, W. ; Moffat, A. M.; Ceschia, E.; Aubinet, M.; Ammann, C.; Osborne, B.; Davis, P. A.; Smith, P.; Jacobs, C.; Moors, E.; Le Dantec, V.; Beziat, P.; Saunders, M.; Jans, W.; Grunwald, T.; Rebmann, C.; Kutsch, W. L.; Czerny, R.; Janous, D.; Moureaux, C.; Dufranne, D.; Carrara, A.; Magliulo, V.; Di Tommasi, P.; Olesen, J. E.; Schelde, K.; Olioso, A.; Bernhofer, C.; Cellier, P.; Larmanou, E.; Loubet, B.; Wattenbach, M.; Marloie, O.; Sanz, M. J.; Sogaard, H., and Buchmann, N. Management effects on European cropland respiration. 2010; 139, (3): 346-362. Rec #: 14372

Keywords: NO TOXICANT

Notes: Chemical of Concern: CTN

Abstract: Abstract: Increases in respiration rates following management activities in croplands are considered a relevant anthropogenic source of CO(2). In this paper, we quantify the impact of management events on cropland respiration fluxes of CO(2) as they occur under current climate and management conditions. Our findings are based on all available CarboEurope IP eddy covariance flux measurements during a 4-year period (2004-2007). Detailed management information was available for 15 out of the 22 sites that contributed flux data, from which we compiled 30 types of management for European-scale comparison. This allowed us to address the question of how management activities influence ecosystem respiration. This was done by comparing respiration fluxes during 7,14, and 28 days after the management with those observed during the matching time period before management. Median increases in respiration ranged from +83% (early season tillage) to -50% (rice paddy flooding and burning of rice residues) on the 28 days time scale, when only management types with a minimum of 7 replications are considered. Most management types showed a large variation among events and between sites, indicating that additional factors other than management alone are also important at a given site. Temperature is the climatic factor that showed best correlation with site-specific respiration fluxes. Therefore, the effect of temperature changes between the time periods before and after management were taken into account for a subset of 13 management types with adequate statistical coverage of at least 5 events during the years 2004-2007. In this comparison, late-season moldboard ploughing (30-45 cm) led to highest median increase in respiration on the 7 days timescale (+43%), which was still +15% in the 28 days comparison. On average, however, management-induced increases in respiration losses from croplands were quite moderate (typically <20% increase over 28 days). An assessment of extreme values in daily respiration fluxes using the Gumbel distribution approach revealed that sites with larger average respiration fluxes also experience the larger extremes in respiration fluxes. This suggests that it is very unlikely that sites that generally have low respiration rates will have exceedingly high respiration rates as a result of certain specific management events. (C) 2010 Elsevier B.V. All rights reserved. Keywords: Ploughing, Tillage, Carbon fluxes, Eddy covariance, Cropland management, ISI Document Delivery No.: 699PO

 250. Evert, D. R.; Bertrand, P. F.; Harrison, K. A., and Young, J. R. Center-Pivot Application of Pesticides to Peaches. 1989; 254, 265-269. 143445. Rec #: 5232 Keywords: MIXTURE Notes: Chemical of Concern: CTN,Captan,EPRN,PRN,VCZ Abstract: NO MIXTURE Second international peach symposium, clemson, south carolina, usa, june 19-23, 1988. Acta hortic (wageningen)//In: 2nd Int.Peach Symp., Jun.19-23, 1988, Clemson, SC, (Wageningen)//

251. Feng, Qianqian; Xu, Ying; Zhou, Youxiang; Lu, Liang; Chen, Fusheng, and Wang, Xiaohong. Preparation of dichlorvosΓÇôprotein complete antigen by Mannich-type reaction. 2010 Aug 10-; 977, (1ΓCô3): 100-105.

Rec #: 700

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: Dichlorvos (DDVP) residues have been linked to substantial adverse health effects on several organ systems. To ensure food safety, rapid and low-cost immunological methods must be applied to detect DDVP residues in food. In immunological methods, a key step is coupling DDVP to carrier proteins to obtain a complete antigen due to DDVP being hapten. In the current research, DDVP was coupled with cationized bovine serum albumin (cBSA) using a method based on Mannich-type reaction. A DDVPFCôcBSA conjugate, with a molar ratio of 40:1 DDVP to cBSA was synthesized. The cationized proteins and their conjugates were identified by UVICôVis and FT-IR spectra, which showed the characteristic bands of the ethylenediamine group and DDVP, respectively. BALB/c mice were immunized with DDVPFCôcBSA. One hybridoma cell line secreted anti-DDVP monoclonal antibody (Mab) that had high sensitivity and specificity for DDVP. Competitive ELISA identified an IC50 of 600 ng/mL and a limit of detection of 1 ng/mL in aqueous solution. The Mab had some cross-reactivity with phosmet, but no cross-reactivity with chlorothalonil and procymidone. We also detected a trace of DDVP in waste water. In conclusion the Mannich-type reaction couples DDVP to protein, yielding an antigen for the production of Mab to detect residual DDVP in the environment. DDVP/ Cationized protein/ Mannich-type reaction/ Monoclonal antibody/ ELISA

252. Feretti, D.; Zerbini, I.; Zani, C.; Ceretti, E.; Moretti, M., and Monarca, S. Allium cepa Chromosome Aberration and Micronucleus Tests Applied to Study Genotoxicity of Extracts from Pesticide-Treated Vegetables and Grapes. SOIL; 2007; 24, (6): 561-572. Rec #: 280 Keywords: IN VITRO,MIXTURE Call Number: NO EFED CHEM (CMX,EPRN,HCZ,PRN), NO IN VITRO (ACP,AZ,BFT,CBL,CPY,CTN,CYP,DCNA,DM,DMT,EP,ES,FNT,FRM,FVL,Folpet,GCYH,IPD ,MP,MYC,OMT,VCZ), NO MIXTURE (ACP,AZ,BFT,CBL,CPY,CTN,CYP,DCNA,DM,DMT,EP,ES,FNT,FRM,FVL,Folpet,GCYH,IPD ,MP,MYC,OMT,VCZ) Notes: Chemical of Concern: ACP,AZ,BFT,CBL,CMX,CPY,CTN,CYP,DCNA,DM,DMT,EP,EPRN,ES,FNT,FRM,FVL,Folpet ,GCYH,HCZ,IPD,MP,MYC,OMT,PRN,VCZ

253. ---. Allium Cepa Chromosome Aberration and Micronucleus Tests Applied to Study Genotoxicity of Extracts From Pesticide-Treated Vegetables and Grapes. 2007; 24, (6): 561-572. 143722. Rec #: 10382 Keywords: IN VITRO,MIXTURE Notes: Chemical of Concern: ACP,AZ,BFT,CBL,CMX,CPY,CTN,CYP,DCNA,DM,DMT,EP,EPRN,ES,FNT,FRM,FVL,Folpet ,GCYH,HCZ,IPD,MP,MYC,OMT,PRN,VCZ Abstract: NO IN VITRO,NO MIXTURE Department of Experimental and Applied Medicine, University of Brescia, Brescia, Italy//

254. Fernandez-Alba, A. R.; Aguera, A.; Contreras, M.; Penuela, G.; Ferrer, I., and Barcelo, D. Comparison of Various Sample Handling and Analytical Procedures for the Monitoring of Pesticides and Metabolites in Ground Waters. 1998; 823, (1-2): 35-47. Rec #: 2661 Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Various sample handling techniques such as liquid-liquid extraction off-line and on-line, solid-phase extraction followed by either gas chromatography (GC) with electron-capture, flame photometric or mass spectrometric detection, or liquid chromatography (LC) with diode array detection were applied in the determination of a selected group of insecticides and fungicides in ground water samples at sub-mug/l levels. An evaluation of the advantages and drawbacks in the application of the proposed methodologies for water monitoring studies is discussed. For the selected group of pesticides studied, off-line C18 or polymeric cartridges followed by GC-MS using an ion trap analyzer have been revealed as the more powerful technique. But very polar compounds such as methamidophos or acephate have not been recovered with this procedure. On the contrary, on-line C18 LC-DAD offered a few drawbacks for the trace determination of a large group of pesticides as a consequence of many im MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Conservation **KEYWORDS: Biochemical Methods-General KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

255. ---. Comparison of Various Sample Handling and Analytical Procedures for the Monitoring of Pesticides and Metabolites in Ground Waters. 1998; 823, (1-2): 35-47.

Rec #: 2661

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Various sample handling techniques such as liquid-liquid extraction off-line and on-line, solid-phase extraction followed by either gas chromatography (GC) with electron-capture, flame photometric or mass spectrometric detection, or liquid chromatography (LC) with diode array detection were applied in the determination of a selected group of insecticides and fungicides in ground water samples at sub-mug/l levels. An evaluation of the advantages and drawbacks in the application of the proposed methodologies for water monitoring studies is discussed. For the selected group of pesticides studied, off-line C18 or polymeric cartridges followed by GC-MS using an ion trap analyzer have been revealed as the more powerful technique. But very polar compounds such as methamidophos or acephate have not been recovered with this procedure. On the contrary, on-line C18 LC-DAD offered a few drawbacks for the trace determination of a large group of pesticides as a consequence of many im MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Conservation **KEYWORDS:** Biochemical Methods-General

KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

256. Fidanza, M. A.; Wetzel III, H. C.; Agnew, M. L., and Kaminski, J. E. Evaluation of Fungicide and Plant Growth Regulator Tank-Mix Programmes on Dollar Spot Severity of Creeping Bentgrass. 2006; 25, (9): 1032-1038. Rec #: 290 Keywords: MIXTURE Call Number: NO MIXTURE (AZX,CTN,FDX,PBZ,PCZ,PPCP,PPCP2011,TXE) Notes: Chemical of Concern: AZX,CTN,FDX,PBZ,PCZ,PPCP,TXE

 257. ---. Evaluation of Fungicide and Plant Growth Regulator Tank-Mix Programmes on Dollar Spot Severity of Creeping Bentgrass. 2006; 25, (9): 1032-1038. 143816. Rec #: 10142 Keywords: MIXTURE Notes: Chemical of Concern: AZX,CTN,FDX,PBZ,PCZ,TXE Abstract: NO MIXTURE Was EcoRef # 94890// (Was ECOREF# 94890)

258. Fiedler, H.; Herrmann, G.; Schramm, K. W., and Hutzinger, O. Application of QSARs to Predict Potential Aquatic Toxicities of Organochlorine Pesticides. 1990; 26, (1-4): 157-160. Rec #: 300 Keywords: MODELING, NO SPECIES, REFS CHECKED Call Number: NO EFED CHEM (AND,CHD,CI,DDT,DLD,EN,HCCH,HPT,MCPA,MTZ,MXC,PPCP), NO MODELING (24D,24DXY,ATZ,CAP,CLP,CPY,CTN,Captan,DCF,DDVP,DU,ES,FNV,FRM,IPD,MCPB,MT L,PCH,PCP,PMR,PPN,TBC,TBZ), NO REFS CHECKED (24D,24DXY,ATZ,CAP,CLP,CPY,CTN,Captan,DCF,DDVP,DU,ES,FNV,FRM,IPD,MCPB,MT L,PCH,PCP,PMR,PPN,TBC,TBZ), NO SPECIES (24D,24DXY,ATZ,CAP,CLP,CPY,CTN,Captan,DCF,DDVP,DU,ES,FNV,FRM,IPD,MCPB,MT L,PCH,PCP,PMR,PPN,TBC,TBZ) Notes: Chemical of Concern: 24D,24DB,24DXY,AND,ATZ,CAP,CHD,CLP,CPY,CTN,Captan,Cl,DCF,DDT,DDVP,DLD,DU, EN,ES,FNV,FRM,HCCH,HPT,IPD,MCPA,MCPB,MTL,MTZ,MXC,PCH,PCP,PMR,PPCP,PPN, TBC, TBZ

 259. ---. Application of Qsars to Predict Potential Aquatic Toxicities of Organochlorine Pesticides. 1990; 26, (1-4): 157-160. 143819. Rec #: 5612 Keywords: MODELING,NO SPECIES,REFS CHECKED Notes: Chemical of Concern: 24D,24DB,24DXY,AND,ATZ,CAP,CHD,CLP,CPY,CTN,Captan,Cl,DCF,DDT,DDVP,DLD,DU, EN,ES,FNV,FRM,HCCH,HPT,IPD,MCPA,MCPB,MTL,MTZ,MXC,PCH,PCP,PMR,PPCP,PPN, TBC,TBZ Abstract: NO MODELING,NO REFS CHECKED,NO SPECIES Searched FY10// (Was ECOREF# 3705)

 260. Fife, J. P. and Nokes, S. E. Evaluation of the Effect of Rainfall Intensity and Duration on the Persistence of Chlorothalonil on Processing Tomato Foliage. ACCSOIL,ENV; 2002; 21, (9): 733-740. Rec #: 460 Call Number: NO CONTROL(CTN) Notes: EcoReference No.: 89825 Chemical of Concern: CTN

<sup>261.</sup> Flores, H.; Soberon, X.; Sanchez, J., and Bravo, A. Isolated Domain Ii and Iii From the Bacillus

Thuringiensis Cry1 Ab Delta-Endotoxin Binds to Lepidopteran Midgut Membranes. 1997; 414, (2): 313-318.

Rec #: 1470

Keywords: BIOLOGICAL TOXICANT, IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The DNA fragment encoding Cry1Ab domain II-II (45.3 kDa) was cloned and expressed. Domain II-III is expressed in low yields. In vitro binding analysis to Manduca sexta and Trichoplusia ni larval midgut tissue sections demonstrated that domain II-III fragment bound along the microvilli of the midgut epithelium, indicating that this fragment retains binding functionality in the absence of domain I. Binding of domain II-III to the midgut brush border membrane proteins from T. ni larvae indicated that Cry1Ab toxin and domain II-III bind to the same 150 kDa protein. In contrast, in M. sexta membranes, Cry1Ab toxin binds to 200 and 120 kDa proteins, and domain II-III only binds to the 200 kDa protein. Finally, binding assays with isolated brush border membrane vesicles showed that the interaction of domain II-III with the membrane vesicles is highly reversible, supporting the proposition that the integration of domain I into the membrane could participate in the irreversible

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: DIGESTIVE SYSTEM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/CLASSIFICATION MESH HEADINGS: ANATOMY, COMPARATIVE MESH HEADINGS: ANIMAL MESH HEADINGS: INSECTS/PHYSIOLOGY MESH HEADINGS: PHYSIOLOGY, COMPARATIVE MESH HEADINGS: PATHOLOGY MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA MESH HEADINGS: LEPIDOPTERA **KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Studies KEYWORDS:** Digestive System-General **KEYWORDS:** Toxicology-General **KEYWORDS:** Bacteriology **KEYWORDS:** Invertebrata KEYWORDS: Endospore-forming Gram-Positives (1992-) **KEYWORDS:** Lepidoptera LANGUAGE: eng

262. ---. Isolated Domain Ii and Iii From the Bacillus Thuringiensis Cry1 Ab Delta-Endotoxin Binds to Lepidopteran Midgut Membranes. 1997; 414, (2): 313-318. Rec #: 1470 Keywords: BIOLOGICAL TOXICANT, IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The DNA fragment encoding Cry1Ab domain II-II (45.3 kDa) was cloned and expressed. Domain II-III is expressed in low yields. In vitro binding analysis to Manduca sexta and Trichoplusia ni larval midgut tissue sections demonstrated that domain II-III fragment bound along the microvilli of the midgut epithelium, indicating that this fragment retains binding functionality in the absence of domain I. Binding of domain II-III to the midgut brush border membrane proteins from T. ni larvae indicated that Cry1Ab toxin and domain II-III bind to the same 150 kDa protein. In contrast, in M. sexta membranes, Cry1Ab toxin binds to 200 and 120 kDa proteins, and domain II-III only binds to the 200 kDa protein. Finally, binding assays with isolated brush border membrane vesicles showed that the interaction of domain II-III with the membrane vesicles is highly reversible, supporting the proposition that the integration of domain I into the membrane could participate in the

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LANGUAGE: eng

263. Fogg, P.; Boxall, A. B., and Walker, A. Degradation of Pesticides in Biobeds: the Effect of Concentration and Pesticide Mixtures.

Rec #: 510

Keywords: BACTERIA, METABOLISM

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Biobeds aim to create an environment whereby any pesticide spills are retained and then degraded, thus reducing the potential for surface or groundwater contamination. Biobeds may receive high concentrations of relatively complex mixtures of pesticides. The effects of concentration and pesticide interaction on degradation rate were therefore investigated. At concentrations up to 20 times the maximum recommended application rate for isoproturon and chlorothalonil, the rate of degradation in topsoil and biomix decreased with increasing concentration. With the exception of isoproturon at concentrations above 11 mg kg(-1), degradation was quicker in biomix (a composted mixture of topsoil, compost, and wheat straw) than in topsoil. One possible explanation for faster isoproturon degradation in topsoil as compared to biomix may be that previous treatments of isoproturon applied to the field soil as part of normal agricultural practices had resulted in proliferation of microbial communities specifically adapted to use isoproturon as an energy source. Such microbial adaptation could enhance the performance of a biobed. Studies with a mixture of isoproturon and chlorothalonil showed that interactions between pesticides are possible. In biomix, the degradation of either isoproturon or chlorothalonil was unaffected by the presence of the other pesticide, whereas in topsoil, isoproturon DT(50) values increased from 18.5 to 71.5 days in the presence of chlorothalonil. These studies suggest that biobeds appear capable of treating high concentrations of more than one pesticide. MESH HEADINGS: Biodegradation, Environmental **MESH HEADINGS: Kinetics** MESH HEADINGS: Methylurea Compounds/administration & amp

MESH HEADINGS: dosage/metabolism

MESH HEADINGS: Nitriles/administration & amp

MESH HEADINGS: dosage/metabolism

MESH HEADINGS: Pesticides/\*metabolism

MESH HEADINGS: \*Phenylurea Compounds

MESH HEADINGS: \*Soil

MESH HEADINGS: Water Pollution/prevention & amp

MESH HEADINGS: control LANGUAGE: eng

264. ---. Degradation of Pesticides in Biobeds: the Effect of Concentration and Pesticide Mixtures.

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MESH HEADINGS: control

LANGUAGE: eng

265. Fogg, P.; Boxall, A. B.; Walker, A., and Jukes, A. Effect of Different Soil Textures on Leaching Potential and Degradation of Pesticides in Biobeds.

Rec #: 1244

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Biobeds can be used to intercept pesticide-contaminated runoff from the mixing/washdown area, creating optimum conditions for sorption and biodegradation such that the amount of pesticide reaching adjacent water bodies is significantly reduced. The biobed is built on the farm using locally available materials, which include, straw, compost, and topsoil. The topsoil acts as the inoculum for the system and is likely to vary in terms of its physical, chemical, and microbiological characteristics from one farm to another. This study therefore investigated the effects of using different soil types on the degradation and leaching potential from biobeds. Three contrasting topsoils were investigated. Leaching studies were performed using isoproturon, dimethoate, and mecoprop-P, which were applied at simulated disposal rates to 1.5 m deep biobeds. Annual average concentrations were similar for each soil type with leaching losses of even the most mobile (Koc = 12-25) pesticide < 1.64% of the applied dose. Greater than 98% of the retained pesticides were degraded in all matrices. Degradation studies investigated the persistence of individual pesticides and pesticide mixtures in the different matrices. DT50 values for isoproturon, chlorothalonil, mecoprop-P, and metsulfuron-methyl applied at 4 times the

maximum approved rate were similar across the biomix types and were all less than or equal to reported DT50 values for soil treated at approved rates. When applied as a mixture, DT50 values in each biomix increased, indicating that interactions between pesticides are possible. However, DT90 values of <167 days were obtained in all circumstances, indicating a negligible risk of accumulation. Studies therefore indicate that substrate will have little impact on biobed performance so it should be possible to use local soils in the construction process. MESH HEADINGS: 2-Methyl-4-chlorophenoxyacetic Acid/\*analogs & amp MESH HEADINGS: derivatives/chemistry MESH HEADINGS: Biodegradation, Environmental MESH HEADINGS: Chemistry, Physical MESH HEADINGS: Dimethoate/chemistry MESH HEADINGS: Environmental Pollution/\*analysis MESH HEADINGS: Methylurea Compounds/chemistry MESH HEADINGS: Pesticides/\*chemistry **MESH HEADINGS: \*Phenylurea Compounds** MESH HEADINGS: Soil/\*analysis MESH HEADINGS: Soil Microbiology LANGUAGE: eng

266. ---. Effect of Different Soil Textures on Leaching Potential and Degradation of Pesticides in Biobeds.

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267. Fogg, P.; Boxall, A. B.; Walker, A., and Jukes, A. A. Pesticide Degradation in a 'biobed' Composting Substrate.

Rec #: 731 Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Pesticides play an important role in the success of modern farming and food production. However, the release of pesticides to the environment arising from non-approved use, poor practice, illegal operations or misuse is increasingly recognised as contributing to water contamination. Biobeds appear to offer a cost-effective method for treating pesticide-contaminated waste. This study was performed to determine whether biobeds can degrade relatively complex pesticide mixtures when applied repeatedly. A pesticide mixture containing isoproturon, pendimethalin, chlorpyrifos, chlorothalonil, epoxiconazole and dimethoate was incubated in biomix and topsoil at concentrations to simulate pesticide disposal. Although the data suggest that interactions between pesticides are possible, the effects were of less significance in biomix than in topsoil. The same mixture was applied on three occasions at 30-day intervals. Degradation was significantly quicker in biomix than in topsoil. The rate of degradation, however, decreased with each additional treatment, possibly due to the toxicity of the pesticide mixture to the microbial community. Incubations with chlorothalonil and pendimethalin carried out in sterile and nonsterile biomix indicated that degradation, rather than irreversible adsorption to the matrix, was the main mechanism responsible for the reduction in recovered residues. Results from these experiments suggest that biobeds offer a viable means of treating pesticide waste. MESH HEADINGS: Biodegradation, Environmental **MESH HEADINGS: Kinetics** MESH HEADINGS: Pesticides/\*metabolism MESH HEADINGS: Soil/\*analysis MESH HEADINGS: Soil Pollutants/\*metabolism **MESH HEADINGS:** Time Factors MESH HEADINGS: Water Pollution/prevention & amp

268. ---. Pesticide Degradation in a 'biobed' Composting Substrate.

**MESH HEADINGS: control** 

Rec #: 731

Keywords: FATE

LANGUAGE: eng

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Pesticides play an important role in the success of modern farming and food production. However, the release of pesticides to the environment arising from non-approved use, poor practice, illegal operations or misuse is increasingly recognised as contributing to water contamination. Biobeds appear to offer a cost-effective method for treating pesticide-contaminated waste. This study was performed to determine whether biobeds can degrade relatively complex pesticide mixtures when applied repeatedly. A pesticide mixture containing isoproturon, pendimethalin, chlorpyrifos, chlorothalonil, epoxiconazole and dimethoate was incubated in biomix and topsoil at concentrations to simulate pesticide disposal. Although the data suggest that interactions between pesticides are possible, the effects were of less significance in biomix than in topsoil. The same mixture was applied on three occasions at 30-day intervals. Degradation was significantly quicker in biomix than in topsoil. The rate of degradation, however, decreased with each additional treatment, possibly due to the toxicity of the pesticide mixture to the microbial community. Incubations with chlorothalonil and pendimethalin carried out in sterile and nonsterile biomix indicated that degradation, rather than irreversible adsorption to the matrix, was the main mechanism responsible for the reduction in recovered residues. Results from these experiments suggest that biobeds offer a viable means of treating pesticide waste. MESH HEADINGS: Biodegradation, Environmental **MESH HEADINGS: Kinetics** MESH HEADINGS: Pesticides/\*metabolism MESH HEADINGS: Soil/\*analysis

MESH HEADINGS: Soil Pollutants/\*metabolism

MESH HEADINGS: Time Factors MESH HEADINGS: Water Pollution/prevention & amp MESH HEADINGS: control LANGUAGE: eng

269. Forcelini, C. A. and Berger, R. D. Management of Black Spot Epidemics on Roses With Reduced Rates of Fungicide. 1997; 87, (6 suppl.): S31. Rec #: 1446 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT DIPLOCARPON-ROSAE ROSE PLANT PATHOGEN HOST CROP INDUSTRY HORTICULTURE PEST MANAGEMENT BLACK SPOT MANCOZEB FUNGICIDE COPPER HYDROXIDE CHLOROTHALONIL REDUCED RATE FUNGICIDE APPLICATION FUNGAL DISEASE EPIDEMIC MANAGEMENT DISEASE CONTROL METHOD MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS. MEDICINAL **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Rosaceae LANGUAGE: eng 270. ---. Management of Black Spot Epidemics on Roses With Reduced Rates of Fungicide. 1997; 87, (6 suppl.): S31. Rec #: 1446 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT

Adstract: ABSTRACT: BIOSIS COPTRIGHT: BIOL ABS. RRM MEETING ABSTRACT DIPLOCARPON-ROSAE ROSE PLANT PATHOGEN HOST CROP INDUSTRY HORTICULTURE PEST MANAGEMENT BLACK SPOT MANCOZEB FUNGICIDE COPPER HYDROXIDE CHLOROTHALONIL REDUCED RATE FUNGICIDE APPLICATION FUNGAL DISEASE EPIDEMIC MANAGEMENT DISEASE CONTROL METHOD MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS, MEDICINAL KEYWORDS: General Biology-Symposia KEYWORDS: Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Ascomycetes KEYWORDS: Rosaceae LANGUAGE: eng

271. Frank, R.; Braun, H. E.; Clegg, B. S.; Ripley, B. D., and Johnson, R. Survey of Farm Wells for Pesticides Ontario Canada 1986 and 1987, 1990; 44, (3): 410-419. Rec #: 1186 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM WATER POLLUTION CONTAMINATION ENVIRONMENTAL SURVEILLANCE MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

272. ---. Survey of Farm Wells for Pesticides Ontario Canada 1986 and 1987. 1990; 44, (3): 410-419. Rec #: 1186 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM WATER POLLUTION CONTAMINATION ENVIRONMENTAL SURVEILLANCE MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

273. Frank, R.; Braun, H. E., and Ripley, B. D. Residues of Insecticides and Fungicides on Ontario-Grown Vegetables, 1986-1988. 1990; 7, (4): 545-554. Rec #: 1712 Keywords: NO SPECIES (DEAD) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Between 1986 and 1988, 433 composite vegetable samples representing 16 commodities were collected from farm deliveries to the marketplace in Ontario, Canada. All samples were analysed for insecticides and fungicides. The analyses included organochlorine, organophosphorus, synthetic pyrethroid, and Nmethylcarbamate insecticides and dithiocarbamate, dicarboximide, and organochlorine fungicides. The commidities tested included asparagus, beans, carrots, celery, cole crops, cucumbers, lettuce, onions, peppers, potatoes, radishes, rutabagas and tomatoes. In 64% of samples, no pesticide residues were indentified to the limits of detection which ranged from 0.005 to 0.05 mg/kg. A further 22% had combined insecticide and fungicide residues below 0.1 mg/kg. Most of the positive findings were a fraction of the Maximum Residue Limit permitted for each commodity under the Canadian Food and Drugs Act and Regulation. Three samples (0.7%) had residues that exceeded the MRL. These invo MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT **MESH HEADINGS: NUTS** MESH HEADINGS: VEGETABLES MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: VEGETABLES **KEYWORDS:** General Biology-Institutions **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS:** Food Technology-Fruits KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods **KEYWORDS:** Horticulture-Vegetables **KEYWORDS: Pest Control** LANGUAGE: eng

274. ---. Residues of Insecticides and Fungicides on Ontario-Grown Vegetables, 1986-1988. 1990; 7, (4): 545-554. Rec #: 1712 Keywords: NO SPECIES (DEAD) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Between 1986 and 1988, 433 composite vegetable samples representing 16 commodities were collected from farm deliveries to

the marketplace in Ontario, Canada. All samples were analysed for insecticides and fungicides. The analyses included organochlorine, organophosphorus, synthetic pyrethroid, and Nmethylcarbamate insecticides and dithiocarbamate, dicarboximide, and organochlorine fungicides. The commidities tested included asparagus, beans, carrots, celery, cole crops, cucumbers, lettuce, onions, peppers, potatoes, radishes, rutabagas and tomatoes. In 64% of samples, no pesticide residues were indentified to the limits of detection which ranged from 0.005 to 0.05 mg/kg. A further 22% had combined insecticide and fungicide residues below 0.1 mg/kg. Most of the positive findings were a fraction of the Maximum Residue Limit permitted for each commodity under the Canadian Food and Drugs Act and Regulation. Three samples (0.7%) had residues that exceeded the MRL. These invo MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: VEGETABLES MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY **MESH HEADINGS: VEGETABLES KEYWORDS:** General Biology-Institutions **KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS:** Food Technology-Fruits KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods **KEYWORDS:** Horticulture-Vegetables **KEYWORDS:** Pest Control LANGUAGE: eng

275. Frank, R.; Braun, H. E.; Ripley, B. D., and Clegg, B. S. Contamination of Rural Ponds With Pesticide 1971-85 Ontario Canada. 1990; 44, (3): 401-409. Rec #: 1677 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM AGRICHEMICAL AGRICULTURE WATER POLLUTION TOXICITY ENVIRONMENTAL SURVEILLANCE MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL

**MESH HEADINGS: PESTICIDES** 

KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

276. ---. Contamination of Rural Ponds With Pesticide 1971-85 Ontario Canada. 1990; 44, (3): 401-409. Rec #: 1677 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM AGRICHEMICAL AGRICULTURE WATER POLLUTION TOXICITY ENVIRONMENTAL SURVEILLANCE MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

277. French Society of Toxicology, Annual Meeting of the French Society of Toxicology, Meeting on Toxic Injury and Cancer: Molecular and Epidemiological Aspects, Paris, France, November 19-20, 1996. 1997; 16, (9): 525-551. Rec #: 1480 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This meeting contains abstracts of 49 papers, written in English, covering carcinogens, pesticides, biomarkers, and pollutants in vivo and in vitro. MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PERSONALITY DEVELOPMENT MESH HEADINGS: PSYCHOLOGY, MEDICAL MESH HEADINGS: PSYCHOLOGY, SOCIAL MESH HEADINGS: MENTAL DISORDERS **MESH HEADINGS: POISONING** MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: NEOPLASMS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: EPIDEMIOLOGIC METHODS MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE MESH HEADINGS: MURIDAE KEYWORDS: General Biology-Symposia KEYWORDS: Biochemical Studies-General KEYWORDS: Psychiatry-General KEYWORDS: Toxicology-General KEYWORDS: Neoplasms and Neoplastic Agents-General KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Epidemiology-Miscellaneous KEYWORDS: Pest Control KEYWORDS: Hominidae KEYWORDS: Muridae LANGUAGE: eng

278. ---. Annual Meeting of the French Society of Toxicology, Meeting on Toxic Injury and Cancer: Molecular and Epidemiological Aspects, Paris, France, November 19-20, 1996. 1997; 16, (9): 525-551.
 Rec #: 1480

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This meeting contains abstracts of 49 papers, written in English, covering carcinogens, pesticides, biomarkers, and pollutants in vivo and in vitro.

MESH HEADINGS: CONGRESSES

MESH HEADINGS: BIOLOGY

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: PERSONALITY DEVELOPMENT

MESH HEADINGS: PSYCHOLOGY, MEDICAL

MESH HEADINGS: PSYCHOLOGY, SOCIAL MESH HEADINGS: MENTAL DISORDERS

MESH HEADINGS: POISONING

MESH HEADINGS: ANIMALS, LABORATORY

- MESH HEADINGS: NEOPLASMS
- MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS

MESH HEADINGS: WATER POLLUTION

MESH HEADINGS: EPIDEMIOLOGIC METHODS

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

MESH HEADINGS: HOMINIDAE

MESH HEADINGS: MURIDAE

KEYWORDS: General Biology-Symposia

KEYWORDS: Biochemical Studies-General

KEYWORDS: Psychiatry-General

KEYWORDS: Toxicology-General KEYWORDS: Neoplasms and Neoplastic Agents-General

KEYWORDS: Public Health: Environmental Health-Air

KEYWORDS: Public Health: Epidemiology-Miscellaneous

KEYWORDS: Pest Control

**KEYWORDS:** Hominidae

KEYWORDS: Muridae

LANGUAGE: eng

279. Frenkel, O.; Yermiyahu, U.; Forbes, G. A.; Fry, W. E., and Shtienberg, D. Restriction of potato and tomato late blight development by sub-phytotoxic concentrations of boron. 2010; 59, (4): 626-633.

Rec #: 12372 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN

Abstract: Abstract: Boron is a microelement required for normal growth and development of plants but its positive effect is restricted to a narrow range of concentrations. The gradual increase in use of recycled water, which contains high concentrations of boron for irrigation, has already raised the level of boron in soils and plants in southern Israel. This research was conducted to examine the direct effects of sub-phytotoxic boron concentrations on potato late blight epidemics and to explore the mode of action of boron against Phytophthora infestans. When boron was applied alone to field grown potato plants it did not affect the epidemic. However, together with a reduced rate of the fungicide Melody Duo (propineb + iprovalicarb), boron improved late blight suppression compared to plants treated with the fungicide alone. The EDâ,...â,€of boron against P. infestans (256Å·4 mg Lâ  $\approx$ Å<sup>1</sup>) was about 6400 times higher than the EDâ,...â,  $\notin$ value of the fungicide chlorothalonil ( $(\hat{A} \cdot 04 \text{ mg L} \hat{a} )$ , indicating that boron does not have a direct fungicidal activity that would explain the level of protection seen in the field. In greenhouse experiments conducted with potted tomato plants, boron decreased late blight severity in both treated leaves and distant leaves not treated with boron. The results suggest that boron is active locally but also may induce systemic acquired resistance against P. infestans. Keywords: iprovalicarb

Oxford, UK : Blackwell Publishing Ltd

280. Fujita, Katsuhide; Kawai, Rena; Iwahashi, Hitoshi, and Komatsu, Yasuhiko. Hsp104 Responds to Heat and Oxidative Stress With Different Intracellular Localization in Saccharomyces Cerevisiae. 1998 Jul 30; 248, (3): 542-547.

Rec #: 73

Keywords: YEAST

Notes: Chemical of Concern: CTN

Abstract: TPN (tetrachloroisophthalonitrile) affected the growth in yeastSaccharomyces cerevisiaeand enhanced the superoxide dismutase and glutathione reductase activity under sublethal concentration. Conversely, mild heat-shock treatment had no effect on the enzyme activities. These show they inhibit the metabolism diversely: TPN is an oxidative stressor and mild heat-shock treatment leads to thermogenesis. We have earlier reported that on exposure to TPN under sublethal concentration, heat-shock protein Hsp104 was induced in the same way as in the mild heat-shock treatment (Fujitaet al., Biochem. Biophys. Res. Commun.(1995) 216, 1041-1047). However, intracellular localizations of Hsp104 showed different patterns in each treated cell according to immunoelectron microscopic observation. While Hsp104 was distributed over the entire TPN-treated cells with no protein aggregates. These findings suggest Hsp104 adaptively responds to comprehensive stress and participates in an emergent rescue function as a molecular chaperone. http://www.sciencedirect.com/science/article/B6WBK-45KN7XX-DS/2/c1842f6c465836af864123c8069a6b80

281. ---. Hsp104 Responds to Heat and Oxidative Stress With Different Intracellular Localization in

Saccharomyces Cerevisiae. 1998 Jul 30; 248, (3): 542-547.

Rec #: 73

Keywords: YEAST

Notes: Chemical of Concern: CTN

Abstract: TPN (tetrachloroisophthalonitrile) affected the growth in yeastSaccharomyces cerevisiaeand enhanced the superoxide dismutase and glutathione reductase activity under sublethal concentration. Conversely, mild heat-shock treatment had no effect on the enzyme activities. These show they inhibit the metabolism diversely: TPN is an oxidative stressor and mild heat-shock treatment leads to thermogenesis. We have earlier reported that on exposure to TPN under sublethal concentration, heat-shock protein Hsp104 was induced in the same way as in the mild heat-shock treatment (Fujitaet al., Biochem. Biophys. Res. Commun.(1995) 216, 1041-1047). However, intracellular localizations of Hsp104 showed different patterns in each treated cell according to immunoelectron microscopic observation. While Hsp104 was localized upon the

circumference of the protein aggregates in mild heat-shocked cells, Hsp104 was distributed over the entire TPN-treated cells with no protein aggregates. These findings suggest Hsp104 adaptively responds to comprehensive stress and participates in an emergent rescue function as a molecular chaperone. http://www.sciencedirect.com/science/article/B6WBK-45KN7XX-DS/2/c1842f6c465836af864123c8069a6b80

282. Fuzi, I. Fungicides Against Diseases of Pea, Pisum sativum L., in Hungary. POPENV,MIXTURE; 1995; 45, (3): 292-295. Rec #: 1740
Call Number: EFFICACY (CTN,MEM,MZB,SFR,TFR), NO EFED CHEM (CPZ,ECZ,TDM), TARGET (CTN,MEM,MZB,SFR,TFR) Notes: EcoReference No.: 150960
Chemical of Concern: CPZ,CTN,ECZ,MEM,MZB,SFR,TDM,TFR

 283. Gagnaire, B.; Thomas-Guyon, H.; Burgeot, Th, and Renault, T. Pollutant Effects on Pacific Oyster, Crassostrea Gigas (Thunberg), Hemocytes: Screening of 23 Molecules Using Flow Cytometry. 2006; 22, (1): 1-14. 144619. Rec #: 10132

Keywords: IN VITRO

Notes: Chemical of Concern:

24DXY,ACR,ANT,ATZ,CBF,CBL,CHD,CTN,DDT,DLD,DU,GYP,MTL,PAH,PCP,PHE,PYR Abstract: NO IN VITRO//Abstract: The shellfish industry is an important economic activity in France, occurring mostly in estuarine zones subject to pollution due to anthropogenic activities. The harmful effects of pollutants on species inhabiting these estuarine zones are not well known. Among marine species, bivalve mollusks---particularly Pacific oyster, Crassostrea gigas-may serve a model of interest. The species is sedentary and filter-feeding, which favors bioaccumulation of pollutants in their tissues. Oysters may be suitable for studies on disturbance by pollutants of physiological activities, among which defense mechanisms are poorly documented in bivalves. In this study, effects of pollutants on hemocyte functions were monitored in Pacific oyster, C. gigas. Hemocytes were exposed in vitro to selected pollutants. The strategy for investigating the effects of pollutants on hemocyte functions is based on several biomarkers, which is more relevant than that of published papers based on single-endpoint experiments. Pollutants belonging to the most important groups of xenobiotics (PAHs, PCBs, and pesticides) were selected and their effect on hemocyte activities was analyzed using flow cytometry. Twentythree pollutants were tested and eight of them showed significant modulation of hemocyte activities. PAHs and PCB 77 induced a decrease of hemocyte activity after an incubation periods of 4 and 24 h at 200 mu mol/L. Three pesticides (2,4D, paraoxon, and chlorothalonil) modulated hemocyte activities. A mixture of eight pesticides also decreased phagocytotic activity. This study is one of the first to investigate the effects of so many pollutants on hemocyte functions at the same time and therefore allows a real comparison of different pollutant effects. Keywords: cellular activities, flow cytometry, hemocytes, Pacific oyster, ISI Document Delivery No.: 009UQ IFREMER La Tremblade, Laboratoire de Genetique et Pathologie (LGP),La Tremblade,Fr//Cell Biology and Toxicology// - emailed reprint request 4/20/07//MIXTURE//

- 284. Gagne, G. Implementation of a Bioherbicide Strategy for Golf Course Environments. POPSOIL,ENV,MIXTURE; 2009: 84 p. (UMI# MR53525). Rec #: 1780 Call Number: TARGET (CTN,PCZ,PPCP,PPCP2011) Notes: EcoReference No.: 155920 Chemical of Concern: CTN,PCZ,PPCP
- 285. Gandy, Doreen G. and Spencer, D. M. Fungicide Evaluation for Control of Dry Bubble, Caused by Verticillium Fungicola, on Commercial Mushroom Strains. 1981 Feb; 14, (2): 107-115. Rec #: 122 Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Twelve fungicides were compared with chlorothalonil, thiabendazole and benomyl for activity against Verticillium fungicola on mushroom crops. Triforine, dimethirimol and tridemorph were phytotoxic, but prochloraz, tridemorph and a carbendazim/maneb mixture ("Delsene M") gave significantly higher yields of healthy mushrooms than untreated controls. Healthy yields from prochloraz and "Delsene M" treatment were greater than from chlorothalonil, but some formulations of prochloraz were phytotoxic and "Delsene M" discoloured treated mushrooms. http://www.sciencedirect.com/science/article/B6TC3-49S82FY-1C/2/946369491b72a5c35c36c56d6d8686d7

286. Gangawane, L. V.; Kamble, S. S., and Arora, R. K. Synergistic Effect of Other Fungicides on Metalaxyl Resistance Isolates of Phytophthora Infestans From Nilgiri Hills. 1995; 23, (2): 159-162. Rec #: 890

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Sensitivity of 100 Phytophthora infestans (Mont.) De Bary isolates against metalaxyl was studied by floating leaf disc technique. Of these 82% isolates were most sensitive, 5% were moderately sensitive, 4% were resistant, 5% were moderately resistant while 4% were highly resistant. Fungicides like SAN-518, chlorothalonil, mancozeb, akomin and phytoalexin were used in combination with metalaxyl on seven wild metalaxyl resistant and three sensitive isolates. Percentage control efficacy (PCE) of metalaxyl with all the five fungicides was 100% on sensitive isolates even at lower concentrations. PCE on resistant isolates, however ranged from 84 to 100%. Use of metalaxyl in mixture with chlorothalonil was highly effective (PCE 100%) followed by SAN-518 (PCE 99%), akomin (PCE 96%), phytoalexin (PCE 96%) and mancozeb (PCE 85%) in decreasing order.

MESH HEADINGS: VEGETABLES

MESH HEADINGS: FUNGI

MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS

KEYWORDS: Horticulture-Vegetables

KEYWORDS: Phytopathology-Diseases Caused by Fungi

KEYWORDS: Phytopathology-Disease Control

KEYWORDS: Pest Control

**KEYWORDS:** Phycomycetes

KEYWORDS: Solanaceae

LANGUAGE: eng

287. Gao, F.; Yates, S. R.; Yates, M. V.; Gan, J., and Ernst, F. F. Design, Fabrication, and Application of a Dynamic Chamber for Measuring Gas Emissions From Soil. 1997; 31, (1): 148-153. Rec #: 2671
 Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Dynamic or flow-through flux chambers are convenient tools for field measurements of gas fluxes from soils to the atmosphere. In this study, a dynamic flux chamber is designed and fabricated on the basis of aerodynamic considerations so that the conditions assumed for the flux model are closely satisfied. The chamber consists of an inlet transition zone, a square main body, and an outlet transition zone. Six equally-spaced air channels are installed in both inlet and outlet transition zones to conduct and spread the flowing air uniformly across the soil surface, which help to produce a simple, horizontal, and uniform airstream above the covered soil surface. Aerodynamic tests in the

laboratory show that the air sweeps over the entire covered soil surface with a relatively constant velocity at a given air flow rate, and no stagnant air zones are present. The chamber is used in a field fumigation experiment to measure methyl bromide emission at the soil surface. The emiss MESH HEADINGS: ECOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL **KEYWORDS: Ecology KEYWORDS:** Toxicology-General KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Soil Science-General** LANGUAGE: eng

288. ---. Design, Fabrication, and Application of a Dynamic Chamber for Measuring Gas Emissions From Soil. 1997; 31, (1): 148-153. Rec #: 2671 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Dynamic or flow-through flux chambers are convenient tools for field measurements of gas fluxes from soils to the atmosphere. In this study, a dynamic flux chamber is designed and fabricated on the basis of aerodynamic considerations so that the conditions assumed for the flux model are closely satisfied. The chamber consists of an inlet transition zone, a square main body, and an outlet transition zone. Six equally-spaced air channels are installed in both inlet and outlet transition zones to conduct and spread the flowing air uniformly across the soil surface, which help to produce a simple, horizontal, and uniform airstream above the covered soil surface. Aerodynamic tests in the laboratory show that the air sweeps over the entire covered soil surface with a relatively constant velocity at a given air flow rate, and no stagnant air zones are present. The chamber is used in a field fumigation experiment to measure methyl bromide emission at the soil surface. The emiss MESH HEADINGS: ECOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS

MESH HEADINGS: PLANTS MESH HEADINGS: SOIL KEYWORDS: Ecology KEYWORDS: Toxicology-General KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-General LANGUAGE: eng

289. Garcia-Bravo, B.; Perez Bernal a; Garcia-Hernandez, M. J., and Camacho, F. Occupational Contact Dermatitis From Anethole in Food Handlers. 1997; 37, (1): 38. Rec #: 2501 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CASE STUDY NOTE HUMAN ADULT HUMAN FOOD HANDLER FEMALE OCCUPATIONAL HEALTH
DERMATOLOGY TOXICOLOGY ALLERGIC CONTACT DERMATITIS ANETHOLE ALLERGEN ANISE OIL INTEGUMENTARY SYSTEM DISEASE IMMUNE SYSTEM DISEASE FATS AND OILS **MESH HEADINGS: FATS** MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: OILS MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: HOMINIDAE **KEYWORDS:** Food Technology-Fats and Oils **KEYWORDS:** Integumentary System-Pathology **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Immunology and Immunochemistry-Immunopathology **KEYWORDS:** Allergy KEYWORDS: Public Health: Environmental Health-Occupational Health **KEYWORDS:** Hominidae LANGUAGE: eng

 290. ---. Occupational Contact Dermatitis From Anethole in Food Handlers. 1997; 37, (1): 38. Rec #: 2501

Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CASE STUDY NOTE HUMAN ADULT HUMAN FOOD HANDLER FEMALE OCCUPATIONAL HEALTH DERMATOLOGY TOXICOLOGY ALLERGIC CONTACT DERMATITIS ANETHOLE ALLERGEN ANISE OIL INTEGUMENTARY SYSTEM DISEASE IMMUNE SYSTEM DISEASE FATS AND OILS **MESH HEADINGS: FATS** MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: OILS MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: HOMINIDAE KEYWORDS: Food Technology-Fats and Oils **KEYWORDS:** Integumentary System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Immunology and Immunochemistry-Immunopathology **KEYWORDS:** Allergy KEYWORDS: Public Health: Environmental Health-Occupational Health **KEYWORDS:** Hominidae LANGUAGE: eng

 291. Garibaldi, A. and Gullino, M. L. Disease Management of Ornamental Plants a Never Ending Challenge. 1990; 55, (2 part a): 189-202. Rec #: 1790 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM REVIEW FUNGI FUNGICIDE

MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY. NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Parasitism and Resistance **KEYWORDS:** Pest Control **KEYWORDS:** Fungi-Unspecified **KEYWORDS:** Tracheophyta LANGUAGE: eng

292. ---. Disease Management of Ornamental Plants a Never Ending Challenge. 1990; 55, (2 part a): 189-202. Rec #: 1790

> Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM REVIEW FUNGI FUNGICIDE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT **MESH HEADINGS: FUNGI** MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Biochemical Studies-General **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Parasitism and Resistance **KEYWORDS:** Pest Control **KEYWORDS:** Fungi-Unspecified **KEYWORDS:** Tracheophyta LANGUAGE: eng

293. Gaunt, R. E. and Liew, R. S. S. Control Strategies for Ascochyta fabae in New Zealand Field and Broad Bean Crops. 1981; 9, (3): 707-715. Rec #: 1210 Keywords: BENEFICIAL EFFECT,REFS CHECKED,REVIEW Call Number: NO BENEFICIAL EFFECT (BMY,CAP,CBX,CTN,Captan,MEM,MZB,TFR,THM), NO REFS CHECKED (BMY,CAP,CBX,CTN,Captan,MEM,MZB,TFR,THM), NO REVIEW (BMY,CAP,CBX,CTN,Captan,MEM,MZB,TFR,THM) Notes: Chemical of Concern: BMY,CAP,CBX,CTN,Captan,MEM,MZB,TFR,THM

- 294. ---. Control Strategies for Ascochyta Fabae in New Zealand Field and Broad Bean Crops. 1981; 9, (3): 707-715. 187335. Rec #: 3642
   Keywords: BENEFICIAL EFFECT, REFS CHECKED, REVIEW
   Notes: Chemical of Concern: BMY, CAP, CBX, CTN, Captan, MEM, MZB, TFR, THM
   Abstract: NO BENEFICIAL EFFECT, NO REFS CHECKED, NO REVIEW Author Affiliation: Coll. Agric., Lincoln Univ., Christchurch, N. Z// (Was ECOREF# 95839)
- 295. Gea, F. J.; Tello, J. C., and Honrubia, M. In Vitro Sensitivity of Verticillium Fungicola to Selected Fungicides. 1996; 136, (3): 133-137.

Rec #: 744

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Twenty isolates of Verticillium fungicola var. fungicola collected from diseased fruit-bodies of Agaricus bisporus from prochloraz-treated crops, were exposed to a range of concentrations of six chemicals (benomyl, chlorothalonil, formaldehyde, iprodione, prochloraz-Mn-complex and prochloraz + carbendazim) in vitro. EC50 values were determined for each fungus-fungicide combination. All isolates were more sensitive to prochloraz-Mn-complex (EC50 values less than 5 mg l-1) than to the remainder fungicides, and only seven isolates were moderately sensitive (EC50 values between 5 and 50 mg l-1) to prochloraz + carbendazim. All isolates were moderately sensitive to formaldehyde, whereas the majority of isolates were very resistant to the other three fungicides (benomyl, chlorothalonil and iprodione).

MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: BASIDIOMYCOTA MESH HEADINGS: MITOSPORIC FUNGI **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Basidiomycetes **KEYWORDS:** Fungi Imperfecti or Deuteromycetes LANGUAGE: eng

296. Geary, B.; Hamm, P. B., and Johnson, D. A. Deposition and Redistribution of Fungicides Applied by Air and Chemigation for Control of Late Blight in Commercial Potato Fields. dajohn@wsu.edu//: 2004; 81, (5): 305-315. Rec #: 1220 Keywords: MIXTURE Call Number: NO EFED CHEM (CMX,PPMH,TPTH), NO MIXTURE (CTN,MEM,MZB) Notes: Chemical of Concern: CMX,CTN,MEM,MZB,PPMH,TPTH 297. Geary, B.; Johnson, D. A., and Hamm, P. B. Application of Fungicide by Chemigation and a Spray Boom for Control of Late Blight. 1997; 87, (6 suppl.): S32. Rec #: 2483 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS POTATO PLANT PATHOGEN HOST CROP INDUSTRY PEST MANAGEMENT CHLOROTHALONIL LATE BLIGHT CHEMIGATION SPRAY BOOM APPLICATION HORTICULTURE FUNGAL DISEASE DISEASE CONTROL METHOD MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY **MESH HEADINGS: VEGETABLES** MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES** MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Phycomycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

298. ---. Application of Fungicide by Chemigation and a Spray Boom for Control of Late Blight. 1997; 87, (6 suppl.): S32. Rec #: 2483 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS POTATO PLANT PATHOGEN HOST CROP INDUSTRY PEST MANAGEMENT CHLOROTHALONIL LATE BLIGHT CHEMIGATION SPRAY BOOM APPLICATION HORTICULTURE FUNGAL DISEASE DISEASE CONTROL **METHOD** MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi

KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Phycomycetes KEYWORDS: Solanaceae LANGUAGE: eng

299. Gelsomino, A.; Petrovicova, B.; Tiburtini, S.; Magnani, E., and Felici, M. Multiresidue Analysis of Pesticides in Fruits and Vegetables by Gel Permeation Chromatography Followed by Gas Chromatography With Electron-Capture and Mass Spectrometric Detection. 1997; 782, (1): 105-122. Rec #: 2545 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A wide range screening method for multiresidue analysis of seventy-seven pesticides (twelve organohalogens, forty-five organonitrogens, eleven organophosphorus and nine pyrethroids) in agricultural products is proposed. Pesticide residues were extracted from crop samples with acetone followed by dichloromethane partitioning. Crop extracts were cleaned-up by gel permeation chromatography equipped with a 10 mm diameter column. Analytical screening was by gas chromatography using long, narrow-bore fused-silica open-tubular columns equipped with electron-capture detection (ECD). Recoveries of majority of pesticides from spiked samples of carrot, melon and tomato at fortification levels of 0.04-0.10 mg/kg ranged from 70 to 108%. The lowest recovery was for chlormephos (51.5%). Limits of detection were less than 0.01 mg/kg for ECD. Confirmation of pesticide identity was performed by gas chromatography-mass spectrometry in selected-ion monitoring mode. The multiresidue procedu MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: VEGETABLES MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Biochemical Methods-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS:** Food Technology-Fruits KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods **KEYWORDS:** Pest Control LANGUAGE: eng

 300. ---. Multiresidue Analysis of Pesticides in Fruits and Vegetables by Gel Permeation Chromatography Followed by Gas Chromatography With Electron-Capture and Mass Spectrometric Detection. 1997; 782, (1): 105-122. Rec #: 2545 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A wide range screening method for multiresidue analysis of seventy-seven pesticides (twelve organohalogens, forty-five organonitrogens, eleven organophosphorus and nine pyrethroids) in agricultural products is proposed. Pesticide residues were extracted from crop samples with acetone followed by dichloromethane partitioning. Crop extracts were cleaned-up by gel permeation chromatography equipped with a 10 mm diameter column. Analytical screening was by gas chromatography using long, narrow-bore fused-silica open-tubular columns equipped with electron-capture detection (ECD). Recoveries of majority of pesticides from spiked samples of carrot, melon and tomato at fortification levels of 0.04-0.10 mg/kg ranged from 70 to 108%. The lowest recovery was for chlormephos (51.5%). Limits of detection were less than 0.01 mg/kg for ECD. Confirmation of pesticide identity was performed by gas chromatography-mass spectrometry in selected-ion monitoring mode. The multiresidue procedu MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY **MESH HEADINGS: FRUIT MESH HEADINGS: NUTS** MESH HEADINGS: VEGETABLES MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Methods-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS:** Food Technology-Fruits KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods **KEYWORDS:** Pest Control LANGUAGE: eng

- 301. Ghini, R.; Bettiol, W.; Spadotto, C. A.; De Moraes, G. J.; Paraiba, L. C., and Mineiro, J. L. C. Soil Solarization for the Control of Tomato and Eggplant Verticillium Wilt and Its Effect on Weed and Micro-Arthropod Communities. 1993; 19, (3/4): 183-189. Rec #: 1450 Keywords: MIXTURE Call Number: NO EFED CHEM (AV), NO MIXTURE (CTN,DM,FNT,MB,MLX,MZB) Notes: Chemical of Concern: AV,CTN,DM,FNT,MB,MLX,MZB
- 302. ---. Soil Solarization for the Control of Tomato and Eggplant Verticillium Wilt and Its Effect on Weed and Micro-Arthropod Communities. 1993; 19, (3/4): 183-189. 282352. Rec #: 6902 Keywords: MIXTURE Notes: Chemical of Concern: AV,CTN,DM,FNT,MB,MLX,MZB Abstract: NO MIXTURE (Was ECOREF# 153235)
- 303. Gil Garcia Md; Garrido Frenich a; Martinez Vidal Jl; Martinez Galera M; Munoz, D. E. La Pena Am, and Salinas, F. Resolution of Overlapping Peaks in Hplc With Diode Array Detection by Application of Partial Least Squares Calibration to Cross-Sections of Spectrochromatograms. 1997; 348, (1-3): 177-185.

Rec #: 2528 Keywords: METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Because of the capacity of the diode array detector (DAD) in high performance liquid chromatography (HPLC), three-dimensional data can be easily generated in analytical laboratories. This allows new possibilities for the identification and quantification of solutes eluting from a chromatographic column. This paper deals with the application of a computer aided technique in the resolution of overlapping peaks by Partial Least Squares (PLS) calibration. This consists in performing cross-sections through the three-dimensional (A, lambda, t) data matrix to increase the analytical information for each analyte. In this way, the sensitivity in the determination is maximized. The application of this technique in combination with the PLS-1 method offers a greater ability to resolve overlapped chromatographic peaks, and greater accuracy in quantification than the PLS-1 method performed by using chromatograms obtained at one selected wavelength. In order to demonstrate the validit MESH HEADINGS: MATHEMATICS MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: BIOMEDICAL ENGINEERING MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENGINEERING MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS:** Biophysics-Bioengineering **KEYWORDS: Pest Control** LANGUAGE: eng

 304. ---. Resolution of Overlapping Peaks in Hplc With Diode Array Detection by Application of Partial Least Squares Calibration to Cross-Sections of Spectrochromatograms. 1997; 348, (1-3): 177-185. Rec #: 2528

Keywords: METHODS

Notes: Chemical of Concern: CTN

**MESH HEADINGS: PESTICIDES** 

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Because of the capacity of the diode array detector (DAD) in high performance liquid chromatography (HPLC), three-dimensional data can be easily generated in analytical laboratories. This allows new possibilities for the identification and quantification of solutes eluting from a chromatographic column. This paper deals with the application of a computer aided technique in the resolution of overlapping peaks by Partial Least Squares (PLS) calibration. This consists in performing cross-sections through the three-dimensional (A, lambda, t) data matrix to increase the analytical information for each analyte. In this way, the sensitivity in the determination is maximized. The application of this technique in combination with the PLS-1 method offers a greater ability to resolve overlapped chromatographic peaks, and greater accuracy in quantification than the PLS-1 method performed by using chromatograms obtained at one selected wavelength. In order to demonstrate the validit MESH HEADINGS: MATHEMATICS MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: BIOMEDICAL ENGINEERING MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENGINEERING MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL

KEYWORDS: Mathematical Biology and Statistical Methods KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Biophysics-Bioengineering KEYWORDS: Pest Control LANGUAGE: eng

305. Gilbert, M. Fate of Chlorothalonil in Apple Foliage and Fruit. ACC. 3614: TOP,MIXTURE; 1976; 24, (5): 1004-1007. Rec #: 540 Keywords: FATE Call Number: NO ENDPOINT,CONTROL(CTN,EPH) Notes: EcoReference No.: 29844 Chemical of Concern: EPH,CTN

306. Gisi, U. Synergistic Interaction of Fungicides in Mixtures. GROENV,MIXTURE; 1996; 86, (11): 1273-1279. Rec #: 550 Keywords: MIXTURE Call Number: NO CONTROL(CPZ,DMB,BMN,TARGET-MZB) Notes: EcoReference No.: 90470 Chemical of Concern: CPZ,DMB,BMN,MZB

307. Gladders, P.; Jones, O. W., and Slawson, D. D. Evaluation of Fungicides for Control of Ringspot and Light Leaf Spot in Brussels Sprouts. POPSOIL,ENV,MIXTURE; 1992; 1-3, 1169-1174. Rec #: 1150 Call Number: EFFICACY (BMY,CTN), NO EFED CHEM (TDM), TARGET (BMY,CTN) Notes: EcoReference No.: 82104 Chemical of Concern: BMY,CTN,TDM

308. Godard, Thierry; Youssef, Adel Ben; Kles, Virginie; Poul, Jean-Michel; Lebailly, Pierre; Vigreux, Carole; Deslandes, Edwige; Staedel, Cathy; Sichel, Francois, and Gauduchon, Pascal. In-Vivo Detection of Genotoxic Effects on Cells of Various Rat Organs With the Single Cell Gel Electrophoresis Assay: Comparison With in Vitro Effects on Cho Cells and in Vivo Micronucleus Test in Mice. 1997; 379, (Supplement 1, ISSUE 1): S130. Rec #: 80 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: http://www.sciencedirect.com/science/article/B6T2C-3Y0S01X-MB/2/80a16151696e4aaee9b6916167d58e94

 309. ---. In-Vivo Detection of Genotoxic Effects on Cells of Various Rat Organs With the Single Cell Gel Electrophoresis Assay: Comparison With in Vitro Effects on Cho Cells and in Vivo Micronucleus Test in Mice. 1997; 379, (Supplement 1, ISSUE 1): S130. Rec #: 80 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: http://www.sciencedirect.com/science/article/B6T2C-3Y0S01X-MB/2/80a16151696e4aaee9b6916167d58e94

 Goff, W. D. and Miller, R. W. Laboratory and Field Testing of Fungicides Against Mycosphaerella caryigena. GRO,MORENV,SOIL,MIXTURE; 1990; 5, (2): 134-141. Rec #: 570 Call Number: NO ENDPOINT(CLNB,Cu,CuNH,CuOH,TDM,CuS,VCZ,Zn),OK(ANZ,BMY,Captan,CBX,CTN,Fol pet,FSTAH,MZB,Maneb,MEM,PCNB,TBA,TPM,THM,TFR,Zineb),OK TARGET(PCZ),TARGET(CTN,MZB,Maneb,TFR,Captan) Notes: EcoReference No.: 70782 Chemical of Concern: PNB,Zn,Cu,CLNB,ANZ,BMY,Captan,CBX,CLNB,CTN,Cu,CuNH,CuOH,Folpet,FSTAL,MZB, Maneb,MEM,PCZ,PCNB,TBA,TPM,THM,TDM,CuS,TFR,VCZ,Zn,Zineb

- 311. ---. Persistence of Fungicides in Inhibiting Germination of Conidia of Mycosphaerella caryigena. REPSOIL,ENV; 1990; 5, (3): 218-222. Rec #: 780 Call Number: NO EFED CHEM (ANZ,TPM,TPTH,Zineb), NO ENDPOINT (BMY,CAP,CTN,Captan,CuNH,DOD,MEM,MZB,Maneb,PNB,THM) Notes: EcoReference No.: 91141 Chemical of Concern: ANZ,BMY,CAP,CTN,CTQ,Captan,CuNH,DOD,MEM,MZB,Maneb,PNB,THM,TPM,TPTH,Zine b
- 312. ---. Persistence of Fungicides in Inhibiting Germination of Conidia of Mycosphaerella caryigena. REP,ACCENV; 1990; 5, (3): 218-222. Rec #: 560 Call Number: NO ENDPOINT(Captan,CAP,CTN,Maneb,MZB,THM) Notes: EcoReference No.: 91141 Chemical of Concern: ANZ,BMY,Captan,CAP,CTN,CuNH,DOD,Maneb,MZB,CTQ,TPM,THM,Zineb

313. Goff, W. D.; Shumack, R. L.; Tilt, K. M., and Hagan, A. K. Fungicide Sprays Affect Leaf Condition and Tree Appearance of Southern Magnolia. PHYSOIL,ENV,MIXTURE; 1996; 22, (5): 201-205. Rec #: 580 Call Number: OK(CuOH),NO MIXTURE(BMY,PCZ,CTN,MYC) Notes: EcoReference No.: 79229 Chemical of Concern: PCZ,MYC,CTN,CuOH,BMY,CTN

Gold, L. S. ; Stern, B. R.; Slone, T. H.; Brown, J. P.; Manley, N. B., and Ames, B. N. Pesticide Residues in Food: Investigation of Disparities in Cancer Risk Estimates. 1997; 117, (2): 195-207. Rec #: 2517
Keywords: HUMAN HEALTH
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Much of the public perceives that exposure to synthetic pesticide residues in the diet is a major cause of cancer. The National Research Council (NRC), in a 1987 report, Regulating Pesticides in Food: The Delaney Paradox, evaluated cancer risks for 29 pesticides that are rodent carcinogens and estimated that the risks for 23 were greater than one-in-a-million. In contrast, our group has ranked possible carcinogenic hazards from a variety of human exposures to rodent carcinogens using the HERP (Human Exposureodent Potency) index, and found that dietary residues of synthetic pesticides ranked low. This paper evaluates the disparities in these analyses by examining the two components of risk

assessment: carcinogenic potency in rodents and human exposure. Potency estimates based on rodent bioassay data are shown to be similar whether calculated, as in the NRC report, as the regulatory q1\* or as TD50. In contrast, estimates of dietary exposure to residues of synthetic pestic MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: DIAGNOSIS MESH HEADINGS: NEOPLASMS/DIAGNOSIS MESH HEADINGS: CARCINOGENS MESH HEADINGS: MURIDAE KEYWORDS: Biochemical Studies-General KEYWORDS: Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Diagnostic Methods KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Muridae LANGUAGE: eng

315. ---. Pesticide Residues in Food: Investigation of Disparities in Cancer Risk Estimates. 1997; 117, (2): 195-207.

Rec #: 2517

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Much of the public perceives that exposure to synthetic pesticide residues in the diet is a major cause of cancer. The National Research Council (NRC), in a 1987 report, Regulating Pesticides in Food: The Delaney Paradox, evaluated cancer risks for 29 pesticides that are rodent carcinogens and estimated that the risks for 23 were greater than one-in-a-million. In contrast, our group has ranked possible carcinogenic hazards from a variety of human exposures to rodent carcinogens using the HERP (Human Exposureodent Potency) index, and found that dietary residues of synthetic pesticides ranked low. This paper evaluates the disparities in these analyses by examining the two components of risk assessment: carcinogenic potency in rodents and human exposure. Potency estimates based on rodent bioassay data are shown to be similar whether calculated, as in the NRC report, as the regulatory q1\* or as TD50. In contrast, estimates of dietary exposure to residues of synthetic pestic

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: DIAGNOSIS MESH HEADINGS: NEOPLASMS/DIAGNOSIS MESH HEADINGS: CARCINOGENS MESH HEADINGS: MURIDAE **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Foods **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Neoplasms and Neoplastic Agents-Diagnostic Methods KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis **KEYWORDS:** Muridae LANGUAGE: eng

Gorbet, D. W.; Knauft, D. A., and Shokes, F. M. Response of Peanut Genotypes With Differential Levels of Leafspot Resistance to Fungicide Treatments. 1990; 30, (3): 529-533. Rec #: 1696
Call Number: TARGET (CTN)
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Leafspot diseases, caused by

Cercospora arachidicola S. Hori (early leafspot) and Cercosporidium personatum (Berk. and Curt.) Deighton (late leafspot), are worldwide production problems on peanut (Arachis hypogaea L.). The extensive use of fungicides to control these diseases on susceptible cultivars is costly to growers. Developing leafspot resistant cultivars is a primary objective in many breeding programs. 'Southern Runner', which was released in 1986, is the only commercially available peanut cultivar in the USA with significant leafspot resistance. Field studies were conducted in 1981 to 1983 and 1985 to 1987 on peanut breeding lines with varying levels of leafspot resistance to evaluate their disease reaction and agronomic response to three leafspot fungicide programs and to assess their potential as cultivars for use with fewer fungicide sprays. The cultivars Florunner (susceptible) and Southern Runner (moderately resistant) and three breeding lines were used in MESH HEADINGS: PLANTS/CYTOLOGY MESH HEADINGS: PLANTS/GENETICS **MESH HEADINGS: MATHEMATICS** MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/ANATOMY & HISTOLOGY **MESH HEADINGS: REPRODUCTION** MESH HEADINGS: OILS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: LEGUMES KEYWORDS:** Genetics and Cytogenetics-Plant **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Biochemical Studies-General KEYWORDS:** Plant Physiology **KEYWORDS:** Plant Physiology **KEYWORDS:** Agronomy-Oil Crops KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Parasitism and Resistance **KEYWORDS: Pest Control KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Leguminosae LANGUAGE: eng

317. Gossen, B. D.; Holley, J. D.; Harrison, L. M., and Smith, S. R. Distribution of Blossom Blight of Alfalfa in Western Canada and Impact on Seed Yield. 1998; 20, (1): 122. Rec #: 880 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT

BOTRYTIS-CINEREA SCLEROTINIA-SCLEROTIORUM ALFALFA PLANT PATHOGEN SEED YIELD HOST PEST MANAGEMENT AGRONOMY BLOSSOM BLIGHT BENOMYL FUNGICIDE CHLOROTHALONIL FUNGAL DISEASE ALBERTA SASKATCHEWAN CANADA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: ANIMAL FEED MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: LEGUMES KEYWORDS:** General Biology-Symposia **KEYWORDS:** Agronomy-Forage Crops and Fodder KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Leguminosae LANGUAGE: eng

318. ---. Distribution of Blossom Blight of Alfalfa in Western Canada and Impact on Seed Yield. 1998; 20, (1): 122.

Rec #: 880 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT BOTRYTIS-CINEREA SCLEROTINIA-SCLEROTIORUM ALFALFA PLANT PATHOGEN SEED YIELD HOST PEST MANAGEMENT AGRONOMY BLOSSOM BLIGHT BENOMYL FUNGICIDE CHLOROTHALONIL FUNGAL DISEASE ALBERTA SASKATCHEWAN CANADA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: ANIMAL FEED MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: LEGUMES KEYWORDS:** General Biology-Symposia **KEYWORDS:** Agronomy-Forage Crops and Fodder KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Leguminosae LANGUAGE: eng

319. Graham, C.; Rosenkranz, H. S., and Karol, M. H. Structure-Activity Model of Chemicals That Cause Human Respiratory Sensitization. 1997; 26, (3): 296-306.

> Rec #: 2574 Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. We report a structure-activity model of chemicals with the potential to cause respiratory allergy developed through the CASEultiCASE systems. Chemicals documented to elicit a decrease in FEV1 of \20% within 24 h of inhalation provocation challenge were used to form a learning set. Additional requirements for inclusion in the learning set were that chemicals had at least two contiguous nonhydrogen atoms and were nonmetallic. Forty chemicals met these criteria. The model identified several "structural alerts" including the isocyanate functionality (N C O), primary and secondary amines, substituted aromatic moieties, and distance descriptors. An external data-withholding exercise used to validate the model yielded a sensitivity of 0.95 and a specificity of 0.95. This model is applicable to initial prediction of the sensitizing ability of untested chemicals and may provide mechanistic insight into the processes of respiratory sensitization. **MESH HEADINGS: MATHEMATICS** MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: PHYSIOLOGY **MESH HEADINGS: PATHOLOGY** MESH HEADINGS: DIAGNOSIS MESH HEADINGS: RESPIRATORY TRACT DISEASES/DIAGNOSIS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: HOMINIDAE **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS:** Comparative Biochemistry **KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS:** Physiology **KEYWORDS:** Pathology **KEYWORDS:** Respiratory System-General KEYWORDS: Toxicology-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Immunology and Immunochemistry-Immunopathology **KEYWORDS:** Allergy **KEYWORDS:** Hominidae LANGUAGE: eng

 320. ---. Structure-Activity Model of Chemicals That Cause Human Respiratory Sensitization. 1997; 26, (3): 296-306. Rec #: 2574 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. We report a structure-activity model of chemicals with the potential to cause respiratory allergy developed through the CASEultiCASE systems. Chemicals documented to elicit a decrease in FEV1 of \20% within 24 h of inhalation provocation challenge were used to form a learning set. Additional requirements for inclusion in the learning set were that chemicals had at least two contiguous nonhydrogen atoms and were nonmetallic. Forty chemicals met these criteria. The model identified several "structural alerts" including the isocyanate functionality (N C O), primary and secondary amines, substituted aromatic moieties, and distance descriptors. An external data-withholding exercise used to validate the model yielded a sensitivity of 0.95 and a specificity of 0.95. This model is applicable to initial prediction of the sensitizing ability of untested chemicals and may provide mechanistic insight into the processes of respiratory sensitization. MESH HEADINGS: MATHEMATICS **MESH HEADINGS: STATISTICS** MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: PHYSIOLOGY MESH HEADINGS: PATHOLOGY MESH HEADINGS: DIAGNOSIS MESH HEADINGS: RESPIRATORY TRACT DISEASES/DIAGNOSIS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: HOMINIDAE **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS:** Comparative Biochemistry **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS:** Physiology **KEYWORDS:** Pathology **KEYWORDS: Respiratory System-General KEYWORDS:** Toxicology-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Immunology and Immunochemistry-Immunopathology **KEYWORDS:** Allergy **KEYWORDS:** Hominidae LANGUAGE: eng

321. Grant, N. T.; Prusinkiewicz, E.; Makowski, R. M. D.; Holmstrom-Ruddick, B., and Mortensen, K. Effect of Selected Pesticides on Survival of Colletotrichum gloeosporioides f. sp. malvae, a Bioherbicide for Round-Leaved Mallow (Malva pusilla). GRO,REPENV,MIXTURE; 1990; 4, (4): 701-715. Rec #: 930
Call Number: LITE EVAL CODED (BT,LNR), NO EFED CHEM (BMN,CPR,CZE,DFP,FBM,IZT,PCL,TPM), OK (24D,24DXY,DFQ,DMB,FNPE,MBZ,PPN,SXD), TARGET (BMY,CBX,CTN,Captan,DCNA,MZB,TDF,THM) Notes: EcoReference No.: 95696 Chemical of Concern: 24D,24DB,24DXY,BMN,BMY,BT,CBX,CPR,CTN,CZE,Captan,DCNA,DFP,DFQ,DMB,FBM,F NPE,IZT,LNR,MBZ,MZB,PCL,PPN,SXD,TDF,THM,TPM

- 322. Grattidge, R. Growing Capsicums and Chillies in Queensland. 1990: 27 p. Rec #: 370 Keywords: NO TOX DATA Call Number: NO TOX DATA(CTN,DMT,MZB) Notes: Chemical of Concern: CTN,DMT,MOM,MTM,FNTH,ES,MZB,MLX,CPY
- 323. ---. Growing Capsicums and Chillies in Queensland. SOIL; 1990: 1-27. Rec #: 350 Keywords: NO TOX DATA Call Number: NO EFED CHEM (FNTH), NO TOX DATA (CPY,CTN,DMT,ES,MLX,MOM,MTM,MZB) Notes: Chemical of Concern: CPY,CTN,DMT,ES,FNTH,MLX,MOM,MTM,MZB
- 324. ---. Growing Capsicums and Chillies in Queensland. 1990: 1-27. 145696. Rec #: 5622 Keywords: NO TOX DATA Notes: Chemical of Concern: CPY,CTN,DMT,ES,FNTH,MLX,MOM,MTM,MZB Abstract: NO TOX DATA Isbn 0-7242-3944-8//

325. Grattidge, R. Growing Capsicums and Chillies in Queensland Australia. 1990; 0, (0): Iii+27p. Rec #: 1789 Keywords: NO TOX DATA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM BOOK INSECT MITE FERTILIZER NUTRITION IRRIGATION PEST CONTROL DISEASE CONTROL HARVESTING INTERSTATE QUARANTINE MARKETING MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: MINERALS MESH HEADINGS: MINERALS MESH HEADINGS: NUTRITIONAL REQUIREMENTS MESH HEADINGS: PUBLIC HEALTH MESH HEADINGS: BIOPHYSICS MESH HEADINGS: NUTRITION MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: VEGETABLES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES

MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PLANTS MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ANATOMY, COMPARATIVE MESH HEADINGS: ANIMAL MESH HEADINGS: ARTHROPODS/PHYSIOLOGY MESH HEADINGS: PHYSIOLOGY, COMPARATIVE MESH HEADINGS: PATHOLOGY MESH HEADINGS: ANIMAL MESH HEADINGS: INSECTS/PHYSIOLOGY MESH HEADINGS: PHYSIOLOGY, COMPARATIVE MESH HEADINGS: PATHOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: INSECTS MESH HEADINGS: ARTHROPODS **KEYWORDS:** General Biology-Institutions **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS:** Biochemical Studies-Minerals **KEYWORDS:** Nutrition-Minerals **KEYWORDS:** Public Health-General and Miscellaneous **KEYWORDS:** Plant Physiology KEYWORDS: Soil Science-Fertility and Applied Studies (1970-) **KEYWORDS:** Horticulture-Vegetables **KEYWORDS:** Phytopathology-Disease Control KEYWORDS: Phytopathology-General and Miscellaneous **KEYWORDS:** Pest Control **KEYWORDS: Economic Entomology-Field** KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Invertebrata **KEYWORDS:** Invertebrata **KEYWORDS:** Solanaceae **KEYWORDS:** Insecta-Unspecified **KEYWORDS:** Acarina LANGUAGE: eng

326. ---. Growing Capsicums and Chillies in Queensland Australia. 1990; 0, (0): Iii+27p. Rec #: 1789 Keywords: NO TOX DATA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM BOOK INSECT MITE FERTILIZER NUTRITION IRRIGATION PEST CONTROL DISEASE CONTROL HARVESTING INTERSTATE QUARANTINE MARKETING MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: MINERALS MESH HEADINGS: MINERALS MESH HEADINGS: NUTRITIONAL REQUIREMENTS MESH HEADINGS: PUBLIC HEALTH MESH HEADINGS: BIOPHYSICS MESH HEADINGS: NUTRITION MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: VEGETABLES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PLANTS MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ANATOMY, COMPARATIVE MESH HEADINGS: ANIMAL MESH HEADINGS: ARTHROPODS/PHYSIOLOGY MESH HEADINGS: PHYSIOLOGY, COMPARATIVE MESH HEADINGS: PATHOLOGY MESH HEADINGS: ANIMAL MESH HEADINGS: INSECTS/PHYSIOLOGY MESH HEADINGS: PHYSIOLOGY, COMPARATIVE MESH HEADINGS: PATHOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: INSECTS MESH HEADINGS: ARTHROPODS **KEYWORDS:** General Biology-Institutions **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-Minerals KEYWORDS:** Nutrition-Minerals **KEYWORDS:** Public Health-General and Miscellaneous **KEYWORDS:** Plant Physiology KEYWORDS: Soil Science-Fertility and Applied Studies (1970-) **KEYWORDS:** Horticulture-Vegetables **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Phytopathology-General and Miscellaneous **KEYWORDS:** Pest Control **KEYWORDS: Economic Entomology-Field** KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Invertebrata **KEYWORDS:** Invertebrata **KEYWORDS:** Solanaceae **KEYWORDS:** Insecta-Unspecified **KEYWORDS:** Acarina

LANGUAGE: eng

327. Groves, C. T. and Ristaino, J. B. Commercial Fungicide Formulations Induce in Vitro Oospore Formation and Phenotypic Change in Mating Type in Phytophthora Infestans. 2000.

Rec #: 285 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 0031-949X Descriptors: Fungicide resistance Descriptors: Irish potato famine Descriptors: Oomycetes Descriptors: Potato late blight

Descriptors: Solanum tuberosum

Abstract: A wide range of commercially formulated fungicides cause in vitro effects on mating behavior in specific isolates of Phytophthora infestans, the causal agent of late blight of potato and tomato. Four isolates of P. infestans representing each of the four common US genotypes, US-1, US-6, US-7, and US-8 and varying in their sensitivity to metalaxyl, were exposed to a variety of fungicides used to control late blight in petri dish assays at concentrations ranging from 1 to 100 mu g a.i./ml. Exposure of each of these normally heterothallic single mating type isolates of P. infestans to 9 of the 11 commercial fungicide formulations tested resulted in the formation of oospores after 2 to 4 weeks. The highest numbers of oospores were formed on media amended with Ridomil 2E (metalaxyl) and Ridomil Gold EC (mefenoxam) at 0.1 to 10 mu g a.i./ml, averaging as many as 471 and 450 oospores per petri dish, respectively. Several other fungicides including Maneb, Manzate (Mancozeb), Curzate (cymoxanil + mancozeb), and Acrobat MZ (dimethomorph + mancozeb) also induced oospore formation, producing from 0 to 200 oospores per plate at fungicide concentrations from 0.1 to 10 mu g a.i./ml. The metalaxyl resistant isolates formed oospores in response to the fungicides more often than the metalaxyl sensitive isolates. No oospores were formed on media amended with Bravo (chlorothalonil) or Tattoo C (chlorothalonil + propamocarb HCl) and these compounds completely suppressed growth of the isolates at 0.1 and 1 mu g a.i./ml. Three metalaxyl resistant A2 isolates mated with both A1 and A2 isolates after exposure to the fungicides Ridomil 2E and Ridomil Gold EC. Alterations in mating type expression were also observed in a metalaxyl sensitive A1 isolate after exposure to Benlate (benomyl). Copious amounts of chemicals are applied annually to potato and tomato production areas to control late blight. Our results indicate that a wide range of chemically diverse fungicides can induce normally heterothallic metalaxyl resistant isolates of P. infestans to form oospores in vitro after short exposures to the fungicides. 49 refs.

English Publication Type: Journal Publication Type: Article Country of Publication: United States Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi general Classification: 92.10.2 CROP SCIENCE: Agronomy and Horticulture Plant Science

328. Gruber, B. R. Effects of Copper-Based Fungicides on Photosynthetic Gas Exchange and Fruit Quality of Tart Cherry. SOIL; 2009: 99 p. (UMI #3384092). Rec #: 50 Keywords: MIXTURE,PUBL AS Call Number: NO EFED CHEM (BSC,FNB,PRC,TZA), NO MIXTURE (CTN,CuS,TEZ), NO PUBL AS (CTN,CuS,TEZ) Notes: EcoReference No.: 156242 Chemical of Concern: BSC,CTN,CuS,FNB,PRC,TEZ,TZA

329. Grunwald, N. J. and Fry, W. E. Comparison of Blitecast and Tom-Cast With Scheduled Fungicide

Applications for Control of Potato Late Blight in the Toluca Valley. 1998; 88, (9 suppl.): S34. Rec #: 2645 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT POTATO CULTIVAR-ALPHA HOST PEST MANAGEMENT HORTICULTURE MODELS AND SIMULATIONS BLITECAST TOM-CAST POTATO LATE BLIGHT CHLOROTHALONIL FUNGICIDE DISEASE FORECASTING MODEL FUNGAL DISEASE TOLUCA VALLEY MEXICO MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: COMPUTER SYSTEMS MESH HEADINGS: BIOLOGY MESH HEADINGS: DOCUMENTATION MESH HEADINGS: INFORMATION SYSTEMS MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** General Biology-Information **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Solanaceae LANGUAGE: eng

 330. ---. Comparison of Blitecast and Tom-Cast With Scheduled Fungicide Applications for Control of Potato Late Blight in the Toluca Valley. 1998; 88, (9 suppl.): S34. Rec #: 2645 Keywords: ABSTRACT

Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT POTATO CULTIVAR-ALPHA HOST PEST MANAGEMENT HORTICULTURE MODELS AND SIMULATIONS BLITECAST TOM-CAST POTATO LATE BLIGHT CHLOROTHALONIL FUNGICIDE DISEASE FORECASTING MODEL FUNGAL DISEASE TOLUCA VALLEY MEXICO MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: COMPUTER SYSTEMS MESH HEADINGS: BIOLOGY **MESH HEADINGS: DOCUMENTATION** MESH HEADINGS: INFORMATION SYSTEMS MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** General Biology-Information **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control

KEYWORDS: Solanaceae LANGUAGE: eng

331. Guan, T. T. ; Blank, G., and Holley, R. A. Survival of Pathogenic Bacteria in Pesticide Solutions and on Treated Tomato Plants.

Rec #: 471

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The ability of Salmonella, Escherichia coli O157:H7, Listeria monocytogenes, and Shigella to survive or grow in pesticide solutions (Ambush 240EC, Benlate T-N-G, Bravo 500, Botran 75WP, Captan 80WDG, Parasol, and Vendex 50W) used by the horticultural industry was examined. In the laboratory, individual cultures were inoculated at 4 log CFU/ml in pesticides diluted with sterile saline to the lowest recommended spray concentrations. During 21 degrees C incubation for < or =96 h, bacterial survivors in the samples and a control consisting of saline were enumerated either by agar surface plating or hydrophobic grid membrane filtration. Most formulations tested were somewhat inhibitory to the pathogenic bacteria. All inoculated bacteria survived or grew in Bravo 500. Among bacteria tested, Salmonella spp. were best able to survive and Listeria spp. were least able to survive in pesticide solutions. When the incubation temperature or pesticide concentration was increased, survival of Salmonella varied depending on the type of formulation. In the field, when a bacterial cocktail containing E. coli O157:H7 and Salmonella Enteritidis was added to Bravo 500 at 6 log CFU/ml, both organisms were recovered from leaves and fruit skins of sprayed tomato plants after the recommended 1 dayto-harvest interval. E. coli and Salmonella survived longer on tomato leaves when spraved in saline (at least 26 and 56 days, respectively) than when sprayed in Bravo 500 (>45 h and < 15days, respectively). While Salmonella serovars Typhimurium and Heidelberg grew in the fungicide Bravo, and Enteritidis grew in the insecticide Vendex within 96 h at 21 degrees C in the laboratory, pathogen growth in other pesticide formulations did not occur. Higher temperature ( <or =30 degrees C) or doubling pesticide concentrations had either no or a negative effect on Salmonella Heidelberg survival. Use of unexpired pesticide formulations may have contributed to the reduced bacterial survival and growth found in the laboratory and during the field trials with Bravo.

MESH HEADINGS: Bacteria/drug effects/\*growth & amp MESH HEADINGS: development MESH HEADINGS: Colony Count, Microbial MESH HEADINGS: Escherichia coli O157/drug effects/growth & amp **MESH HEADINGS: development** MESH HEADINGS: Food Microbiology MESH HEADINGS: Fungicides, Industrial/\*pharmacology **MESH HEADINGS: Humans** MESH HEADINGS: Listeria monocytogenes/drug effects/growth & amp **MESH HEADINGS: development** MESH HEADINGS: Lycopersicon esculentum/\*microbiology MESH HEADINGS: Pesticides/\*pharmacology MESH HEADINGS: Salmonella/drug effects/growth & amp MESH HEADINGS: development MESH HEADINGS: Shigella/drug effects/growth & amp **MESH HEADINGS: development MESH HEADINGS: Temperature MESH HEADINGS: Time Factors** LANGUAGE: eng

 332. ---. Survival of Pathogenic Bacteria in Pesticide Solutions and on Treated Tomato Plants. Rec #: 471 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: The ability of Salmonella, Escherichia coli O157:H7, Listeria monocytogenes, and Shigella to survive or grow in pesticide solutions (Ambush 240EC, Benlate T-N-G, Bravo 500, Botran 75WP, Captan 80WDG, Parasol, and Vendex 50W) used by the horticultural industry was examined. In the laboratory, individual cultures were inoculated at 4 log CFU/ml in pesticides diluted with sterile saline to the lowest recommended spray concentrations. During 21 degrees C incubation for < or =96 h, bacterial survivors in the samples and a control consisting of saline were enumerated either by agar surface plating or hydrophobic grid membrane filtration. Most formulations tested were somewhat inhibitory to the pathogenic bacteria. All inoculated bacteria survived or grew in Bravo 500. Among bacteria tested, Salmonella spp. were best able to survive and Listeria spp. were least able to survive in pesticide solutions. When the incubation temperature or pesticide concentration was increased, survival of Salmonella varied depending on the type of formulation. In the field, when a bacterial cocktail containing E. coli O157:H7 and Salmonella Enteritidis was added to Bravo 500 at 6 log CFU/ml, both organisms were recovered from leaves and fruit skins of sprayed tomato plants after the recommended 1 dayto-harvest interval. E. coli and Salmonella survived longer on tomato leaves when spraved in saline (at least 26 and 56 days, respectively) than when sprayed in Bravo 500 (>45 h and < 15days, respectively). While Salmonella serovars Typhimurium and Heidelberg grew in the fungicide Bravo, and Enteritidis grew in the insecticide Vendex within 96 h at 21 degrees C in the laboratory, pathogen growth in other pesticide formulations did not occur. Higher temperature ( < or =30 degrees C) or doubling pesticide concentrations had either no or a negative effect on Salmonella Heidelberg survival. Use of unexpired pesticide formulations may have contributed to the reduced bacterial survival and growth found in the laboratory and during the field trials with Bravo.

MESH HEADINGS: Bacteria/drug effects/\*growth & amp **MESH HEADINGS: development** MESH HEADINGS: Colony Count, Microbial MESH HEADINGS: Escherichia coli O157/drug effects/growth & amp **MESH HEADINGS: development** MESH HEADINGS: Food Microbiology MESH HEADINGS: Fungicides, Industrial/\*pharmacology **MESH HEADINGS: Humans** MESH HEADINGS: Listeria monocytogenes/drug effects/growth & amp MESH HEADINGS: development MESH HEADINGS: Lycopersicon esculentum/\*microbiology MESH HEADINGS: Pesticides/\*pharmacology MESH HEADINGS: Salmonella/drug effects/growth & amp **MESH HEADINGS: development** MESH HEADINGS: Shigella/drug effects/growth & amp **MESH HEADINGS: development MESH HEADINGS: Temperature MESH HEADINGS: Time Factors** LANGUAGE: eng

## Guereca, L. and Bravo, A. The Oligomeric State of Bacillus Thuringiensis Cry Toxins in Solution . 1999; 1429, (2): 342-350.

Rec #: 2400

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The molecular mass of different Cry toxins produced by Bacillus thuringiensis bacteria was estimated by size-exclusion chromatography and non-denaturing polyacrylamide gel electrophoresis at neutral and alkaline pH in order to assess the existence of oligomers in solution. We found that Cry1Aa, Cry1Ac, Cry1C, Cry1D and Cry3A toxins exist in solution as a mixture of monomer and high molecular mass aggregates with an apparent molecular mass greater than 600 kDa, that depend on the time elapsed between toxin activation and analysis. Aggregation of toxins by disulfide bonds is unlikely because aggregates are also observed in samples incubated with DTT. These data show that the Cry toxins studied do not form oligomers of less than ten subunits in solution and suggest that

oligomer formation may occur after the toxin binds to the receptor and inserts into the membrane. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/CLASSIFICATION MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Studies KEYWORDS: Toxicology-General KEYWORDS: Bacteriology KEYWORDS: Endospore-forming Gram-Positives (1992- ) LANGUAGE: eng

 334. ---. The Oligomeric State of Bacillus Thuringiensis Cry Toxins in Solution. 1999; 1429, (2): 342-350. Rec #: 2400

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The molecular mass of different Cry toxins produced by Bacillus thuringiensis bacteria was estimated by size-exclusion chromatography and non-denaturing polyacrylamide gel electrophoresis at neutral and alkaline pH in order to assess the existence of oligomers in solution. We found that Cry1Aa, Cry1Ac, Cry1C, Cry1D and Cry3A toxins exist in solution as a mixture of monomer and high molecular mass aggregates with an apparent molecular mass greater than 600 kDa, that depend on the time elapsed between toxin activation and analysis. Aggregation of toxins by disulfide bonds is unlikely because aggregates are also observed in samples incubated with DTT. These data show that the Cry toxins studied do not form oligomers of less than ten subunits in solution and suggest that oligomer formation may occur after the toxin binds to the receptor and inserts into the membrane. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/CLASSIFICATION MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Studies KEYWORDS:** Toxicology-General **KEYWORDS:** Bacteriology KEYWORDS: Endospore-forming Gram-Positives (1992-) LANGUAGE: eng

335. Gullino, M. L. Strobilurins for the Control of Diseases of Vegetable and Ornamental Crops in Italy. POP. DI.VA.P.R.A. - Patologia vegetale,Grugliasco,Italy//: SOIL,ENV,MIXTURE; 2000; 2, 747-754. Rec #: 1640 Call Number: NO EFED CHEM (ANZ,BTN,CMX,HCZ,KRSM,TCM,TFX), TARGET (AZX,BMY,CTN,FSTAL,Folpet,MLX,SFR,TCZ) Notes: EcoReference No.: 75963 Chemical of Concern: ANZ,AZX,BMY,BTN,CMX,CTN,FSTAL,Folpet,HCZ,KRSM,MLX,SFR,TCM,TCZ,TFX

336. ---. Strobilurins for the Control of Diseases of Vegetable and Ornamental Crops in Italy. MOR,PHY,POP. DI.VA.P.R.A. - Patologia vegetale,Grugliasco,Italy: SOIL,ENV,MIXTURE; 2000; 2, 747-754.

Rec #: 270 Call Number: NO COC(EFED-Cu),OK(AZX,ANZ),NO ENDPOINT(TCZ,TCM,TFX,KRSM,FSTAI,CMX,BTN,BMY),NO CROP(CTN,Folpet) Notes: EcoReference No.: 75963 Chemical of Concern: Cu,TCZ,TCM,TFX,KRSM,FSTAI,CMX,CTN,BTN,BMY,AZX,ANZ,Folpet

- 337. Gyoutoku, Y. and Kasio, T. Toxicity of Pesticides on the Oligota spp. (Coleoptera: Staphylinidae). 1990;
  36, 155-159(JPN) (ENG ABS). Rec #: 370 Keywords: NON-ENGLISH Call Number: NO EFED CHEM (BFZ,CHX,TPM), NON-ENGLISH (ACP,AMZ,BFT,BMY,CPY,CTN,CYP,DCF,DDVP,DMT,EFX,FBOX,FNV,FPP,MZB,PMR) Notes: Chemical of Concern: ACP,AMZ,BFT,BFZ,BMY,CHX,CPY,CTN,CYP,DCF,DDVP,DMT,EFX,FBOX,FNV,FPP,LLC A,MZB,PMR,TPM
- 338. ---. Toxicity of Pesticides on the Oligota Spp. (Coleoptera: Staphylinidae). 1990; 36, 155-159(JPN) (ENG ABS). 146172. Rec #: 5632 Keywords: NON-ENGLISH Notes: Chemical of Concern: ACP,AMZ,BFT,BFZ,BMY,CHX,CPY,CTN,CYP,DCF,DDVP,DMT,EFX,FBOX,FNV,FPP,LLC A,MZB,PMR,TPM Abstract: NON-ENGLISH ESA Search//Y.Gyoutoku, Fruit Tree Res. Inst., Kumamoto Prefect. Agric. Res. Cent., Kumamoto, 869-05, Japan//Kyushu Byogaichu Kenkyukaiho// (Was ECOREF# 111347)
- H. Wang. Effects of Foliar Fungicides on Kernel Black Point of Wheat in Southern Saskatchewan. 2002; 24, (3): 287-293.
  - Rec #: 237 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 0706-0661 Descriptors: Wheat Descriptors: Black point Descriptors: Fungicide

Descriptors: Kernel mass

Abstract: This study was undertaken to determine the effect of fungicides on the incidence of black point in wheat (Triticum spp.) in southern Saskatchewan, Canada. Experiment 1 was conducted at Swift Current and Indian Head for 3 years. Folicur 3.6F (tebuconazole) and Bravo 500 (chlorothalonil) were applied at different growth stages from stem elongation to head emergence. Three spring common wheat (Triticum aestivum) and three durum wheat (Triticum turgidum var. durum) genotypes were used in this study. Experiment 2 was conducted at Indian Head for 3 years. Folicur 3.6F was applied from stem elongation to early milk stage for a durum cultivar. The incidence of black point was very low at Swift Current. Severe black point incidence occurred at Indian Head in 1999, which could be related to low temperature and high rainfall during the grain filling stage. Durum wheat cultivars had higher black point incidence than the common wheat cultivars. Fungicide applications from stem elongation to flag emergence could increase black point infection and it was, in many cases, associated with an increase in kernel mass. Fungicide applications at or after head emergence could reduce the incidence of black point, although this was not consistent.

31 refs.

English; French

Publication Type: Journal Publication Type: Article Country of Publication: Canada Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi Classification: 92.11.1.1 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi cereal hosts Plant Science

340. Hagan, A. K.; Campbell, H. L.; Bowen, K. L.; Wells, L., and Goodman, R. Managing early leaf spot and stem rot with reduced fungicide inputs on disease-resistant peanut cultivars. 2010; 37, issue 2, 129-136. Rec #: 12492 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: Keywords: Cercospora arachidicola Includes references 1023002214

341. Hajslova, J.; Holadova, K.; Kocourek, V.; Poustka, J.; Godula, M.; Cuhra, P., and Kempny, M. Matrix-Induced Effects: a Critical Point in the Gas Chromatographic Analysis of Pesticide Residues. 1998; 800, (2): 283-295.

Rec #: 2584

Keywords: NO SPECIES (DEAD)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The influence of several experimental factors related to the enhanced gas chromatographic responses yielding apparent recoveries of pesticide residues greater than 100% was investigated. Optimisation of a gel permeation chromatographic clean-up step with respect to the trueness and precision of generated data was performed. An increase of relative detector response (100%=response of analyte in pure solvent solution) was evidenced to be dependent both on the concentration of the analyte and the character of the matrix: pronounced matrix-induced effects were observed particularly in orange and wheat extracts at low concentration levels of analytes (especially for GC-electron-capture detection analysis of certain pesticides). As soon as the splitless injector became contaminated after injection of large series of matrix-containing samples, a decrease of relative responses of pesticides, largely below 100%, was experienced. Although troublesome compounds tending to give mat

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT **MESH HEADINGS: NUTS** MESH HEADINGS: VEGETABLES MESH HEADINGS: CEREALS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** Biochemical Studies-General **KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS:** Food Technology-Fruits **KEYWORDS:** Food Technology-Cereal Chemistry KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Pest Control LANGUAGE: eng

 342. ---. Matrix-Induced Effects: a Critical Point in the Gas Chromatographic Analysis of Pesticide Residues. 1998; 800, (2): 283-295. Rec #: 2584 Keywords: NO SPECIES (DEAD)

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- 343. Hall, J. F.; Westerdahl, H. E.; Hoeppel, R. E., and Williams, L. The 2,4-D Threshold Concentrations for Control of Eurasian Watermilfoil and Sago Pondweed. 1982. Rec #: 2915 Keywords: PUBL AS Notes: Chemical of Concern: 24DXY
- 344. ---. The 2,4-D Threshold Concentrations for Control of Eurasian Watermilfoil and Sago Pondweed. 1982. Rec #: 2915 Keywords: PUBL AS Notes: Chemical of Concern: 24DXY

345. Hall, R. A. Laboratory Studies on the Effects of Fungicides, Acaricides and Insecticides on the Entomopathogenic Fungus, Verticillium lecanii. POP,REPENV; 1981; 29, (1): 39-48. Rec #: 730 Call Number: NO EFED CHEM (CHX,DINO,ILL,OXC,Zineb), NO ENDPOINT (BMY,CBL,CTN,Captan,DCF,DFZ,DZ,FRM,IPD,MLN,Maneb,PIM,PMR,TFR,VCZ), TARGET (TFR) Notes: EcoReference No.: 94390 Chemical of Concern: BMY,CBL,CHX,CTN,Captan,DCF,DFZ,DINO,DZ,FRM,ILL,IPD,MLN,Maneb,OXC,PIM,PMR, TFR,VCZ,Zineb

- 346. Hamersak, Zdenko; Hollosi, Miklos; Kontrec, Darko; Ladesie, Branko; Majer, Zsuzsa, and Sunjic, Vitomir. Preparation and Properties of Glutathion Conjugates of 2,4,5,6-Tetrachloro-1,3-Dicyanobenzene. 1995 Feb 20; 51, (8): 2331-2338.
  - Rec #: 90

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: Preparation and spectroscopic properties of 2,5,6-trichloro-4(S-[gamma]-L-glutamyl-Lcysteinyl-glycine)-1.3-dicyanobenzene (2), 2,5-dichloro-4,6-di-(S-[gamma]-L-glutamyl-Lcysteinyl-glycine)-1,3-dicyanobenzene (3), and 5-chloro-2,4,6-tri(S-[gamma]-L-glutamyl-Lcysteinyl-glycine)-1,3-dicyanobenzene (4), gluthation conjugates of the general fungicide chlorothalonil (2,4,5,6-tetrachloro-1,3-dicyanobenzene, 1) are reported. Optimal conditions for preparation and chromatographic separation of the single conjugates are described. NMRspectroscopic data allowed unambiguous determination of regioselectivity of conjugation reaction of chlorothalonil with glutathione. UV Spectra of 2-4 revealed significant long-wavelength band shift and enhancement of intensity with increasing number of thioalkyl groups attached to the aromatic ring. The UV band assignement is based on the UV-VIS spectra of the model compounds 5-7. The far-UV CD spectra are dominated by the chiral contribution of the amide chromophores. In a trifluoroethanol/water (70:30) mixture the peptide backbone of conjugate 2 likely adopts an ordered (folded) conformation, whereas peptides 3 and 4 show no significant tendency for forming ordered structures. http://www.sciencedirect.com/science/article/B6THR-3YXBWCN-12W/2/dcb59d4a70830c2b56636172d10cd2a3

347. ---. Preparation and Properties of Glutathion Conjugates of 2,4,5,6-Tetrachloro-1,3-Dicyanobenzene. 1995 Feb 20; 51, (8): 2331-2338.

Rec #: 90

Keywords: METHODS

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348. Hanks, G. R. Control of Fusarium oxysporum f.sp. narcissi, the Cause of Narcissus Basal Rot, with Thiabendazole and Other Fungicides. POP,GRO,PHYSOIL,ENV; 1996; 15, (6): 549-558. Rec #: 630 Call Number: OK(FML,TBA),NO MIXTURE(CTN,CBD,BMY) Notes: EcoReference No.: 89791 Chemical of Concern: FML,TBA,CTN,CBD,BMY

349. Hansen, E. S. Chest Symptoms in Chimney Sweeps and Postmen: a Comparative Survey. 1990; 19, (2): 339-342.
Rec #: 565
Keywords: HUMAN HEALTH
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The purpose of this survey was to

study the association between a number of chronic diseases and occupational exposure to soot and smoke. The problem was illustrated by comparing chimney sweeps and postmen with regard to self-reported occurrence of symptoms. Data were obtained by means of a postal questionnaire. Potential confounding was controlled by matching and stratified analysis. Compared to postmen, the chimney sweeps experienced a significantly increased risk of long-term coughing with expectorate (Prevalence Rate Ratio (PRR) = 1.74, dyspnoea from fast walking (PRR = 1.46), dyspnoea from ordinary walking (PRR = 1.79), dyspnoea when dressing (PRR = 2.29) and subsernal oppression from exposure to cold or physical strain (PRR = 1.41). It seems likely that the chimney sweep's inhalation of soot particles and locally irritating flue gases may have contributed to the increased occurrence of chest symptoms in this occupational group. MESH HEADINGS: MATHEMATICS MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: DIAGNOSIS MESH HEADINGS: RESPIRATORY TRACT DISEASES/DIAGNOSIS MESH HEADINGS: RESPIRATORY TRACT DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: HOMINIDAE **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Biochemical Studies-General KEYWORDS:** Respiratory System-General **KEYWORDS:** Respiratory System-Pathology **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Occupational Health **KEYWORDS:** Hominidae LANGUAGE: eng

350. ---. Chest Symptoms in Chimney Sweeps and Postmen: a Comparative Survey. 1990; 19, (2): 339-342. Rec #: 565

Keywords: HUMAN HEALTH

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KEYWORDS: Mathematical Biology and Statistical Methods KEYWORDS: Biochemical Studies-General KEYWORDS: Respiratory System-General KEYWORDS: Respiratory System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Hominidae LANGUAGE: eng

 351. Hansen, E. S.; Olsen, J. H., and Tilt, B. Cancer and Noncancer Mortality of Chimney Sweeps in Copenhagen (Denmark). 1982; 11, (4): 356-361. Rec #: 596

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: HEEP COPYRIGHT: BIOL ABS. This is a cohort study of the mortality among chimney sweeps in Copenhagen, Denmark, during 1958-77. Nearly all the chimney sweeps started in the trade around the age of 15 yr, so this age gives the time of 1st exposure to the environmental conditions of the trade. The analysis applies a continuous time model with stratification by cause of death (cancer, non-cancer), time and age, where cumulative mortality rates are derived from current mortality tables. For each stratum of interest the observed/expected mortality ratio (O ratio) is calculated and a test performed, based on the normal distribution. The main result is a significantly higher cancer mortality for the 40-69 yr age class compared with the population at large (O/E ratio = 3.9). LANGUAGE: eng

- 352. ---. Cancer and Noncancer Mortality of Chimney Sweeps in Copenhagen (Denmark). 1982; 11, (4): 356-361.
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353. Harty, L. C.; Caporaso, N. E.; Hayes, R. B.; Winn, D. M.; Bravo-Otero, E.; Blot, W. J.; Kleinman, D. V.; Brown, L. M.; Armenian, H. K.; Fraumeni, J. F Jr, and Shields, P. G. Alcohol Dehydrogenase 3 Genotype and Risk of Oral Cavity and Pharyngeal Cancers. 1997; 89, (22): 1698-1705. Rec #: 1484

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Background: The consumption of alcoholic beverages is a strong risk factor for cancers of the oral cavity and pharynx (oral cancers). Alcohol dehydrogenase type 3 (ADH3) metabolizes ethanol to acetaldehyde, a carcinogen. We evaluated whether individuals homozygous for the fast-metabolizing ADH31 allele (ADH31-1) have a greater risk of developing oral cancer in the presence of alcoholic beverage consumption than those with the slow-metabolizing ADH32 allele (ADH31-2 and ADH32-2). Methods: As part of a population-based study of oral cancer conducted in Puerto Rico, the ADH3 genotypes of 137 patients with histologically confirmed oral cancer and of 146 control subjects (i.e., individuals with no history of oral cancer) were determined by molecular genetic analysis of oral epitheliaL

cell samples. Risks were estimated by use of multiple logistic regression analyses. Results: Compared with nondrinkers with the ADH31-1 genotype, consumers of at least 57 alcoholic drinks per MESH HEADINGS: GENETICS, MEDICAL MESH HEADINGS: HUMAN MESH HEADINGS: SOCIAL BEHAVIOR MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NUCLEIC ACIDS **MESH HEADINGS: PURINES MESH HEADINGS: PYRIMIDINES** MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: ENZYMES/PHYSIOLOGY MESH HEADINGS: MOUTH DISEASES/PATHOLOGY MESH HEADINGS: TOOTH DISEASES/PATHOLOGY **MESH HEADINGS: POISONING** MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: NEOPLASMS/PATHOLOGY MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HOMINIDAE **KEYWORDS:** Genetics and Cytogenetics-Human **KEYWORDS: Social Biology KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS: Biochemical Studies-Proteins KEYWORDS: Enzymes-Physiological Studies KEYWORDS:** Dental and Oral Biology-Pathology **KEYWORDS:** Toxicology-General **KEYWORDS:** Toxicology-Foods **KEYWORDS:** Neoplasms and Neoplastic Agents-Pathology KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS:** Hominidae LANGUAGE: eng

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with no history of oral cancer) were determined by molecular genetic analysis of oral epitheliaL cell samples. Risks were estimated by use of multiple logistic regression analyses. Results: Compared with nondrinkers with the ADH31-1 genotype, consumers of at least 57 alcoholic drinks per MESH HEADINGS: GENETICS, MEDICAL

MESH HEADINGS: HUMAN MESH HEADINGS: SOCIAL BEHAVIOR MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NUCLEIC ACIDS **MESH HEADINGS: PURINES** MESH HEADINGS: PYRIMIDINES MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: ENZYMES/PHYSIOLOGY MESH HEADINGS: MOUTH DISEASES/PATHOLOGY MESH HEADINGS: TOOTH DISEASES/PATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: NEOPLASMS/PATHOLOGY MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HOMINIDAE **KEYWORDS:** Genetics and Cytogenetics-Human **KEYWORDS: Social Biology KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS: Biochemical Studies-Proteins KEYWORDS: Enzymes-Physiological Studies KEYWORDS:** Dental and Oral Biology-Pathology **KEYWORDS:** Toxicology-General **KEYWORDS:** Toxicology-Foods **KEYWORDS:** Neoplasms and Neoplastic Agents-Pathology KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS:** Hominidae LANGUAGE: eng

355. ---. Susceptibility to Oral Cancer Associated With the Alcohol Dehydrogenase Type 3 Gene. 1997; 145, (11 suppl.): S77. Rec #: 2487 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE HUMAN ORAL CANCER ALCOHOL DEHYDROGENASE TYPE 3 GENE HEAVY DRINKING ACETALDEHYDE OXIDIZATION ALCOHOL METABOLISM GENOTYPE GENETICS TUMOR BIOLOGY SUSCEPTIBILITY DENTAL AND ORAL DISEASE NEOPLASTIC DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: GENETICS, MEDICAL MESH HEADINGS: BEHAVIOR MESH HEADINGS: HUMAN MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HOMINIDAE KEYWORDS: General Biology-Symposia KEYWORDS: Genetics and Cytogenetics-Human KEYWORDS: Behavioral Biology-Human Behavior KEYWORDS: Toxicology-General KEYWORDS: Neoplasms and Neoplastic Agents-General KEYWORDS: Hominidae LANGUAGE: eng

356. ---. Susceptibility to Oral Cancer Associated With the Alcohol Dehydrogenase Type 3 Gene. 1997; 145, (11 suppl.): S77.
 Rec #: 2487

Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE HUMAN ORAL CANCER ALCOHOL DEHYDROGENASE TYPE 3 GENE HEAVY DRINKING ACETALDEHYDE OXIDIZATION ALCOHOL METABOLISM GENOTYPE GENETICS TUMOR BIOLOGY SUSCEPTIBILITY DENTAL AND ORAL DISEASE NEOPLASTIC DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: GENETICS, MEDICAL **MESH HEADINGS: BEHAVIOR** MESH HEADINGS: HUMAN MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HOMINIDAE **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Genetics and Cytogenetics-Human **KEYWORDS: Behavioral Biology-Human Behavior KEYWORDS:** Toxicology-General **KEYWORDS:** Neoplasms and Neoplastic Agents-General **KEYWORDS:** Hominidae LANGUAGE: eng

357. Hashim, I. B.; Koehler, P. E., and Kvien, C. K. Fatty Acid Composition, Mineral Content, and Flavor Quality of Southern Runner Peanuts Treated with Herbicides and Fungicides. POP,BCMSOIL,ENV,MIXTURE; 1993; 20, (2): 106-111. Rec #: 290 Call Number: LITE EVAL CODED(MTL),OK(ALL CHEMS),NO CROP(CTN) Notes: EcoReference No.: 73925 Chemical of Concern: ACR,VNT,BFL,MTL,CTN,PAQT,DCZ,CRME

358. Hashimoto, Y. and Nishiuchi, Y. Establishment of Bioassay Methods for the Evaluation of Acute Toxicity of Pesticides to Aquatic Organisms. MORAQUA; 1981; 6, (2): 257-264(JPN) (ENG ABS). Rec #: 550
Call Number: NO CONTROL (24DXY,CBL,CTN,Captan,DZ,ES,FNT,Folpet,KSM,MLN,MOM,NaDPA,NaPCP,PAQT,PNB,P PN,PPX,PQT,RTN,SZ,TBC,TDC,TFN), NO EFED CHEM

(AND,ANZ,CZE,DDT,EN,EPRN,ETN,FBM,FLAC,FNTH,Fe,PRN,PYN,TPN,Zineb), NO ENDPOINT (CBL,CTN,Captan,DZ,ES,FNT,Folpet,KSM,MLN,MOM,NaDPA,NaPCP,PAQT,PNB,PPN,PPX, RTN,SZ,TBC,TFN) Notes: EcoReference No.: 5761 Chemical of Concern: 24DXY,AND,ANZ,CBL,CTN,CZE,Captan,DDT,DZ,EN,EPRN,ES,ETN,FBM,FLAC,FNT,FNT H,Fe,Folpet,KSM,MLN,MOM,NaDPA,NaPCP,PAQT,PNB,PPN,PPX,PQT,PRN,PYN,RTN,SZ,T BC,TDC,TFN,TPN,Zineb

359. Hathway, D. E. Mechanisms of Chemical Carcinogenesis. 1981; 0, (0): P160-197. Rec #: 2756 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: HEEP COPYRIGHT: BIOL ABS. REVIEW RAT MOUSE POLY CHLORINATED AROMATIC PESTICIDE METAL NITROSAMINE ANILINE CARCINOGEN LANGUAGE: eng

 360. ---. Mechanisms of Chemical Carcinogenesis. 1981; 0, (0): P160-197. Rec #: 2756 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: HEEP COPYRIGHT: BIOL ABS. REVIEW RAT MOUSE POLY CHLORINATED AROMATIC PESTICIDE METAL NITROSAMINE ANILINE CARCINOGEN LANGUAGE: eng

361. Hawton, D. and Johnson, I. D. G. Weed Control in Peanuts in North Queensland. POPSOIL,ENV,MIXTURE; 1981; 21, (109): 218-222. Rec #: 670 Call Number: OK(BT,24DB),NO MIXTURE(VNT,TFN,CTN),OK TARGET(MCPB) Notes: EcoReference No.: 75856 Chemical of Concern: MCPB,BT,VNT,24DB,TFN,CTN

362. Haygood, R. A. and Mazur, A. R. Evaluation of Gliocladium-Virens as a Biocontrol Agent of Dollar Spot on Bermudagrass. 1990; 80, (4): 435. Rec #: 1692 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT LANZIA MOELLERODISCUS FUNGUS CHLOROTHALONIL PROPICONAZOLE IPRODIONE CROP INDUSTRY AGRICULTURE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ANIMAL FEED MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: GRASSES KEYWORDS: General Biology-Symposia KEYWORDS: Biochemical Studies-General KEYWORDS: Agronomy-Forage Crops and Fodder KEYWORDS: Horticulture-Flowers and Ornamentals KEYWORDS: Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Ascomycetes KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Gramineae LANGUAGE: eng

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 364. Hennion, M. C. Applications and Validations of Immunoassays for Pesticides Analysis. 1998; 26, (6): M149-m155. Rec #: 2632 Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Immunoassay techniques provide a simple, powerful and inexpensive method for pesticide analysis which has been widely used in monitoring programs especially in the US. Their rapid and recent development witnesses of their increasing acceptance and is the result from the demonstration of quality and validity compared to more traditional techniques.

MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: IMMUNITY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Immunology and Immunochemistry-General KEYWORDS: Public Health: Environmental Health-Air LANGUAGE: eng

365. ---. Applications and Validations of Immunoassays for Pesticides Analysis. 1998; 26, (6): M149-m155. Rec #: 2632

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MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: IMMUNITY

- MESH HEADINGS: AIR POLLUTION
- MESH HEADINGS: SOIL POLLUTANTS

MESH HEADINGS: WATER POLLUTION

KEYWORDS: Biochemical Methods-General

KEYWORDS: Biochemical Studies-General

KEYWORDS: Toxicology-Environmental and Industrial Toxicology

KEYWORDS: Immunology and Immunochemistry-General

KEYWORDS: Public Health: Environmental Health-Air

LANGUAGE: eng

366. Hennion, M. C. and Barcelo, D. Strengths and Limitations of Immunoassays for Effective and Efficient Use for Pesticide Analysis in Water Samples: a Review. 1998; 362, (1): 3-34. Rec #: 2588

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Immunoassay techniques provide a simple, powerful and inexpensive method for pesticide analysis. However, the acceptance of immunoassays is dependent on the demonstration of quality and validity compared to more traditional techniques. In this review, primarily, the knowledge and the fundamentals of immunoassay methods are given in order to make good use of immunoassays, especially of

ELISA tests. Special attention is given to a better understanding of the high selectivity and sensitivity which is attained for some immunoassays and not for others. It is also explained why some immunoassays are a quantitative method whereas others can only be used as a screening method. The cross-reactivity process, the effect of the sample matrix and the data interpretation are illustrated by numerous examples from the literature. Other formats, especially flow-injection immunoassays, dipstick immunoassay and liposome-amplified immunoassays are presented. Ouality assurance and guideline MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: IMMUNITY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Methods-General KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Immunology and Immunochemistry-General KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

367. ---. Strengths and Limitations of Immunoassays for Effective and Efficient Use for Pesticide Analysis in Water Samples: a Review. 1998; 362, (1): 3-34.

Rec #: 2588
Keywords: METHODS
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MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: IMMUNITY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Methods-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Immunology and Immunochemistry-General KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

368. Henriques, W.; Jeffers, R. D.; Lacher, T. E Jr, and Kendall, R. J. Agrochemical Use on Banana Plantations in Latin America: Perspectives on Ecological Risk. 1997; 16, (1): 91-99. Rec #: 2665

Keywords: REVIEW

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Developing tropical nations have greatly expanded their agricultural production during the past decade. Substantial areas of tropical ecosystems have been altered to accommodate agriculture. Banana cultivation is responsible for much of this habitat alteration. Substantial use of agricultural chemicals is required to successfully cultivate bananas, and this has raised concern over the effects of these chemicals on workers, wildlife, and tropical environments in general. We review the practice of banana cultivation and address the major chemical inputs to plantations. Numerous cases of pesticide-related health problems in Latin American plantation workers have been documented, and most were attributable to incorrect use and handling. A review of known wildlife-related impacts of agricultural chemicals commonly used in banana plantations raises substantial concerns about the large-scale environmental impacts in tropical terrestrial and aquatic environments. We recommend t MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Pest Control KEYWORDS:** Hominidae LANGUAGE: eng

369. ---. Agrochemical Use on Banana Plantations in Latin America: Perspectives on Ecological Risk. 1997; 16, (1): 91-99.
 Rec #: 2665

Keywords: REVIEW

Notes: Chemical of Concern: CTN

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address the major chemical inputs to plantations. Numerous cases of pesticide-related health problems in Latin American plantation workers have been documented, and most were attributable to incorrect use and handling. A review of known wildlife-related impacts of agricultural chemicals commonly used in banana plantations raises substantial concerns about the large-scale environmental impacts in tropical terrestrial and aquatic environments. We recommend t MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Pest Control KEYWORDS:** Hominidae LANGUAGE: eng

- 370. Hernandez-Dorrego, A. and Pares, J. M. Evaluation of some fungicides on mycorrhizal symbiosis between two Glomus species from commercial inocula and Allium porrum L. seedlings. 2010; 8, S43-S50. Rec #: 14652
  - Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: This paper reports the effect of twenty-five commonly used fungicides in agriculture on two arbuscular mycorrhizal fungi (AMF) present in commercial products of ATENS, S.L.: Glomus intraradices (Schenck & Smith) and Glomus mosseae [(Nicol. & Gerd.) Gerdemann & Trappe], forming the symbiosis with leek plants. Systemic fungicides (Aliette, Beltanol, Caddy 10, Forum, Moncut, Ortiva, Previcur, Ridomil Gold MZ, Ridomil Gold SL, Rubigan, Sinthane, Stroby, Swich, Tachigarem, Teldor, Topas 10 EC, Frupica) and non systemic fungicides (Daconil 75%, Ditiver, Euparem, INACOP, Octagon, Parmex, Terrazole and Metaram), started to be applied to soil and leaves at recommended concentrations and frequencies 4 weeks after transplant and AMF inoculation. The effect of the fungicides was assessed by comparing treated and untreated plants that were inoculated with the AMF through quantification of root mycorrhizal colonization. Among the fungicides applied to the soil, Octagon, Ditiver, Parmex and Metaram virtually eliminated the mycorrhizal symbiosis in treated plants, while the mycorrhizal colonization was not affected by the soil treatment with Beltanol, INACOP and Previcur. Three fungicides of foliar recommended application: Rubigan, Frupica, and Sinthane, strongly inhibited mycorrhizal colonization, but Aliette, Forum, Teldor, Swich and Ortiva, did not seem to reduce it substantially. In addition, the work describes the individual effect of each fungicide applied on both, foliage and soil.

Keywords: chemical control, endomycorrhiza, Glomus intraradices, Glomus mosseae, ISI Document Delivery No.: 627WT

 371. Hernandez, L.; Hernandez, P., and Vicente, J. Voltammetric Determination of Methyl Parathion, O-, Mand P- Nitrophenol With a Carbon Paste Electrode Modified With C18. 1993; 345, (11): 712-715. Rec #: 2014

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The determination of methylparathion (MPT), ortho (ONP), meta (MNP) and para nitrophenol (PNP) has been studied by differential pulse voltammetry with a carbon-paste electrode modified with 50% (w/w) of C18. A study of the influence of the pH in the preconcentration cell and the measurement cell was carried out for an electrode with 50% modifier and an accumulation time of 5 min. The voltammograms were recorded with a sweep rate of 40 mV s-1 and a pulse amplitude of 50 mV. With the optimum conditions of pH for both the steps, various other variables were studied. The variables for each compound were optimized and the possibility of application to the determination of a mixture of the four compounds was investigated. The determination limits found for all the compounds are: 2 ng ml-1 for ONP, 5 ng ml-1 for MNP, 4.3 ng ml-1 for PNP and 7.9 ng ml-1 for MPT. The method was applied to samples of a small lake which gathers rain water and water filtered for land on which ce MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS **MESH HEADINGS: INSECTICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control LANGUAGE: eng

372. ---. Voltammetric Determination of Methyl Parathion, O-, M- and P- Nitrophenol With a Carbon Paste Electrode Modified With C18. 1993; 345, (11): 712-715.

Rec #: 2014

Keywords: METHODS

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373. Herrera, L.; Hernandez, J.; Bravo, L.; Romo, L., and Vera, L. Biological Process for Sulfate and Metals Abatement From Mine Effluents. 1997; 12, (2): 101-107. Rec #: 2835

Keywords: EFFLUENT

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A biological process was developed, aimed at treating water containing 1-2 g sulfate, typical of effluents in diverse mining operations. The original inocula was adapted from sanitary fill culture, to reduce sulphate, utilizing hydrogen gas as energy source and carbon dioxide as sole carbon source. Cost analysis, when compared to a lactate process, indicated the superiority of the hydrogen process. Experiences with an experimental 1 L reactor led to reaction rates ranging from 32 to 83 mg/L per h. Degradation rates could be accelerated by increasing the feed sulphate concentration; however, this strategy is not feasible, because concentrating sulphate is a fairly expensive process. The suspended solids in the effluent had good sedimentation and flotation properties, giving a process with few postreactor separation processes, previous to environmental discharge. Process economic analyses for a typical mine operation indicate that sulphate, and consequently metals, can be MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: SANITATION MESH HEADINGS: SEWAGE MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **KEYWORDS: Biochemical Studies-General** KEYWORDS: Public Health: Environmental Health-Sewage Disposal and Sanitary Measures KEYWORDS: Public Health: Environmental Health-Air LANGUAGE: eng

374. ---. Biological Process for Sulfate and Metals Abatement From Mine Effluents. 1997; 12, (2): 101-107. Rec #: 2835

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 Hildebrand, G. L. and Bock, K. R. Effect of Timing of Single Applications of Fungicide on Groundnut Yield. 1990: 3-8.

Rec #: 1311 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CERCOSPORA-ARACHIDICOLA ARACHIS-HYPOGAEA GROUNDNUT EARLY LEAF SPOT CHLOROTHALONIL MALAWI ZAMBIA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: OILS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: LEGUMES KEYWORDS:** General Biology-Symposia **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Plant Physiology **KEYWORDS:** Agronomy-Oil Crops KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control

KEYWORDS: Pest Control KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Leguminosae LANGUAGE: eng

376. ---. Effect of Timing of Single Applications of Fungicide on Groundnut Yield. 1990: 3-8. Rec #: 1311

> Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CERCOSPORA-ARACHIDICOLA ARACHIS-HYPOGAEA GROUNDNUT EARLY LEAF SPOT CHLOROTHALONIL MALAWI ZAMBIA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: OILS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT **MESH HEADINGS: SOIL** MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: LEGUMES **KEYWORDS:** General Biology-Symposia **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Plant Physiology KEYWORDS: Agronomy-Oil Crops KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Leguminosae LANGUAGE: eng

377. Hillenweck, A.; Corpet, D. E.; Killeen, J. C. Jr; Bliss, M. Jr, and Cravedi, J. P. Ex Vivo Gastrointestinal Biotransformation of Chlorothalonil in the Germ-Free and Conventional Rat. 1998; 28, (11): 1017-1028. Rec #: 437 Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: 1. The metabolism and absorption of chlorothalonil and corresponding

diglutathione and dicysteine conjugates was studied using isolated everted gastrointestinal sacs of the conventional and germ-free rat. An HPLC method was used to analyse mucosal and serosal fluids. Thiol metabolites of chlorothalonil were determined by GC/MS. 2. Low absorption of the substrates was observed, with < 4% of the radioactivity being recovered from the serosal buffers and the digestive tissues. A major part of the radioactivity was recovered from the mucosal fluids and it corresponded to unchanged chlorothalonil. Traces of unchanged chlorothalonil and mono-, di- and trimethylthio metabolites were present in serosal fluids as well as unidentified polar peaks. An important transformation (>75%) of the chlorothalonil conjugates was observed. The di- and trimethylthio metabolites of chlorothalonil were detected from both sides of the everted gut sac of rat incubated with the diglutathione and dicysteine conjugates. 3. Few differences were observed between the conventional and germ-free rat: absorption was higher in the duodenum of germ-free rat, but tissue retention was more significant in the duodenum of the conventional rat. MESH HEADINGS: 3-O-Methylglucose/metabolism **MESH HEADINGS: Animals MESH HEADINGS: Biotransformation** MESH HEADINGS: Carbon Radioisotopes/metabolism MESH HEADINGS: Cecum/metabolism MESH HEADINGS: Cysteine/metabolism MESH HEADINGS: Duodenum/metabolism MESH HEADINGS: Fungicides, Industrial/metabolism/\*pharmacokinetics MESH HEADINGS: Germ-Free Life MESH HEADINGS: Glutathione/metabolism **MESH HEADINGS: Intestinal Absorption** MESH HEADINGS: Intestinal Mucosa/\*metabolism **MESH HEADINGS: Male** MESH HEADINGS: Nitriles/metabolism/\*pharmacokinetics **MESH HEADINGS: Rats** MESH HEADINGS: Rats, Sprague-Dawley **MESH HEADINGS: Tissue Distribution** LANGUAGE: eng

378. ---. Ex Vivo Gastrointestinal Biotransformation of Chlorothalonil in the Germ-Free and Conventional Rat. 1998; 28, (11): 1017-1028.

Rec #: 437

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: 1. The metabolism and absorption of chlorothalonil and corresponding diglutathione and dicysteine conjugates was studied using isolated everted gastrointestinal sacs of the conventional and germ-free rat. An HPLC method was used to analyse mucosal and serosal fluids. Thiol metabolites of chlorothalonil were determined by GC/MS. 2. Low absorption of the substrates was observed, with < 4% of the radioactivity being recovered from the serosal buffers and the digestive tissues. A major part of the radioactivity was recovered from the mucosal fluids and it corresponded to unchanged chlorothalonil. Traces of unchanged chlorothalonil and mono-, di- and trimethylthio metabolites were present in serosal fluids as well as unidentified polar peaks. An important transformation (> 75%) of the chlorothalonil conjugates was observed. The di- and trimethylthio metabolites of chlorothalonil were detected from both sides of the everted gut sac of rat incubated with the diglutathione and dicysteine conjugates. 3. Few differences were observed between the conventional and germ-free rat: absorption was higher in the duodenum of germ-free rat, but tissue retention was more significant in the duodenum of the conventional rat. MESH HEADINGS: 3-O-Methylglucose/metabolism MESH HEADINGS: Animals

**MESH HEADINGS: Biotransformation** 

MESH HEADINGS: Carbon Radioisotopes/metabolism

- MESH HEADINGS: Cecum/metabolism
- MESH HEADINGS: Cysteine/metabolism

MESH HEADINGS: Duodenum/metabolism

MESH HEADINGS: Fungicides, Industrial/metabolism/\*pharmacokinetics MESH HEADINGS: Germ-Free Life MESH HEADINGS: Glutathione/metabolism MESH HEADINGS: Intestinal Absorption MESH HEADINGS: Intestinal Mucosa/\*metabolism MESH HEADINGS: Male MESH HEADINGS: Nitriles/metabolism/\*pharmacokinetics MESH HEADINGS: Rats MESH HEADINGS: Rats, Sprague-Dawley MESH HEADINGS: Tissue Distribution LANGUAGE: eng

379. Hillenweck, A.; Cravedi, J. P.; Debrauwer, L.; Killeen, J. C Jr; Bliss, M. Jr, and Corpet, D. E.

Chlorothalonil Biotransformation by Gastrointestinal Microflora: in Vitro Comparative Approach in Rat, Dog, and Human. 1997; 58, (1): 34-48.

Rec #: 453

Keywords: METABOLISM, BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Chlorothalonil (2,4,5,6tetrachloroisophthalonitrile) is a broad spectrum contact fungicide used in agriculture and horticulture. The role of digestive microflora in chlorothalonil metabolism was assessed by in vitro incubation of (14C)chlorothalonil with stomach, duodenum, and cecum contents from rat, stomach, duodenum, and colon contents from dog and with human feces and stomach contents using an incubation dose of 500 mug/g of digestive contents. Transformation of chlorothalonil mostly occurred in rat cecum contents, dog colon contents, and human feces, in which unchanged chlorothalonil accounted for 46.7, 29.7, and 22.6% of the radioactivity, respectively. In those incubations, the identified metabolites were: 2,5,6-trichloro-4-methylthioisophthalonitrile (0.8-3% of the radioactivity), 2,5,6-trichloro-4-thioisophthalonitrile (0-7.1%), 3-thia-1-cyano-2,5,6trichloroisoindolinone (2.6-12.7%), 2,5,6-trichloro-4-hydroxy-isophthalonitrile (03.2%), and 2,5,6-trichloroiso

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: METABOLISM MESH HEADINGS: DIGESTIVE SYSTEM/PHYSIOLOGY MESH HEADINGS: DIGESTIVE SYSTEM/METABOLISM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: MICROBIOLOGY **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MICROBIOLOGY MESH HEADINGS: CARNIVORA MESH HEADINGS: HOMINIDAE MESH HEADINGS: MURIDAE **KEYWORDS:** Comparative Biochemistry **KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Digestive System-Physiology and Biochemistry **KEYWORDS:** Toxicology-General **KEYWORDS:** Microorganisms **KEYWORDS:** Pest Control **KEYWORDS:** Microorganisms-Unspecified **KEYWORDS:** Canidae **KEYWORDS:** Hominidae **KEYWORDS:** Muridae LANGUAGE: eng

380. ---. Chlorothalonil Biotransformation by Gastrointestinal Microflora: in Vitro Comparative Approach in Rat, Dog, and Human. 1997; 58, (1): 34-48. Rec #: 453 Keywords: METABOLISM, BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Chlorothalonil (2,4,5,6tetrachloroisophthalonitrile) is a broad spectrum contact fungicide used in agriculture and horticulture. The role of digestive microflora in chlorothalonil metabolism was assessed by in vitro incubation of (14C)chlorothalonil with stomach, duodenum, and cecum contents from rat, stomach, duodenum, and colon contents from dog and with human feces and stomach contents using an incubation dose of 500 mug/g of digestive contents. Transformation of chlorothalonil mostly occurred in rat cecum contents, dog colon contents, and human feces, in which unchanged chlorothalonil accounted for 46.7, 29.7, and 22.6% of the radioactivity, respectively. In those incubations, the identified metabolites were: 2,5,6-trichloro-4-methylthioisophthalonitrile (0.8-3% of the radioactivity), 2,5,6-trichloro-4-thioisophthalonitrile (0-7.1%), 3-thia-1-cyano-2,5,6trichloroisoindolinone (2.6-12.7%), 2,5,6-trichloro-4-hydroxy-isophthalonitrile (03.2%), and 2.5.6-trichloroiso MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: METABOLISM MESH HEADINGS: DIGESTIVE SYSTEM/PHYSIOLOGY MESH HEADINGS: DIGESTIVE SYSTEM/METABOLISM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: MICROBIOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MICROBIOLOGY MESH HEADINGS: CARNIVORA MESH HEADINGS: HOMINIDAE MESH HEADINGS: MURIDAE **KEYWORDS:** Comparative Biochemistry **KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Digestive System-Physiology and Biochemistry **KEYWORDS:** Toxicology-General **KEYWORDS:** Microorganisms **KEYWORDS:** Pest Control **KEYWORDS:** Microorganisms-Unspecified **KEYWORDS:** Canidae **KEYWORDS:** Hominidae **KEYWORDS:** Muridae LANGUAGE: eng

381. Hobbelen, P. H. F.; Paveley, N. D., and van den Bosch, F. Delaying Selection for Fungicide Insensitivity by Mixing Fungicides at a Low and High Risk of Resistance Development: A Modeling Analysis. 2011; 101, (10): 1224-1233. Rec #: 14702 Keywords: MODELING Notes: Chemical of Concern: CTN Abstract: Abstract: Hobbelen, P. H. F., Paveley, N. D., and van den Bosch, F. 2011. Delaying selection for fungicide insensitivity by mixing fungicides at a low and high risk of resistance development: A modeling analysis. Phytopathology 101:1224-1233. This study used mathematical modeling to predict whether mixtures of a high-resistance-risk and a low-risk fungicide delay selection for resistance against the high-risk fungicide. We used the winter wheat and Mycosphaerella graminicola host-pathogen system as an example, with a quinone outside inhibitor

fungicide as the high-risk and chlorothalonil as the low-risk fungicide. The usefulness of the mixing strategy was measured as the "effective life": the number of seasons that the disease-induced reduction of the integral of canopy green area index during the yield forming period could be kept <5%. We determined effective lives for strategies in which the dose rate (i) was constant for both the low-risk and high-risk fungicides, (ii) was constant for the low-risk fungicide but could increase for the high-risk fungicide, and (iii) was adjusted for both fungicides but their ratio in the mixture was fixed. The effective life was highest when applying the full label-recommended dose of the low-risk fungicide and adjusting the dose of the high-risk fungicide each season to the level required to maintain effective control. This strategy resulted in a predicted effective life of <= 12 years compared with 3 to 4 years when using the high risk fungicide alone. Keywords: SEPTORIA LEAF BLOTCH, MYCOSPHAERELLA-GRAMINICOLA, WINTER-WHEAT,

ISI Document Delivery No.: 824EN

382. Hoferkamp, Lisa; Hermanson, Mark H; Muir, Derek Cg, and Hoferkamp, Lisa. Current Use Pesticides in Arctic Media; 2000-2007. 2010 Jul 1; 408, (15): 2985-2994.

Rec #: 11672

Keywords: REVIEW, SURVEY

Notes: Chemical of Concern: CTN

Abstract: Abstract: This review will summarize the levels of selected current use pesticides (CUPs) that have been identified and reported in Arctic media (i.e. air, water, sediment, and biota) since the year 2000. Almost all of the 10 CUPs (chlorothalonil, chlorpyrifos, dacthal, diazinon, dicofol, lindane, methoxychlor, pentachloronitrobenzene (PCNB), pentachlorophenol, and trifluralin) examined in the review currently are, or have been, high production volume chemicals i.e. >1M lbs/y in USA or >1000t/y globally. Characteristic travel distances for the 10 chemicals range from 55km (methoxychlor) to 12,100km (PCNB). Surveys and long-term monitoring studies have demonstrated the presence of 9 of the 10 CUPs included in this review in the Arctic environment. Only dicofol has not been reported. The presence of these chemicals has mainly been reported in high volume air samples and in snow from Arctic ice caps and lake catchments. There are many other CUPs registered for use which have not been determined in Arctic environments. The discovery of the CUPs currently measured in the Arctic has been mainly serendipitous, a result of analyzing some samples using the same suite of analytes as used for studies in mid-latitude locations. A more systematic approach is needed to assess whether other CUPs might be accumulating in the arctic and ultimately to assess whether their presence has any significance biologically or results in risks for human consumers. Date revised - 2010-10-01. Publication date - Jul 1, 2010. Language of summary - English. Location - PN, Arctic; USA. Pages - 2985-2994. ProQuest ID - 759307639. Corporate institution author - Hoferkamp, Lisa; Hermanson, Mark H; Muir, Derek CG. DOI - b961ee7a-b100-40ca-8282csaobj202; 13072081; CS1115550; 10.1016/j.scitotenv.2009.11.038; 0048-9697

 383. Holopainen, J. K. and Rikala, R. Abundance and Control of Lygus rugulipennis (Heteroptera: Miridae) on Scots Pine (Pinus sylvestris L.) Nursery Stock. POP,GROSOIL,ENV; 1990; 4, (1): 13-25. Rec #: 700 Call Number: NO COC(CTN),OK(OXD,HCCH,CYP) Notes: EcoReference No.: 89773 Chemical of Concern: OXD,HCCH,CYP

384. Horsfield, Andrew; Wicks, Trevor, and Wilson, Doug. Field evaluation of fungicides for the control of rust, brown rot, shot hole and scab in almonds. 2010; 39, (2): 112-119.
 Rec #: 12582
 Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: Three field trials were conducted during 2007 and 2008 to evaluate a range of new fungicide products for control of rust, brown rot, shot hole and scab in almonds in South Australia. Azoxystrobin, pyraclostrobin + boscalid, pyraclostrobin + metiram and chlorothalonil controlled rust, whereas propiconazole was less effective with limited residual activity. Under

heavy disease pressure boscalid, azoxystrobin and pyraclostrobin + metiram controlled brown rot, whereas captan was significantly less effective and the efficacy of propiconazole was inconsistent between sites. Shot hole was controlled most effectively with azoxystrobin, captan, pyraclostrobin + boscalid and pyraclostrobin + metiram, with propiconazole being less effective. All of the fungicides evaluated significantly reduced scab infections, with limited difference between the fungicides and formulations. Future fungicide work in almonds should focus on new product evaluation as well as refining use rates and timing to optimise disease control. Keywords: Internet resource Collingwood, Victoria: CSIRO Publishing

385. Horsley, S. W. and Moser, J. A. Monitoring Ground Water for Pesticides at a Golf Course a Case Study on Cape Cod Massachusetts Usa. 1990; 10, (1): 101-108. Rec #: 1672 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Ecology** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Pest Control LANGUAGE: eng

386. ---. Monitoring Ground Water for Pesticides at a Golf Course a Case Study on Cape Cod Massachusetts Usa. 1990; 10, (1): 101-108. Rec #: 1672 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **MESH HEADINGS: SOIL** MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Ecology** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Pest Control

LANGUAGE: eng

- 387. Hossain, M. Evaluation of Fungicides in Controlling Anthracnose of Guava. 1993; 22, (1): 101-103. Rec #: 2042 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM PSIDIUM-GUAJAVA COLLETOTRICHUM-PSIDII BORDEAUX MIXTURE ZINEB TOPSIN M 70 WP DITHANE M-45 BAVISTIN MORESTAN DACONIL MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: TROPICAL CLIMATE MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Tropical and Subtropical Fruits and Nuts KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Myrtaceae LANGUAGE: eng
- 388. Howard, J. E.; Vaswani, A., and Heotis, P. Thyroid Disease Among the Rongelap and Utirik Population: an Update. 1997; 73, (1): 190-198. Rec #: 2493

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In 1954, 253 Marshallese were accidentally exposed to fallout radiation from the hydrogen bomb, BRAVO. The Marshall Islands Medical Program (MIMP) was established by the Department of Energy in 1955 to monitor and treat radiation-related disease pursuant to this accident. Medical teams from Brookhaven National Laboratory, a federal institution, regularly visit the Marshall Islands to give medical care to the exposed population. The most significant complication of the exposure has been found to be thyroid disease due to the ingestion of radioactive iodides from the fallout. In 1963 the first thyroid nodules were found in Rongelap subjects and in 1969 in Utirik. Non-neoplastic adenomatous nodules were associated with higher doses of radiation and neoplastic nodules developed in individuals receiving lower doses of radiation. Women were more susceptible to the thyroid by ultras MESH HEADINGS: RADIATION EFFECTS MESH HEADINGS: RADIATION PROTECTION

MESH HEADINGS: RADIATION PROTECTION MESH HEADINGS: THYROID GLAND MESH HEADINGS: CARCINOGENS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: RADIATION DOSAGE MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HOMINIDAE KEYWORDS: Radiation-Radiation Effects and Protective Measures KEYWORDS: Endocrine System-Thyroid KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Environmental Health-Radiation Health KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms KEYWORDS: Hominidae LANGUAGE: eng

389. ---. Thyroid Disease Among the Rongelap and Utirik Population: an Update. 1997; 73, (1): 190-198. Rec #: 2493

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In 1954, 253 Marshallese were accidentally exposed to fallout radiation from the hydrogen bomb, BRAVO. The Marshall Islands Medical Program (MIMP) was established by the Department of Energy in 1955 to monitor and treat radiation-related disease pursuant to this accident. Medical teams from Brookhaven National Laboratory, a federal institution, regularly visit the Marshall Islands to give medical care to the exposed population. The most significant complication of the exposure has been found to be thyroid disease due to the ingestion of radioactive iodides from the fallout. In 1963 the first thyroid nodules were found in Rongelap subjects and in 1969 in Utirik. Non-neoplastic adenomatous nodules were associated with higher doses of radiation and neoplastic nodules developed in individuals receiving lower doses of radiation. Women were more susceptible to the development of palpable thyroid nodules than men. In 1994 the MIMP initiated examination of the thyroid by ultras

MESH HEADINGS: RADIATION EFFECTS MESH HEADINGS: RADIATION PROTECTION MESH HEADINGS: THYROID GLAND MESH HEADINGS: CARCINOGENS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: RADIATION DOSAGE MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HOMINIDAE **KEYWORDS:** Radiation-Radiation Effects and Protective Measures **KEYWORDS: Endocrine System-Thyroid** KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Environmental Health-Radiation Health KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS:** Hominidae LANGUAGE: eng

390. Huang, S.; Zhang, J.; Li, Z., and Deng, P. Study of Multiresidue Analytical Method for Organonitrogen and Organophosphorus Pesticides in Soil and Water. 1990; 2, (3): 107-114.
Rec #: 1757
Keywords: FATE, METHODS
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A gas chromatographic method without derivatization was developed for the residue analysis of 10 organonitrogen and 9 organophosphorus pesticides in soil and water. The samples were blended or shaken with acetone

for extraction. The extracts were cleaned up by coagulation, then, re-extracted with three 50 ml portions of dichloromethane. The final residue was detected by gas chromatography equipped with NPD. All of the 19 pesticides were completely separated at a constant temperature. The method described above was applicable to the simultaneous determination of 10 organonitrogen and 9 organophosphorus pesticides in soil and water with the satisfactory recovery (from 82.42% to 103.57%), coefficient of variance (from 0.17% to 12.57%) and limit of detection (from 0.0006 ppm to 0.058 ppm). MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** General Biology-Conservation **KEYWORDS:** Ecology **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Soil Science-General** KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Pest Control LANGUAGE: eng

- ---. Study of Multiresidue Analytical Method for Organonitrogen and Organophosphorus Pesticides in Soil and Water. 1990; 2, (3): 107-114.
  - Rec #: 1757

Keywords: FATE, METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A gas chromatographic method without derivatization was developed for the residue analysis of 10 organonitrogen and 9 organophosphorus pesticides in soil and water. The samples were blended or shaken with acetone for extraction. The extracts were cleaned up by coagulation, then, re-extracted with three 50 ml portions of dichloromethane. The final residue was detected by gas chromatography equipped with NPD. All of the 19 pesticides were completely separated at a constant temperature. The method described above was applicable to the simultaneous determination of 10 organonitrogen and 9 organophosphorus pesticides in soil and water with the satisfactory recovery (from 82.42% to 103.57%), coefficient of variance (from 0.17% to 12.57%) and limit of detection (from 0.0006 ppm to 0.058 ppm).

MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: SOIL **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** General Biology-Conservation **KEYWORDS: Ecology KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Soil Science-General** KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Pest Control LANGUAGE: eng

392. Hueskes, R. and Levsen, K. Pesticides in Rain. 1997; 35, (12): 3013-3024.

Rec #: 2562 Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. 40 rainwater samples were collected in Hannover and near Peine (Lower Saxony, Germany) in 1992 using a wet-only collector. The samples were extracted by solid phase extraction and analyzed by GC for 59 pesticides. 11 pesticides were found in more than 10 samples. The highest concentrations were observed for terbuthylazine (0.003-0.52 mug/L), metolachlor (0.003-0.51 mug/L, mean: 0.10 mug/L), metalaxyl (0.006-0.48 mug/L, mean: 0.10 mug/L) and chlorothalonil (0.003-1.1 mug/L, mean: 0.16 mug/L). The concentrations show a seasonal dependence reflecting the application periods./PHYSIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-Molecular Properties and Macromolecules** KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Pest Control** 

LANGUAGE: eng

393. ---. Pesticides in Rain. 1997; 35, (12): 3013-3024.

Rec #: 2562

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. 40 rainwater samples were collected in Hannover and near Peine (Lower Saxony, Germany) in 1992 using a wet-only collector. The samples were extracted by solid phase extraction and analyzed by GC for 59 pesticides. 11 pesticides were found in more than 10 samples. The highest concentrations were observed for terbuthylazine (0.003-0.52 mug/L), metolachlor (0.003-0.51 mug/L, mean: 0.10 mug/L), metalaxyl (0.006-0.48 mug/L, mean: 0.10 mug/L) and chlorothalonil (0.003-1.1 mug/L, mean: 0.16 mug/L). The concentrations show a seasonal dependence reflecting the application periods./PHYSIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-Molecular Properties and Macromolecules KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Pest Control** LANGUAGE: eng

Hung, Hayley; Kallenborn, Roland; Breivik, Knut; Su, Yushan; Brorstr+\m-Lund+\_n, Eva; Olafsdottir, Kristin; Thorlacius, Johanna M.; Lepp+ńnen, Sirkka; Bossi, Rossana; Skov, Henrik; Man++, Stein; Patton, Gregory W.; Stern, Gary; Sverko, Ed, and Fellin, Phil. Atmospheric monitoring of organic pollutants in the Arctic under the Arctic Monitoring and Assessment Programme (AMAP): 1993ΓÇô2006: Levels, trends and effects of legacy and new persistent organic pollutants in the Arctic: An AMAP Assessment . 2010 Jul 1-; 408, (15): 2854-2873. Rec #: 660

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: Continuous and comparable atmospheric monitoring programs to study the transport and occurrence of persistent organic pollutants (POPs) in the atmosphere of remote regions is essential to better understand the global movement of these chemicals and to evaluate the effectiveness of international control measures. Key results from four main Arctic research stations, Alert (Canada), Pallas (Finland), Storhofdi (Iceland) and Zeppelin (Svalbard/Norway), where long-term monitoring have been carried out since the early 1990s, are summarized. We have also included a discussion of main results from various Arctic satellite stations in Canada, Russia, US (Alaska) and Greenland which have been operational for shorter time periods. Using the Digital Filtration temporal trend development technique, it was found that while some POPs showed more or less consistent declines during the 1990s, this reduction is less apparent in recent years at some sites. In contrast, polybrominated diphenyl ethers (PBDEs) were still found to be increasing by 2005 at Alert with doubling times of 3.5 years in the case of deca-BDE. Levels and patterns of most POPs in Arctic air are also showing spatial variability, which is typically explained by differences

in proximity to suspected key source regions and long-range atmospheric transport potentials. Furthermore, increase in worldwide usage of certain pesticides, e.g. chlorothalonil and quintozene, which are contaminated with hexachlorobenzene (HCB), may result in an increase in Arctic air concentration of HCB. The results combined also indicate that both temporal and spatial patterns of POPs in Arctic air may be affected by various processes driven by climate change, such as reduced ice cover, increasing seawater temperatures and an increase in biomass burning in boreal regions as exemplified by the data from the Zeppelin and Alert stations. Further research and continued air monitoring are needed to better understand these processes and its future impact on the Arctic environment. Arctic/ Atmospheric monitoring/ Persistent organic pollutants (POPs)/ Temporal trends/ Spatial distribution/ Long-range transport (LRT)/ Climate change

395. Hutcheon, J. A. and Jordan, V. Wl. Glasshouse Evaluation of Fungicides for Control of Fusarium-Spp on Ears of Winter Wheat. 1990; 0, (11): 50-51. Rec #: 1701 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM FUSARIUM-AVENACEUM FUSARIUM-CULMORUM FUSARIUM-GRAMINEARUM FUSARIUM-NIVALE CARBENDAZIM CHLOROTHALONIL PROCHLORAL PROPICONAZOLE UK-264 AC-4389 MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: CEREALS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: GRASSES KEYWORDS: Biochemical Studies-General KEYWORDS: Agronomy-Grain Crops** KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Gramineae LANGUAGE: eng

396. ICI Americas Inc. Initial Submission: Pp523/Tridemorph/Chlorothalonil: Skin Sensitisation Study to the Guinea Pig of a 40/140/400g/L Formulation With Cover Letter Dated 082892. 1992: 38 p. (NTIS/OTS0538454). 148288. Rec #: 6532
Keywords: MIXTURE Notes: Chemical of Concern: CTN Abstract: NO MIXTURE Microfiche processed 4/16/07//Was EcoRef # 90782// (Was ECOREF# 90782)

397. Ignoffo, C. M.; Hostetter, D. L.; Garcia, C., and Pinnell, R. E. Sensitivity of the Entomopathogenic Fungus Nomuraea rileyi to Chemical Pesticides Used on Soybeans. GRO,MORENV; 1975; 4, 765-768. Rec #: 870 Call Number: NO EFED CHEM (CHD,ETN,HPT,TXP), NO ENDPOINT (BMY,CPY,CTN,LNR,MLN,MP,MZB,Maneb) Notes: EcoReference No.: 108373 Chemical of Concern: 24DB,BMY,CHD,CPY,CTN,ETN,HPT,LNR,MLN,MP,MZB,Maneb,TXP

398. Ilyas, M. B. and Bashir, M. Effect of Chickpea Seed Treatment with Fungicides on the Recovery of Seed Borne Fungi. POP,REPSOIL,ENV,MIXTURE; 1987; 8, (1): 114-116. Rec #: 130
Call Number: EFFICACY (BMY,CTN,Captan,MZB,PNB), NO EFED CHEM (DINO,OTQ), TARGET (BMY,CTN,Captan,MZB,PNB) Notes: EcoReference No.: 156663
Chemical of Concern: BMY,CTN,Captan,DINO,MZB,OTQ,PNB

399. Indian Society of Mycology and Plant Pathology. 1997 Annual Conference of the Indian Society of Mycology and Plant Pathology (India; 1997). 1997; 27, (1): 98-109. Rec #: 2580 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This meeting contains abstracts of 35 papers, written in English, covering pest control, and treatment, diagnosis, and prevention of plant diseases. MESH HEADINGS: BOTANY/ECONOMICS MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY. NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: PLANTS MESH HEADINGS: FUNGI **KEYWORDS: Economic Botany** KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Phytopathology-General and Miscellaneous **KEYWORDS:** Pest Control **KEYWORDS:** Organisms-Unspecified **KEYWORDS:** Plantae-Unspecified **KEYWORDS:** Fungi-Unspecified LANGUAGE: eng

400. ---. 1997 Annual Conference of the Indian Society of Mycology and Plant Pathology (India; 1997). 1997; 27, (1): 98-109. Rec #: 2580 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This meeting contains abstracts of 35 papers, written in English, covering pest control, and treatment, diagnosis, and prevention of plant diseases. MESH HEADINGS: BOTANY/ECONOMICS MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PLANT DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: PLANTS MESH HEADINGS: FUNGI **KEYWORDS: Economic Botany** KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control KEYWORDS: Phytopathology-General and Miscellaneous **KEYWORDS:** Pest Control **KEYWORDS:** Organisms-Unspecified **KEYWORDS:** Plantae-Unspecified **KEYWORDS:** Fungi-Unspecified LANGUAGE: eng

401. Inglis, D. A. and Powelson, M. L. Coordination of the 1996 National Late Blight Fungicide Trial. 1998; 88, (9 suppl.): S107. Rec #: 1040 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PEST MANAGEMENT HORTICULTURE LATE BLIGHT MANCOZEB FUNGICIDE CHLOROTHALONIL PROPAMOCARB HYDROXIDE TRIPHENYL-TIN TACHOPHOR HYDROXIDE NATIONAL LATE BLIGHT FUNGICIDE TRIAL FUNGAL DISEASE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Symposia KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control LANGUAGE: eng

402. ---. Coordination of the 1996 National Late Blight Fungicide Trial. 1998; 88, (9 suppl.): S107. Rec #: 1040 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PEST MANAGEMENT HORTICULTURE LATE BLIGHT MANCOZEB FUNGICIDE CHLOROTHALONIL PROPAMOCARB HYDROXIDE TRIPHENYL-TIN TACHOPHOR HYDROXIDE NATIONAL LATE BLIGHT FUNGICIDE TRIAL FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: General Biology-Symposia KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control LANGUAGE: eng

403. Iqbal, Z.; Pervez, M. A.; Ahmad, S.; Iftikhar, Y.; Yasin, M.; Nawaz, A.; Ghazanfar, M. U.; Dasti, A. A., and Saleem, A. DETERMINATION OF MINIMUM INHIBITORY CONCENTRATIONS OF FUNGICIDES AGAINST FUNGUS FUSARIUM MANGIFERAE. 2010; 42, (5): 3525-3532. Rec #: 14792

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: Eight fungicides were evaluated for their In vitro effect on the colony growth of Fusarium mangiferae after 3, 8 and 16 days of inoculation in pre-amended Potato dextrose agar (PDA) medium. The fungicides showed variable response in inhibiting the colony growth of the pathogen according to their nature and specificity at different minimum inhibitory concentrations (MICs). Benlate 50 WP and Carbendazim proved to be the best fungicides giving 100% suppression of the colony growth. When decrease of colony growth over control was examined, Benlate and Carbendazim showed 100% decrease over control after 3, 8 and 16 days of inoculation. The fungicides Score 250 EC, Daconil W 75 and Captan 50 WP proved to be comparatively less effective. The fungicides were classified into three types i.e., I, II and III in reference to the sensitivity of F. mangiferae. Fungus proved highly sensitive to type-I fungicides (Benlate 50 WP, Carbendazim, Topsin-M 70 WP and Copper oxychloride 50 WP) with 100% suppression at tested MICs. The studies will be helpful to devise suitable control strategy to curb malformation in mango orchards. Keywords: MALFORMATION, GROWTH

ISI Document Delivery No.: 700FT

404. ISK Biotech. Chronic Toxicity Study in Daphnia magna with Technical Chlorothalonil. 3651: WATER,AQUA; 1982. Rec #: 460 Keywords: NOT PURSUING Call Number: NO SOURCE Notes: Chemical of Concern: CTN

 405. ---. Chronic Toxicity Study in Daphnia magna with Technical Chlorothalonil. 3651//: 1982. Rec #: 430 Keywords: NO SOURCE Notes: Chemical of Concern: CTN

 406. ---. Chronic Toxicity Study in Daphnia Magna With Technical Chlorothalonil. 1982. Rec #: 2959 Keywords: NOT PURSUING Notes: Chemical of Concern: CTN Abstract: 2/26/02-Cannot release unpublished reports. michele.schulz@syngenta.com

 407. ---. Chronic Toxicity Study in Daphnia Magna With Technical Chlorothalonil. 1982148541. Rec #: 3772 Keywords: NO SOURCE Notes: Chemical of Concern: CTN Abstract: 2/26/02-Cannot release unpublished reports. michele.schulz@syngenta.com//

- 408. ---. DACONIL 2787 Extra: 96-Hour Acute Toxicity Study (LD50) in the Rainbow Trout. 3666//: 1990. Rec #: 520 Keywords: NO SOURCE Notes: Chemical of Concern: CTN
- 409. ISK Biotech . Daconil 2787 Extra: 96-Hour Acute Toxicity Study (Ld50) in the Rainbow Trout. 1990. Rec #: 2905 Keywords: NOT PURSUING Notes: Chemical of Concern: CTN Abstract: 2/26/02-Cannot release unpublished reports. michele.schulz@syngenta.com
- 410. ISK Biotech. Daconil 2787 Extra: 96-Hour Acute Toxicity Study (Ld50) in the Rainbow Trout. 1990148552. Rec #: 5652 Keywords: NO SOURCE Notes: Chemical of Concern: CTN Abstract: 2/26/02-Cannot release unpublished reports. michele.schulz@syngenta.com//
- 411. ---. Static, Acute Toxicity Study in Sheepshead Minnows with Technical Chlorothalonil. 3652: WATER, AQUA; 1982. Rec #: 470 Keywords: NOT PURSUING Call Number: NO SOURCE Notes: Chemical of Concern: CTN
- 412. ---. Static, Acute Toxicity Study in Sheepshead Minnows with Technical Chlorothalonil. 3652//: AQUA; 1982.
  Rec #: 540
  Keywords: NO SOURCE
  Notes: Chemical of Concern: CTN
- 413. ---. Static, Acute Toxicity Study in Sheepshead Minnows With Technical Chlorothalonil. 1982. Rec #: 2960 Keywords: NOT PURSUING Notes: Chemical of Concern: CTN Abstract: 2/26/02-Cannot release unpublished reports. michele.schulz@syngenta.com
- 414. ---. Static, Acute Toxicity Study in Sheepshead Minnows With Technical Chlorothalonil. 1982148554. Rec #: 3782 Keywords: NO SOURCE Notes: Chemical of Concern: CTN Abstract: 2/26/02-Cannot release unpublished reports. michele.schulz@syngenta.com//
- 415. ---. A Two Generation Reproduction Study in Rats with Technical Chlorothalonil. 3668: 1990. Rec #: 520 Keywords: NOT PURSUING Call Number: NO SOURCE Notes: Chemical of Concern: CTN
- 416. ---. A Two Generation Reproduction Study in Rats with Technical Chlorothalonil. 3668//: 1990. Rec #: 510 Keywords: NO SOURCE Notes: Chemical of Concern: CTN
- 417. ---. A Two Generation Reproduction Study in Rats With Technical Chlorothalonil. 1990.

Rec #: 2974 Keywords: NOT PURSUING Notes: Chemical of Concern: CTN Abstract: 2/26/02-Cannot release unpublished reports. michele.schulz@syngenta.com

 418. ---. A Two Generation Reproduction Study in Rats With Technical Chlorothalonil. 1990148551. Rec #: 5642 Keywords: NO SOURCE Notes: Chemical of Concern: CTN Abstract: 2/26/02-Cannot release unpublished reports. michele.schulz@syngenta.com//

419. Jacobi, J. C. and Backman, P. A. Comparison of Yield, Value, and Seed Quality Factors of Florunner and Southern Runner Peanut. POP. Dep. Plant Pathol., Alabama Agric. Exp. Stn., Auburn University, Auburn, AL //: SOIL,ENV,MIXTURE; 1994; 21, (1): 28-34. Rec #: 150 Call Number: EFFICACY (CTN), NO EFED CHEM (CPZ), NO MIXTURE (CPZ,TEZ), TARGET (CTN) Notes: EcoReference No.: 156714 Chemical of Concern: CPZ,CTN,TEZ

420. Jenkinson, H. A. Contact Dermatitis in a Chimney Sweep. 1997; 37, (1): 35. Rec #: 876 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CASE STUDY NOTE HUMAN HUMAN CHIMNEY SWEEP MALE MIDDLE AGE OCCUPATIONAL HEALTH TOXICOLOGY ALLERGIC CONTACT DERMATITIS SOOT ALLERGEN OCCUPATIONAL TOXICOLOGY DERMATOLOGY TOXICITY INTEGUMENTARY SYSTEM DISEASE IMMUNE SYSTEM DISEASE MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: HOMINIDAE **KEYWORDS:** Integumentary System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Allergy KEYWORDS: Public Health: Environmental Health-Occupational Health **KEYWORDS:** Hominidae LANGUAGE: eng

421. ---. Contact Dermatitis in a Chimney Sweep. 1997; 37, (1): 35. Rec #: 876

Kec #: 870 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CASE STUDY NOTE HUMAN HUMAN CHIMNEY SWEEP MALE MIDDLE AGE OCCUPATIONAL HEALTH TOXICOLOGY ALLERGIC CONTACT DERMATITIS SOOT ALLERGEN OCCUPATIONAL TOXICOLOGY DERMATOLOGY TOXICITY INTEGUMENTARY SYSTEM DISEASE IMMUNE SYSTEM DISEASE MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: HOMINIDAE KEYWORDS: Integumentary System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Allergy KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Hominidae LANGUAGE: eng

 Johnson, D. A.; Cummings, T. F.; Hamm, P. B.; Rowe, R. C.; Miller, J. S.; Thornton, R. E.; Pelter, G. Q., and Sorensen, E. J. Potato Late Blight in the Columbia Basin: an Economic Analysis of the 1995 Epidemic. 1997. Rec #: 348

> Keywords: REVIEW Notes: Chemical of Concern: CTN

Abstract: ISSN: 0191-2917

Abstract: The cost of managing late blight in potatoes during a severe epidemic caused by new, aggressive strains of Phytophthora infestans in the Columbia Basin of Washington and Oregon in 1995 was documented. The mean number of fungicide applications per field varied from 5.1 to 6.3 for early- and midseason potatoes, and from 8.2 to 12.3 for late-season potatoes in the northern and southern Columbia Basin, respectively. In 1994, a year when late blight was not severe, the mean number of fungicide applications per field made to early- and midseason potatoes was 2.0; whereas late-season potatoes received a mean of 2.5 applications. The mean per acre cost of individual fungicides applied varied from dollar-sign 4.90 for copper hydroxide to dollar-sign 36.00 for propamocarb + chlorothalonil. Total per acre expenses (application costs plus fungicide material) for protecting the crop from late blight during 1995 ranged from dollar-sign 106.77 to dollar-sign 110.08 for early and midseason potatoes in different regions of the Columbia Basin and from dollar-sign 149.30 to dollar-sign 226.75 for late-season potatoes in the northern and southern Columbia Basin, respectively. Approximately 28% of the crop was chemically desiccated before harvest as a disease management practice for the first time in 1995, resulting in an additional mean cost of dollar-sign 34.48/acre or dollar-sign 1.3 million for the region. Harvested yields were 4 to 6% less than in 1994. The total cost of managing late blight in the Columbia Basin in 1995 is estimated to have approached dollar-sign 30 million. 19 refs.

English

Publication Type: Journal

Publication Type: Article

Country of Publication: United States

Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi - general

Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi

Classification: 92.10.2.3 CROP SCIENCE: Agronomy and Horticulture: Root and tuber crops Plant Science

423. ---. Potato Late Blight in the Columbia Basin: an Economic Analysis of the 1995 Epidemic. 1997.

Rec #: 348

Keywords: REVIEW

Notes: Chemical of Concern: CTN

Abstract: ISSN: 0191-2917

Abstract: The cost of managing late blight in potatoes during a severe epidemic caused by new, aggressive strains of Phytophthora infestans in the Columbia Basin of Washington and Oregon in 1995 was documented. The mean number of fungicide applications per field varied from 5.1 to 6.3 for early- and midseason potatoes, and from 8.2 to 12.3 for late-season potatoes in the northern and southern Columbia Basin, respectively. In 1994, a year when late blight was not severe, the mean number of fungicide applications per field made to early- and midseason potatoes was 2.0; whereas late-season potatoes received a mean of 2.5 applications. The mean per acre cost of individual fungicides applied varied from dollar-sign 4.90 for copper hydroxide to dollar-sign

36.00 for propamocarb + chlorothalonil. Total per acre expenses (application costs plus fungicide material) for protecting the crop from late blight during 1995 ranged from dollar-sign 106.77 to dollar-sign 110.08 for early and midseason potatoes in different regions of the Columbia Basin and from dollar-sign 149.30 to dollar-sign 226.75 for late-season potatoes in the northern and southern Columbia Basin, respectively. Approximately 28% of the crop was chemically desiccated before harvest as a disease management practice for the first time in 1995, resulting in an additional mean cost of dollar-sign 34.48/acre or dollar-sign 1.3 million for the region. Harvested yields were 4 to 6% less than in 1994. The total cost of managing late blight in the Columbia Basin in 1995 is estimated to have approached dollar-sign 30 million. 19 refs. English Publication Type: Journal Publication Type: Article **Country of Publication: United States** Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi general Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi Classification: 92.10.2.3 CROP SCIENCE: Agronomy and Horticulture: Root and tuber crops Plant Science

- 424. Jones, A. L. Control of Brown Rot of Cherry with a New Hydantoin Fungicide and with Selected Fungicide Mixtures. POPENV; 1975; 59, (2): 127-130. Rec #: 670 Call Number: NO EFED CHEM (TPM), TARGET (BMY,CTN,TFR) Notes: EcoReference No.: 95982 Chemical of Concern: BMY,CTN,TFR,TPM
- 425. Jones, A. L.; Ehret, G. R.; Garcia, S. M.; Kesner, C. D., and Klein, W. M. Control of Cherry Leaf Spot and Powdery Mildew on Sour Cherry with Alternate-Side Applications of Fenarimol, Myclobutanil, and Tebuconazole. POPSOIL,ENV,MIXTURE; 1993; 77, (7): 703-706. Rec #: 690 Call Number: EFFICACY (CTN,FRM,IPD,MYC,TEZ), TARGET (CTN,FRM,IPD,MYC,TEZ) Notes: EcoReference No.: 94379 Chemical of Concern: CTN,FRM,IPD,MYC,TEZ
- 426. Jones, D. R. A Chemical Treatment for Maize Seed to Control the Germination of Teliospores of Ustilago maydis. REPSOIL,ENV; 1986; 26, (2): 187-191. Rec #: 320
  Call Number: NO MIXTURE(TCMTB,TDF),OK(IPD,BMY,THM,OXC),NO CROP(MZB,CTN,Captan) Notes: EcoReference No.: 81029
  Chemical of Concern: CBX,BTN,TDF,MZB,IPD,CTN,Captan,BMY,THM,TCMTB,OXC
- 427. Jordan, D. L.; Culpepper, A. S.; Grichar, W. J.; Ducar, J. T.; Brecke, B. J., and York, A. C. Weed Control with Combinations of Selected Fungicides and Herbicides Applied Postemergence to Peanut (Arachis hypogaea L.). PHY,POPSOIL,ENV; 2003; 30, (1): 1-7. Rec #: 1070
  Call Number: NO CONTROL (AZX,CLT), NO EFED CHEM (ACF,IZT), NO MIXTURE (AZX,CTN,CuOH,FNZ,FTL,IPD,PCZ,PPCP,PPCP2011,TEZ)
  Notes: EcoReference No.: 101688
  Chemical of Concern: ACF,AZX,CLT,CTN,CuOH,FNZ,FTL,IPD,IZT,MZP,PCZ,PPCP,TEZ
- 428. Jordan, D. L.; Lancaster, S. H.; Lanier, J. E.; Lassiter, B. R., and Johnson, P. D. Weed Management in Peanut with Herbicide Combinations Containing Imazapic and Other Pesticides. POPSOIL, ENV, MIXTURE; 2009; 23, (1): 6-10. Rec #: 1260

Call Number: NO EFED CHEM (ACF,DEF,IAZ,PRC), NO EFFECT (MTL,PDM), NO MIXTURE (24DB,ACF,AZX,CTN,PRC,TEZ) Notes: EcoReference No.: 156424 Chemical of Concern: 24DB,ACF,AZX,CTN,DEF,IAZ,MTL,PDM,PRC,TEZ

429. Jordan, M. M.; Maude, R. B., and Burchill, R. T. Tests of Fungicides for the Control of Leaf Blotch Diseases: Cladosporium allii of Leek and C. allii-cepae of Onion. POP,REP. Dow Elanco Chem. Co. Ltd., Letcombe Lab., Letcombe Regis, Wantage, Oxon, UK//: SOIL,ENV; 1990; 9, (5): 367-370. Rec #: 1660 Call Number: NO MIXTURE (Maneb), OK (CAP), TARGET (BMY,CTN,FRM,IPD,MLX,MZB,Maneb,PCZ,PPCP,PPCP2011,TDF,TFR) Notes: EcoReference No.: 91263 Chemical of Concern: BMY,CAP,CTN,FRM,IPD,MLX,MZB,Maneb,PCZ,PPCP,TDF,TFR

430. ---. Tests of Fungicides for the Control of Leaf Blotch Diseases: Cladosporium allii of Leek and C. allii-cepae of Onion. SOIL,ENV; 1990; 9, (5): 367-370. Rec #: 340 Call Number: OK TARGET(ALL CHEMS),NO MIXTURE(Maneb) Notes: EcoReference No.: 91263 Chemical of Concern: PCZ,CAP,TDF,FRM,IPD,CTN,BMY,MLX,TFR,MZB,Maneb

431. Ju Rez, R. A.; Dorry, L. L.; Bello-Mendoza, R., and S Nchez, J. E. Use of Spent Substrate After Pleurotus Pulmonarius Cultivation for the Treatment of Chlorothalonil Containing Wastewater. Rec #: 10722

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Lignocellulosic materials are used as substrate for the cultivation of the edible mushroom Pleurotus pulmonarius. After two or three flushes of mushrooms, the spent substrate is discarded although it still has an important enzymatic activity that can be used for several purposes. In this study, we sought to determine the technical feasibility of using spent substrate from P. pulmonarius to degrade chlorothalonil. Reaction mixture was prepared with 6 ml of pesticide aqueous solution (2 mg active ingredient/l) and 3 ml of enzymatic extract obtained from spent P. pulmonarius substrate. The enzymatic reaction (27 & deg;C, pH 7.4) was conducted for 1 h with sampling at 15 min intervals. The effect of storage time and temperature (freezing or refrigerating) of spent substrate and enzymatic extract, respectively, on the activity over chlorothalonil was determined. Freshly obtained spent substrate extract was able to reduce 100% of the initial concentration of chlorothalonil (2 mg/l) after 45 min of reaction. Storage time had a negative effect on the stability of the enzymatic activity: with spent substrate stored for a week, chlorothalonil concentration was reduced in 49.5% after 1 h reaction and with substrate stored for two and three weeks, the degradation efficiency decreased to 9.15% and 0%, respectively. Cooling and freezing the spent substrate extract also had a negative effect on chlorothalonil degradation. MESH HEADINGS: \*Biodegradation, Environmental MESH HEADINGS: Chromatography, Gas MESH HEADINGS: Environmental Remediation/\*methods **MESH HEADINGS: Feasibility Studies** MESH HEADINGS: Nitriles/\*isolation & amp **MESH HEADINGS: purification** MESH HEADINGS: Pesticide Residues/isolation & amp **MESH HEADINGS: purification** MESH HEADINGS: Pleurotus/\*metabolism MESH HEADINGS: Water Pollutants, Chemical/\*isolation & amp

MESH HEADINGS: purification eng

432. Juntunen, M. L. and Kitunen, V. Leaching of Propiconazole and Chlorothalonil During Production of Pinus Sylvestris Seedlings in Containers. 2003; 18 (1), 45-53.

Rec #: 203 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ISSN: 0282-7581 Descriptors: Agricultural pollution Descriptors: Forest nursery Descriptors: Fungicide Descriptors: Groundwater **Descriptors:** Pesticide Abstract: The risk of environmental contamination by pesticides is not well known in container production of forest seedlings. Leaching of propiconazole (Tilt 250 EC(registered trademark)) and chlorothalonil (Bravo 500(registered trademark)) from peat container medium into the ground was monitored during three growing seasons in nursery production of Scots pine (Pinus sylvestris L.) seedlings. Fungicides were applied at about 20 day intervals from the end of July until November. The annual load of leached propiconazole (25-183 g active ingredients ha<sup>-1</sup>) was greater than that of chlorothalonil (5 to 82 g active ingredients ha $\langle sup \rangle -1 \langle sup \rangle$ ). The proportion of leached to applied propiconazole was large, 4-29%, but less than 1% of the applied chlorothalonil was detected in leachates. The downstream percolation of water in the soil beneath the container area was small. After extra irrigation into the ground, the detected concentrations of chlorothalonil in soil water 0.5 m beneath the ground surface were 0.4-2.4 (mu)g 1<sup>-1</sup>. 27 refs. English Publication Type: Journal Publication Type: Article Country of Publication: Norway Classification: 92.10.4.9 CROP SCIENCE: Crop Protection: Chemical residues Classification: 92.10.3.1 CROP SCIENCE: Tree Growth and Forest Management: Silviculture

- Plant Science
- 433. ---. Leaching of Propiconazole and Chlorothalonil During Production of Pinus Sylvestris Seedlings in Containers. 2003; 18 (1), 45-53.

Rec #: 203 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ISSN: 0282-7581 Descriptors: Agricultural pollution Descriptors: Forest nursery Descriptors: Fungicide Descriptors: Groundwater

Descriptors: Pesticide

Abstract: The risk of environmental contamination by pesticides is not well known in container production of forest seedlings. Leaching of propiconazole (Tilt 250 EC(registered trademark)) and chlorothalonil (Bravo 500(registered trademark)) from peat container medium into the ground was monitored during three growing seasons in nursery production of Scots pine (Pinus sylvestris L.) seedlings. Fungicides were applied at about 20 day intervals from the end of July until November. The annual load of leached propiconazole (25-183 g active ingredients ha<sup>-1</sup>) was greater than that of chlorothalonil (5 to 82 g active ingredients ha<sup>-1</sup>). The proportion of leached to applied propiconazole was large, 4-29%, but less than 1% of the applied chlorothalonil was detected in leachates. The downstream percolation of water in the soil beneath the container area was small. After extra irrigation into the ground, the detected concentrations of chlorothalonil in soil water 0.5 m beneath the ground surface were 0.4-2.4 (mu)g 1<sup>-1</sup>. 27 refs. English

Publication Type: Journal Publication Type: Article Country of Publication: Norway Classification: 92.10.4.9 CROP SCIENCE: Crop Protection: Chemical residues Classification: 92.10.3.1 CROP SCIENCE: Tree Growth and Forest Management: Silviculture Plant Science

434. Kammerbauer, J. and Moncada, J. Pesticide Residue Assessment in Three Selected Agricultural

Production Systems in the Choluteca River Basin of Honduras. 1998; 103, (2-3): 171-181. Rec #: 2352

Keywords: SURVEY

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. There is a basic lack of information about the presence of pesticide residues in the environment in Central America. Over the period of February 1995 to June 1997, river, well, lagoon and spring water samples, as well as soil, fish tissue, lagoon bed sediments and some foodstuffs were taken from the greater Cholutecan River Basin of Honduras and analyzed for pesticide residues. These were collected at three separate sites (La Lima, Zamorano and Choluteca), each characterized by differing agricultural production systems. The main pesticide residues found in soil samples were dieldrin and pp-DDT, while river water samples were found to have detectable levels of heptachlor, endosulfan and chlorpyrifos, with lagoon and well water also being shown to contain heptachlor. These pesticide residues at higher concentrations were found to be associated with areas of more intensive agriculture MESH HEADINGS: ECOLOGY

MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: FISHES MESH HEADINGS: HOMINIDAE **KEYWORDS:** Ecology **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Agronomy-General **KEYWORDS: Pest Control KEYWORDS:** Pisces-Unspecified **KEYWORDS:** Hominidae LANGUAGE: eng

 435. ---. Pesticide Residue Assessment in Three Selected Agricultural Production Systems in the Choluteca River Basin of Honduras. 1998; 103, (2-3): 171-181. Rec #: 2352 Keywords: SURVEY

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. There is a basic lack of information about the presence of pesticide residues in the environment in Central America. Over the period of February 1995 to June 1997, river, well, lagoon and spring water samples, as well as soil, fish tissue, lagoon bed sediments and some foodstuffs were taken from the greater Cholutecan River Basin of Honduras and analyzed for pesticide residues. These were collected at three separate sites (La Lima, Zamorano and Choluteca), each characterized by differing agricultural production

systems. The main pesticide residues found in soil samples were dieldrin and pp-DDT, while river water samples were found to have detectable levels of heptachlor, endosulfan and chlorpyrifos, with lagoon and well water also being shown to contain heptachlor. These pesticides detected were in more than 20% of the samples assessed. In river water samples more pesticide residues at higher concentrations were found to be associated with areas of more intensive agricu MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **MESH HEADINGS: FISHES** MESH HEADINGS: HOMINIDAE **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Agronomy-General **KEYWORDS:** Pest Control **KEYWORDS:** Pisces-Unspecified **KEYWORDS:** Hominidae LANGUAGE: eng

436. Kamrin, M. A. Pesticide Profiles Toxicity Environmental Impact and Fate. 1997: Xix+676p. Rec #: 2592 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM BOOK PESTICIDE TOXICITY PESTICIDES ENVIRONMENTAL IMPACT ENVIRONMENTAL FATE PESTICIDE INFORMATION PROFILE TOXICOLOGY INFORMATION BRIEFS **EXPOSURE GUIDELINES** MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** Biochemical Studies-General **KEYWORDS:** Toxicology-General KEYWORDS: Public Health: Environmental Health-Occupational Health **KEYWORDS:** Pest Control LANGUAGE: eng

 437. ---. Pesticide Profiles Toxicity Environmental Impact and Fate. 1997: Xix+676p. Rec #: 2592 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM BOOK PESTICIDE TOXICITY PESTICIDES ENVIRONMENTAL IMPACT ENVIRONMENTAL FATE PESTICIDE INFORMATION PROFILE TOXICOLOGY INFORMATION BRIEFS EXPOSURE GUIDELINES MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Studies-General KEYWORDS: Toxicology-General KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Pest Control LANGUAGE: eng

 438. Karadimos, D. A. and Karaoglanidis, G. S. Comparative Efficacy, Selection of Effective Partners, and Application Time of Strobilurin Fungicides for Control of Cercospora Leaf Spot of Sugar Beet. 2006; 90, (6): 820-825. Rec #: 143

Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 0191-2917 Descriptors: Cercospora beticola

Abstract: In this study, we attempt to optimize the use of strobilurin fungicides by testing the efficacy of azoxystrobin, kresoxim-methyl, pyraclostrobin, and trifloxystrobin under field conditions, by testing for the most efficient partners in fungicide mixtures, and by testing control efficacy of strobilurin fungicides applied at several application times to determine the better options for disease management. Results showed that trifloxystrobin was the most efficient strobilurin fungicide, followed by pyraclostrobin. Azoxystrobin provided a modest to poor control efficacy, whereas kresoxim-methyl provided only poor disease control efficacy. Mixtures of azoxystrobin and trifloxystrobin with either chlorothalonil or maneb and difenoconazole or flutriafol were tested for their efficacy in controlling the disease. The results showed that the azoxystrobin-containing mixtures provided significantly better control compared with that obtained by single applications of each mixture component. The mixtures of trifloxystrobin with maneb or with difenoconazole or flutriafol provided control efficacy similar to that obtained by single applications of trifloxystrobin, whereas the mixture of trifloxystrobin and chlorothalonil provided significantly lower control efficacy compared with the other trifloxystrobin-containing mixtures tested. For both strobilurin fungicides tested, the calculated ratio between the observed and the expected control efficacy ranged around the value of 1, suggesting additive interactions between the mixtures' components. To determine the most appropriate time for strobilurin fungicides application, trifloxystrobin was applied as the first two, the middle two, or the final two consecutive treatments of six fungicide applications. The remaining fungicide treatments in the spray schedules were carried out by applying the systemic fungicide difenoconazole. Results showed that a higher control efficacy was obtained when trifloxystrobin was applied in either of the earlier applications. (copyright) 2006 The American Phytopathological Society. 28 refs. English Publication Type: Journal Publication Type: Article Country of Publication: United States

Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi

Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi - general Plant Science

439. Karmali, M. A.; Petric, M.; Lim, C.; Cheung, R., and Arbus, G. S. Sensitive Method for Detecting Low

Numbers of Verotoxin-Producing Escherichia Coli in Mixed Cultures by Use of Colony Sweeps and Polymyxin Extraction of Verotoxin.

Rec #: 645

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: High titers of Verotoxin (VT) were released from cell pellets of VTproducing Escherichia coli (VTEC; corresponding to E. coli strains producing "high" levels of Shiga-like toxin) after incubation in polymyxin B (0.1 mg/ml) for 30 min at 37 degrees C. Maximal titers of polymyxin-releasable VT occurred in cells obtained from 5-h Penassay broth cultures and were up to eightfold higher than the peak culture supernatant VT titers which occurred in 8-h cultures. Polymyxin-releasable cell extracts of 5-h broth cultures inoculated with mixtures of VT-positive (VT+) and VT-negative strains had easily detectable VT titers when the proportion of VT+ cells in the mixture was about 1.0%, but culture supernatants were negative for VT even when this proportion was 20%. The results were the same whether the initial inoculum consisted of broth culture mixtures of VT+ and VT-negative strains or colony sweeps (loopfuls of confluent bacterial growth) taken from solid plate media previously inoculated with the broth mixtures. In a clinical study, 80 stool cultures from patients with hemolytic uremic syndrome and family contacts with diarrhea were tested for free fecal VT, VT in polymyxin extracts of colony sweeps (VT/PECS), and VTEC (examination of 20 separate E. coli colonies from primary media for VT production). Of the 80 samples, 40 were positive for at least one of these three tests; all 40 were positive for free fecal VT, and 20 of these were positive for VT/PECS. VTEC (as few as 1 colony out of 20) were only isolated from 14 of the 20 cultures that were positive for VT/PECS. In six cases, the VT/PECS was positive even when none of 20 colonies tested were VT+, suggesting that the procedure was able to detect a proportion of VTEC that was less than one in 20(5%). We conclude that the VT/PECS method is highly sensitive for detecting low concentrations of VTEC in stools and provides a rapid method for screening out stools that are negative for VTEC. The technique should also be of value in epidemiological studies for detecting low numbers of VTEC in animal feces, foods, and environmental samples. MESH HEADINGS: Bacterial Toxins/\*analysis/biosynthesis MESH HEADINGS: \*Bacteriological Techniques MESH HEADINGS: Cytotoxins/\*analysis/biosynthesis MESH HEADINGS: Escherichia coli/\*isolation & amp MESH HEADINGS: purification/metabolism MESH HEADINGS: Feces/\*microbiology **MESH HEADINGS: Humans MESH HEADINGS: Kinetics** MESH HEADINGS: Polymyxin B/pharmacology MESH HEADINGS: Shiga-Like Toxin I LANGUAGE: eng

 440. ---. Sensitive Method for Detecting Low Numbers of Verotoxin-Producing Escherichia Coli in Mixed Cultures by Use of Colony Sweeps and Polymyxin Extraction of Verotoxin. Rec #: 645

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: High titers of Verotoxin (VT) were released from cell pellets of VTproducing Escherichia coli (VTEC; corresponding to E. coli strains producing "high" levels of Shiga-like toxin) after incubation in polymyxin B (0.1 mg/ml) for 30 min at 37 degrees C. Maximal titers of polymyxin-releasable VT occurred in cells obtained from 5-h Penassay broth cultures and were up to eightfold higher than the peak culture supernatant VT titers which occurred in 8-h cultures. Polymyxin-releasable cell extracts of 5-h broth cultures inoculated with mixtures of VT-positive (VT+) and VT-negative strains had easily detectable VT titers when the proportion of VT+ cells in the mixture was about 1.0%, but culture supernatants were negative for VT even when this proportion was 20%. The results were the same whether the initial inoculum consisted of broth culture mixtures of VT+ and VT-negative strains or colony sweeps (loopfuls of confluent bacterial growth) taken from solid plate media previously inoculated with the broth

mixtures. In a clinical study, 80 stool cultures from patients with hemolytic uremic syndrome and family contacts with diarrhea were tested for free fecal VT, VT in polymyxin extracts of colony sweeps (VT/PECS), and VTEC (examination of 20 separate E. coli colonies from primary media for VT production). Of the 80 samples, 40 were positive for at least one of these three tests; all 40 were positive for free fecal VT, and 20 of these were positive for VT/PECS. VTEC (as few as 1 colony out of 20) were only isolated from 14 of the 20 cultures that were positive for VT/PECS. In six cases, the VT/PECS was positive even when none of 20 colonies tested were VT+, suggesting that the procedure was able to detect a proportion of VTEC that was less than one in 20(5%). We conclude that the VT/PECS method is highly sensitive for detecting low concentrations of VTEC in stools and provides a rapid method for screening out stools that are negative for VTEC. The technique should also be of value in epidemiological studies for detecting low numbers of VTEC in animal feces, foods, and environmental samples. MESH HEADINGS: Bacterial Toxins/\*analysis/biosynthesis **MESH HEADINGS: \*Bacteriological Techniques** MESH HEADINGS: Cytotoxins/\*analysis/biosynthesis MESH HEADINGS: Escherichia coli/\*isolation & amp MESH HEADINGS: purification/metabolism MESH HEADINGS: Feces/\*microbiology **MESH HEADINGS: Humans MESH HEADINGS: Kinetics** MESH HEADINGS: Polymyxin B/pharmacology MESH HEADINGS: Shiga-Like Toxin I LANGUAGE: eng

- 441. Kataria, H. R. and Verma, P. R. Efficacy of Fungicidal Seed Treatments Against Pre-Emergence Damping-Off and Post-emergence Seedling Root Rot of Growth Chamber Grown Canola Caused by Rhizoctonia solani AG-2-1 and AG-4. POPENV; 1990; 12, (4): 409-416. Rec #: 1040
  Call Number: NO EFED CHEM (CPZ,ILL,TBA), TARGET (BMY,CBX,CTN,FRM,FTL,FUZ,IPD,PCZ,PPCP,PPCP2011,TDF,TEZ) Notes: EcoReference No.: 92248
  Chemical of Concern: BMY,CBX,CPZ,CTN,FRM,FTL,FUZ,ILL,IPD,PCZ,PPCP,TBA,TDF,TEZ
- 442. Katayama, A.; Itou, T., and Ukai, T. Ubiquitous Capability to Substitute Chlorine Atoms of Chlorothalonil in Bacteria. 1997; 22, (1): 12-16.

Rec #: 441

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Thirty-seven strains of bacteria belonging to various taxonomic positions were examined for the degrading ability of a fungicide chlorothalonil, 2, 4, 5, 6-tetrachloroisophthalonitrile, in nutrient broth. All of the bacteria degraded chlorothalonil, except Pimelobacter sp. A3. On the chlorothalonil-suspended agar, most of the Gram-negative bacteria grew but many Gram-positive bacteria did not grow. No production of 14CO2 was observed in the degradation of (1-nitrile-14C)-chlorothalonil. The degradation of chlorothalonil was mainly observed in the exponential growth stage of bacteria. Methylthiotrichloroisophthalonitrile and hydroxytrichloroisophthalonitrile were major metabolites. Trichloroisophthalonitrile was detected as a minor metabolite. These findings suggested that the capability to degrade chlorothalonil by the substitution reaction of chlorine atoms on aromatic ring with methylthio group, hydroxyl group or hydrogen is ubiquitous in bacteria. MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: METABOLISM MESH HEADINGS: BACTERIA/PHYSIOLOGY MESH HEADINGS: BACTERIA/METABOLISM MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: BACTERIA MESH HEADINGS: NOCARDIACEAE KEYWORDS: Biochemical Studies-General KEYWORDS: Metabolism-General Metabolism KEYWORDS: Physiology and Biochemistry of Bacteria KEYWORDS: Pest Control KEYWORDS: Bacteria-General Unspecified (1992- ) KEYWORDS: Nocardioidaceae (1992- ) LANGUAGE: eng

443. ---. Ubiquitous Capability to Substitute Chlorine Atoms of Chlorothalonil in Bacteria. 1997; 22, (1): 12-16. Rec #: 441

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Thirty-seven strains of bacteria belonging to various taxonomic positions were examined for the degrading ability of a fungicide chlorothalonil, 2, 4, 5, 6-tetrachloroisophthalonitrile, in nutrient broth. All of the bacteria degraded chlorothalonil, except Pimelobacter sp. A3. On the chlorothalonil-suspended agar, most of the Gram-negative bacteria grew but many Gram-positive bacteria did not grow. No production of 14CO2 was observed in the degradation of (1-nitrile-14C)-chlorothalonil. The degradation of chlorothalonil was mainly observed in the exponential growth stage of bacteria. Methylthiotrichloroisophthalonitrile and hydroxytrichloroisophthalonitrile were major metabolites. Trichloroisophthalonitrile was detected as a minor metabolite. These findings suggested that the capability to degrade chlorothalonil by the substitution reaction of chlorine atoms on aromatic ring with methylthio group, hydroxyl group or hydrogen is ubiquitous in bacteria.

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: METABOLISM MESH HEADINGS: BACTERIA/PHYSIOLOGY MESH HEADINGS: BACTERIA/METABOLISM MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: BACTERIA MESH HEADINGS: NOCARDIACEAE **KEYWORDS: Biochemical Studies-General KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Physiology and Biochemistry of Bacteria **KEYWORDS:** Pest Control KEYWORDS: Bacteria-General Unspecified (1992-) KEYWORDS: Nocardioidaceae (1992-) LANGUAGE: eng

- 444. Kato, M.; Mizubuti, E. S.; Goodwin, S. B., and Fry, W. E. Sensitivity to Protectant Fungicides and Pathogenic Fitness of Clonal Lineages of Phytophthora infestans in the United States. POP. weft@cornell.edu//W.E. Fry, HNAES, Sapporo 062, Japan//: ENV; 1997; 87, (9): 973-978. Rec #: 1630 Call Number: TARGET (CTN,MZB) Notes: EcoReference No.: 111003 Chemical of Concern: CTN,MZB
- Kato, M.; Mizubuti, E. S.; Goodwin, S. B., and Fry, W. E. Sensitivity to Protectant Fungicides and Pathogenic Fitness of Clonal Lineages of Phytophthora Infestans in the United States. 1997; 87, (9): 973-978. Rec #: 903

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Since 1991, dramatic changes have occurred in the genetic composition of populations of Phytophthora infestans in the United States. Clonal lineages recently introduced into the United States (US-7 and US-8) are more common now than the previously dominant lineage (US-1). To help determine why these changes occurred, four clonal lineages of P. infestans common during the early 1990s in the United States and Canada were evaluated for sensitivity to the protectant fungicides mancozeb and chlorothalonil using amended agar assays for isolates collected from 1990 to 1994. No isolate or lineage was resistant to either mancozeb or chlorothalonil. There were significant differences among isolates for degree of sensitivity to one fungicide individually, but there were no significant (P = 0.05) differences among the US-1, US-6, US-7, and US-8 clonal lineages for degree of sensitivity to both fungicides. Therefore, resistance to protectant fungicides cannot explain the rapid incre MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **MESH HEADINGS: PHYCOMYCETES** MESH HEADINGS: PLANTS **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Phycomycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

446. Kawamoto, K. and Urano, K. Parameters for Predicting Fate of Organochlorine Pesticides in the Environment: Iii. Biodegradation Rate Constants. 1990; 21, (10-11): 1141-1152. Rec #: 1772 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Aerobic and anaerobic biodegradation rate constants of 10 principal organochlorine pesticides were investigated to predict their fate in the environment. The biodegradation rate can be expressed by the first order rate equation. The half-lives were in the range 0.4-50 (d) for aerobic biodegradation and in the range 0.06-100 (d) for anaerobic biodegradation. The hydrophobicity of the pesticide and the presence of functional groups easily transferred by microorganisms affect the biodegradation rate. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: METABOLISM MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: MICROBIOLOGY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIODEGRADATION MESH HEADINGS: INDUSTRIAL MICROBIOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA

MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MICROBIOLOGY KEYWORDS: Biochemical Studies-General KEYWORDS: Metabolism-General Metabolism KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Microorganisms KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Food and Industrial Microbiology-Biodegradation and Biodeterioration KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control KEYWORDS: Microorganisms-Unspecified LANGUAGE: eng

447. ---. Parameters for Predicting Fate of Organochlorine Pesticides in the Environment: Iii. Biodegradation Rate Constants. 1990; 21, (10-11): 1141-1152.

Rec #: 1772 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Aerobic and anaerobic biodegradation rate constants of 10 principal organochlorine pesticides were investigated to predict their fate in the environment. The biodegradation rate can be expressed by the first order rate equation. The half-lives were in the range 0.4-50 (d) for aerobic biodegradation and in the range 0.06-100 (d) for anaerobic biodegradation. The hydrophobicity of the pesticide and the presence of functional groups easily transferred by microorganisms affect the biodegradation rate. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: METABOLISM MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: MICROBIOLOGY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIODEGRADATION MESH HEADINGS: INDUSTRIAL MICROBIOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MICROBIOLOGY **KEYWORDS:** Biochemical Studies-General **KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Microorganisms KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Food and Industrial Microbiology-Biodegradation and Biodeterioration **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Microorganisms-Unspecified LANGUAGE: eng

448. Keinath, A. P. Effects of Fungicide Application Schedules on Epidemics of Gummy Stem Blight and Marketable Yield of Watermelon. 1998; 88, (9 suppl.): S125. Rec #: 2653 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT DIDYMELLA-BRYONIAE WATERMELON PATHOGEN HOST INFECTION PEST MANAGEMENT PHYTOPATHOLOGY GUMMY STEM BLIGHT EPIDEMIC CONTROL MARKETABLE YIELD CHLOROTHALONIL FUNGICIDE MANCOZEB HORTICULTURE FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY **MESH HEADINGS: VEGETABLES** MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Cucurbitaceae LANGUAGE: eng

449. ---. Effects of Fungicide Application Schedules on Epidemics of Gummy Stem Blight and Marketable Yield of Watermelon. 1998; 88, (9 suppl.): S125. Rec #: 2653 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT DIDYMELLA-BRYONIAE WATERMELON PATHOGEN HOST INFECTION PEST MANAGEMENT PHYTOPATHOLOGY GUMMY STEM BLIGHT EPIDEMIC CONTROL MARKETABLE YIELD CHLOROTHALONIL FUNGICIDE MANCOZEB HORTICULTURE FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi

KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Ascomycetes KEYWORDS: Cucurbitaceae LANGUAGE: eng

- 450. Keinath, A. P. Fungicide Timing for Optimum Management of Gummy Stem Blight Epidemics on Watermelon. POPENV,MIXTURE; 1995; 79, (4): 354-358. Rec #: 1290 Call Number: TARGET (CTN,MZB) Notes: EcoReference No.: 90314 Chemical of Concern: CTN,MZB
- 451. Keinath, A. P. and DuBose, V. B. Evaluation of Fungicides for Prevention and Management of Powdery Mildew on Watermelon. GRO,POPSOIL,ENV; 2004; 23, (1): 35-42. Rec #: 570
  Call Number: NO MIXTURE (AZX,BMY,CTN), OK (MZB) Notes: EcoReference No.: 90313
  Chemical of Concern: AZX,BMY,CTN,MZB
- 452. ---. Evaluation of Fungicides for Prevention and Management of Powdery Mildew on Watermelon. POP,GROSOIL,ENV; 2004; 23, (1): 35-42. Rec #: 740 Call Number: OK TARGET,NO CROP(MZB),NO MIXTURE(BMY,AZX,CTN) Notes: EcoReference No.: 90313 Chemical of Concern: BMY,AZX,MZB,CTN
- 453. Keinath, A. P.; Holmes, G. J.; Everts, K. L.; Egel, D. S., and Langston, D. B. Jr. Evaluation of Combinations of Chlorothalonil with Azoxystrobin, Harpin, and Disease Forecasting for Control of Downy Mildew and Gummy Stem Blight on Melon. POPENV; 2007; 26, (2): 83-88. Rec #: 1090 Call Number: NO MIXTURE (AZX,MZB), TARGET (AZX,CTN,MZB) Notes: EcoReference No.: 90925 Chemical of Concern: AZX,CTN,MZB
- 454. ---. Evaluation of Combinations of Chlorothalonil with Azoxystrobin, Harpin, and Disease Forecasting for Control of Downy Mildew and Gummy Stem Blight on Melon. POPENV; 2007; 26, (2): 83-88. Rec #: 400 Call Number: NO MIXTURE(MZB,AZX),OK TARGET(CTN) Notes: EcoReference No.: 90925 Chemical of Concern: MZB,CTN,AZX
- 455. Kemerait, R. C. Jr. A Characterization of Soilborne Fungi Associated with Peanut (Arachis hypogaea L.) in Florida. POPSOIL,ENV,MIXTURE; 2000: 362 p. (UMI #9976559). Rec #: 160 Call Number: EFFICACY (BMY,CTN,FTL,TEZ), TARGET (BMY,CTN,FTL,TEZ) Notes: EcoReference No.: 156431 Chemical of Concern: BMY,CTN,FTL,TEZ
- 456. Khan, M. F. R. and Griffin, R. P. Control of Insect Pests on Cabbage, 1998. POPENV; 1999; 24, 101-102 (E6). Rec #: 750 Call Number: NO COC(CTN),NO MIXTURE(AZD) Notes: EcoReference No.: 89793 Chemical of Concern: AZD

457. Kharbanda, P. D.; Lange, R. M., and Werezuk, S. M. New Fungicides for Control of Alternaria Black Spot and Sclerotinia Stem Rot of Canola. 1997; 19, (3): 326. Rec #: 1494 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT ALTERNARIA-BRASSICAE BRASSICA-NAPUS BRASSICA-RAPA SCLEROTINIA-SCLEROTIORUM CANOLA PATHOGEN CULTIVAR-LEGACY CULTIVAR-REWARD AGRONOMY BOND ADJUVANT PEST MANAGEMENT ALTERNARIA BLACK SPOT AZOXYSTROBIN FUNGICIDE CHLOROTHALONIL CROP INDUSTRY DISEASE INCIDENCE DISEASE SEVERITY IPRODIONE SCLEROTINIA STEM ROT FUNGAL DISEASE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: OILS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT **MESH HEADINGS: SOIL** MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Agronomy-Oil Crops KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Cruciferae LANGUAGE: eng

 458. Killeen, S. Development and Use of Environmental Quality Standards (Eqss) for Priority Pesticides. 1997;
 49, (2): 191-195. Rec #: 2759

Keywords: REVIEW

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The National Rivers Authority (NRA) has a statutory duty to maintain and improve water quality within England and Wales. In carrying out this and other related duties, the NRA needs to identify and prioritize chemicals of concern, including pesticides, with a particular focus on their routes of entry into the aquatic environment. Pesticides can gain access to the aquatic environment via both point and diffuse sources and the NRA therefore undertakes monitoring of surface and groundwaters. The NRA publication, 'Pesticides in the Aquatic Environment', summarizes the available monitoring data for 1992 and 1993. The significance of pesticide concentrations in surface waters is assessed by direct comparison with Environmental Quality Standards (EQSs) which are designed to give protection to aquatic organisms following acute or chronic exposure. The methodology used in deriving EQSs is outlined, with particular reference to pesticides, together with an indication of how they MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION
MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

459. ---. Development and Use of Environmental Quality Standards (Eqss) for Priority Pesticides. 1997; 49, (2): 191-195.

Rec #: 2759

Keywords: REVIEW

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The National Rivers Authority (NRA) has a statutory duty to maintain and improve water quality within England and Wales. In carrying out this and other related duties, the NRA needs to identify and prioritize chemicals of concern, including pesticides, with a particular focus on their routes of entry into the aquatic environment. Pesticides can gain access to the aquatic environment via both point and diffuse sources and the NRA therefore undertakes monitoring of surface and groundwaters. The NRA publication, 'Pesticides in the Aquatic Environment', summarizes the available monitoring data for 1992 and 1993. The significance of pesticide concentrations in surface waters is assessed by direct comparison with Environmental Quality Standards (EQSs) which are designed to give protection to aquatic organisms following acute or chronic exposure. The methodology used in deriving EQSs is outlined, with particular reference to pesticides, together with an indication of how they MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Public Health: Environmental Health-Air **KEYWORDS:** Pest Control

- LANGUAGE: eng
- 460. Kim, D. G. and Riggs, R. D. Effects of Some Pesticides on the Growth of ARF18 and Its Pathogenicity to Heterodera glycines. BEH,POPENV; 1998; 30, (2): 201-205. Rec #: 990
  Call Number: LITE EVAL CODED
  (ADC,BT,CBL,DCNA,DZ,FPP,GYPI,MLN,PAQT,PQT,SXD,TFN), NO EFED CHEM
  (CHX,FML,TPM), OK (DCF), TARGET (BMY,CBX,CTN,KLRT,MYC,MZB,PNB)
  Notes: EcoReference No.: 70527
  Chemical of Concern: ADC,BMY,BT,CBL,CBX,CHX,CTN,DCF,DCNA,DZ,FML,FPP,GYPI,KLRT,MLN,MYC,MZB, PAQT,PNB,PQT,SXD,TFN,TPM
- 461. ---. Effects of Some Pesticides on the Growth of ARF18 and Its Pathogenicity to Heterodera glycines. POP,GROSOIL,ENV; 1998; 30, (2): 201-205. Rec #: 410 Call Number: LITE EVAL CODED(DZ,DCNA,SXD,CBL),OK(ALL CHEMS),TARGET(CTN,MZB) Notes: EcoReference No.: 70527

Chemical of Concern: PNB,CBL,DCNA,SXD,FPP,MLN,KFAT,CHX,DZ,DCF,TPM,GYPI,MYC,PAQT,MZB,DMM,T FN,FML,ADC,DLN,CTN

- 462. Kim, H. J.; Park, D. S.; Hyun, M. H., and Shim, Y. B. Determination of Hgii Ion With a 1,11-Bis(8-Quinoyloxy)-3,6,9-Trioxaundecane-Modified Glassy Carbon Electrode Using Spin-Coating Technique. 1998; 10, (5): 303-306. Rec #: 908 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A glassy carbon electrode modified with an open-chain crown ether, 1,1,1-bis(8-quinolyloxy)-3,6,9-trioxaundecane (BQT), using a spin coating method, has been applied for the highly selective and sensitive analysis of trace amounts of HgII. The modified electrode HgII ion was spontaneously deposited on the modified electrode and the resulting surfaces were characterized by anodic stripping voltammetry. The linear sweep voltammogram of the modified electrode deposited with HgII ion shows a welldefined anodic peak at +0.17 V. The detection limit with linear sweep voltammetry was 1.0d was about 7.0tammetry. The response reproduced with a value of 6.1% relative standard deviation. The presence of 20-fold molar AgI, CdII, PbII FeII, NiII, CoII, CuII, AllIII, MgII, SbII, TiII, and ZnII did not interfere in the analysis of HgII ion except FeII. The electrode has been successfully applied to the determination of trace amounts of the HgII ion in the human urine sample. MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: CHEMISTRY, CLINICAL MESH HEADINGS: MINERALS/ANALYSIS MESH HEADINGS: MINERALS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: BODY FLUIDS/CHEMISTRY MESH HEADINGS: URINE/CHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HOMINIDAE **KEYWORDS:** Methods **KEYWORDS:** Methods **KEYWORDS:** Clinical Biochemistry **KEYWORDS:** Biochemical Methods-Minerals **KEYWORDS: Biochemical Studies-Minerals KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS: Blood KEYWORDS:** Urinary System and External Secretions-General **KEYWORDS:** Toxicology-General **KEYWORDS:** Hominidae LANGUAGE: eng
- 463. ---. Determination of Hgii Ion With a 1,11-Bis(8-Quinoyloxy)-3,6,9-Trioxaundecane-Modified Glassy Carbon Electrode Using Spin-Coating Technique. 1998; 10, (5): 303-306. Rec #: 908

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

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presence of 20-fold molar AgI, CdII, PbII FeII, NiII, CoII, CuII, AllIII, MgII, SbII, TiII, and ZnII did not interfere in the analysis of HgII ion except FeII. The electrode has been successfully applied to the determination of trace amounts of the HgII ion in the human urine sample. MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: CHEMISTRY, CLINICAL MESH HEADINGS: MINERALS/ANALYSIS MESH HEADINGS: MINERALS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: BODY FLUIDS/CHEMISTRY MESH HEADINGS: URINE/CHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HOMINIDAE **KEYWORDS:** Methods **KEYWORDS:** Methods **KEYWORDS:** Clinical Biochemistry **KEYWORDS:** Biochemical Methods-Minerals **KEYWORDS: Biochemical Studies-Minerals KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS:** Blood KEYWORDS: Urinary System and External Secretions-General **KEYWORDS:** Toxicology-General **KEYWORDS:** Hominidae LANGUAGE: eng

 464. Kim, J. H.; Alfieri, A. A.; Rosenblum, M.; Bravo, S., and Kim, S. H. Low Dose Rate Radiotherapy for Transplantable Gliosarcoma in the Rat Brain. 1990; 9(1), 9-15.
 Rec #: 1344

Kec #: 1544

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Interstitial brachytherapy with low energy radionuclides is becoming widely used in conjunction with external beam radiotherapy in the treatment of primary malignant gliomas of the brain. Few radiobiological studies have been carried out with low dose rate brachytherapy for brain tumors. Since we have recently developed a non-invasive low dose rate radiotherapy model for the treatment of transplantable 9L gliosarcoma growing in the rat brain, we carried out a series of radiobiological studies to determine the dose rate effect on the tumor and normal brain tissue. Using TCD50 (the radiation dose to control 50% tumor control) as the endpoints, we obtained the results indicating that the tumor control rate was highly dependent on the dose rate and the total dose delivered to the tumor. The TCD50 of dose rates ranging from 100 cGy/min, 120 cGy/hr, and 40 cGy/hr were 25 Gy, 80 Gy, and 100 Gy, respectively. The normal tissue effects were most pronounced with high dose rate irradiation (100 cGy/min). The LD50 for high dose rate irradiation to the whole brain was 29 Gy. In contrast, the majority of animals treated with low dose rate radio-therapy behaved quite normal up to a year follow-up. The late histopathological changes of the irradiated brain usually consisted of vascular and white matter necrosis, although the extent of such changes showed a considerable individual variation within the long-term survivors.

**MESH HEADINGS: Animals** 

MESH HEADINGS: Brachytherapy/adverse effects

MESH HEADINGS: Brain/pathology/radiation effects

MESH HEADINGS: Brain Neoplasms/\*radiotherapy

MESH HEADINGS: Dose-Response Relationship, Radiation

MESH HEADINGS: Glioma/\*radiotherapy

MESH HEADINGS: Male

MESH HEADINGS: Neoplasm Transplantation

MESH HEADINGS: Radiobiology

MESH HEADINGS: Radiotherapy Dosage

MESH HEADINGS: Rats MESH HEADINGS: Rats, Inbred F344 MESH HEADINGS: Time Factors LANGUAGE: eng

465. ---. Low Dose Rate Radiotherapy for Transplantable Gliosarcoma in the Rat Brain. 1990; 9(1), 9-15.

Rec #: 1344 Keywords: HUMAN HEALTH

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**MESH HEADINGS: Animals** 

MESH HEADINGS: Brachytherapy/adverse effects MESH HEADINGS: Brain/pathology/radiation effects MESH HEADINGS: Brain Neoplasms/\*radiotherapy MESH HEADINGS: Dose-Response Relationship, Radiation MESH HEADINGS: Glioma/\*radiotherapy MESH HEADINGS: Male MESH HEADINGS: Neoplasm Transplantation MESH HEADINGS: Radiobiology MESH HEADINGS: Radiotherapy Dosage MESH HEADINGS: Rats MESH HEADINGS: Rats, Inbred F344 MESH HEADINGS: Time Factors LANGUAGE: eng

466. King, K. W.; McDonald, J.; Moore, J. F.; Agrawal, S. G.; Fischer, E. N., and Balogh, J. C. Nutrient and Pesticide Removal from Laboratory-Simulated Tile Drainage Discharge. 2010; 53, (3): 769-777. Rec #: 12742

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: Abstract: Excess nutrient and pesticide transport through subsurface tile drainage is well documented. One approach being considered to reduce the amount of these contaminants in subsurface drainage waters is the use of end-of-tile filters. Materials used in such filters are often comprised of natural minerals and industrial wastes or by-products that have a significant capacity for binding or sorbing nutrients and pesticides (e.g., activated carbon, fly ash). In this laboratory study, the feasibility and efficacy of an activated carbon, zeolite (clinoptilolite), and activated alumina filter to reduce nitrate-nitrogen (NO3-N), dissolved reactive phosphorus (DRP), metalaxyl, and chlorothalonil concentrations in simulated drainage waters was determined. Hydrographs having peak flow rates of 0.63, 1.26, and 1.89 L s-1 were simulated in a laboratory environment and replicated three times. Across all flow rates, the cartridge-type filter system produced average load reductions of 4.7% for NO3-N, 51.6% for DRP, 58.2% for chlorothalonil,

and 28.8% for metalaxyl. The filter effectiveness was dependent on flow rate and position on the hydrograph. The findings from this study suggest that the end-of-tile filter approach could be adapted as a best management practice to reduce nutrient and pesticide transport in subsurface tile drainage where the contributing area and flow rates are relatively small. Additionally, the findings support further investigation into alternative sorbent materials and delivery designs that permit larger drainage areas and greater flow rates to be filtered. Keywords: activated alumina Includes references 1022996125

467. Kloppel, H. and Kordel, W. Pesticide Volatilization and Exposure of Terrestrial Ecosystems. 1771//: SOIL; 1997; 35, (6): 1271-1289. Rec #: 590 Keywords: MIXTURE Call Number: NO EFED CHEM (EPRN,PRN), NO MIXTURE (BT,CTN) Notes: Chemical of Concern: BT,CTN,EPRN,PRN

468. Kloppel, H. and Kordel, W. Pesticide Volatilization and Exposure of Terrestrial Ecosystems. 1997; 35, (6): 1271-1289. 150435.

Rec #: 8082 Keywords: MIXTURE

Notes: Chemical of Concern: BT.CTN,EPRN,PRN

Abstract: NO MIXTURE//Field experiments in cereals were carried out by herbicide and fungicide post emergence application in spring and by insecticide and fungicide treatment of barley before ripeness in summer. The pesticide concentrations in plants and soil of the target area and in the air above the field and concentrations in different distances to the treated field in front of and behind the hedge situated downwind were determined. After treatment in spring fenpropimorph occurred in the air in concentrations up to 1.3 [mu]g/m3; parathionethyl reached concentrations up to 3.3 [mu]g/m3 in the air after application in summer. The pesticide discharge in the main wind direction could be estimated assuming a pesticide transport with the average downwind wind speed and an average pesticide concentration at the field edge. While the total amounts of herbicide and fungicide discharges were low during the treatment in spring, the downwind discharge of the insecticide parathion-ethyl was 16-17 % of the applied amount in summer 1995. To assess the exposure of terrestrial ecosystems the pesticide uptake by standardized grass cultures and of leaves of the natural hedge situated downwind was determined. It was demonstrated that both, fenpropimorph uptake by plants after application in spring and chlorothalonil uptake by plants after application in summer resulted in high concentrations in non target plants. Here, the climatic parameters play an important role. However a significant accumulation of fenpropimorph and chlorothalonil did not take place in the grass cultures. As fenpropimorph concentrations in the target plants were low and decreased rapidly, 6-10 h after application no significant differences between the fenpropimorph concentrations in the target plants and in the grass cultures were determined.

http://www.sciencedirect.com/science/article/B6V74-4164W2M-

C/2/6f3c7560da5f0d7a721fa298b0f88c63 Was ECOREF #51031// (Was ECOREF# 51031)

469. Kluwe, W. M. Chronic Chemical Injury to the Kidney. 1990; London, england, uk. Illus. Isbn 0-12-289515-0.; 0, (0): 367-406. Rec #: 1256 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM REVIEW ANIMALS HALOGENATED HYDROCARBONS NITROSAMINES FURANS TOXICOLOGY MECHANISMS CARCINOGENESIS OCCUPATIONAL HEALTH NONNEOPLASTIC DISEASES MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: UROLOGIC DISEASES/PATHOLOGY MESH HEADINGS: UROLOGIC DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: MAMMALS KEYWORDS: Biochemical Studies-General KEYWORDS: Urinary System and External Secretions-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Mammalia-Unspecified LANGUAGE: eng

470. ---. Chronic Chemical Injury to the Kidney. 1990; London, england, uk. Illus. Isbn 0-12-289515-0.; 0, (0): 367-406.

Rec #: 1256 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM REVIEW ANIMALS HALOGENATED HYDROCARBONS NITROSAMINES FURANS TOXICOLOGY MECHANISMS CARCINOGENESIS OCCUPATIONAL HEALTH NONNEOPLASTIC DISEASES MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: UROLOGIC DISEASES/PATHOLOGY MESH HEADINGS: UROLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: MAMMALS **KEYWORDS: Biochemical Studies-General KEYWORDS:** Urinary System and External Secretions-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Public Health: Environmental Health-Occupational Health **KEYWORDS:** Mammalia-Unspecified LANGUAGE: eng

471. Knecht, U.; Bolm-Audorff, U., and Woitowitz, H. J. Atmospheric Concentrations of Polycyclic Aromatic Hydrocarbons During Chimney Sweeping.

Rec #: 1375

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Air sampled from the breathing zone of chimney sweeps during "dirty work" and soot samples were analysed for polycyclic aromatic hydrocarbons (PAH). A total of 20 PAH were quantified by gas chromatography-mass spectrometry in 115 air samples and 18 soot samples. These included benzo(b)fluoranthene, benzo(a)pyrene (BaP), chrysene, dibenz(a,h)anthracene, and indeno (1,2,3-cd)pyrene, all of which are animal carcinogens. The summed atmospheric concentration of these compounds depended on the type of fuel used and averaged 2.27 micrograms/m3 for oil fuel. If a mixture of oil and solid fuel was used the concentrations of BaP were 0.36, 0.83, and 0.82 micrograms/m3 respectively. The soot samples recovered after using the three different fuel types were 10.50, 109.10, and 51.25 mg BaP/kg. The maximum total concentrations of the five carcinogenic PAH were 243.70, 691.06, and 213.94 mg/kg respectively. The time weighted, shift mean concentrations of 0.02 to 0.21 micrograms/m3 benzo(a)pyrene obtained on 11 days form the basis for the industrial medical

estimation of risk.

MESH HEADINGS: Air Pollutants, Occupational/\*isolation & amp MESH HEADINGS: purification MESH HEADINGS: Carcinogens/isolation & amp MESH HEADINGS: purification MESH HEADINGS: Dust/analysis MESH HEADINGS: Environmental Exposure MESH HEADINGS: Heating MESH HEADINGS: Household Articles MESH HEADINGS: Household Articles MESH HEADINGS: Polycyclic Compounds/\*isolation & amp MESH HEADINGS: purification LANGUAGE: eng

472. ---. Atmospheric Concentrations of Polycyclic Aromatic Hydrocarbons During Chimney Sweeping . Rec #: 1375

> Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Air sampled from the breathing zone of chimney sweeps during "dirty work" and soot samples were analysed for polycyclic aromatic hydrocarbons (PAH). A total of 20 PAH were quantified by gas chromatography-mass spectrometry in 115 air samples and 18 soot samples. These included benzo(b)fluoranthene, benzo(a)pyrene (BaP), chrysene, dibenz(a,h)anthracene, and indeno (1,2,3-cd)pyrene, all of which are animal carcinogens. The summed atmospheric concentration of these compounds depended on the type of fuel used and averaged 2.27 micrograms/m3 for oil fuel. If a mixture of oil and solid fuel was used the concentrations of BaP were 0.36, 0.83, and 0.82 micrograms/m3 respectively. The soot samples recovered after using the three different fuel types were 10.50, 109.10, and 51.25 mg BaP/kg. The maximum total concentrations of the five carcinogenic PAH were 243.70, 691.06, and 213.94 mg/kg respectively. The time weighted, shift mean concentrations of 0.02 to 0.21 micrograms/m3 benzo(a)pyrene obtained on 11 days form the basis for the industrial medical estimation of risk.

MESH HEADINGS: Air Pollutants, Occupational/\*isolation & amp MESH HEADINGS: purification MESH HEADINGS: Carcinogens/isolation & amp MESH HEADINGS: purification MESH HEADINGS: Dust/analysis MESH HEADINGS: Environmental Exposure MESH HEADINGS: Heating MESH HEADINGS: Household Articles MESH HEADINGS: Household Articles MESH HEADINGS: Polycyclic Compounds/\*isolation & amp MESH HEADINGS: purification LANGUAGE: eng

## 473. Knight, R. D. and Kemp, D. T. Wave and Place Fixed Dpoae Maps of the Human Ear.

Rec #: 1323

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Human intermodulation distortion product otoacoustic emissions (DPOAE) can be a mixture of low and high latency components. They have different level, phase, and suppression characteristics, which indicate that emissions arise both from the frequency region of the primary tones directly and indirectly via the DP frequency place. Which component dominates the measured DPOAE in the ear canal depends on the stimulus parameters, especially the frequency ratio, f2/f1. Interference between the two emissions adds complexity to measurements of DPOAE. The behavior and even existence of whichever emission route is lower

in level often cannot directly be deduced from the raw DPOAE data because the other emission covers it. It is therefore not known whether both emissions are present for all stimulus parameters or whether the trends seen in each emission when they are the dominant emission route continue under stimulus conditions when they are not dominant. In this study, the two DPOAE components are separated by a post-processing method. Previously, maps of raw DPOAE data against f2/f1 and DP frequency have been obtained. To separate the components, sets of data consisting of f2/f1 sweeps were transformed by an inverse Fourier transform into the time domain. The low and high latency components appeared as two distinct peaks because of their different phase gradients. These peaks were separated by windowing in the time domain and two frequency domain maps were reconstructed, representing the low and high latency DPOAEs. It was found that the low latency component of the 2 f1-f2 DP was only emitted strongly with f2/f1 between approximately 1.1 and 1.3. The removal of the high latency component revealed the low ratio edge of this region, at which the level falls sharply. However, the low latency emission has been traced at reduced amplitude over a wide range of stimulus parameters. Although previously only observed at small frequency ratios, the high latency component was found to be present widely in the lower sideband, its level reducing slowly at larger f2/f1. Its phase behavior changes in the lower sideband, being approximately constant with DP frequency at small ratios of f2/f1, but deviating from this at wider ratios. These results support the hypothesis that a DPOAE component which propagates to and is re-emitted from the DP frequency place (place fixed emission) is present across a wide parameter range. However, for all but the close primary condition the lower sideband DPOAE is dominated by direct emission from the region of f2 and f1 wave interaction (wave fixed emission). A simple transmission line model is presented to illustrate how the observed DPOAE maps can arise on the basis of this hypothesis. MESH HEADINGS: Cochlea/\*physiology

MESH HEADINGS: Humans

MESH HEADINGS: Noise

MESH HEADINGS: Otoacoustic Emissions, Spontaneous/\*physiology LANGUAGE: eng

## 474. ---. Wave and Place Fixed Dpoae Maps of the Human Ear.

Rec #: 1323

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Human intermodulation distortion product otoacoustic emissions (DPOAE) can be a mixture of low and high latency components. They have different level, phase, and suppression characteristics, which indicate that emissions arise both from the frequency region of the primary tones directly and indirectly via the DP frequency place. Which component dominates the measured DPOAE in the ear canal depends on the stimulus parameters, especially the frequency ratio,  $f^2/f^1$ . Interference between the two emissions adds complexity to measurements of DPOAE. The behavior and even existence of whichever emission route is lower in level often cannot directly be deduced from the raw DPOAE data because the other emission covers it. It is therefore not known whether both emissions are present for all stimulus parameters or whether the trends seen in each emission when they are the dominant emission route continue under stimulus conditions when they are not dominant. In this study, the two DPOAE components are separated by a post-processing method. Previously, maps of raw DPOAE data against f2/f1 and DP frequency have been obtained. To separate the components, sets of data consisting of f2/f1 sweeps were transformed by an inverse Fourier transform into the time domain. The low and high latency components appeared as two distinct peaks because of their different phase gradients. These peaks were separated by windowing in the time domain and two frequency domain maps were reconstructed, representing the low and high latency DPOAEs. It was found that the low latency component of the 2 f1-f2 DP was only emitted strongly with f2/f1 between approximately 1.1 and 1.3. The removal of the high latency component revealed the low ratio edge of this region, at which the level falls sharply. However, the low latency emission has been traced at reduced amplitude over a wide range of stimulus parameters. Although previously only observed at small frequency ratios, the high latency component was found to be present widely in the lower sideband, its level reducing slowly at larger  $f^2/f^1$ . Its phase behavior changes in the lower

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475. Koch, K. A.; Potter, B. D., and Ragsdale, D. W. Non-Target Impacts of Soybean Rust Fungicides on the Fungal Entomopathogens of Soybean Aphid. POPSOIL,ENV,MIXTURE; 2010; 103, (3): 156-164.
Rec #: 1140
Call Number: NO EFED CHEM (PRC,TFX), NO MIXTURE (CTN), OK (AZX,LCYT,PCZ,PPCP,PPCP2011,TEZ) Notes: EcoReference No.: 156456

Chemical of Concern: AZX,CTN,LCYT,PCZ,PPCP,PRC,TEZ,TFX

 476. Kocourek, V.; Hajslova, J.; Holadova, K., and Poustka, J. Stability of Pesticides in Plant Extracts Used as Calibrants in the Gas Chromatographic Analysis of Residues. 1998; 800, (2): 297-304. Rec #: 2585

Keywords: NO SPECIES (DEAD)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The stability of commonly used pesticides in plant sample extracts was evaluated. Matrices differing in the character of coextracts were represented by wheat, oranges and white cabbage. After homogenisation with ethyl acetate and anhydrous sodium sulphate, spiked filtrates were stored for 60 days at 20eC or 40eC. The decrease of concentrations was observed at 20eC after 40 days for chlorothalonil and iprodione in cabbage extracts and some degradation was observed for most organophosphates, iprodione and pirimicarb in orange extracts. At increased temperature (40eC), degradation of most pesticides in the orange and cabbage extracts was observed. No decomposition was noticed for synthetic pyrethroids in all tested extracts. The stability of pesticides in wheat extracts was distinctly higher than that in other extracts. Most pesticides are stable enough to store plant sample extracts several weeks prior to further handling, or to use them as calibrants to avoid matrix-indu MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY

MESH HEADINGS: FOOD TECHNOLOG T MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: VEGETABLES

MESH HEADINGS: FOOD ANALYSIS

MESH HEADINGS: FOOD TECHNOLOGY

MESH HEADINGS: POISONING

MESH HEADINGS: ANIMALS, LABORATORY

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

KEYWORDS: Biochemical Studies-General

KEYWORDS: Biophysics-General Biophysical Techniques

KEYWORDS: Food Technology-Fruits

KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-)

**KEYWORDS:** Toxicology-General

KEYWORDS: Pest Control LANGUAGE: eng

477. ---. Stability of Pesticides in Plant Extracts Used as Calibrants in the Gas Chromatographic Analysis of Residues. 1998; 800, (2): 297-304.

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MESH HEADINGS: FOOD TECHNOLOGY

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KEYWORDS: Food Technology-Fruits

KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) KEYWORDS: Toxicology-General

KEYWORDS: Pest Control

LANGUAGE: eng

478. Koelsch, M. C.; Cole, J. C., and Von Broembsen, S. L. Effectiveness of Selected Fungicides in Controlling Foliar Diseases of Common Periwinkle (Vinca minor L.). GRO,POPSOIL,ENV,MIXTURE; 1995; 30, (3): 554-557. Rec #: 940
Call Number: NO EFED CHEM (CPZ,TPM), OK (FDX,PCZ,PPCP,PPCP2011,TFR), TARGET (CTN,CuOH,MZB) Notes: EcoReference No.: 95186
Chemical of Concern: CPZ,CTN,CuOH,FDX,MZB,PCZ,PPCP,TFR,TPM

479. Koike, S. T.; Smith, R. F.; Schulbach, K. F., and Chaney, W. E. Association of the Insecticide Naled with Celery Petiole Lesion Damage. CEL,PHY. S.T. Koike, Univ. of California Coop. Extension, 1432 Abbott Street, Salinas, CA 93901//: SOIL,ENV; 1997; 16, (8): 753-758. Rec #: 230 Call Number: LITE EVAL CODED (Naled), NO ENDPOINT (ABM,BMY,CTN,CuOH,MOM,PMR) Notes: EcoReference No.: 63164 Chemical of Concern: ABM, BMY, CTN, CuOH, MOM, Naled, PMR

480. ---. Association of the Insecticide Naled with Celery Petiole Lesion Damage. POP,PHY. S.T. Koike, Univ. of California Coop. Extension, 1432 Abbott Street, Salinas, CA 93901: SOIL,ENV; 1997; 16, (8): 753-758. Rec #: 770 Call Number: NO MIXTURE(CTN,BMY,PMR,ABM),OK(MOM,Naled) Notes: EcoReference No.: 63164 Chemical of Concern: CTN,BMY,MOM,PMR,ABM,Naled

481. Kookana, R. S.; Baskaran, S., and Naidu, R. Pesticide Fate and Behaviour in Australian Soils in Relation to Contamination and Management of Soil and Water: a Review. 1998; 36, (5): 715-764. Rec #: 1518

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Pesticides, if used as recommended, are generally expected to cause little adverse impact on the environment. However, it is evident that trace levels of pesticide residues present in soil, water, air, and sometimes food, may result in harmful effects on human and environmental health. Pesticides can pose health risks through several exposure pathways including direct occupational related exposure, through food, or through the residues present in the environment. This paper reviews available information on the nature and extent of pesticide contamination of Australian soils, surface water, and groundwaters. Published studies on the fate and behaviour of pesticides in Australian soils have also been reviewed, covering the key processes controlling the fate and behaviour of pesticides in soils, namely sorption-desorption, degradation (biological and abiotic), and volatilisation in soil and their off-site transport into surface and groundwaters. Some management options for MESH HEADINGS: AIR POLLUTION

MESH HEADINGS: SOIL POLLUTANTS

MESH HEADINGS: WATER POLLUTION

MESH HEADINGS: SOIL

MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

KEYWORDS: Public Health: Environmental Health-Air

KEYWORDS: Soil Science-Physics and Chemistry (1970-)

KEYWORDS: Soil Science-Fertility and Applied Studies (1970-)

KEYWORDS: Pest Control

LANGUAGE: eng

482. ---. Pesticide Fate and Behaviour in Australian Soils in Relation to Contamination and Management of Soil and Water: a Review. 1998; 36, (5): 715-764.

Rec #: 1518

Keywords: FATE

Notes: Chemical of Concern: CTN

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- 483. Koster, A. T. J. and Van der Meer, L. J. Control of Botrytis spp. in Tulip with Reduced Input of Chemical Crop Protection. POPSOIL,ENV,MIXTURE; 1992: 277-281. Rec #: 650 Call Number: EFFICACY (CTN), NO MIXTURE (CBD,MZB), OK (FDX,FNZ), TARGET (CTN) Notes: EcoReference No.: 90186 Chemical of Concern: CBD,CTN,FDX,FNZ,MZB
- 484. ---. Control of Botrytis spp. in Tulip with Reduced Input of Chemical Crop Protection. PHY,POPSOIL,ENV,MIXTURE; 1992: 277-281. Rec #: 430 Call Number: NO CROP(CTN),OK(FZN),NO MIXTURE(CBD,MZB) Notes: EcoReference No.: 90186 Chemical of Concern: CBD,CTN,MZB,FZN
- 485. KovÁ C, J.; BÁ Tora, V.; HankovÁ A, and Szokolay, A. Cleanup of Extracts Using Sweep Co-Distillation Adapted to Gas Chromatograph. Rec #: 817 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: An adaptation of the Varian Aerograph gas chromatograph to the sweep co-distillation cleanup using the modified Storherr tube is described. The recoveries of this cleanup technique were evaluated for the mixture of four organophosphoru pesticides added to extracts from ten crop and milk. Pesticides were analyzed by gas chromatography with a cesium thermionic detector. **MESH HEADINGS: Animals** MESH HEADINGS: Chromatography, Gas/\*methods MESH HEADINGS: Fenitrothion/analysis MESH HEADINGS: Fruit/analysis MESH HEADINGS: Insecticides/analysis MESH HEADINGS: Malathion/analysis MESH HEADINGS: Milk/analysis

MESH HEADINGS: Plant Extracts/analysis

MESH HEADINGS: Vegetables/analysis

LANGUAGE: eng

 486. ---. Cleanup of Extracts Using Sweep Co-Distillation Adapted to Gas Chromatograph. Rec #: 817 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: An adaptation of the Varian Aerograph gas chromatograph to the sweep co-distillation cleanup using the modified Storherr tube is described. The recoveries of this cleanup technique were evaluated for the mixture of four organophosphoru pesticides added to extracts from ten crop and milk. Pesticides were analyzed by gas chromatography with a cesium thermionic detector. MESH HEADINGS: Animals MESH HEADINGS: Chromatography, Gas/\*methods MESH HEADINGS: Fenitrothion/analysis MESH HEADINGS: Fruit/analysis MESH HEADINGS: Insecticides/analysis MESH HEADINGS: Malathion/analysis MESH HEADINGS: Malathion/analysis

- MESH HEADINGS: Plant Extracts/analysis MESH HEADINGS: Vegetables/analysis LANGUAGE: eng
- 487. Kubik, M.; Nowacki, J.; Michalczuk, L.; Pidek, A.; Warakomska, Z., and Goszczynski, W. Decay of Pesticides Residues in Bee Honey. 1998; 6, (2): 73-85. Rec #: 560 Keywords: MIXTURE Call Number: NO ENDPOINT(ALL CHEMS),NO MIXTURE Notes: Chemical of Concern: ES,IPD,VCZ,CTN,FSTAl,Captan,DFC
- 488. ---. Decay of Pesticides Residues in Bee Honey. 1998; 6, (2): 73-85. 151081. Rec #: 8432 Keywords: MIXTURE Notes: Chemical of Concern: CTN,Captan,DFC,ES,FSTAL,IPD,VCZ Abstract: NO MIXTURE Department of Botany, University of Agriculture, Lublin, Poland//Journal of fruit and ornamental plant research//
- 489. Kumar, R. and Singh, S. B. Field Evaluation of Fungitoxicants for the Control of Leaf Spot of Sunflower (Alternaria alternata (FR.) Keissler). PHY,POPSOIL,ENV; 1997; 10, (1): 233-235. Rec #: 790 Call Number: LITE EVAL CODED(MZB,Captan),NO COC(CTN) Notes: EcoReference No.: 90197 Chemical of Concern: Captan,MZB,CBD,DINO
- 490. Kumar Singh, B.; Walker, A., and Wright, D. J. Persistence of Chlorpyrifos, Fenamiphos, Chlorothalonil, and Pendimethalin in Soil and Their Effects on Soil Microbial Characteristics. 2002; 69, (2): 181-188.
  Rec #: 570
  Keywords: BACTERIA
  Call Number: NO BACTERIA
  Notes: Chemical of Concern: CTN,CPY,FMP,PDM
- 491. ---. Persistence of Chlorpyrifos, Fenamiphos, Chlorothalonil, and Pendimethalin in Soil and Their Effects on Soil Microbial Characteristics. 2002; 69, (2): 181-188. Rec #: 620 Keywords: BACTERIA Call Number: NO BACTERIA (CPY,CTN,FMP,PDM) Notes: Chemical of Concern: CPY,CTN,FMP,PDM
- 492. ---. Persistence of Chlorpyrifos, Fenamiphos, Chlorothalonil, and Pendimethalin in Soil and Their Effects on Soil Microbial Characteristics. 2002; 69, (2): 181-188. 151186. Rec #: 9262 Keywords: BACTERIA

Notes: Chemical of Concern: CPY,CTN,FMP,PDM Abstract: NO BACTERIA Microbe//

493. Kuti, J. O. Evaluation of Two Foliar Fungicides for Controlling Alternaria Rot of Tomatoes. 1997; 87, (6 suppl.): S55.

Rec #: 2484 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT ALTERNARIA-ALTERNATA TOMATO PLANT PATHOGEN HOST HORTICULTURE PEST MANAGEMENT CROP INDUSTRY ALTERNARIA ROT CHLOROTHANONIL FUNGICIDE METALAXYL FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

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Rec #: 2484 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT ALTERNARIA-ALTERNATA TOMATO PLANT PATHOGEN HOST HORTICULTURE PEST MANAGEMENT CROP INDUSTRY ALTERNARIA ROT CHLOROTHANONIL FUNGICIDE METALAXYL FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables

KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Solanaceae LANGUAGE: eng

495. Kvien, C. K.; Culbreath, A. K.; Wilcut, J. W.; Brown, S. L., and Bell, D. K. Peanut Production in Systems Restricting Use of Pesticides Based on Carcinogenicity or Leachability. 1993; 20, (2): 118-124. Rec #: 590 Keywords: MIXTURE Call Number: NO MIXTURE(ALL CHEMS) Notes: Chemical of Concern: MLN,BMY,Captan,MZB,CTN,MLX,24DB,AND,CPY,MOM

496. ---. Peanut Production in Systems Restricting Use of Pesticides Based on Carcinogenicity or Leachability. 1993; 20, (2): 118-124. 151321. Rec #: 6892 Keywords: MIXTURE Notes: Chemical of Concern: 24DB,AND,BMY,CPY,CTN,Captan,MLN,MLX,MOM,MZB Abstract: NO MIXTURE Author Affiliation: Dep. Crop and Soil Sci., Coastal Plain Stn., Univ. Ga., P.O. Box 748, Tifton, GA 31793//Peanut science//

497. Laatikainen, T. and Heinonen-Tanski, H. Mycorrhizal Growth in pure Cultures in the Presence of Pesticides. POPSOIL,ENV; 2002; 157, (2): 127-137. Rec #: 770 Call Number: NO ENDPOINT (BMY,CTN,CYP,Cu,GYP,HXZ,LNR,Maneb,PCZ,PPCP,PPCP2011,TBZ), TARGET (BMY,Cu,Maneb,PCZ,PPCP,PPCP2011,TBZ) Notes: EcoReference No.: 93246 Chemical of Concern: BMY,CTN,CYP,Cu,GYP,HXZ,LNR,Maneb,PCZ,PPCP,TBZ

498. Laatikainen, Tarja and Heinonen-Tanski, H. Mycorrhizal Growth in Pure Cultures in the Presence of Pesticides. 2002; 157, (2): 127-137.

Rec #: 51

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Summary The effects of pesticides on 64 ectomycorrhizal fungi of boreal forest trees were studied in vitro. The pesticides (fungicides: benomyl, chlorothalonil, copper oxychloride, maneb and propiconazole; herbicides: chlorthiamid, glyphosate, hexazinone, linuron and terbuthylazine; insecticide: cypermethrin) were selected as those commonly used in Nordic forest nurseries and afforestation sites. In general, the fungicides proved to be more toxic to ectomycorrhizal fungi than the herbicides and cypermethrin. The fungicides, chlorothalonil and propiconazole, had the clearest inhibitory effect on growth of mycorrhizal fungi. Conversely, maneb, glyphosate and terbuthylazine stimulated the growth of some mycorrhizal fungi. Leccinum versipelle and L. scabrum, Paxillus involutus and Cenococcum geophilum were the most sensitive ectomycorrhizal fungi to the various pesticides. ectomycorrhizal fungi/ fungicide/ herbicide/ insecticide cypermethrin/ pesticide side effect http://www.sciencedirect.com/science/article/B7GJ8-4DS329Y-

2D/2/0c58a2dbb17696645b7b3af8dfbb4bcd

499. Lagnaoui, A. and Radcliffe, E. B. Interference of Fungicides with Entomopathogens: Effects on Entomophthoran Pathogens of Green Peach Aphid. 1997: 301-315. Rec #: 600 Keywords: REVIEW Call Number: NO REVIEW(ALL CHEMS) Notes: EcoReference No.: 90364 Chemical of Concern: BMY,CAP,AZ,CTN,MZB,MXC,CuOH

- 500. ---. Interference of Fungicides With Entomopathogens: Effects on Entomophthoran Pathogens of Green Peach Aphid. 1997: 301-315. 224338. Rec #: 7972 Keywords: REVIEW Notes: Chemical of Concern: AZ,BMY,CAP,CTN,CuOH,MXC,MZB Abstract: NO REVIEW Isbn 0-8133-8758-2//
- 501. Laihanen, N.; Tanninen, V. P., and Yliruusi, J. Crystal Modifications of Alprazolam. Vol 4 iss 6 1994, p381-386, (Ref 12). Rec #: 2733 Keywords: HUMAN HEALETH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: IPA COPYRIGHT: ASHP Alprazolam was recrystallized from different solvents and the physical properties of the crystals were studied in vitro. According to x-ray powder diffraction, 4 different crystal modifications were classified. In differential scanning calorimetry measurements, 3 of the modifications had 2 endothermic peaks and an exotherm between them. The fourth modification had only 1 melting endotherm at a slightly higher temperature. With thermogravimetry, one of the forms was shown to be a monohydrate. The crystal habits of the modifications were angular, acicular, or a mixture of both. It was concluded that alprazolam recrystallized from different solvents has 4 crystal modifications. **KEYWORDS:** Alprazolam **KEYWORDS:** crystals **KEYWORDS:** physical properties **KEYWORDS:** Anxiolytics **KEYWORDS:** crystals

KEYWORDS: alprazolam(Anxiolytics KEYWORDS: X-ray diffraction LANGUAGE: eng LANGUAGE: fre

502. ---. Crystal Modifications of Alprazolam. Vol 4 iss 6 1994, p381-386, (Ref 12).

Rec #: 2733

Keywords: HUMAN HEALETH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: IPA COPYRIGHT: ASHP Alprazolam was recrystallized from different solvents and the physical properties of the crystals were studied in vitro. According to x-ray powder diffraction, 4 different crystal modifications were classified. In differential scanning calorimetry measurements, 3 of the modifications had 2 endothermic peaks and an exotherm between them. The fourth modification had only 1 melting endotherm at a slightly higher temperature. With thermogravimetry, one of the forms was shown to be a monohydrate. The crystal habits of the modifications were angular, acicular, or a mixture of both. It was concluded that alprazolam recrystallized from different solvents has 4 crystal modifications. **KEYWORDS:** Alprazolam **KEYWORDS:** crystals **KEYWORDS:** physical properties **KEYWORDS:** Anxiolytics **KEYWORDS:** crystals KEYWORDS: alprazolam(Anxiolytics **KEYWORDS: X-ray diffraction** LANGUAGE: eng LANGUAGE: fre

503. Lalancette, N. and Robison, D. M. Effect of Fungicides, Application Timing, and Canker Removal on Incidence and Severity of Constriction Canker of Peach. POPSOIL, ENV; 2002; 86, (7): 721-728. Rec #: 870 Call Number: TARGET (AZX,BMY,CTN,Captan,Cu,MYC) Notes: EcoReference No.: 111456 Chemical of Concern: AZX,BMY,CTN,Captan,Cu,MYC

504. Lancaster, S. H.; Beam, J. B.; Lanier, J. E.; Jordan, D. L., and Johnson, P. D. Compatibility of Diclosulam with Postemergence Herbicides and Fungicides. POPSOIL,ENV,MIXTURE; 2007; 21, (4): 869-872.
Rec #: 320
Call Number: NO EFED CHEM (DEF,PRC), NO ENDPOINT (24D,24DXY,AZX,CLT,CTN,FMX,GYP,GYPT,PQT,SXD,TBNU,TEZ,THF), NO MIXTURE (24D,24DXY,AZX,CTN,FMX,PRC,TBNU,TEZ,THF)
Notes: EcoReference No.: 120640
Chemical of Concern: 24D,24DXY,AZX,CLT,CTN,DEF,FMX,GYP,GYPT,PCR,PQT,PRC,SXD,TBNU,TEZ,THF

505. Lancaster, S. H.; Jordan, D. L., and Johnson, P. D. Influence of Graminicide Formulation on Compatibility with Other Pesticides. POPSOIL, ENV, MIXTURE; 2008; 22, (4): 580-583. Rec #: 60
Call Number: NO EFED CHEM (IAZ, PRC), NO ENDPOINT (CLT, SXD), NO MIXTURE (AZX, CTN, IAZ, PCZ, PPCP, PPCP2011, PRC, TEZ) Notes: EcoReference No.: 156422
Chemical of Concern: AZX, CLT, CTN, IAZ, PCZ, PPCP, PRC, SXD, TEZ

506. Lancaster, S. H.; Jordan, D. L.; Spears, J. F.; York, A. C.; Wilcut, J. W.; Monks, D. W.; Batts, R. B., and Brandenburg, R. L. Sicklepod (Senna obtusifolia) Control and Seed Production After 2,4-DB Applied Alone and with Fungicides or Insecticides. POP,REP,GROSOIL,ENV,MIXTURE; 2005; 19, (2): 451-455. Rec #: 800 Call Number: OK(24DB),NO MIXTURE(TEZ,AZX,CTN,FZN) Notes: EcoReference No.: 90198 Chemical of Concern: 24DB,TEZ,AZX,CTN,FZN

507. Lancaster, S. H.; Jordan, D. L.; York, A. C.; Burke, I. C.; Corbin, F. T.; Sheldon, Y. S.; Wilcut, J. W., and Monks, D. W. Influence of Selected Fungicides on Efficacy of Clethodim and Sethoxydim. ACC,POPSOIL,ENV,MIXTURE; 2005; 19, (2): 397-403. Rec #: 700
Call Number: NO CONTROL (AZX,CTN,FNZ,PCZ,PPCP,PPCP2011,SXD,TEZ), NO EFED CHEM (BSC,PRC,TFX)
Notes: EcoReference No.: 90199
Chemical of Concern: AZX,BSC,CTN,FNZ,PCZ,PPCP,PRC,SXD,TEZ,TFX

 508. ---. Influence of Selected Fungicides on Efficacy of Clethodim and Sethoxydim. POPSOIL,ENV,MIXTURE; 2005; 19, (2): 397-403. Rec #: 820 Call Number: OK(CLT,SXD),NO MIXTURE(PCZ,TFX,TEZ,CTN,BSC,PRC) Notes: EcoReference No.: 90199 Chemical of Concern: CLT,SXD,PCZ,TFX,TEZ,CTN,BSC,PRC

509. Lancaster, S. H.; Jordan, D. L.; York, A. C.; Wilcut, J. W.; Brandenburg, R. L., and Monks, D. W. Interactions of Late-Season Morningglory (Ipomoea spp.) Management Practices in Peanut (Arachis hypogaea). POPSOIL,ENV,MIXTURE; 2005; 19, (4): 803-808. Rec #: 720 Call Number: NO EFED CHEM (BSC,IDC,PRC,TFX), NO MIXTURE (AZX,CTN,EFV,FNZ,LCYT,PCZ,PPCP,PPCP2011,TEZ), OK (24DB) Notes: EcoReference No.: 89805 Chemical of Concern: AZX,BSC,CTN,EFV,FNZ,IDC,LCYT,PCZ,PPCP,PRC,TEZ,TFX

510. ---. Interactions of Late-Season Morningglory (Ipomoea spp.) Management Practices in Peanut (Arachis hypogaea). POPSOIL,ENV; 2005; 19, (4): 803-808. Rec #: 810
Call Number: OK(24DB),NO MIXTURE(ALL CHEMS) Notes: EcoReference No.: 89805
Chemical of Concern: PHDCa,24DB,AZX,BSC,CTN,FZN,PCZ,PRC,TEZ,EFV,IDC,LCYT,Na2OT

511. Landgren, O.; Kyle, R. A.; Hoppin, J. A.; Beane Freeman, L. E.; Cerhan, J. R.; Katzmann, J. A.; Rajkumar, S. V., and Alavanja, M. C. Pesticide Exposure and Risk of Monoclonal Gammopathy of Undetermined Significance in the Agricultural Health Study.

Rec #: 10942

Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Pesticides are associated with excess risk of multiple myeloma, albeit inconclusively. We included 678 men (30-94 years) from a well-characterized prospective cohort of restricted-use pesticide applicators to assess the risk of monoclonal gammopathy of undetermined significance (MGUS). Serum samples from all subjects were analyzed by electrophoresis performed on agarose gel; samples with a discrete or localized band were subjected to immunofixation. Age-adjusted prevalence estimates of MGUS were compared with MGUS prevalence in 9469 men from Minnesota. Associations between pesticide exposures and MGUS prevalence were assessed by logistic regression models adjusted for age and education level. Among study participants older than 50 years (n = 555), 38 were found to have MGUS, yielding a prevalence of 6.8% (95% CI, 5.0%-9.3%). Compared with men from Minnesota, the age-adjusted prevalence of MGUS was 1.9-fold (95% CI, 1.3- to 2.7-fold) higher among male pesticide applicators. Among applicators, a 5.6-fold (95% CI, 1.9- to 16.6-fold), 3.9-fold (95% CI, 1.5- to 10.0-fold), and 2.4-fold (95% CI, 1.1- to 5.3-fold) increased risk of MGUS prevalence was observed among users of the chlorinated insecticide dieldrin, the fumigant mixture carbontetrachloride/carbon disulfide, and the fungicide chlorothalonil, respectively. In summary, the prevalence of MGUS among pesticide applicators was twice that in a population-based sample of men from Minnesota, adding support to the hypothesis that specific pesticides are causatively linked to myelomagenesis.

MESH HEADINGS: Adult

**MESH HEADINGS: Age Factors** 

MESH HEADINGS: Aged

MESH HEADINGS: Aged, 80 and over

MESH HEADINGS: Agricultural Workers' Diseases/chemically induced/\*epidemiology

MESH HEADINGS: Blood Protein Electrophoresis

MESH HEADINGS: Carbon Disulfide/adverse effects

MESH HEADINGS: Carbon Tetrachloride/adverse effects

MESH HEADINGS: Cohort Studies

MESH HEADINGS: Dieldrin/adverse effects

MESH HEADINGS: Electrophoresis, Agar Gel

MESH HEADINGS: Humans

MESH HEADINGS: /epidemiology

MESH HEADINGS: Male

MESH HEADINGS: Middle Aged

MESH HEADINGS: Nitriles/adverse effects

MESH HEADINGS: /epidemiology

MESH HEADINGS: \*Occupational Exposure

MESH HEADINGS: Paraproteinemias/chemically induced/\*epidemiology

MESH HEADINGS: Pesticides/\*adverse effects

MESH HEADINGS: Prevalence

**MESH HEADINGS: Prospective Studies** 

MESH HEADINGS: Sampling Studies eng

512. Lange, R. M. and Bains, P. S. Efficacy of Fungicides for Control of Entomosporium Leaf and Berry Spot of Saskatoon in Alberta. 1997; 19, (1): 112. Rec #: 2505 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT AMELANCHIER-ALNIFOLIA ENTOMOSPORIUM-MESPILI SASKATOON HOST PLANT PATHOGEN PEST MANAGEMENT CROP INDUSTRY HORTICULTURE ENTOMOSPORIUM LEAF SPOT ENTOMOSPORIUM BERRY SPOT BENOMYL FUNGICIDE CHLOROTHALONIL PROPICONAZOLE SULFUR TRIFORINE MYCLOBUTANIL FUNGAL DISEASE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: FRUIT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS, MEDICINAL **KEYWORDS:** General Biology-Symposia **KEYWORDS: Horticulture-Small Fruits** KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Rosaceae LANGUAGE: eng 513. ---. Efficacy of Fungicides for Control of Entomosporium Leaf and Berry Spot of Saskatoon in Alberta. 1997; 19, (1): 112. Rec #: 2505 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT AMELANCHIER-ALNIFOLIA ENTOMOSPORIUM-MESPILI SASKATOON HOST PLANT PATHOGEN PEST MANAGEMENT CROP INDUSTRY HORTICULTURE

ENTOMOSPORIUM LEAF SPOT ENTOMOSPORIUM BERRY SPOT BENOMYL FUNGICIDE CHLOROTHALONIL PROPICONAZOLE SULFUR TRIFORINE

MYCLOBUTANIL FUNGAL DISEASE MESH HEADINGS: CONGRESSES

MESH HEADINGS: BIOLOGY

MESH HEADINGS: FRUIT MESH HEADINGS: FUNGI

MESH HEADINGS: PUNCI MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PREVENTIVE MEDICINE

MESH HEADINGS: FREVENTIVE MEDIC MESH HEADINGS: HERBICIDES

MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

MESH HEADINGS: MITOSPORIC FUNGI

MESH HEADINGS: PLANTS, MEDICINAL KEYWORDS: General Biology-Symposia KEYWORDS: Horticulture-Small Fruits KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Rosaceae LANGUAGE: eng

514. Latteur, G. and Jansen, J.-P. Effects of 20 Fungicides on the Infectivity of Conidia of the Aphid Entomopathogenic Fungus Erynia neoaphidis. POPENV; 2002; 47, (4): 435-444. Rec #: 450
Call Number: OK(ALL CHEMS),OK TARGET(CTN) Notes: EcoReference No.: 90251
Chemical of Concern: AZX,CBD,CTN,CPZ,FUZ,HCZ,IPD,KRSM,PCZ,SPX,TEZ,TPM,TDM

515. Lavy, T. L.; Mattice, J. D., and Massey, J. H. Evaluation of Worker Exposure to Multiple Pesticides. 1990; 199, (1-2): Agro 21. Rec #: 1197 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT CONIFER NURSERY BENOMYL BIFENOX CAPTAN CARBARYL CHLORPYRIFOS GLYPHOSATE TRIADIMEFON CHLOROTHALONIL DIAZINON DIPHENAMIDE FENVALERATE METALAXYL NAPROPAMIDE OXYFLUORFEN BIOLOGICAL MONITORING **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: RADIATION DOSAGE MESH HEADINGS: TREES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS **MESH HEADINGS: INSECTICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Public Health: Environmental Health-Air KEYWORDS: Public Health: Environmental Health-Radiation Health **KEYWORDS:** Forestry and Forest Products **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Coniferopsida LANGUAGE: eng

516. ---. Evaluation of Worker Exposure to Multiple Pesticides. 1990; 199, (1-2): Agro 21.

Rec #: 1197 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT CONIFER NURSERY BENOMYL BIFENOX CAPTAN CARBARYL CHLORPYRIFOS GLYPHOSATE TRIADIMEFON CHLOROTHALONIL DIAZINON DIPHENAMIDE FENVALERATE METALAXYL NAPROPAMIDE OXYFLUORFEN BIOLOGICAL MONITORING MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: RADIATION DOSAGE MESH HEADINGS: TREES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS **MESH HEADINGS: INSECTICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia **KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Environmental Health-Radiation Health **KEYWORDS:** Forestry and Forest Products **KEYWORDS:** Pest Control **KEYWORDS:** Economic Entomology-Chemical and Physical Control **KEYWORDS:** Coniferopsida LANGUAGE: eng

517. Lebailly, P.; Vigreux, C.; Godard, T.; Sichel, F.; Bar, E.; Letalaer, J. Y.; Henry-Amar, M., and Gauduchon, P. Assessment of Dna Damage Induced in Vitro by Etoposide and Two Fungicides (Carbendazim and Chlorothalonil) in Human Lymphocytes With the Comet Assay. 1997; 375, (2): 205-217. Rec #: 681

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The effects of two fungicides (carbendazim and chlorothalonil) on the induction of DNA damage in human peripheral blood lymphocytes (human PBL) have been investigated using the single cell gel electrophoresis assay (SCGE assay or comet assay) immediately after a 1-h treatment and after a 24-h post-treatment incubation. The assessment of etoposide (an effective antitumour agent) effects on human PBL in terms of cell viability and dose-DNA damage relationships was made and etoposide selected as a positive control. The results indicate that etoposide induces significant (p < 0.01) dose-dependent DNA damages for concentrations at which the loss of cell viability is low. After a 24-h recuperation period, all observed DNA damages had disappeared. With SCGE assay performed after a 1-h treatment, similar positive results were observed with chlorothalonil alone or in association with carbendazim, without any loss of cell viability. However, a dramatic loss of cell viability w

MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: HUMAN MESH HEADINGS: GENETICS, MEDICAL MESH HEADINGS: NUCLEIC ACIDS/ANALYSIS MESH HEADINGS: PURINES/ANALYSIS MESH HEADINGS: PYRIMIDINES/ANALYSIS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NUCLEIC ACIDS **MESH HEADINGS: PURINES MESH HEADINGS: PYRIMIDINES** MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: BLOOD CELLS/ULTRASTRUCTURE MESH HEADINGS: BLOOD CELLS/PHYSIOLOGY MESH HEADINGS: BLOOD CELLS/CHEMISTRY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY **MESH HEADINGS: POISONING** MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HOMINIDAE **KEYWORDS:** Cytology and Cytochemistry-Human **KEYWORDS:** Genetics and Cytogenetics-Human **KEYWORDS: Biochemical Methods-Nucleic Acids KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS: Blood KEYWORDS: Blood KEYWORDS:** Toxicology-General **KEYWORDS:** Hominidae LANGUAGE: eng

 518. ---. Assessment of Dna Damage Induced in Vitro by Etoposide and Two Fungicides (Carbendazim and Chlorothalonil) in Human Lymphocytes With the Comet Assay. 1997; 375, (2): 205-217. Rec #: 681

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MESH HEADINGS: CTTOLOGT MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: HUMAN MESH HEADINGS: GENETICS, MEDICAL

MESH HEADINGS: NUCLEIC ACIDS/ANALYSIS MESH HEADINGS: PURINES/ANALYSIS MESH HEADINGS: PYRIMIDINES/ANALYSIS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NUCLEIC ACIDS MESH HEADINGS: PURINES MESH HEADINGS: PYRIMIDINES MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: BLOOD CELLS/ULTRASTRUCTURE MESH HEADINGS: BLOOD CELLS/PHYSIOLOGY MESH HEADINGS: BLOOD CELLS/CHEMISTRY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HOMINIDAE KEYWORDS: Cytology and Cytochemistry-Human KEYWORDS: Genetics and Cytogenetics-Human **KEYWORDS: Biochemical Methods-Nucleic Acids KEYWORDS: Biochemical Studies-General KEYWORDS:** Biochemical Studies-Nucleic Acids **KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS: Blood KEYWORDS: Blood KEYWORDS:** Toxicology-General **KEYWORDS:** Hominidae LANGUAGE: eng

519. Lebailly, P.; Vigreux, C.; Lechevrel, C.; Ledemeney, D.; Godard, T.; Sichel, F.; LetalaóEr, J. Y.; Henry-Amar, M., and Gauduchon, P. Dna Damage in Mononuclear Leukocytes of Farmers Measured Using the Alkaline Comet Assay: Modifications of Dna Damage Levels After a One-Day Field Spraying Period With Selected Pesticides. 1998; 7, (10): 929-940. Rec #: 941

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The alkaline comet assay was used to assess DNA damage in mononuclear leukocytes of farmers before and after a 1-day spraying period with selected pesticides under usual conditions. Two blood samples were collected, one in the morning of the day of spraying (S0) and the second in the morning of the day after (S1). Here, we assessed variations in DNA damage levels between these two sampling times. Four groups of farmers were formed, according to exposure to: (a) various fungicide-insecticide mixtures (including chlorothalonil; group 1, n = 8), (b) the herbicide isoproturon (group 2, n = 11), (c) fungicide triazoles (group 3, n = 14), and (d) a fungicide (chlorothalonil)-insecticide mixture (group 4, n =8). An increase in DNA damage levels was observed at S1 for groups 1 and 4, who were exposed to similar pesticides. This increase was correlated with area sprayed between S0 and S1 and with the number of spraying tanks used over this 1-day period. No effect was observed on cell viability or on hematological parameters for these two groups. No statistically significant modification of DNA damage level was observed the day after spraying for groups 2 and 3, when each was observed as a whole. However, some farmers presented significantly more DNA damage after exposure, and others presented less damage. In these two groups, a significant decrease of neutrophils was observed at S1, and a decrease of red blood cells was observed in group 3. In parallel, a significant loss of lymphocyte viability was observed in these two groups. A 1-day spraying period seems to be sufficient to significantly modify DNA damage levels in mononuclear

leukocytes, but the correlation of this change with pesticide-related exposure parameters depends on the kind of pesticide concerned. MESH HEADINGS: Adult MESH HEADINGS: Agrochemicals/\*ADVERSE EFFECTS MESH HEADINGS: Agrochemicals/\*CHEMISTRY MESH HEADINGS: DNA Damage/\*GENETICS MESH HEADINGS: Environmental Monitoring/\*METHODS MESH HEADINGS: Erythrocyte Count/DRUG EFFECTS **MESH HEADINGS: Human** MESH HEADINGS: Leukocyte Count/DRUG EFFECTS MESH HEADINGS: Leukocytes, Mononuclear/\*DRUG EFFECTS MESH HEADINGS: Lymphocytes/DRUG EFFECTS MESH HEADINGS: Male MESH HEADINGS: Middle Age MESH HEADINGS: Neutrophils/DRUG EFFECTS MESH HEADINGS: Occupational Exposure/\*ADVERSE EFFECTS MESH HEADINGS: Pesticides/\*ADVERSE EFFECTS MESH HEADINGS: Pesticides/\*CHEMISTRY **MESH HEADINGS: Prospective Studies MESH HEADINGS: Questionnaires MESH HEADINGS: Time Factors** LANGUAGE: eng

520. ---. Dna Damage in Mononuclear Leukocytes of Farmers Measured Using the Alkaline Comet Assay: Modifications of Dna Damage Levels After a One-Day Field Spraying Period With Selected Pesticides. 1998; 7, (10): 929-940.

Rec #: 941

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The alkaline comet assay was used to assess DNA damage in mononuclear leukocytes of farmers before and after a 1-day spraying period with selected pesticides under usual conditions. Two blood samples were collected, one in the morning of the day of spraying (S0) and the second in the morning of the day after (S1). Here, we assessed variations in DNA damage levels between these two sampling times. Four groups of farmers were formed, according to exposure to: (a) various fungicide-insecticide mixtures (including chlorothalonil; group 1, n = 8), (b) the herbicide isoproturon (group 2, n = 11), (c) fungicide triazoles (group 3, n = 14), and (d) a fungicide (chlorothalonil)-insecticide mixture (group 4, n =8). An increase in DNA damage levels was observed at S1 for groups 1 and 4, who were exposed to similar pesticides. This increase was correlated with area sprayed between S0 and S1 and with the number of spraying tanks used over this 1-day period. No effect was observed on cell viability or on hematological parameters for these two groups. No statistically significant modification of DNA damage level was observed the day after spraying for groups 2 and 3, when each was observed as a whole. However, some farmers presented significantly more DNA damage after exposure, and others presented less damage. In these two groups, a significant decrease of neutrophils was observed at S1, and a decrease of red blood cells was observed in group 3. In parallel, a significant loss of lymphocyte viability was observed in these two groups. A 1-day spraying period seems to be sufficient to significantly modify DNA damage levels in mononuclear leukocytes, but the correlation of this change with pesticide-related exposure parameters depends on the kind of pesticide concerned.

MESH HEADINGS: Adult

MESH HEADINGS: Agrochemicals/\*ADVERSE EFFECTS MESH HEADINGS: Agrochemicals/\*CHEMISTRY

MESH HEADINGS: DNA Damage/\*GENETICS

MESH HEADINGS: Environmental Monitoring/\*METHODS

MESH HEADINGS: Erythrocyte Count/DRUG EFFECTS

MESH HEADINGS: Human

MESH HEADINGS: Leukocyte Count/DRUG EFFECTS MESH HEADINGS: Leukocytes, Mononuclear/\*DRUG EFFECTS MESH HEADINGS: Lymphocytes/DRUG EFFECTS MESH HEADINGS: Male MESH HEADINGS: Middle Age MESH HEADINGS: Neutrophils/DRUG EFFECTS MESH HEADINGS: Occupational Exposure/\*ADVERSE EFFECTS MESH HEADINGS: Pesticides/\*ADVERSE EFFECTS MESH HEADINGS: Pesticides/\*CHEMISTRY MESH HEADINGS: Prospective Studies MESH HEADINGS: Questionnaires MESH HEADINGS: Time Factors LANGUAGE: eng

521. Lee, S.; Mclaughlin, R.; Harnly, M.; Gunier, R., and Kreutzer, R. Community Exposures to Airborne Agricultural Pesticides in California: Ranking of Inhalation Risks. 2002; 110, (12): 1175-1184. Rec #: 917

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: We assessed inhalation risks to California communities from airborne agricultural pesticides by probability distribution analysis using ambient air data provided by the California Air Resources Board and the California Department of Pesticide Regulation. The pesticides evaluated include chloropicrin, chlorothalonil, chlorpyrifos, S,S,S-tributyl phosphorotrithioate, diazinon, 1,3-dichloropropene, dichlorvos (naled breakdown product), endosulfan, eptam, methidathion, methyl bromide, methyl isothiocyanate (MITC; metam sodium breakdown product), molinate, propargite, and simazine. Risks were estimated for the median and 75th and 95th percentiles of probability (50, 25, and 5% of the exposed populations). Exposure estimates greater than or equal to noncancer reference values occurred for 50% of the exposed populations (adults and children) for MITC subchronic and chronic exposures, methyl bromide subchronic exposures (year 2000 monitoring), and 1,3-dichloropropene subchronic exposures (1990 monitoring). Short-term chlorpyrifos exposure estimates exceeded the acute reference value for 50% of children (not adults) in the exposed population. Noncancer risks were uniformly higher for children due to a proportionately greater inhalation rate-to-body weight ratio compared to adults and other factors. Target health effects of potential concern for these exposures include neurologic effects (methyl bromide and chlorpyrifos) and respiratory effects (1,3-dichloropropene and MITC). The lowest noncancer risks occurred for simazine and chlorothalonil. Lifetime cancer risks of one-in-a-million or greater were estimated for 50% of the exposed population for 1,3dichloropropene (1990 monitoring) and 25% of the exposed populations for methidathion and molinate. Pesticide vapor pressure was found to be a better predictor of inhalation risk compared to other methods of ranking pesticides as potential toxic air contaminants.

MESH HEADINGS: Adolescent

MESH HEADINGS: Adult

MESH HEADINGS: Age Factors MESH HEADINGS: Aged

MESH HEADINGS: \*Agriculture

MESH HEADINGS: Body Weight

MESH HEADINGS: California

MESH HEADINGS: Child

MESH HEADINGS: Child, Preschool

MESH HEADINGS: \*Environmental Exposure

MESH HEADINGS: Female

**MESH HEADINGS: Humans** 

**MESH HEADINGS: Infant** 

MESH HEADINGS: Infant, Newborn

MESH HEADINGS: \*Inhalation Exposure

MESH HEADINGS: Male

MESH HEADINGS: Middle Aged MESH HEADINGS: Neoplasms/\*chemically induced MESH HEADINGS: Pesticides/\*analysis MESH HEADINGS: Reference Values MESH HEADINGS: Risk Assessment LANGUAGE: eng

522. ---. Community Exposures to Airborne Agricultural Pesticides in California: Ranking of Inhalation Risks. 2002; 110, (12): 1175-1184.

Rec #: 917

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

MESH HEADINGS: \*Inhalation Exposure

MESH HEADINGS: Pesticides/\*analysis MESH HEADINGS: Reference Values MESH HEADINGS: Risk Assessment

MESH HEADINGS: Neoplasms/\*chemically induced

MESH HEADINGS: Male MESH HEADINGS: Middle Aged

LANGUAGE: eng

Abstract: ABSTRACT: We assessed inhalation risks to California communities from airborne agricultural pesticides by probability distribution analysis using ambient air data provided by the California Air Resources Board and the California Department of Pesticide Regulation. The pesticides evaluated include chloropicrin, chlorothalonil, chlorpyrifos, S,S,S-tributyl phosphorotrithioate, diazinon, 1,3-dichloropropene, dichlorvos (naled breakdown product), endosulfan, eptam, methidathion, methyl bromide, methyl isothiocyanate (MITC; metam sodium breakdown product), molinate, propargite, and simazine. Risks were estimated for the median and 75th and 95th percentiles of probability (50, 25, and 5% of the exposed populations). Exposure estimates greater than or equal to noncancer reference values occurred for 50% of the exposed populations (adults and children) for MITC subchronic and chronic exposures, methyl bromide subchronic exposures (year 2000 monitoring), and 1,3-dichloropropene subchronic exposures (1990 monitoring). Short-term chlorpyrifos exposure estimates exceeded the acute reference value for 50% of children (not adults) in the exposed population. Noncancer risks were uniformly higher for children due to a proportionately greater inhalation rate-to-body weight ratio compared to adults and other factors. Target health effects of potential concern for these exposures include neurologic effects (methyl bromide and chlorpyrifos) and respiratory effects (1,3-dichloropropene and MITC). The lowest noncancer risks occurred for simazine and chlorothalonil. Lifetime cancer risks of one-in-a-million or greater were estimated for 50% of the exposed population for 1,3dichloropropene (1990 monitoring) and 25% of the exposed populations for methidathion and molinate. Pesticide vapor pressure was found to be a better predictor of inhalation risk compared to other methods of ranking pesticides as potential toxic air contaminants. MESH HEADINGS: Adolescent MESH HEADINGS: Adult **MESH HEADINGS: Age Factors** MESH HEADINGS: Aged MESH HEADINGS: \*Agriculture MESH HEADINGS: Body Weight MESH HEADINGS: California MESH HEADINGS: Child MESH HEADINGS: Child, Preschool MESH HEADINGS: \*Environmental Exposure **MESH HEADINGS: Female MESH HEADINGS: Humans MESH HEADINGS: Infant** MESH HEADINGS: Infant, Newborn

- 523. Lee, S. S.; Marciniszyn, J. P.; Marks, A. F., and Ignatoski, J. A. Balance Study of the Distribution of Radioactivity Following Oral Administration of 14C-Chlorothalonil (14c-ds-2787) to Rats. 1982. Rec #: 640 Keywords: NO SOURCE Notes: Chemical of Concern: CTN
- 524. ---. Balance Study of the Distribution of Radioactivity Following Oral Administration of 14c-Chlorothalonil (14c-Ds-2787) to Rats. 1982151887. Rec #: 3792 Keywords: NO SOURCE Notes: Chemical of Concern: CTN

525. Lehotay, S. J. Supercritical Fluid Extraction of Pesticides in Foods. 1997; 785, (1-2): 289-312.

Rec #: 2551

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This article summarizes research findings involving the supercritical fluid extraction (SFE) of pesticides in food and other tissue matrices. Emphasis is placed on multiresidue analysis of pesticides in nonfatty foods, including some previously unpublished aspects of SFE in this application. Brief overviews of pesticides and traditional multiresidue methods are given, followed by discussion of results for SFE applications in the pesticide residue analysis of foods.

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Toxicology-Foods LANGUAGE: eng

526. ---. Supercritical Fluid Extraction of Pesticides in Foods. 1997; 785, (1-2): 289-312.

Rec #: 2551

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This article summarizes research findings involving the supercritical fluid extraction (SFE) of pesticides in food and other tissue matrices. Emphasis is placed on multiresidue analysis of pesticides in nonfatty foods, including some previously unpublished aspects of SFE in this application. Brief overviews of pesticides and traditional multiresidue methods are given, followed by discussion of results for SFE applications in the pesticide residue analysis of foods.

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- MESH HEADINGS: FOOD POISONING

MESH HEADINGS: FOOD PRESERVATIVES/POISONING

- MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY
- KEYWORDS: Biochemical Studies-General

KEYWORDS: Biophysics-General Biophysical Techniques

**KEYWORDS:** Toxicology-Foods

LANGUAGE: eng

527. Lehotay, S. J. and Lee, C.-H. Evaluation of a Fibrous Cellulose Drying Agent in Supercritical Fluid Extraction and Pressurized Liquid Extraction of Diverse Pesticides. 1997; 785, (1/2): 313-327. Rec #: 620 Keywords: METHODS Call Number: NO CONTROL(ALL CHEMS),NO METHODS Notes: EcoReference No.: 89727 Chemical of Concern: DDVP,MLN,CBF,AZ,FNV,Captan,ACP,CTN,CYP,CBL

528. Lehotay, S. J. and Lee, C. H. Evaluation of a Fibrous Cellulose Drying Agent in Supercritical Fluid Extraction and Pressurized Liquid Extraction of Diverse Pesticides. 1997; 785, (1-2): 313-327. 209856. Rec #: 8282 Keywords: METHODS Notes: Chemical of Concern: ACP,AZ,CBF,CBL,CTN,CYP,Captan,DDVP,FNV,MLN Abstract: NO METHODS US Dep. Agric., Agric. Res. Serv., Beltsville Agric. Res. Cent., 10300 Baltimore Ave., Beltsville, MD 20705//Journal of chromatography a//PLEASE ADD FULL PDF NAME TO PAPER//

529. Lehotay, S. J. and Valverde-Garcia, A. Evaluation of Different Solid-Phase Traps for Automated Collection and Clean-up in the Analysis of Multiple Pesticides in Fruits and Vegetables After Supercritical Fluid Extraction. 1997; 765, (1): 69-84. Rec #: 2881

Rec #: 2001

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This study was designed to determine which combination of sorbent-trap and elution solvent provided the most efficient automated method of collection in supercritical fluid extraction (SFE), elution of analytes, and clean-up of orange, sweet potato and green bean extracts for analysis of 56 diverse pesticides using GC-ion-trap MS. The solid-phase traps evaluated consisted of octyldecylsilane (ODS), diol, Tenax and Porapak-Q, and the elution solvents compared were acetone, ethyl acetate, acetonitrile and methanol. SFE collection by bubbling into each organic solvent was also compared. Recoveries, elution volumes, limits of detection and clean-up aspects were determined for each combination of commodity, trap and solvent tested. High trapping efficiencies were achieved in each case, and acetone usually eluted the pesticides in the least volume ( < 1 ml) from the traps. The few matrix components that interfered in GC-ion-trap MS continued to interfere in all trap/solvent

MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: VEGETABLES KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Food Technology-Fruits LANGUAGE: eng

530. ---. Evaluation of Different Solid-Phase Traps for Automated Collection and Clean-up in the Analysis of Multiple Pesticides in Fruits and Vegetables After Supercritical Fluid Extraction. 1997; 765, (1): 69-84. Rec #: 2881 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This study was designed to determine which combination of sorbent-trap and elution solvent provided the most efficient automated method of collection in supercritical fluid extraction (SFE), elution of analytes, and clean-up of orange, sweet potato and green bean extracts for analysis of 56 diverse pesticides using GC-ion-trap MS. The solid-phase traps evaluated consisted of octyldecylsilane (ODS), diol, Tenax and Porapak-Q, and the elution solvents compared were acetone, ethyl acetate, acetonitrile and methanol. SFE collection by bubbling into each organic solvent was also compared. Recoveries, elution volumes, limits of detection and clean-up aspects were determined for each combination of commodity, trap and solvent tested. High trapping efficiencies were achieved in each case, and acetone usually eluted the pesticides in the least volume ( < 1 ml) from the traps. The few matrix components that interfered in GC-ion-trap MS continued to interfere in all trap/solvent

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531. Lehotay, Steven J.; Son, Kyung Ae; Kwon, Hyeyoung; Koesukwiwat, Urairat; Fu, Wusheng; Mastovska, Katerina; Hoh, Eunha, and Leepipatpiboon, Natchanun. Comparison of QuEChERS sample preparation methods for the analysis of pesticide residues in fruits and vegetables. 2010; 1217, (16): 2548-2560.

Rec #: 12912

Keywords: FOOD

Notes: Chemical of Concern: CTN

Abstract: Abstract: This article describes the comparison of different versions of an easy, rapid and low-cost sample preparation approach for the determination of pesticide residues in fruits and vegetables by concurrent use of gas and liquid chromatography (GC and LC) coupled to mass spectrometry (MS) for detection. The sample preparation approach is known as QuEChERS, which stands for â€equick, easy, cheap, effective, rugged and safe†. The three compared versions were based on the original unbuffered method, which was first published in 2003, and two interlaboratory validated versions: AOAC Official Method 2007.01, which uses acetate buffering, and European Committee for Standardization (CEN) Standard Method EN 15662, which calls for citrate buffering. LC-MS/MS and GC-MS analyses using each method were tested from 50 to 1000ng/g in apple-blueberry sauce, peas and limes spiked with 32 representative pesticides. As expected, the results were excellent (overall average of 98% recoveries with 10% RSD) using all 3 versions, except the unbuffered method gave somewhat lower recoveries for the few pH-dependent pesticides. The different methods worked equally well for all matrices tested with equivalent amounts of matrix co-extractives measured, matrix effects on quantification and chemical noise from matrix in the chromatographic backgrounds. The acetate-buffered version gave higher and more consistent recoveries for pymetrozine than the other versions in all 3 matrices and for thiabendazole in limes. None of the versions consistently worked well for chlorothalonil, folpet or tolylfluanid in peas, but the acetate-buffered method gave better results for screening of those pesticides. Also, due to the recent shortage in acetonitrile (MeCN), ethyl acetate (EtOAc) was evaluated as a substitute solvent in the acetate-buffered QuEChERS version, but it generally led to less clean extracts and lower recoveries of pymetrozine, thiabendazole, acephate, methamidophos, omethoate and dimethoate. In summary, the acetate-buffered version of QuEChERS using MeCN exhibited advantages compared to the other tested methods in the study. Keywords: QuEChERS sample preparation methods Amsterdam; New York: Elsevier

 532. Lemmens-Gruber, R.; Studenik, C.; Karkhaneh, A., and Heistracher, P. Mechanism of Sodium Channel Blockade in the Cardiotoxic Action of Emetine Dihydrochloride in Isolated Cardiac Preparations and Ventricular Myocytes of Guinea Pigs. 1997; 30(5), 554-61. Rec #: 2504 Keywords: IN VITRO Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Emetine is used in the therapy of special forms of amebiasis and is abused as syrup of ipecac by persons with bulimia. Severe cardiac side effects were reported. Thus the intracellular microelectrode technique and the patch-clamp technique in the cell-attached mode were used to study the effects of emetine on the action potential and upstroke velocity (Vmax) in papillary muscles and Purkinje fibers of guinea pigs as well as on macroscopic and (S)-DPI 201-106-modified and unmodified single-sodium-channel current (I(Na)) of guinea-pig ventricular myocytes. Emetine caused a tonic block of Vmax and reduced I(Na) independent of frequency. Hill plots were linear, with slopes ranging from 0.96 to 1.06, suggestive of a first-order reaction. The current-voltage relation was not influenced, indicating a voltage-independent blockade of the sodium channels. The most prominent effects were an increase of sweeps without activity, a decrease of the fast component of the open-time distribution, an increase of the slow component of the closed-time distribution, and a reduction in the number of bursts per record. The amplitude of the unitary current was not changed. From the results, we conclude that I(Na) blockade contributes to the cardiotoxicity of emetine. MESH HEADINGS: Action Potentials/drug effects MESH HEADINGS: Amebicides/\*toxicity **MESH HEADINGS: Animals** MESH HEADINGS: Dose-Response Relationship, Drug MESH HEADINGS: Emetine/\*toxicity **MESH HEADINGS: Female MESH HEADINGS: Guinea Pigs** MESH HEADINGS: Heart Ventricles/drug effects MESH HEADINGS: Male **MESH HEADINGS: Microelectrodes** MESH HEADINGS: Papillary Muscles/\*drug effects/physiology **MESH HEADINGS: Patch-Clamp Techniques** 

MESH HEADINGS: Purkinje Cells/\*drug effects/physiology

MESH HEADINGS: \*Sodium Channel Blockers

MESH HEADINGS: Sodium Channels/physiology

LANGUAGE: eng

 533. ---. Mechanism of Sodium Channel Blockade in the Cardiotoxic Action of Emetine Dihydrochloride in Isolated Cardiac Preparations and Ventricular Myocytes of Guinea Pigs. 1997; 30(5), 554-61. Rec #: 2504

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534. Lenoir, J.; Aston, L.; Datta, S.; Fellers, G.; Mcconnell, L., and Seiber, J. Pesticides and Pcbs in Sierra Nevada Ecosystems Potential Relationship to Decline of Amphibians. 1998; 216, (1-3): Envr 114. Rec #: 2625 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT AMPHIBIAN POLLUTION POLYCHLORINATED BIPHENYLS POLLUTANT TOXIN PCB'S SIERRA NEVADA ECOSYSTEMS ECOLOGY PESTICIDES PESTICIDE ENVIRONMENTAL POLLUTION SIERRA NEVADA CALIFORNIA USA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: AMPHIBIA KEYWORDS: General Biology-Symposia **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control **KEYWORDS:** Amphibia-Unspecified LANGUAGE: eng

535. ---. Pesticides and Pcbs in Sierra Nevada Ecosystems Potential Relationship to Decline of Amphibians. 1998; 216, (1-3): Envr 114. Rec #: 2625 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT AMPHIBIAN POLLUTION POLYCHLORINATED BIPHENYLS POLLUTANT TOXIN PCB'S SIERRA NEVADA ECOSYSTEMS ECOLOGY PESTICIDES PESTICIDE ENVIRONMENTAL POLLUTION SIERRA NEVADA CALIFORNIA USA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: AMPHIBIA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control **KEYWORDS:** Amphibia-Unspecified LANGUAGE: eng

536. Leonard, J. A. and Yeary, R. A. Exposure of Workers Using Hand-Held Equipment During Urban Application of Pesticides to Trees and Ornamental Shrubs. 1990; 51, (71): 605-609. Rec #: 803 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Occupational exposure to four insecticides and two fungicides was measured in 151 commercial tree and shrub applicators who used hand-held equipment when spraying pesticides. The study was conducted for 3 consecutive vears: 1985, 1986, and 1987. Worker exposure was determined by collecting full-shift, breathing zone air samples. Sampling was conducted with battery operated, constant flow air sampling devices. The air concentrations of acephate and benomyl were below the laboratory detection limit of 0.001 mg for all samples taken. Carbaryl (71 samples), diazinon (74 samples), and dicofol (84 samples) were detectable in less than 30% of the total samples. Of the samples where detectable levels were identified, the range of detectable levels were 0.010-0.070 mg/m3, 0.001-0.040 mg/m3, and 0.001-0.007 mg/m3 for carbaryl (19 samples), diazinon (25 samples), and dicofol (11 samples), respectively. Chlorothalonil was detected in one (1) of 14 samples at 0.011 mg/m3. Where thre MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Occupational Health **KEYWORDS:** Horticulture-Flowers and Ornamentals **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Hominidae

LANGUAGE: eng

537. ---. Exposure of Workers Using Hand-Held Equipment During Urban Application of Pesticides to Trees and Ornamental Shrubs. 1990; 51, (71): 605-609.

Rec #: 803

Keywords: HUMAN HEALTH

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KEYWORDS: Horticulture-Flowers and Ornamentals

**KEYWORDS:** Pest Control

KEYWORDS: Economic Entomology-Chemical and Physical Control KEYWORDS: Hominidae

LANGUAGE: eng

538. Lepore, L.; Paloni, G.; Caorsi, R.; Alessio, M.; Rigante, D.; Ruperto, N.; Cattalini, M.; Tommasini, A.; Zulian, F.; Ventura, A.; Martini, A., and Gattorno, M. Follow-Up and Quality of Life of Patients with Cryopyrin-Associated Periodic Syndromes Treated with Anakinra. 2010; 157, (2): 310-NIL\_171.

Rec #: 15112

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: Abstract: Objective To evaluate the quality of life and long-term follow-up of patients enrolled in the Italian registry of cryopyrin-associated periodic syndromes (CAPS). Study design Since 2004, 20 patients with CAPS were enrolled in a common registry from different Italian Centers of Pediatric Rheumatology; 14 patients were treated with Anakinra in an open fashion. Both treated and untreated patients were routinely followed according to standard of care. The Child Health Questionnaire (CHQ-PF 50) was used to assess the health-related quality of life Results The mean duration of follow-up was 37.5 months. In all treated patients, a complete and

persistent control of the inflammatory manifestations was observed with no further progression of the disease. At enrollment in the registry, patients showed a poorer health-related quality of life than healthy children in both physical and the psychosocial summary scores. Treatment was associated with a dramatic and sustained amelioration of a variety of measures of poor quality of life, particularly in those concerning the global health perception, bodily pain-discomfort, and other physical domains. Conclusions Long-termIL-1 blockade produces a significant and persistent improvement in the clinical manifestations associated with the disease and on the overall quality of life. (J Pediatr 2010;157:310-5). Keywords: COLD AUTOINFLAMMATORY SYNDROME, MUCKLE-WELLS-SYNDROME, CIAS1 MUTATIONS, ISI Document Delivery No.: 625DA

539. Levy, Y. Fungicidal Control of the Northern Leaf Blight of Corn. POP,REP,PHYSOIL,ENV; 1985: 375-378. Rec #: 840 Call Number: NO ENDPOINT(ALL CHEMS) Notes: EcoReference No.: 73066 Chemical of Concern: MZB,CTN,Zineb,TFR

540. Lewis Ivey, M. L.; Nava-Diaz, C., and Miller, S. A. Identification and Management of Colletotrichum acutatum on Immature Bell Peppers. POPSOIL,ENV,MIXTURE; 2004; 88, (11): 1198-1204. Rec #: 1340
Call Number: EFFICACY (AZX,CTN,CuOH,Maneb), NO EFED CHEM (PRC), NO MIXTURE (AZX,CuOH,PRC), TARGET (AZX,CTN,CuOH,Maneb)
Notes: EcoReference No.: 115046
Chemical of Concern: AZX,CTN,CuOH,Maneb,PRC

541. Lewis Ivey, M. L.; Nava-Diaz, C., and Miller, S. A. Identification and Management of Collectorichum Acutatum on Immature Bell Peppers. 2004. Rec #: 191

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ISSN: 0191-2917

Abstract: Farmers in northwestern Ohio reported severe losses due to anthracnose in immature (green) bell pepper as early as 1998. Two fungal isolates (AN1 and AN2) were recovered from immature fruit showing severe anthracnose symptoms. The pathogen was identified as Colletotrichum acutatum based on morphological and cultural characteristics, polymerase chain reaction (PCR) assay with the C. acutatum species-specific primer (CaInt2), and nucleotide sequencing. Isolate AN1 was pathogenic on immature pepper, tomato, and strawberry. Twentytwo bell pepper cultivars evaluated in field trials were all susceptible to C. acutatum AN1 and AN2, but the degree of susceptibility varied among cultivars. 'Crusader', 'Valiant', and 'ACX229' were the most susceptible, while 'North Star' and 'Paladin' were least susceptible. The fungicides pyraclostrobin (Cabrio) alternated with manganese ethylenebisdithiocarbamate (Manex), chlorothalonil (Bravo Ultrex) alone, Manex plus copper hydroxide (Kocide 2000), and pyraclostrobin + boscalid (BAS 516 = Pristine) alternated with Manex significantly reduced anthracnose incidence and intensity in bell peppers compared with the untreated control. 51 refs. English Publication Type: Journal Publication Type: Article Country of Publication: United States Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi general Plant Science

542. Li, W.; Merrill, D. E., and Haith, D. A. Loading Functions for Pesticide Runoff. 1990; 62, (1): 16-26.

Rec #: 1706 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Two simple models or loading functions were developed for estimating mean annual pesticide loads in surface runoff. The loading functions are regression equations derived from 100-year simulation runs of a daily pesticide runoff model. Regression Model A explains 71 to 94% of pesticide runoff variations and requires only mean annual soil erosion to estimate pesticide runoff. Model B explains 85 to 96% of pesticide runoff variations and requires both mean annual soil erosion and surface runoff volume during the month of pesticide application. To facilitate applications of the loading functions, half-lives and partition coefficients are provided for 49 pesticides. Mean annual erosivities and monthly runoff are provided for 27 locations in the eastern and central U.S. MESH HEADINGS: MATHEMATICS MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Pest Control LANGUAGE: eng

543. ---. Loading Functions for Pesticide Runoff. 1990; 62, (1): 16-26.

Rec #: 1706

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Two simple models or loading functions were developed for estimating mean annual pesticide loads in surface runoff. The loading functions are regression equations derived from 100-year simulation runs of a daily pesticide runoff model. Regression Model A explains 71 to 94% of pesticide runoff variations and requires only mean annual soil erosion to estimate pesticide runoff. Model B explains 85 to 96% of pesticide runoff variations and requires both mean annual soil erosion and surface runoff volume during the month of pesticide application. To facilitate applications of the loading functions, half-lives and partition coefficients are provided for 49 pesticides. Mean annual erosivities and monthly runoff are provided for 27 locations in the eastern and central U.S. MESH HEADINGS: MATHEMATICS MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: SOIL

MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Mathematical Biology and Statistical Methods KEYWORDS: Biochemical Studies-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-Physics and Chemistry (1970- ) KEYWORDS: Pest Control LANGUAGE: eng

544. Liapis, K. S. Determination of Organochlorine Pesticide Residues in Potatoes by Gas Chromatography/Negative Chemical Ionization/Mass Spectrometry. 1997; 18, (1): 53-56.

Rec #: 2606

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A simple extraction method combined with gas chromatography/negative chemical ionization/mass spectrometry has been used to identify and quantify organochlorine pesticide residues in potato samples with a limit of determination of 0.02 to 20 mug/kg (ppb). Samples taken from imported to Greece potatoes originated from countries non-members of European Union were analysed and organochlorine pesticide residues were determined in twelve of them.

MESH HEADINGS: BIOPHYSICS/METHODS

MESH HEADINGS: FOOD ADDITIVES/POISONING

MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION

MESH HEADINGS: FOOD POISONING

MESH HEADINGS: FOOD PRESERVATIVES/POISONING

MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

KEYWORDS: Biophysics-General Biophysical Techniques

KEYWORDS: Toxicology-Foods KEYWORDS: Pest Control

LANGUAGE: eng

 545. ---. Determination of Organochlorine Pesticide Residues in Potatoes by Gas Chromatography/Negative Chemical Ionization/Mass Spectrometry. 1997; 18, (1): 53-56. Rec #: 2606

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A simple extraction method combined with gas chromatography/negative chemical ionization/mass spectrometry has been used to identify and quantify organochlorine pesticide residues in potato samples with a limit of determination of 0.02 to 20 mug/kg (ppb). Samples taken from imported to Greece potatoes originated from countries non-members of European Union were analysed and organochlorine pesticide residues were determined in twelve of them. MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD ADDITIVES/POISONING

MESH HEADINGS: FOOD ADDITIVES/TOXICITY

MESH HEADINGS: FOOD CONTAMINATION

MESH HEADINGS: FOOD POISONING

MESH HEADINGS: FOOD PRESERVATIVES/POISONING

MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY

MESH HEADINGS: HERBICIDES
MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Toxicology-Foods KEYWORDS: Pest Control LANGUAGE: eng

546. Liden, C. Facial Dermatitis Caused by Chlorothalonil in a Paint. 1990; 22, (4): 206-211. Rec #: 451

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A case of acute facial dermatitis caused by staying in a summer cottage is described. Patch testing revealed contact allergy to the paint Pa Tra Lasur, and to chlorothalonil. Chlorothalonil was used as a pesticide in the paint. Chemical analyses using high-performance liquid chromatography and gas chromatography/mass spectrometry were performed to reveal the purity of the chlorothalonil. Chlorothalonil has earlier been described as a contact allergen, sometimes causing facial dermatitis. The reason for localization to the face has not before been discussed. It is now suggested that it might be due to the high vapour pressure of chlorothalonil. It is concluded that products containing chlorothalonil are unsuitable for indoor use.

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: CHORDATA **MESH HEADINGS: FACE** MESH HEADINGS: ANIMAL MESH HEADINGS: INFLAMMATION/PATHOLOGY MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE **KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Chordate Body Regions-Facial (1970-) **KEYWORDS:** Pathology **KEYWORDS:** Integumentary System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Immunology and Immunochemistry-Immunopathology **KEYWORDS:** Allergy **KEYWORDS: Pest Control KEYWORDS:** Hominidae LANGUAGE: eng

547. ---. Facial Dermatitis Caused by Chlorothalonil in a Paint. 1990; 22, (4): 206-211.

Rec #: 451

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A case of acute facial dermatitis caused by staying in a summer cottage is described. Patch testing revealed contact allergy to the paint Pa Tra Lasur, and to chlorothalonil. Chlorothalonil was used as a pesticide in the paint. Chemical analyses using high-performance liquid chromatography and gas chromatography/mass spectrometry were performed to reveal the purity of the chlorothalonil. Chlorothalonil has earlier

been described as a contact allergen, sometimes causing facial dermatitis. The reason for localization to the face has not before been discussed. It is now suggested that it might be due to the high vapour pressure of chlorothalonil. It is concluded that products containing chlorothalonil are unsuitable for indoor use. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: CHORDATA MESH HEADINGS: FACE MESH HEADINGS: ANIMAL MESH HEADINGS: INFLAMMATION/PATHOLOGY MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE **KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Chordate Body Regions-Facial (1970-) **KEYWORDS:** Pathology **KEYWORDS:** Integumentary System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Immunology and Immunochemistry-Immunopathology **KEYWORDS:** Allergy **KEYWORDS: Pest Control KEYWORDS:** Hominidae LANGUAGE: eng

- 548. Liew, R. S. S. and Gaunt, R. E. Chemical Control of Ascochyta fabae in Vicia faba. PHY,POPSOIL,ENV,MIXTURE; 1980; 8, (1): 67-70. Rec #: 520
  Call Number: EFFICACY (CTN), LITE EVAL CODED (BMY), TARGET (CTN,Captan,MEM,MZB,TFR,THM) Notes: EcoReference No.: 92017
  Chemical of Concern: BMY,CTN,Captan,MEM,MZB,TFR,THM
- 549. Liggitt, J.; Jenkinson, P., and Parry, D. W. The Role of Saprophytic Microflora in the Development of Fusarium Ear Blight of Winter Wheat Caused by Fusarium culmorum. POPENV; 1997; 16, (7): 679-685. Rec #: 70 Call Number: NO ENDPOINT (BMY,CTN,IMC,PIM,TEZ), TARGET (BMY,TEZ) Notes: EcoReference No.: 156667 Chemical of Concern: BMY,CTN,IMC,PIM,TEZ

550. Lilja, A.; Lilja, S.; Kurkela, T., and Rikala, R. Nursery Practices and Management of Fungal Diseases in Forest Nurseries in Finland. A Review. 1997; 31, (1): 79-100. Rec #: 2811 Keywords: NO TOX DATA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The purpose of this article is to collate the literature on fungal diseases that occur on seedlings in forest nurseries. It describes the symptoms of the diseases, the infection pattern of each fungus and the possibilities of controlling the diseases. As background a short introduction is given on forests and nursery practices in

Finland.

MESH HEADINGS: TREES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: FUNGI MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS KEYWORDS: Forestry and Forest Products KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Fungi-Unspecified KEYWORDS: Foniferopsida KEYWORDS: Betulaceae LANGUAGE: eng

551. ---. Nursery Practices and Management of Fungal Diseases in Forest Nurseries in Finland. A Review. 1997; 31, (1): 79-100. Rec #: 2811 Keywords: NO TOX DATA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The purpose of this article is to collate the literature on fungal diseases that occur on seedlings in forest nurseries. It describes the symptoms of the diseases, the infection pattern of each fungus and the possibilities of controlling the diseases. As background a short introduction is given on forests and nursery practices in Finland. MESH HEADINGS: TREES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: FUNGI MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS **KEYWORDS:** Forestry and Forest Products KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Fungi-Unspecified **KEYWORDS:** Coniferopsida **KEYWORDS: Betulaceae** LANGUAGE: eng

552. Linduska, J. J.; Ross, M.; Baumann, D.; Boltz, M., and Cain, C. Control of Cabbage Looper Diamondback Moth and Imported Cabbageworm on Cabbage with Microbial Insecticides, 1996. POP,PHYSOIL,ENV; 1997; 22, 94-95 (No. 15E). Rec #: 860 Call Number: NO COC(CTN),OK(PMR) Notes: EcoReference No.: 90472 Chemical of Concern: PMR

553. Lio-Po, G. D.; Sanvictores, M. E. G.; Baticados, M. C. L., and Lavilla, C. R. In Vitro Effect of Fungicides on Hyphal Growth and Sporogenesis of Lagenidium spp. Isolated from Penaeus monodon Larvae and Scylla serrata Eggs. POP,GROTOP; 1982; 5, 97-112. Rec #: 890 Call Number: NO ENDPOINT(ALL CHEMS) Notes: EcoReference No.: 65464 Chemical of Concern: ACAC,BMY,DBAC,BRA,CaOCl,CuS,24DXY,CTN,ETHN,FML,HOX,IODN,PL,KPM,TFN

554. Littlefield, T. A.; Colvin, D. L.; Brecke, B. J., and McCarty, L. B. The Effect of Nicosulfuron Tank-Mixes and Time of Application on Sunrunner Peanut (Arachis hypogaea). POP. Dep. Agron., Univ. Fla., Gainesville, FL//: SOIL,ENV,MIXTURE; 1995; 9, (3): 568-573. Rec #: 80 Call Number: NO EFED CHEM (ACF,FZFP,IZT,NSF,PYD), NO MIXTURE (ACF,BT,CTN,FZFP,IZT,LCF,PYD), OK (CRM) Notes: EcoReference No.: 156427 Chemical of Concern: ACF,BT,CRM,CTN,FZFP,IZT,LCF,NSF,PYD

555. Liu, M.; Rechnitz, G. A.; Li, K., and Li, Q. X. Capacitive Immunosensing of Polycyclic Aromatic Hydrocarbon and Protein Conjugates. 1998; 31, (12): 2025-2038. Rec #: 2619 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A capacitive immunosensor for the detection of the interaction between benzo(a)pyrene-bovine serum albumin (BaP-BSA) and a monoclonal antibody (designated as MAb10c10) specific to BaP has been developed. MAb10c10 was immobilized on a gold electrode through a self-assembled monolayer of cystamine. Linear sweep voltammetry showed that the charging current decreased with BaPBSA binding to the antibody on the electrode, and calibration curves were constructed for BaP-BSA and Pyrene-BSA in the range of 0.01 muM-6.00 muM. Selectivity over structurally related analytes is observed. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY KEYWORDS: Biochemical Methods-General

KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General

LANGUAGE: eng

556. ---. Capacitive Immunosensing of Polycyclic Aromatic Hydrocarbon and Protein Conjugates. 1998; 31, (12): 2025-2038.

Rec #: 2619

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

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chromatography (HPLC) combined with solid-phase extraction was reported on, for simultaneous

KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General LANGUAGE: eng

557. Liu, W. and Lee, H. K. Quantitative Analysis of Pesticides by Capillary Column High Performance Liquid Chromatography Combined With Solid-Phase Extraction. 1998; 45, (4): 631-639. Rec #: 2579 Keywords: METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. High performance liquid

analysis of pesticides in this work. The separation of 12 pesticides was achieved on a C18 capillary column with gradient elution. Sub-microlitre injection volume of the samples and a Ushaped 35 nl flow cell were used to improve the separation and detection. In addition, the method used C18 solid-phase extraction disks to allow a 250-fold enrichment of the pesticides from fortified water and apple samples. The calculated detection limits range was 0.15-0.8 mug/l. Under the optimal extraction conditions, recoveries of 85-107% for most of the pesticides at 1.0-10.0 mug/l level, were obtained. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS:** Food Technology-General **KEYWORDS:** Pest Control LANGUAGE: eng

558. ---. Quantitative Analysis of Pesticides by Capillary Column High Performance Liquid Chromatography Combined With Solid-Phase Extraction. 1998; 45, (4): 631-639.

Rec #: 2579

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. High performance liquid chromatography (HPLC) combined with solid-phase extraction was reported on, for simultaneous analysis of pesticides in this work. The separation of 12 pesticides was achieved on a C18 capillary column with gradient elution. Sub-microlitre injection volume of the samples and a U-shaped 35 nl flow cell were used to improve the separation and detection. In addition, the method used C18 solid-phase extraction disks to allow a 250-fold enrichment of the pesticides from fortified water and apple samples. The calculated detection limits range was 0.15-0.8 mug/l. Under the optimal extraction conditions, recoveries of 85-107% for most of the pesticides at 1.0-10.0 mug/l level, were obtained.

MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Food Technology-General KEYWORDS: Pest Control LANGUAGE: eng

- 559. Locher, F. J.; Lorenz, G., and Beetz, K. J. Resistance Management Strategies for Dicarboximide Fungicides in Grapes: Results of Six Years' Trial Work. GRO, POPSOIL, ENV, MIXTURE; 1987; 6, (3): 139-147. Rec #: 1530 Call Number: NO MIXTURE (Captan, MZB), TARGET (CTN, Captan, MEM, MZB, THM, VCZ) Notes: EcoReference No.: 92353 Chemical of Concern: CTN, Captan, MEM, MZB, THM, VCZ
- 560. Locke, T.; Bobbin, P.; Atwood, J., and Owen, J. Effect of Strobilurin Fungicides on Disease Control and Yield in Blackcurrants. GRO, POPSOIL, ENV; 2002; 585, 375-380. Rec #: 410

Call Number: NO ENDPOINT (AZX,CTN,MYC,THM) Notes: EcoReference No.: 110360 Chemical of Concern: AZX,CTN,MYC,THM

561. Lockley, K. D.; Clark, A. N. S., and Hodgson, I. The Management of Stagonospora nodorum on Winter Wheat in South West England. POPSOIL,ENV; 1998; 3, 999-1004. Rec #: 940
Call Number: NO EFED CHEM (CYD,KRSM), NO ENDPOINT (AZX,CTN,FUZ,MCZ,TEZ), TARGET (AZX,FUZ,MCZ,TEZ) Notes: EcoReference No.: 91773
Chemical of Concern: AZX,CTN,CYD,FUZ,KRSM,MCZ,TEZ

562. Lodovici, M.; Aiolli, S.; Monserrat, C.; Dolara, P.; Medica, A., and Di Simplicio P. Effect of a Mixture of 15 Commonly Used Pesticides on Dna Levels of 8-Hydroxy-2-Deoxyguanosine and Xenobiotic Metabolizing Enzymes in Rat Liver. 1994; 13, (3): 163-168. Rec #: 2176 Keywords: MIXTURE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The level of 8-OH-2deoxyguanosine in rat liver DNA was measured as an index of oxidative damage after treating rats for 10 days at a dose ranging from 0.75 to 10 mg/kg with a mixture of 15 pesticides (dithiocarbamate, benomyl, thiabendazole, diphenylamine, chlorothalonil, procimidone, methidathion, chlorpyrifos-ethyl, fenarimol, parathion-methyl, chlorpropham, parathion, vinclozolin, chlorfenvinphos, pirimiphos-ethyl) commonly found in foods of central Italy. At the doses of 0.75 and 1 mg(kg DNA levels of 8-OH2-deoxyguanosine were significantly increased relative to controls, whereas at higher doses (2.5, 5, 10 mg/kg) the levels returned to control values. The administration of the pesticide mixture dose dependently reduced benzo(a)pyrene hydroxylase, N-demethylase activities, glutathione peroxidase, glutathione reductase, glutathione-S-transferase and thiol transferase activities in the liver. The results show that the pesticide mixture induced free radical DNA damage MESH HEADINGS: ANIMALS MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: ANIMALS/GENETICS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NUCLEIC ACIDS **MESH HEADINGS: PURINES** MESH HEADINGS: PYRIMIDINES MESH HEADINGS: DIGESTIVE SYSTEM DISEASES/PATHOLOGY MESH HEADINGS: DIGESTIVE SYSTEM/PATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MURIDAE **KEYWORDS:** Cytology and Cytochemistry-Animal **KEYWORDS:** Genetics and Cytogenetics-Animal **KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS:** Digestive System-Pathology **KEYWORDS:** Toxicology-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Pest Control

KEYWORDS: Muridae LANGUAGE: eng

563. ---. Effect of a Mixture of 15 Commonly Used Pesticides on Dna Levels of 8-Hydroxy-2-Deoxyguanosine and Xenobiotic Metabolizing Enzymes in Rat Liver. 1994; 13, (3): 163-168.

Rec #: 2176 Keywords: MIXTURE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The level of 8-OH-2deoxyguanosine in rat liver DNA was measured as an index of oxidative damage after treating rats for 10 days at a dose ranging from 0.75 to 10 mg/kg with a mixture of 15 pesticides (dithiocarbamate, benomyl, thiabendazole, diphenylamine, chlorothalonil, procimidone, methidathion, chlorpyrifos-ethyl, fenarimol, parathion-methyl, chlorpropham, parathion, vinclozolin, chlorfenvinphos, pirimiphos-ethyl) commonly found in foods of central Italy. At the doses of 0.75 and 1 mg(kg DNA levels of 8-OH2-deoxyguanosine were significantly increased relative to controls, whereas at higher doses (2.5, 5, 10 mg/kg) the levels returned to control values. The administration of the pesticide mixture dose dependently reduced benzo(a)pyrene hydroxylase, N-demethylase activities, glutathione peroxidase, glutathione reductase, glutathione-S-transferase and thiol transferase activities in the liver. The results show that the pesticide mixture induced free radical DNA damage MESH HEADINGS: ANIMALS MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: ANIMALS/GENETICS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NUCLEIC ACIDS **MESH HEADINGS: PURINES** MESH HEADINGS: PYRIMIDINES MESH HEADINGS: DIGESTIVE SYSTEM DISEASES/PATHOLOGY MESH HEADINGS: DIGESTIVE SYSTEM/PATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MURIDAE **KEYWORDS:** Cytology and Cytochemistry-Animal KEYWORDS: Genetics and Cytogenetics-Animal **KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS:** Digestive System-Pathology **KEYWORDS:** Toxicology-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Pest Control **KEYWORDS:** Muridae LANGUAGE: eng

564. Lodovici, M.; Aiolli, S.; Monserrat, C.; Dolara, P.; Medica, A., and Di Simplico, P. Effect of a Mixture of 15 Commonly Used Pesticides on DNA Levels of 8-Hydroxy-2-Deoxyguanosine and Xenobiotic Metabolizing Enzymes in Rat Liver. 1994; 13, (3): 163-168. Rec #: 650 Keywords: MIXTURE Call Number: NO EFED CHEM (EPRN,PRN,TBA), NO MIXTURE (BMY,CPP,CTN,FRM,MDT,MP,PIRM,VCZ) Notes: Chemical of Concern: BMY,CPP,CTN,EPRN,FRM,MDT,MP,PIRM,PRN,TBA,VCZ

565. ---. Effect of a Mixture of 15 Commonly Used Pesticides on Dna Levels of 8-Hydroxy-2-Deoxyguanosine and Xenobiotic Metabolizing Enzymes in Rat Liver. 1994; 13, (3): 163-168. 152609. Rec #: 7172
Keywords: MIXTURE
Notes: Chemical of Concern: BMY,CPP,CTN,EPRN,FRM,MDT,MP,PIRM,PRN,TBA,VCZ
Abstract: NO MIXTURE Dep. Pharmacol. and Toxicol., Univ. Florence, Viale Morgagni 65, 50134 Florence, Italy.//Journal of environmental pathology toxicology and oncology//

566. Loera-Gallardo, J.; Wolfenbarger, D. A., and Riley, D. G. Insecticidal Mixture Interactions Against B-Strain Sweetpotato Whitefly (Homoptera: Aleyrodidae). MOR. J. Loera-Gallardo, Inst. Nac. Invest. Forest. Agropec., Apartado Postal 172, Rio Bravo, Tamaulipas, Mexico.: ENV,MIXTURE; 1998; 33, (4): 407-411. Rec #: 900 Keywords: MIXTURE Call Number: TARGET(MP),OK(ALL CHEMS),NO COC(CTN),TARGET(MP) Notes: EcoReference No.: 63008 Chemical of Concern: PPB,MP,ACP,FPP,AMZ,BPZ,AZ,BFT,ES

- 567. Lofs-Holmin, A. Influence of Routine Pesticide Spraying on Earthworms (Lumbricidae) in Field Experiments with Winter Wheat. 631: 1982; 12, 121-124. Rec #: 630 Keywords: MIXTURE Call Number: NO MIXTURE Notes: Chemical of Concern: TDF,CTN
- 568. ---. Influence of Routine Pesticide Spraying on Earthworms (Lumbricidae) in Field Experiments with Winter Wheat. 631//: 1982; 12, (3): 121-124. Rec #: 660 Keywords: MIXTURE Call Number: NO MIXTURE (CTN,EFV,TDF) Notes: Chemical of Concern: CTN,EFV,TDF
- 569. ---. Influence of Routine Pesticide Spraying on Earthworms (Lumbricidae) in Field Experiments With Winter Wheat. 1982; 12, (3): 121-124. 152624. Rec #: 3762 Keywords: MIXTURE Notes: Chemical of Concern: CTN,EFV,TDF Abstract: NO MIXTURE Was ECOREF#51621//No COC for EFED// (Was ECOREF# 51621)

570. Long, John W. and Siegel, Malcolm R. Mechanism of Action and Fate of the Fungicide Chlorothalonil (2,4,5,6-Tetrachloroisophthalonitrile) in Biological Systems : 2. In Vitro Reactions. 1975 Jun; 10, (6): 383-394.
Rec #: 127
Keywords: IN VITRO
Notes: Chemical of Concern: CTN
Abstract: The reaction characteristics of chlorothalonil with glyceraldehyde-3-phosphate dehydrogenase (GPDH), from yeast, (EC 1.2.1.12) were studied in vitro. Enzyme inhibition was related to the amount of [14C]chlorothalonil bound to the protein. Kinetics of enzyme inhibition was non-competitive for the substrate glyceraldehyde-3-phosphate (GAP) (Ki = 0.42 [mu]M). Reversal of enzyme inhibition could not be demonstrated with the low molecular thiol dithiothreitol (DTT), although the thiol did protect the protein against the toxic action of the fungicide. Because 5,5' dithiobis-(2-nitrobenzoic) acid (DTNB) reduced the binding of 14C-labeled fungicide by approximately 90% it is postulated that chlorothalonil affects catalytic activity by reacting with the 4 sulfhydryl sites (cysteine-149) responsible for the binding of GAP.

Certain reaction characteristics of the trichloromethyl sulfenyl fungicides with GPDH were found to be similar to those of chlorothalonil. However, chlorothalonil differed from those fungicides in that it did not react with non-thiol groups of either GPDH or [alpha]-chymotrypsin ([alpha]CT) and had a slower reaction rate with the GPDH. It is suggested that the differences in reaction rates of the fungicides are due to the molecular size and the chemical nature of the reactive toxiphores. http://www.sciencedirect.com/science/article/B6T56-479DHKT-5C/2/26639d0b427e5caadbfb3d38328363ef

 571. ---. Mechanism of Action and Fate of the Fungicide Chlorothalonil (2,4,5,6-Tetrachloroisophthalonitrile) in Biological Systems : 2. In Vitro Reactions. 1975 Jun; 10, (6): 383-394. Rec #: 127

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: The reaction characteristics of chlorothalonil with glyceraldehyde-3-phosphate dehydrogenase (GPDH), from yeast, (EC 1.2.1.12) were studied in vitro. Enzyme inhibition was related to the amount of [14C]chlorothalonil bound to the protein. Kinetics of enzyme inhibition was non-competitive for the substrate glyceraldehyde-3-phosphate (GAP) (Ki = 0.42 [mu]M). Reversal of enzyme inhibition could not be demonstrated with the low molecular thiol dithiothreitol (DTT), although the thiol did protect the protein against the toxic action of the fungicide. Because 5,5' dithiobis-(2-nitrobenzoic) acid (DTNB) reduced the binding of 14Clabeled fungicide by approximately 90% it is postulated that chlorothalonil affects catalytic activity by reacting with the 4 sulfhydryl sites (cysteine-149) responsible for the binding of GAP. Certain reaction characteristics of the trichloromethyl sulfenyl fungicides with GPDH were found to be similar to those of chlorothalonil. However, chlorothalonil differed from those fungicides in that it did not react with non-thiol groups of either GPDH or [alpha]-chymotrypsin ([alpha]CT) and had a slower reaction rate with the GPDH. It is suggested that the differences in reaction rates of the fungicides are due to the molecular size and the chemical nature of the reactive toxiphores. http://www.sciencedirect.com/science/article/B6T56-479DHKT-5C/2/26639d0b427e5caadbfb3d38328363ef

572. Longtine, C. A.; Suranyi, R. A.; Connors, T.; Ragsdale, D. W., and Radcliffe, E. B. Control of Green Peach Aphid on Potato, 1997. POPENV; 1998; 23, 127 (No. 69E). Rec #: 910 Call Number: NO COC(CTN),OK(IMC),OK TARGET(MTM) Notes: EcoReference No.: 90242 Chemical of Concern: MTM,IMC

573. Lopez-Avila, V.; Benedicto, J., and Bauer, K. M. Stability of Organochlorine and Organophosphorus Pesticides When Extracted From Solid Matrixes With Microwave Energy. 1998; 81, (6): 1224-1232.

Rec #: 2374

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A stability study of 44 organochlorine pesticides (OCPs) and 47 organophosphorus pesticides (OPPs) was conducted. Compounds were spiked into solvent only (hexane-acetone, 1 + 1; methylene chloride-acetone, 1 + 1; methyl tert-butyl ether (MTBE); and toluene-methanol, 10 + 1), solvent/dry soil suspensions, and solvent/wet soil suspensions (20% water, w/w). Spiked matrixes were heated in closed vessels with microwave energy at 2 temperatures (50ę and 145ęC) for 5 or 20 min. For comparison and for determination of nitrogen blowdown losses, spiked matrixes that had not been exposed to microwave energy were concentrated by using the blowdown technique and analyzed for each of the spiked compounds. For OCPs, temperature had the most significant effect on compound recovery, followed by matrix. All 3 pairwise comparisons of the 3 matrix types were statistically significant. The solvent factor was also significant, with average recoveries of 97.8% with methylene chloride acetone,

MESH HEADINGS: BIOCHEMISTRY/METHODS

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Pest Control LANGUAGE: eng

574. ---. Stability of Organochlorine and Organophosphorus Pesticides When Extracted From Solid Matrixes With Microwave Energy. 1998; 81, (6): 1224-1232.

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575. Lopez-Avila, V.; Wesselman, R., and Edgell, K. Gas Chromatographic-Electron Capture Detection Method for Determination of 29 Organochlorine Pesticides in Finished Drinking Water: Collaborative Study. 1990; 73, (2): 276-286.

Rec #: 1681

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A joint U.S. EPA interlaboratory method validation study was conducted on EPA Method 508, Determination of Chlorinated Pesticides in Water by Gas Chromatography with and Electron Capture Detector, to determine the mean recovery and precision for analyses of 29 pesticides in reagent water and finished drinking water. The study design was based on Youden's nonreplicate plan for collaborative tests of analytical methods. The waters were spiked with 29 pesticides at 6 concentration levels, as 3 Youden pairs. Eleven volunteer laboratories extracted the spiked test waters with methylene chloride, performed a solvent exchange with methyl tert-butyl ether, and analyzed an aliquot of each extract by gas ghromatography with electron capture detection. Results were analyzed using an EPA computer, program, interlaboratory Method Validation Study (IMVS), which measured recovery and precision for each of the 29 pesticides and compared the performance of the method between water tested

MESH HEADINGS: LEGISLATION

MESH HEADINGS: ORGANIZATION AND ADMINISTRATION

MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Institutions **KEYWORDS: Biochemical Methods-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Agronomy-General **KEYWORDS:** Pest Control LANGUAGE: eng

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**KEYWORDS:** Agronomy-General

KEYWORDS: Pest Control LANGUAGE: eng

577. Lopez-Carrillo, L.; Blair, A.; Lopez-Cervantes, M.; Cebrian, M.; Rueda, C.; Reyes, R.; Mohar, A., and Bravo, J. Dichlorodiphenyltrichloroethane Serum Levels and Breast Cancer Risk: a Case-Control Study From Mexico. 1997; 57, (17): 3728-3732.

Rec #: 2513

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Some, but not all, epidemiological studies have suggested that dichlorodiphenyltrichloroethane (DDT) may play a role in the development of breast cancer. These investigations have been conducted in countries where this substance has been banned for at least 20 years. We conducted a study in Mexico, a country in which DDT is still being used to control malaria. In a hospital-based case-control study, we compared 141 histologically confirmed cases of breast cancer with 141 age-matched controls (3 years). All subjects were identified at three referral hospitals of Mexico City between March 1994 and April 1996. Reproductive histories and other variables were obtained by structured interviews, DDT levels were determined in serum by gas-liquid chromatography. The arithmetic mean of serum DDE in lipid basis was 562.48 | 676.18 ppb (range, 10.24-4661.44) for the cases and 505.46 567.22 ppb (range, 0.004 to 4361.75) for the controls, but this difference was not statistically MESH HEADINGS: MATHEMATICS **MESH HEADINGS: STATISTICS** MESH HEADINGS: BIOLOGY MESH HEADINGS: GENITALIA/PHYSIOLOGY MESH HEADINGS: GENITALIA/METABOLISM **MESH HEADINGS: REPRODUCTION** MESH HEADINGS: GENITALIA/PATHOLOGY MESH HEADINGS: GENITALIA/PHYSIOPATHOLOGY MESH HEADINGS: REPRODUCTION MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: CARCINOGENS **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS:** Reproductive System-Physiology and Biochemistry **KEYWORDS:** Reproductive System-Pathology **KEYWORDS:** Toxicology-General KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis LANGUAGE: eng

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MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: GENITALIA/PHYSIOLOGY MESH HEADINGS: GENITALIA/METABOLISM **MESH HEADINGS: REPRODUCTION** MESH HEADINGS: GENITALIA/PATHOLOGY MESH HEADINGS: GENITALIA/PHYSIOPATHOLOGY MESH HEADINGS: REPRODUCTION MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: CARCINOGENS **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS:** Reproductive System-Physiology and Biochemistry **KEYWORDS:** Reproductive System-Pathology **KEYWORDS:** Toxicology-General KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis LANGUAGE: eng

579. Lorbeer, J. W. and Vincelli, P. C. Efficacy of Dicarboximide Fungicides and Fungicide Combinations for Control of Botrytis Leaf Blight of Onion in New York. POPSOIL, ENV, MIXTURE; 1990; 74, (3): 235-237. Rec #: 520
Call Number: EFFICACY (IPD, MZB, Maneb, VCZ), NO MIXTURE (CTN) Notes: EcoReference No.: 92011
Chemical of Concern: CTN, IPD, MZB, Maneb, VCZ

580. Lorence, A.; Darszon, A., and Bravo, A. Aminopeptidase Dependent Pore Formation of Bacillus Thuringiensis Cry1ac Toxin on Trichoplusia Ni Membranes. 1997; 414, (2): 303-307. Rec #: 2527 Keywords: BIOLOGICAL TOXICANT, IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The insecticidal Bacillus thuringiensis Cry1Ac delta-endotoxin specifically binds to a 120 kDa aminopeptidase N (APN) in the midgut of susceptible insects such as Manduca sexta, Heliothis virescens, Lymantria dispar and Plutella xylostella. The 120 kDa APN has a glycosylphosphatidylinositol (GPI) anchor susceptible to the action of GPI-specific phospholipase C (PIPLC). Here we show that Cry1Ac pore-forming activity depends on the amount of APN present on brush border membrane vesicles (BBMV) from Trichoplusia ni larvae. Inhibition of APN activity with bestatin did not affect Cry1Ac pore formation, suggesting that Cry1Ac action depends on the presence of APN, but not on its enzymatic activity. N-Acetyl-Dgalactosamine blocks the action of the toxin, indicating that this sugar is also directly involved in the Cry1Ac toxin-receptor interaction. Membrane potential measurements using PIPLC treated and non-treated BBMV suggest that both APN could participate as Cry1Ac receptor MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: COENZYMES MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: ENZYMES MESH HEADINGS: DIGESTIVE SYSTEM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/CLASSIFICATION MESH HEADINGS: ANATOMY, COMPARATIVE MESH HEADINGS: ANIMAL MESH HEADINGS: INSECTS/PHYSIOLOGY

MESH HEADINGS: PHYSIOLOGY, COMPARATIVE

MESH HEADINGS: PATHOLOGY MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA MESH HEADINGS: LEPIDOPTERA KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Studies KEYWORDS: Enzymes-General and Comparative Studies KEYWORDS: Digestive System-General KEYWORDS: Digestive System-General KEYWORDS: Toxicology-General KEYWORDS: Bacteriology KEYWORDS: Invertebrata KEYWORDS: Invertebrata KEYWORDS: Endospore-forming Gram-Positives (1992- ) KEYWORDS: Lepidoptera LANGUAGE: eng

581. ---. Aminopeptidase Dependent Pore Formation of Bacillus Thuringiensis Cry1ac Toxin on Trichoplusia Ni Membranes. 1997; 414, (2): 303-307.

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LANGUAGE: eng

- 582. Lorence, A.; Darszon, A., and Bravo, A. Is Aminopeptidase N the Receptor of Cryiac Delta-Endotoxin in Trichoplusia Ni Midgut? 1998; 36, (9): 1298. Rec #: 2638 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MEETING POSTER TRICHOPLUSIA-NI AMINOPEPTIDASE N CRYIAC INSECTICIDAL CRYSTAL PROTEIN DELTA-ENDOTOXIN MIDGUT N-ACETYL-D-GALACTOSAMINE ENZYMOLOGY TOXICOLOGY DIGESTIVE SYSTEM **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COENZYMES MESH HEADINGS: COMPARATIVE STUDY **MESH HEADINGS: ENZYMES** MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: LEPIDOPTERA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Enzymes-General and Comparative Studies **KEYWORDS:** Toxicology-General **KEYWORDS:** Lepidoptera LANGUAGE: eng
- 583. ---. Is Aminopeptidase N the Receptor of Cryiac Delta-Endotoxin in Trichoplusia Ni Midgut? 1998; 36, (9): 1298.

Rec #: 2638 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MEETING POSTER TRICHOPLUSIA-NI AMINOPEPTIDASE N CRYIAC INSECTICIDAL CRYSTAL PROTEIN DELTA-ENDOTOXIN MIDGUT N-ACETYL-D-GALACTOSAMINE ENZYMOLOGY TOXICOLOGY DIGESTIVE SYSTEM MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COENZYMES MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: ENZYMES MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: LEPIDOPTERA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS: Enzymes-General and Comparative Studies KEYWORDS:** Toxicology-General **KEYWORDS:** Lepidoptera LANGUAGE: eng

584. Lowcock, L. A.; Sharbel, T. F.; Bonin, J.; Ouellet, M.; Rodrigue, J., and DesGranges, J. L. Flow Cytometric Assay for In Vivo Genotoxic Effects of Pesticides in Green Frogs (Rana clamitans). 1997; 38, (4): 241-255. Rec #: 640 Keywords: MIXTURE Call Number: NO MIXTURE Notes: EcoReference No.: 83840 Chemical of Concern: ATZ,PRT,CTN

585. ---. Flow Cytometric Assay for In Vivo Genotoxic Effects of Pesticides in Green Frogs (Rana clamitans). 1997; 38, (4): 241-255. Rec #: 680 Keywords: MIXTURE Call Number: NO MIXTURE (AZ,BTY,CBF,CTN,CYP,DM,LNR,MBZ,MLX,MZB,OML,PRT) Notes: Chemical of Concern: AZ,BTY,CBF,CTN,CYP,DM,DZT,GPYA,LNR,MBZ,MLX,MZB,OML,PRT

586. ---. Flow Cytometric Assay for in Vivo Genotoxic Effects of Pesticides in Green Frogs (Rana Clamitans). 1997; 38, (4): 241-255. 152767. Rec #: 8092 Keywords: MIXTURE Notes: Chemical of Concern: AZ,BTY,CBF,CTN,CYP,DM,DZT,GPYA,LNR,MBZ,MLX,MZB,OML,PRT Abstract: NO MIXTURE Atrazine 2003-Text//Was Ecoref 83840// (Was ECOREF# 83840)

587. Lu, Xiao Hong; Zhu, Shu Sheng; Bi, Yang; Liu, Xi Li, and Hao, Jianjun J. Baseline Sensitivity and Resistance-Risk Assessment of Phytophthora capsici to Iprovalicarb. 2010; 100, (11): 1162-1168. Rec #: 12942

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: Iprovalicarb has been used to control Phytophthora capsici, a devastating pathogen of many economically important crops. To evaluate the risk of fungicide resistance, 158 isolates of P. capsici were examined for sensitivity to iprovalicarb by measuring mycelial growth. Values of effective concentrations for 50% mycelial growth inhibition varied from 0.2042 to 0.5540 ÎL'g/ml and averaged 0.3923 ( $\hat{A}\pm 0.0552$ ) ÎL'g/ml, with a unimodal distribution. This is the first report of P. capsici isolates highly resistant to iprovalicarb (resistance factor >100). Resistance of the isolates was stable through 10 transfers on iprovalicarb-free medium, and most resistant isolates had the same level of fitness (mycelial growth, zoospore production, and virulence) as their corresponding parents, indicating that iprovalicarb resistance was independent from other general growth characters. There was cross-resistance among all tested carboxylic acid amide (CAA) fungicides, including iprovalicarb, flumorph, dimethomorph, and mandipropamid, but not with non-CAA fungicides, including azoxystrobin, chlorothalonil, cymoxanil, etridiazole, metalaxyl, and zoxamide. Based on the present results, resistance risk of P. capsici to CAAs could be moderate and resistance management should be considered. Keywords: iprovalicarb

Includes references 1022999541

588. Lub, T. T. and Smit, H. C. Computer-Controlled Temperature Sweeping as a Scanning Technique for Tunable Diode Lasers: Application to Measurements at Atmospheric Pressure. Au - Spaink Ha. 1990; 241, (1): 95-104.

Rec #: 753

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A simple device that provides external control of the heat-sink temperature of a tunable diode laser by almost any computer is presented. This device allows routine application of temperature sweeping as an alternative way of tuning the laser wavelength. Some important characteristics of the temperature sweep are compared with those of the more conventional current sweep. It is demonstrated that temperature sweeping has great advantages when large laser current modulation amplitudes are required in the detection of broad absorption profiles. As an example, the method is applied to the measurement

of nitric acid at atmospheric pressure. A detection limit of 18 nl l-1 is established. It is argued that lower lowr detection limits should be attainable without great effort. MESH HEADINGS: COMPUTER SYSTEMS MESH HEADINGS: BIOLOGY **MESH HEADINGS: DOCUMENTATION** MESH HEADINGS: INFORMATION SYSTEMS **MESH HEADINGS: GASES** MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **KEYWORDS:** General Biology-Information KEYWORDS: Biochemistry-Gases (1970-) **KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Public Health: Environmental Health-Air LANGUAGE: eng

589. ---. Computer-Controlled Temperature Sweeping as a Scanning Technique for Tunable Diode Lasers: Application to Measurements at Atmospheric Pressure. Au - Spaink Ha. 1990; 241, (1): 95-104. Rec #: 753 Keywords: METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A simple device that provides external control of the heat-sink temperature of a tunable diode laser by almost any computer is presented. This device allows routine application of temperature sweeping as an alternative way of tuning the laser wavelength. Some important characteristics of the temperature sweep are compared with those of the more conventional current sweep. It is demonstrated that temperature sweeping has great advantages when large laser current modulation amplitudes are required in the detection of broad absorption profiles. As an example, the method is applied to the measurement of nitric acid at atmospheric pressure. A detection limit of 18 nl l-1 is established. It is argued that lower lowr detection limits should be attainable without great effort. MESH HEADINGS: COMPUTER SYSTEMS MESH HEADINGS: BIOLOGY MESH HEADINGS: DOCUMENTATION MESH HEADINGS: INFORMATION SYSTEMS MESH HEADINGS: GASES MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS

MESH HEADINGS: WATER POLLUTION KEYWORDS: General Biology-Information KEYWORDS: Biochemistry-Gases (1970-) KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Public Health: Environmental Health-Air

LANGUAGE: eng

590. Macdougal, &Nbsp and S. Fluorescence based trace detection of pesticides using supramolecular hosts, UV photolysis and synchronous scanning. 2010.

Rec #: 11412 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: End Page: 151 Abstract: Traditional methods of pe

Abstract: Traditional methods of pesticide detection used on Prince Edward Island (PEI) are very expensive and time consuming. These methods are typically only useful after harm has been done to the environment, and cannot be used in prevention. A new method for rapid, on-site detection of these pesticides would not only be of value financially, it could also prove to be essential in

preventative measures, for example by monitoring streams. Fluorescence, the light emitted by electronically excited molecules, is a highly sensitive technique for detecting and measuring the concentration of molecules in solution. Most pesticides used on Prince Edward Island show only weak native fluorescence in water. However by forming a supramolecular host:guest inclusion complex, in which the pesticide "guest" becomes included within the internal cavity of an organic host molecule, this fluorescence is increased for many guest molecules. In some cases, this enhancement of the fluorescence might be sufficiently large enough to allow for the development of a fluorescence-based trace analysis technique with sensitivity in the required ppb level. In this project, native and modified cyclodextrins and their effect on the fluorescence of a series of pesticides used on PEI, specifically carbofuran, carbaryl and chlorothalonil along with five others, is measured with results varying from 670 parts per trillion for carbaryl to 69 ppb for Chlorothalonil. In addition, UV photolysis of certain pesticides can also lead to enhanced fluorescence such as azoxystrobin and imidacloprid, and thus also be a technique used in the trace detection of pesticides. This occurs via creation of a more highly fluorescent molecule from a previously non-fluorescent or weakly fluorescent pesticide. Synchronous scanning, a method of measuring fluorescence by scanning both excitation and emission wavelengths simultaneously, which results in narrower measured emission bands is also examined in detail to separate fluorescent bands of similar emission wavelengths, and thus simultaneously measure a set of two or more pesticides in solution. Overall, the main goal of this work is to develop a sensitive, enhanced fluorescence based trace analysis technique for pesticides, which could eventually be carried out using a portable fluorimeter, so that samples could be analyzed on site, in a matter of minutes, rather than in a lab over a period of days. Analytical chemistry/ Environmental science

591. MacLachlan, D. J. and Hamilton, D. Estimation methods for Maximum Residue Limits for pesticides. 2010; 58, (2): 208-218.

Rec #: 15182

Keywords: FOOD

Notes: Chemical of Concern: CTN

Abstract: Abstract: Maximum Residue Limits (MRLs) are standards that represent the maximum residue concentration expected to be found if a pesticide is applied according to good agricultural practice (GAP). MRLs are established only where the residues in food resulting from particular use patterns of the pesticide pass the public health risk assessment. Foodstuffs are monitored for MRL compliance and MRL exceedance can have economic and trade consequences. There is a trade-off when deciding on values for MRLs. The aim is to establish MRLs at levels that are high enough to prevent chance exceedance but not so high that misuse will not be detected. Small data sets typically available for estimating MRLs present problems for establishing consistent values. A review of MRL estimation methods is presented together with an assessment of the various methods. Crown Copyright (C) 2010 Published by Elsevier Inc. All rights reserved. Keywords: Pesticides, Residue, Maximum Residue Limits, Food ISI Document Delivery No.: 667OW

 Mahaling, D. M. and Anahosur, K. H. In-Vitro Evaluation of Fungicides Against Grain Mold and Stalk Rot of Sorghum. 1998; 28, (2): 174-176.

Rec #: 2322

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Among several destructive diseases of sorghum, grain mold and stalk rot, caused by species of Fusarium are important in many parts of the world. Among nine fungicides tested for inhibition of mycelial growth of species of Fusarium, emisan and benomyl were found most effective. The fungicidal combination thiram (1000 mug/ml) + dithane M-45 (1000 mug/ml) and thiram (1000 mug/ml) + dithane Z-78 (1000 mug/ml) were also equally effective in inhibiting the growth of the fungi. MH - CEREALS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: GRASSES KEYWORDS: Agronomy-Grain Crops KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Gramineae LANGUAGE: eng

593. Mahrishi, R. P. and Siradhana, B. S. Metalaxyl and Mancozeb Mixtures - Fungicide for the Control of Downy Mildew of Muskmelon (Cucumis melo) in India. POPENV; 1990; 16, (2): 174-177. Rec #: 1450
Call Number: NO EFED CHEM (Zineb), TARGET (CAP,CTN,Captan,MLX,MZB) Notes: EcoReference No.: 94474
Chemical of Concern: CAP,CTN,Captan,MLX,MZB,Zineb

594. Maini, P. and Collina, A. Residues of Chlorpyrifos Insecticide in Various Crops. I. Sweep Co-Distillation Method for Extraction and Cleanup. 1972; 55, (6): 1265-1269. Rec #: 2044 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN

Abstract: MESH HEADINGS: Chlorpyrifos/\*analysis MESH HEADINGS: Chromatography, Gas

MESH HEADINGS: Food Analysis

MESH HEADINGS: Fruit/analysis

MESH HEADINGS: Italy

MESH HEADINGS: Methods

MESH HEADINGS: Pesticide Residues/\*analysis

MESH HEADINGS: Plants, Edible/\*analysis

MESH HEADINGS: Plants, Toxic

MESH HEADINGS: Soil/analysis

MESH HEADINGS: Tobacco/analysis

MESH HEADINGS: Vegetables/analysis

MESH HEADINGS: Zea mays/analysis

LANGUAGE: eng

595. Maletta, M. H.; Cowgill, W. P Jr, and Johnston, S. A. Evaluation of Fungicides for Use With Tom-Cast on Fresh-Market Tomatoes in Northern New Jersey. 1999; 34, (3): 443. Rec #: 2292 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM EVALUATION OF FUNGICIDES FOR USE WITH TOM-CAST ON FRESH-MARKET TOMATOES IN NORTHERN NEW JERSEYYMEETING ABSTRACT MEETING POSTER TOMATO VEGETABLE CROP PEST MANAGEMENT HORTICULTURE TOM-CAST EARLY BLIGHT QUADRIS FUNGICIDE BRAVO WEATHERSTIK MANZATE CHAMP NUCOP EARLY BLIGHT FORECAST SYSTEM FUNGAL DISEASE NEW JERSEY USA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Solanaceae LANGUAGE: eng

596. ---. Evaluation of Fungicides for Use With Tom-Cast on Fresh-Market Tomatoes in Northern New Jersey. 1999; 34, (3): 443.

Rec #: 2292 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM EVALUATION OF FUNGICIDES FOR USE WITH TOM-CAST ON FRESH-MARKET TOMATOES IN NORTHERN NEW JERSEYYMEETING ABSTRACT MEETING POSTER TOMATO VEGETABLE CROP PEST MANAGEMENT HORTICULTURE TOM-CAST EARLY BLIGHT OUADRIS FUNGICIDE BRAVO WEATHERSTIK MANZATE CHAMP NUCOP EARLY BLIGHT FORECAST SYSTEM FUNGAL DISEASE NEW JERSEY USA **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS: Pest Control KEYWORDS:** Solanaceae LANGUAGE: eng

- 597. Mani, M. Studies on the Toxicity of Pesticides to Cotesia Plutellae (Hymenoptera: Braconidae), a Parasitoid of Diamondback Moth, Plutella Xylostella (L.). MORENV,MIXTURE; 1995; 8, (1): 31-33. Rec #: 940 Call Number: NO CONTROL(ALL CHEMS),NO MIXTURE(MZB) Notes: EcoReference No.: 90902 Chemical of Concern: AZD,MZB,FVL,CBL,DMT,MP,CTN,CuOS,ACP,PPHD,DDVP,ES,CPY
- 598. Mann, R. L.; Kettlewell, P. S., and Jenkinson, P. Effect of Foliar-Applied Potassium Chloride on Septoria Leaf Blotch of Winter Wheat. POP. R.L. Mann, Sports Turf Research Institute, St. Ives Estate, Bingley, West Yorkshire BD16 1AU, United Kingdom//: SOIL,ENV,MIXTURE; 2004; 53, (5): 653-659.

Rec #: 850 Call Number: EFFICACY (CTN), NO EFED CHEM (ECZ,KCl,PEG), TARGET (CTN) Notes: EcoReference No.: 92095 Chemical of Concern: CTN,ECZ,KCl,PEG

599. Mantecon, J. D. Chemical Control of Potato Late Blight. PHY,POPSOIL,ENV,MIXTURE; 1989; 10, 60-61. Rec #: 530 Call Number: EFFICACY (CTN,Captan,CuS,MZB,SFR), NO EFED CHEM (CMX,ODL), NO MIXTURE (CMX,CuS,ODL,SFR) Notes: EcoReference No.: 92173 Chemical of Concern: CMX,CTN,Captan,CuS,MZB,ODL,SFR

600. Markoglou, Anastasios N.; Doukas, Eleftherios G., and Ziogas, Basil N. Phenylpyrrole-resistance and aflatoxin production in Aspergillus parasiticus Speare. 2008 Oct 31-; 127, (3): 268-275. Rec #: 490

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Mutants of Aspergillus parasiticus highly resistant to phenylpyrroles were isolated at a high mutation frequency, after UV-mutagenesis and selection on media containing fludioxonil. Studies on the effect of mutation(s) on the aflatoxin production resulted in the identification of two fludioxonil-resistant phenotypes: aflatoxigenic (FLDafl+) and non-aflatoxigenic (FLDaflFeC) mutant strains. Most of the FLDafl+ mutant strains produced the aflatoxin B1 at similar or even higher (up to 2.5-fold) concentrations than the wild-type parent strain on yeast extract sucrose medium. Interestingly, in most of these mutant strains the aflatoxigenic ability significantly increased (up to 4-fold) when the mutants were grown on fungicide-amended medium. However, a significant reduction in the aflatoxin production was observed in wheat grains by all FLDafl+ mutant strains. Tests on the response of mutant strains to high osmotic pressure showed that most fludioxonil-resistant mutants were more sensitive to high osmolarity than the wild-type parent strain. Study of other fitness determining parameters showed that the mutation(s) for resistance to phenylpyrroles may or may not affect the mycelial growth rate, sporulation and conidial germination. However, in a number of aflatoxigenic-mutant strains these fitness parameters were unaffected or only slightly affected. Cross resistance studies with fungicides from different chemical groups showed that the mutation(s) for resistance to fludioxonil also highly reduced the sensitivity of mutant strains to the aromatic hydrocarbon and dicarboximide fungicides. No effect of phenylpyrroles resistance mutation(s) on fungitoxicity of triazoles, benzimidazoles, anilinopyrimidines, phenylpyridinamines, strobilurin-type fungicides and to the non site-specific inhibitors chlorothalonil and maneb was observed. The above mentioned data indicate, for the first time, the potential risk of increased aflatoxin contamination of agricultural products by the appearance and predominance of highly aflatoxigenic mutant strains of A. parasiticus resistant to aromatic hydrocarbon, dicarboximide and phenylpyrrole fungicides. Aspergillus parasiticus/ Aflatoxins/ Fungicides/ Fludioxonil/ Phenylpyrrole-resistance/ HPLC/ LC/MS

Marois, J. J. and Wright, D. L. Effect of Tillage System, Phorate, and Cultivar on Tomato Spotted Wilt of Peanut. SOIL; 2003; 95, (2): 386-389. Rec #: 760 Keywords: MIXTURE Call Number: NO EFED CHEM (IAZ), NO MIXTURE (CTN,PDM,PRT) Notes: Chemical of Concern: CTN,IAZ,PDM,PRT

602. ---. Effect of Tillage System, Phorate, and Cultivar on Tomato Spotted Wilt of Peanut. 2003; 95, (2): 386-389. 153555. Rec #: 9492 Keywords: MIXTURE Notes: Chemical of Concern: CTN,IAZ,PDM,PRT Abstract: NO MIXTURE Was Ecoref 72924// (Was ECOREF# 72924) 603. Marshall, M. R.; Moye, H. A., and Lore, E. L. Aqueous Based Solvent Systems With Solid Phase Extraction Disks for the Extraction of Moderately Soluble Pesticides From Marine Tissues. 1997; 214, (1-2): Agro 119. Rec #: 2526 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT SOLID PHASE EXTRACTION ALACHLOR TISSUE CONCENTRATION PESTICIDE SOLUBLE ATRAZINE BROMACIL CHLOROTHALONIL CHLORPYRIFOS DIAZINON ENDOSULFAN SIMAZINE TRIFLURALIN METHODOLOGY BIOCHEMISTRY AND BIOPHYSICS PESTICIDES FINFISH SHELLFISH FOODS EXTRACTION METHOD AQUEOUS BASED SOLVENT SYSTEMS DISKS SEAFOOD SHELLFISH MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Studies** KEYWORDS: Food Technology-General **KEYWORDS: Pest Control** LANGUAGE: eng

604. ---. Aqueous Based Solvent Systems With Solid Phase Extraction Disks for the Extraction of Moderately Soluble Pesticides From Marine Tissues. 1997; 214, (1-2): Agro 119. Rec #: 2526 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT SOLID PHASE EXTRACTION ALACHLOR TISSUE CONCENTRATION PESTICIDE SOLUBLE ATRAZINE BROMACIL CHLOROTHALONIL CHLORPYRIFOS DIAZINON ENDOSULFAN SIMAZINE TRIFLURALIN METHODOLOGY BIOCHEMISTRY AND BIOPHYSICS PESTICIDES FINFISH SHELLFISH FOODS EXTRACTION METHOD AQUEOUS BASED SOLVENT SYSTEMS DISKS SEAFOOD SHELLFISH MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Studies KEYWORDS: Food Technology-General **KEYWORDS:** Pest Control

LANGUAGE: eng

605. Mart&Iacute ; Nez Galera, M.; MartÍ Nez Vidal, J. L.; Garrido Frenich, A.; Gil Garc&Iacute, and A, M. D. Evaluation of Multiwavelength Chromatograms for the Quantification of Mixtures of Pesticides by High-Performance Liquid Chromatography-Diode Array Detection With

Multivariate Calibration. 1997; 778, (1-2): 139-149. Rec #: 635

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Three multivariate calibration methods, partial least squares (PLS-1 and PLS-2) and principal component regression, were applied to the simultaneous determination of the five pesticides iprodione, procymidone, chlorothalonil, folpet and triazophos by high-performance liquid chromatography with diode array detection. Such detection gives multiwavelength chromatograms from a single analysis of one sample. In this paper, calibration models at two different wavelengths were developed to resolve mixtures of five pesticides with overlapping chromatographic peaks. The first model, carried out at 220 nm as detector compromise wavelength, yielded satisfactory sensitivity for accurate estimation of the concentration of iprodione, procymidone, chlorothalonil and folpet and the second model, at 200 nm, was used for accurate estimation of triazophos. Both calibration models were evaluated using the chromatograms and first-derivative (1D) chromatograms by predicting the concentrations of independent test set samples. Finally, the proposed 1D calibration models were successfully applied to the determination of these pesticides in groundwater and soil samples. In all cases, the PLS-1 calibration method showed superior quantitative prediction ability than the PLS-2 or principal component regression methods. MESH HEADINGS: Aminoimidazole Carboxamide/analogs & amp MESH HEADINGS: derivatives/analysis MESH HEADINGS: Bicyclo Compounds/analysis **MESH HEADINGS: Calibration** MESH HEADINGS: Chromatography, High Pressure Liquid/\*methods MESH HEADINGS: Fresh Water/analysis/chemistry MESH HEADINGS: Fungicides, Industrial/\*analysis

MESH HEADINGS: \*Hydantoins

MESH HEADINGS: Insecticides/analysis

MESH HEADINGS: Models, Chemical

MESH HEADINGS: Nitriles/analysis

MESH HEADINGS: Pesticide Residues/\*analysis

MESH HEADINGS: Phthalimides/analysis

MESH HEADINGS: Reproducibility of Results

MESH HEADINGS: Soil/analysis

MESH HEADINGS: Spectrophotometry, Ultraviolet

MESH HEADINGS: Thiophosphoric Acid Esters/analysis

MESH HEADINGS: Triazoles/analysis

LANGUAGE: eng

606. ---. Evaluation of Multiwavelength Chromatograms for the Quantification of Mixtures of Pesticides by High-Performance Liquid Chromatography-Diode Array Detection With Multivariate Calibration. 1997; 778, (1-2): 139-149.

Rec #: 635

Keywords: CHEM METHODS

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Abstract: ABSTRACT: Three multivariate calibration methods, partial least squares (PLS-1 and PLS-2) and principal component regression, were applied to the simultaneous determination of the five pesticides iprodione, procymidone, chlorothalonil, folpet and triazophos by high-performance liquid chromatography with diode array detection. Such detection gives multiwavelength chromatograms from a single analysis of one sample. In this paper, calibration models at two different wavelengths were developed to resolve mixtures of five pesticides with overlapping chromatographic peaks. The first model, carried out at 220 nm as detector compromise wavelength, yielded satisfactory sensitivity for accurate estimation of the concentration of iprodione, procymidone, chlorothalonil and folpet and the second model, at 200 nm, was used for accurate estimation of triazophos. Both calibration models were evaluated using the chromatograms and first-derivative (1D) chromatograms by predicting the concentrations of

independent test set samples. Finally, the proposed 1D calibration models were successfully applied to the determination of these pesticides in groundwater and soil samples. In all cases, the PLS-1 calibration method showed superior quantitative prediction ability than the PLS-2 or principal component regression methods. MESH HEADINGS: Aminoimidazole Carboxamide/analogs & amp MESH HEADINGS: derivatives/analysis MESH HEADINGS: Bicyclo Compounds/analysis **MESH HEADINGS: Calibration** MESH HEADINGS: Chromatography, High Pressure Liquid/\*methods MESH HEADINGS: Fresh Water/analysis/chemistry MESH HEADINGS: Fungicides, Industrial/\*analysis **MESH HEADINGS: \*Hydantoins** MESH HEADINGS: Insecticides/analysis MESH HEADINGS: Models, Chemical MESH HEADINGS: Nitriles/analysis MESH HEADINGS: Pesticide Residues/\*analysis MESH HEADINGS: Phthalimides/analysis MESH HEADINGS: Reproducibility of Results MESH HEADINGS: Soil/analysis MESH HEADINGS: Spectrophotometry, Ultraviolet MESH HEADINGS: Thiophosphoric Acid Esters/analysis MESH HEADINGS: Triazoles/analysis

LANGUAGE: eng

- 607. Martel, R.; Gelinas, P. J., and Saumure, L. Aquifer Washing by Micellar Solutions: 3 Field Test at the Thouin Sand Pit (L'assomption, Quebec, Canada). 1998; 30, (1-2): 33-48.
  - Rec #: 2583

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A field test was performed to recover DNAPL (Dense Non Aqueous Phase Liquid) in a shallow aquifer at the Thouin Sand Pit near Montreal, to evaluate a new technique of aquifer restoration involving surfactant solutions. Laboratory tests have shown that washing solutions containing alcohols, surfactants, and solvents are very efficient in recovering DNAPL as a miscible phase. The Thouin field test was designed to: (1) study in situ recovery of DNAPL; (2) evaluate an injection-pumping strategy; (3) test the use of polymer solutions to control the mobility of a washing solution slug and to improve the vertical sweep efficiency throughout the sand unit. The test was performed in a shallow medium sand aquifer containing both contaminated saturated and unsaturated zones. The washing experiment was done on 17 m3 of the saturated zone with an average DNAPL initial concentration of 55 000 mg kg-1 dry soil. Solutions were injected through a central well and pumped into four wells

MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL KEYWORDS: Methods KEYWORDS: Biochemical Methods-General KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-General LANGUAGE: eng

608. ---. Aquifer Washing by Micellar Solutions: 3 Field Test at the Thouin Sand Pit (L'assomption, Quebec,

Canada). 1998; 30, (1-2): 33-48. Rec #: 2583 Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A field test was performed to recover DNAPL (Dense Non Aqueous Phase Liquid) in a shallow aquifer at the Thouin Sand Pit near Montreal, to evaluate a new technique of aquifer restoration involving surfactant solutions. Laboratory tests have shown that washing solutions containing alcohols, surfactants, and solvents are very efficient in recovering DNAPL as a miscible phase. The Thouin field test was designed to: (1) study in situ recovery of DNAPL; (2) evaluate an injection-pumping strategy; (3) test the use of polymer solutions to control the mobility of a washing solution slug and to improve the vertical sweep efficiency throughout the sand unit. The test was performed in a shallow medium sand aquifer containing both contaminated saturated and unsaturated zones. The washing experiment was done on 17 m3 of the saturated zone with an average DNAPL initial concentration of 55 000 mg kg-1 dry soil. Solutions were injected through a central well and pumped into four wells

MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL KEYWORDS: Methods KEYWORDS: Biochemical Methods-General KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-General LANGUAGE: eng

- 609. Martin, R. A.; MacLeod, J. A., and Caldwell, C. Influences of Production Inputs on Incidence of Infection by Fusarium Species on Cereal Seed. SOIL; 1991; 75, 784-788. Rec #: 770 Keywords: MIXTURE,NUTRIENT Call Number: NO MIXTURE (CTN,PCZ,PPCP,PPCP2011), NO NUTRIENT (CTN,PCZ,PPCP,PPCP2011) Notes: Chemical of Concern: CTN,PCZ,PPCP
- 610. ---. Influences of Production Inputs on Incidence of Infection by Fusarium Species on Cereal Seed. 1991; 75, 784-788. 153642. Rec #: 6132 Keywords: MIXTURE,NUTRIENT Notes: Chemical of Concern: CTN,PCZ Abstract: NO MIXTURE,NO NUTRIENT
- 611. Martin, W. J. Evaluation of Fungicides for Effectiveness Against the Sweetpotato Black Rot Fungus, Ceratoscystis fimbriata. POP,GROENV,SOIL,MIXTURE; 1971; 55, (6): 523-526. Rec #: 960
  Call Number: NO ENDPOINT(ALL CHEMS),MIXTURE(Captan) Notes: EcoReference No.: 72317
  Chemical of Concern: DCNA,CTN,BMY,TBA,THM,Captan
- MatÉ Mj; Sevinc, M. S.; Hu, B.; Bujons, J.; Bravo, J.; Switala, J.; Ens, W.; Loewen, P. C., and Fita, I. Mutants That Alter the Covalent Structure of Catalase Hydroperoxidase Ii From Escherichia Coli. Rec #: 1958

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The three-dimensional structures of two HPII variants, V169C and H392Q, have been determined at resolutions of 1.8 and 2.1 A, respectively. The V169C variant contains a new type of covalent bond between the sulfur atom of Cys(169) and a carbon atom on the imidazole ring of the essential His(128). This variant enzyme has only residual catalytic activity and contains heme b. The chain of water molecules visible in the main channel may reflect the organization of the hydrogen peroxide substrates in the active enzyme. Two alternative mechanisms, involving either compound I or free radical intermediates, are presented to explain the formation of the Cys-His covalent bond. The H392Q and H392E variants exhibit 75 and 25% of native catalytic activity, respectively. The Gln(392) variant contains only heme b, whereas the Glu(392) variant contains a mixture of heme b and cis and trans isomers of heme d, suggesting of a role for this residue in heme conversion. Replacement of either Gln(419) and Ser(414), both of which interact with the heme, affected the cis:trans ratio of spirolactone heme d. Implications for the heme oxidation mechanism and the His-Tyr bond formation in HPII are considered. MESH HEADINGS: Amino Acid Sequence MESH HEADINGS: Amino Acid Substitution MESH HEADINGS: Base Sequence MESH HEADINGS: Catalase/\*chemistry/genetics/\*metabolism MESH HEADINGS: Crystallography, X-Ray MESH HEADINGS: Cysteine MESH HEADINGS: Escherichia coli/\*enzymology MESH HEADINGS: Glutamic Acid **MESH HEADINGS: Heme MESH HEADINGS: Histidine** MESH HEADINGS: Models, Molecular MESH HEADINGS: Molecular Sequence Data MESH HEADINGS: Mutagenesis, Site-Directed MESH HEADINGS: Oligodeoxyribonucleotides **MESH HEADINGS: Protein Conformation** MESH HEADINGS: Recombinant Proteins/chemistry/metabolism MESH HEADINGS: Restriction Mapping MESH HEADINGS: Variation (Genetics) LANGUAGE: eng

613. ---. Mutants That Alter the Covalent Structure of Catalase Hydroperoxidase Ii From Escherichia Coli. Rec #: 1958

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The three-dimensional structures of two HPII variants, V169C and H392Q, have been determined at resolutions of 1.8 and 2.1 A, respectively. The V169C variant contains a new type of covalent bond between the sulfur atom of Cys(169) and a carbon atom on the imidazole ring of the essential His(128). This variant enzyme has only residual catalytic activity and contains heme b. The chain of water molecules visible in the main channel may reflect the organization of the hydrogen peroxide substrates in the active enzyme. Two alternative mechanisms, involving either compound I or free radical intermediates, are presented to explain the formation of the Cys-His covalent bond. The H392Q and H392E variants exhibit 75 and 25% of native catalytic activity, respectively. The Gln(392) variant contains only heme b, whereas the Glu(392) variant contains a mixture of heme b and cis and trans isomers of heme d, suggesting of a role for this residue in heme conversion. Replacement of either Gln(419) and Ser(414), both of which interact with the heme, affected the cis:trans ratio of spirolactone heme d. Implications for the heme oxidation mechanism and the His-Tyr bond formation in HPII are considered. MESH HEADINGS: Amino Acid Sequence MESH HEADINGS: Amino Acid Substitution

MESH HEADINGS: Base Sequence

MESH HEADINGS: Catalase/\*chemistry/genetics/\*metabolism

MESH HEADINGS: Crystallography, X-Ray MESH HEADINGS: Cysteine MESH HEADINGS: Escherichia coli/\*enzymology MESH HEADINGS: Glutamic Acid MESH HEADINGS: Glutamic Acid MESH HEADINGS: Heme MESH HEADINGS: Models, Molecular MESH HEADINGS: Molecular Sequence Data MESH HEADINGS: Molecular Sequence Data MESH HEADINGS: Mutagenesis, Site-Directed MESH HEADINGS: Oligodeoxyribonucleotides MESH HEADINGS: Protein Conformation MESH HEADINGS: Recombinant Proteins/chemistry/metabolism MESH HEADINGS: Restriction Mapping MESH HEADINGS: Variation (Genetics) LANGUAGE: eng

614. Matheron, M. E. and Porchas, M. Comparison of Several Fungicides for Control of Downy Mildew on Broccoli. 1996; 86, (11 suppl.): S4. Rec #: 2559 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PERONOSPORA-PARASITICA BROCCOLI PATHOGEN FUNGUS HOST HORTICULTURE PEST MANAGEMENT CROP INDUSTRY PATHOLOGY DOWNY MILDEW ACROBAT MZ FUNGICIDE ALIETTE BAS 490 BRAVO 720 CURZATE M-8 MANZATE ICIA-5504 PROPAMOCARB RIDOMIL DITHANE PLANT FUNGAL DISEASE ARIZONA USA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES

MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Phycomycetes KEYWORDS: Cruciferae LANGUAGE: eng

615. ---. Comparison of Several Fungicides for Control of Downy Mildew on Broccoli. 1996; 86, (11 suppl.): S4. Rec #: 2559

Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PERONOSPORA-PARASITICA BROCCOLI PATHOGEN FUNGUS HOST HORTICULTURE PEST MANAGEMENT CROP INDUSTRY PATHOLOGY DOWNY MILDEW ACROBAT MZ FUNGICIDE ALIETTE BAS 490 BRAVO 720 CURZATE M-8 MANZATE ICIA-5504 PROPAMOCARB RIDOMIL DITHANE PLANT FUNGAL DISEASE ARIZONA USA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES **MESH HEADINGS: FUNGI** MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Phycomycetes **KEYWORDS:** Cruciferae LANGUAGE: eng

616. Mathew, K. A.; Gupta, S. K., and Shyam, K. R. New Strategies in Fungicidal Management of Angular Leaf Spot (Phaeoisariopsis griseola) of French Bean. POP,REP. Dep. Mycol. Plant Pathol., Dr. YS Parmar Univ. Hortic. For., Solan 173 230, Himachal Pradesh, India//: SOIL,ENV; 1998; 28, (2): 123-133. Rec #: 190 Call Number: EFFICACY (CBD,CTN,FUZ,MYC,MZB), NO EFED CHEM (BTN,HCZ), TARGET (CBD,CTN,FUZ,MYC,MZB) Notes: EcoReference No.: 151250 Chemical of Concern: BTN,CBD,CTN,FUZ,HCZ,MYC,MZB

 Mattern, G. C.; Louis, J. B., and Rosen, J. D. Multipesticide Determination in Surface Water by Gas Chromatography/Chemical Ionization/Mass Spectrometry/Ion Trap Detection. 1991; 74, (6): 982-986.

Rec #: 762 Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. An improved method for the determination of trace levels of pesticides in surface water has been developed and was used to analyze 20 target pesticides in New Jersey. Pesticides were extracted from 2 L water samples, using a mixture of XAD-2 and XAD-7 resins, and were determined by gas chromatography/chemical ionization mass spectrometry with ion trap detction. Average recoveries (performed in triplicate at the ppb level, except for captan and chlorothalonil at 5 ppb) were between 75 and 113%, with an average coefficient of variation of 9%. Most of the pesticides (alachlor, atrazine, butylate, carbofuran, chlorpyrifos, diazinon, fonofos, isofenphos, metolachlor, metribuzin, parathion, and simazine) had limits of detection (LODs) of 0.005 ppb or lower, while some (carbaryl, cyanazine, fenamiphos, linuron, pendimethalin, and terbufos) had LODs between 0.005 and 0.05 ppb. Captan and chlorothalonil had LODs of 1 ppb. Of 31 samples analyzed, 29 contained one or more of the f MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: ISOTOPES MESH HEADINGS: RADIATION MESH HEADINGS: ECOLOGY

MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY

MESH HEADINGS: FRESH WATER

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: ENVIRONMENTAL MONITORING MESH HEADINGS: PUBLIC HEALTH MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** Methods **KEYWORDS:** Radiation-Radiation and Isotope Techniques **KEYWORDS: Ecology KEYWORDS:** Comparative Biochemistry **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health-Public Health Laboratory Methods KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

618. ---. Multipesticide Determination in Surface Water by Gas Chromatography/Chemical Ionization/Mass Spectrometry/Ion Trap Detection. 1991; 74, (6): 982-986.

Rec #: 762

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. An improved method for the determination of trace levels of pesticides in surface water has been developed and was used to analyze 20 target pesticides in New Jersey. Pesticides were extracted from 2 L water samples, using a mixture of XAD-2 and XAD-7 resins, and were determined by gas chromatography/chemical ionization mass spectrometry with ion trap detction. Average recoveries (performed in triplicate at the ppb level, except for captan and chlorothalonil at 5 ppb) were between 75 and 113%, with an average coefficient of variation of 9%. Most of the pesticides (alachlor, atrazine, butylate, carbofuran, chlorpyrifos, diazinon, fonofos, isofenphos, metolachlor, metribuzin, parathion, and simazine) had limits of detection (LODs) of 0.005 ppb or lower, while some (carbaryl, cyanazine, fenamiphos, linuron, pendimethalin, and terbufos) had LODs between 0.005 and 0.05 ppb. Captan and chlorothalonil had LODs of 1 ppb. Of 31 samples analyzed, 29 contained one or more of the f MESH HEADINGS: BIOLOGY/METHODS **MESH HEADINGS: ISOTOPES** MESH HEADINGS: RADIATION MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: COMPARATIVE STUDY MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: ENVIRONMENTAL MONITORING

MESH HEADINGS: ENVIRONMENTAL MONITORI MESH HEADINGS: PUBLIC HEALTH

MESH HEADINGS: PUBLIC HEALTH

MESH HEADINGS: AIR POLLUTION

MESH HEADINGS: SOIL POLLUTANTS

MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Methods KEYWORDS: Radiation-Radiation and Isotope Techniques KEYWORDS: Ecology KEYWORDS: Comparative Biochemistry KEYWORDS: Diochemical Studies-General KEYWORDS: Biochemical Studies-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health-Public Health Laboratory Methods KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

619. Matura, M.; Goossens, A.; Bordalo, O.; Garcia-Bravo, B.; Magnusson, K.; WrangsjÖ K, and Karlberg, A. T. Patch Testing With Oxidized R-(+)-Limonene and Its Hydroperoxide Fraction. Rec #: 2122

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: R-(+)-Limonene is an ubiquitous allergen in our environment. It is one of the most widely used fragrance materials not only in fine fragrances but also most often incorporated in domestic and occupational products. Although the non-oxidized R-(+)-limonene itself is not allergenic, it easily forms allergenic products due to autoxidation during handling and storage. 2273 patients at 4 dermatological clinics in Europe were patch tested between 1997 and 1999 in 2 steps. First, the oxidation mixture of R-(+)-limonene and 1 selected allergen fraction of the mixture, the limonene hydroperoxides, were tested in 2 different vehicles in consecutive patients. A diverging frequency of positive patch test reactions was observed in the 4 clinics. 3.8% of the consecutive patients tested reacted to oxidized R-(+)-limonene in 2 clinics, 6.5% in the 3rd, whereas 0.3% in the 4th clinic. In 2 of the centres, different but significant concomitant positive response rates to other allergens were observed; e.g. to fragrance materials and to colophonium. However, in the total test population, 57% of the limonene-allergic subjects did not react to any of the fragrance allergy markers used in the standard series. In the 2nd step, patients showing positive reactions were retested, also including additional separate allergens of the limonene oxidation mixture (carvone and limonene oxide). 60% of the limonene-allergic patients showed positive results at retesting. The limonene hydroperoxide fraction was proved to be the most important allergen of the oxidation mixture, showing positive reactions in around 60% of the limoneneallergic patients at both test sessions. Testing limonene oxide and carvone separately resulted in very few positive reactions. 3% oxidized R-(+)-limonene in non-stabilized petrolatum is most suitable when using only 1 test preparation for diagnosis of contact allergy to oxidized limonene. Our data give clinical support to the European classification of R-(+)-limonene, containing oxidation products, as a skin sensitizer.

MESH HEADINGS: Cyclohexenes

MESH HEADINGS: Dermatitis, Allergic Contact/epidemiology/\*etiology

MESH HEADINGS: Europe/epidemiology

MESH HEADINGS: Female

MESH HEADINGS: Humans

MESH HEADINGS: Hydrogen Peroxide/\*adverse effects/analysis

MESH HEADINGS: Male

MESH HEADINGS: Oxidation-Reduction

MESH HEADINGS: Patch Tests

MESH HEADINGS: Perfume/\*adverse effects

MESH HEADINGS: Solvents/\*adverse effects/analysis

MESH HEADINGS: Terpenes/\*adverse effects/analysis

LANGUAGE: eng

## 620. ---. Patch Testing With Oxidized R-(+)-Limonene and Its Hydroperoxide Fraction.

Rec #: 2122

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: R-(+)-Limonene is an ubiquitous allergen in our environment. It is one of the most widely used fragrance materials not only in fine fragrances but also most often incorporated in domestic and occupational products. Although the non-oxidized R-(+)-limonene itself is not allergenic, it easily forms allergenic products due to autoxidation during handling and storage. 2273 patients at 4 dermatological clinics in Europe were patch tested between 1997 and 1999 in 2 steps. First, the oxidation mixture of R-(+)-limonene and 1 selected allergen fraction of the mixture, the limonene hydroperoxides, were tested in 2 different vehicles in consecutive patients. A diverging frequency of positive patch test reactions was observed in the 4 clinics. 3.8% of the consecutive patients tested reacted to oxidized R-(+)-limonene in 2 clinics, 6.5% in the 3rd, whereas 0.3% in the 4th clinic. In 2 of the centres, different but significant concomitant positive response rates to other allergens were observed; e.g. to fragrance materials and to colophonium. However, in the total test population, 57% of the limonene-allergic subjects did not react to any of the fragrance allergy markers used in the standard series. In the 2nd step, patients showing positive reactions were retested, also including additional separate allergens of the limonene oxidation mixture (carvone and limonene oxide). 60% of the limonene-allergic patients showed positive results at retesting. The limonene hydroperoxide fraction was proved to be the most important allergen of the oxidation mixture, showing positive reactions in around 60% of the limoneneallergic patients at both test sessions. Testing limonene oxide and carvone separately resulted in very few positive reactions. 3% oxidized R-(+)-limonene in non-stabilized petrolatum is most suitable when using only 1 test preparation for diagnosis of contact allergy to oxidized limonene. Our data give clinical support to the European classification of R-(+)-limonene, containing oxidation products, as a skin sensitizer.

MESH HEADINGS: Cyclohexenes

MESH HEADINGS: Dermatitis, Allergic Contact/epidemiology/\*etiology

MESH HEADINGS: Europe/epidemiology

MESH HEADINGS: Female

MESH HEADINGS: Humans

MESH HEADINGS: Hydrogen Peroxide/\*adverse effects/analysis

MESH HEADINGS: Male

MESH HEADINGS: Oxidation-Reduction

MESH HEADINGS: Patch Tests

MESH HEADINGS: Perfume/\*adverse effects

MESH HEADINGS: Solvents/\*adverse effects/analysis

MESH HEADINGS: Terpenes/\*adverse effects/analysis

LANGUAGE: eng

621. Mayer, J. R. and Elkins, N. R. Potential for Agricultural Pesticide Runoff to a Puget Sound Estuary Padilla Bay Washington Usa. 1990; 45, (2): 215-222. Rec #: 1222 Keywords: EFFLUENT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM FISH ENVIRONMENTAL SURVEILLANCE CONTAMINATION WATER POLLUTION TOXICITY MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: FRESH WATER MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES

MESH HEADINGS: ECOLOGY

MESH HEADINGS: MARINE BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: FISHES **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Pest Control KEYWORDS:** Osteichthyes LANGUAGE: eng

622. ---. Potential for Agricultural Pesticide Runoff to a Puget Sound Estuary Padilla Bay Washington Usa. 1990; 45, (2): 215-222. Rec #: 1222 Keywords: EFFLUENT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM FISH ENVIRONMENTAL SURVEILLANCE CONTAMINATION WATER POLLUTION TOXICITY MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES MESH HEADINGS: ECOLOGY MESH HEADINGS: MARINE BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **MESH HEADINGS: FISHES KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air

KEYWORDS: Pest Control KEYWORDS: Osteichthyes LANGUAGE: eng

623. Mayton, H.; Forbes, G. A.; Mizubuti, E. S. G., and Fry, W. E. The Roles of Three Fungicides in the Epidemiology of Potato Late Blight. 2001; 85, (9): 1006-1012.

Rec #: 256 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 0191-2917

Abstract: Three fungicides were tested in the field for efficacy on late blight caused by Phytophthora infestans. The effects of these fungicides on epidemic development, lesion growth rate and sporulation were measured. No fungicide completely arrested epidemic development under the environmental conditions of these experiments. However, the fungicide mixture, propamocarb hydrochloride plus chlorothalonil, had the most suppressive effect of the fungicides tested. The mechanism of effect included suppression of disease progress and lesion expansion. Growth chamber studies demonstrated that 24(degrees)C compared to 10 or 16(degrees)C limited cymoxanil efficacy.

22 refs.

English

Publication Type: Journal

Publication Type: Article

Country of Publication: United States

Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi

Classification: 92.10.2.3 CROP SCIENCE: Agronomy and Horticulture: Root and tuber crops Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi general Plant Science

624. Mayton, H.; Mizubuti, E. Sg; Smart, C. D., and Fry, W. E. Perturbation of Oospore Developmental Signal Transmission in Phytophthora Infestans Upon Fungicide Application. 1997; 87, (6 suppl.): S63. Rec #: 2485

Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS PHYTOPATHOGEN STRAIN-A1 STRAIN-A2 PEST MANAGEMENT CROP PESTS OOSPORE DEVELOPMENTAL SIGNAL TRANSMISSION CHLOROTHALONIL FUNGICIDE DIMETHOMORPH CYMOXANIL METALAXYL PROPAMOCARB DEVELOPMENT **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: PHYCOMYCETES KEYWORDS:** General Biology-Symposia KEYWORDS: Toxicology-General

KEYWORDS: Plant Physiology KEYWORDS: Plant Physiology KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Phycomycetes LANGUAGE: eng

625. ---. Perturbation of Oospore Developmental Signal Transmission in Phytophthora Infestans Upon Fungicide Application. 1997; 87, (6 suppl.): S63. Rec #: 2485 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS PHYTOPATHOGEN STRAIN-A1 STRAIN-A2 PEST MANAGEMENT CROP PESTS OOSPORE DEVELOPMENTAL SIGNAL TRANSMISSION CHLOROTHALONIL FUNGICIDE DIMETHOMORPH CYMOXANIL METALAXYL PROPAMOCARB DEVELOPMENT MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PHYCOMYCETES **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Toxicology-General **KEYWORDS:** Plant Physiology **KEYWORDS:** Plant Physiology KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Phycomycetes LANGUAGE: eng

 McCalla, J. H. Jr.; Richardson, M. D.; Karcher, D. E., and Fry, L. R. Moss Control in Creeping Bentgrass Putting Greens. PHY,POPENV; 2002: 20-21. Rec #: 1290 Call Number: NO CONTROL (CTN,MZB), NO EFED CHEM (FeNHS) Notes: EcoReference No.: 156674 Chemical of Concern: CTN,FeNHS,MZB

McCartney, C.; Mercer, P. C.; Cooke, L. R., and Fraaije, B. A. Effects of a Strobilurin-Based Spray Programme on Disease Control, Green Leaf Area, Yield and Development of Fungicide-Resistance in Mycosphaerella graminicola in Northern Ireland. CEL,POPSOIL,ENV,MIXTURE; 2007; 26, (8): 1272-1280. Rec #: 1790 Call Number: EFFICACY (AZX,CTN), NO EFED CHEM (ECZ), TARGET (AZX,CTN) Notes: EcoReference No.: 156717 Chemical of Concern: AZX,CTN,ECZ

- 628. Mcconnell, L. L.; Lenoir, J. S.; Datta, S., and Seiber, J. N. Wet Deposition of Current-Use Pesticides in the Sierra Nevada Mountain Range, California, Usa. 1998; 17, (10): 1908-1916. Rec #: 912
  - Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Atmospheric inputs of pesticides transported from California's Central Valley to the Sierra Nevada mountains (California, USA) were investigated by collecting winter-spring precipitation (rain and snow) from Sequoia National Park and from the Lake Tahoe basin. Pesticides currently used in California's Central Valley were detected in snow and rain samples from two elevations in Sequoia National Park (SNP) in the southern Sierras. At the lower elevation site (533 m), chlorothalonil was present at the highest levels (< 0.4-85 ng), followed by malathion (< 0.046-24 ng/L), diazinon (< 0.21-19 ng/L), and chlorpyrifos (1.3-4.4 ng/L). At 1,920 m elevation, chlorothalonil was also present at the highest levels (< 0.57-13 ng/L) followed by diazinon (< 0.057-14 ng/L), chlorpyrifos (1.1-13 ng/L), and malathion ( < 0.045-6 ng/L). Trifluralin, alpha- and gamma-hexachlorocyclohexane (HCH), and alpha- and beta-endosulfan were also detected at both locations and at lower conc MESH HEADINGS: ECOLOGY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Ecology KEYWORDS:** Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

629. ---. Wet Deposition of Current-Use Pesticides in the Sierra Nevada Mountain Range, California, Usa. 1998; 17, (10): 1908-1916. Rec #: 912 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Atmospheric inputs of pesticides transported from California's Central Valley to the Sierra Nevada mountains (California, USA) were investigated by collecting winter-spring precipitation (rain and snow) from Sequoia National Park and from the Lake Tahoe basin. Pesticides currently used in California's Central Valley were detected in snow and rain samples from two elevations in Sequoia National Park (SNP) in the southern Sierras. At the lower elevation site (533 m), chlorothalonil was present at the highest levels (< 0.4-85 ng), followed by malathion (< 0.046-24 ng/L), diazinon (< 0.21-19 ng/L), and chlorpyrifos (1.3-4.4 ng/L). At 1,920 m elevation, chlorothalonil was also present at the highest levels (< 0.57-13 ng/L) followed by diazinon (< 0.057-14 ng/L), chlorpyrifos (1.1-13 ng/L), and malathion ( < 0.045-6 ng/L). Trifluralin, alpha- and gamma-hexachlorocyclohexane (HCH), and alpha- and beta-endosulfan were also detected at both locations and at lower conc MESH HEADINGS: ECOLOGY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES MESH HEADINGS: PESTICIDES

KEYWORDS: Ecology

ZEVWORDS, ECOlog

KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

McCoy, G. D.; Rosenkranz, H. S., and Klopman, G. Non-Mutagenic Carcinogens are Primarily Hydrophobic. 1990; 11, (7): 1111-1117. Rec #: 780 Keywords: REFS CHECKED,REVIEW Call Number: NO EFED CHEM (3CE,AND,ANZ,BNZ,CHD,DDT,DLD,EDTA,EN,EPRN,FNTH,HCCH,HPT,ISO,MXC,PCL,PP CP,PPHD,PRN,TXP), NO REFS CHECKED (ADC,ASCN,CMPH,CTN,CaCl2,Captan,DCF,DDVP,DMT,DZ,EGL,ETHB,Halides,MBTZ,MEL ,MLN,MLO,MP,OXT,PPB,RTN,Ziram), NO REVIEW (ADC,ASCN,CMPH,CTN,CaCl2,Captan,DCF,DDVP,DMT,DZ,EGL,ETHB,Halides,MBTZ,MEL ,MLN,MLO,MP,OXT,PPB,RTN,Ziram) Notes: Chemical of Concern: 3CE,ADC,AND,ANZ,ASCN,BNZ,CHD,CMPH,CTN,CaCl2,Captan,DCF,DDT,DDVP,DLD,DM T,DZ,EDTA,EGL,EN,EPRN,ETHB,FMV,FNTH,HCCH,HPT,Halides,ISO,MBTZ,MEL,MLN,M LO,MP,MXC,OXT,PCL,PPB,PPCP,PPHD,PRN,RTN,TXP,Ziram

631. ---. Non-Mutagenic Carcinogens Are Primarily Hydrophobic. 1990; 11, (7): 1111-1117. 154008. Rec #: 5662 Keywords: REFS CHECKED,REVIEW Notes: Chemical of Concern: 3CE,ADC,AND,ANZ,ASCN,BNZ,CHD,CMPH,CTN,CaCl2,Captan,DCF,DDT,DDVP,DLD,DM T,DZ,EDTA,EGL,EN,EPRN,ETHB,FMV,FNTH,HCCH,HPT,Halides,ISO,MBTZ,MEL,MLN,M LO,MP,MXC,OXT,PCL,PPB,PPCP,PPHD,PRN,RTN,TXP,Ziram Abstract: NO REFS CHECKED,NO REVIEW Dep. Environ. Health Sci.,Case West. Reserve Univ.,Cleveland,OH//NONE TO ORDER//

McDonald, S. J.; Dernoeden, P. H., and Bigelow, C. A. Dollar Spot and Gray Leaf Spot Severity as Influenced by Irrigation, Chlorothalonil, Paclobutrazol, and a Wetting Agent. POPENV,MIXTURE; 2006; 46, (6): 2675-2684. Rec #: 820
Call Number: LITE EVAL CODED (PBZ,PCZ), TARGET (CTN) Notes: EcoReference No.: 96427 Chemical of Concern: CTN,PBZ,PCZ

633. Mcgrath, M. T. An Action Threshold for Management of Pumpkin Powdery Mildew. 1990; 80, (10): 971. Rec #: 1249 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT SPHAEROTHECA-FULIGINEA CHLOROTHALONIL TRIADIMEFON FUNGICIDE FUNGUS PLANT VEGETABLE AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ASCOMYCOTA **MESH HEADINGS: PLANTS**
KEYWORDS: General Biology-Symposia KEYWORDS: Biochemical Studies-General KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Ascomycetes KEYWORDS: Cucurbitaceae LANGUAGE: eng

634. ---. An Action Threshold for Management of Pumpkin Powdery Mildew. 1990; 80, (10): 971. Rec #: 1249 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT SPHAEROTHECA-FULIGINEA CHLOROTHALONIL TRIADIMEFON FUNGICIDE FUNGUS PLANT VEGETABLE AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS: Pest Control KEYWORDS:** Ascomycetes **KEYWORDS:** Cucurbitaceae LANGUAGE: eng

- 635. McGrath, M. T. Successful Management of Powdery Mildew in Pumpkin with Disease Threshold-Based Fungicide Programs. POP. Dep. Plant Pathol., Long Island Hortic. Research Lab., Cornell Univ., 3059 Sound Ave., Riverhead, NY 11901-1098, USA.//: SOIL,ENV,MIXTURE; 1996; 80, (8): 910-916. Rec #: 1890 Call Number: EFFICACY (BMY,CTN,TDF), NO MIXTURE (BMY,TDF), TARGET (BMY,CTN,TDF) Notes: EcoReference No.: 156711 Chemical of Concern: BMY,CTN,TDF
- 636. Mcgrath, M. T. Successful Management of Powdery Mildew in Summer Squash With Host Resistance 1991. 1992; 7, (0): 23. Rec #: 1939 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CUCURBITA-PEPO

SPHAEROTHECA-FULIGINEA BRAVO 720 BENLATE BAYLETON FUNGICIDE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ASCOMYCOTA **MESH HEADINGS: PLANTS KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Cucurbitaceae LANGUAGE: eng

- 637. McInnes, T. B.; Gitaitis, R. D.; McCarter, S. M.; Jaworski, C. A., and Phatak, S. C. Airborne Dispersal of Bacteria in Tomato and Pepper Transplant Fields. 1988; 72, (7): 575-579. Rec #: 690 Keywords: BACTERIA Call Number: NO BACTERIA,NO MIXTURE(CuOH,MZB) Notes: Chemical of Concern: CuOH,MZB,CTN
- 638. Mckenna, N. A Disaster Waiting to Happen.

Rec #: 1236

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: 250 million indigenous or first peoples inhabit 70 countries throughout the world. They are almost universally marginalized, impoverished, and denied access to adequate health care. They are therefore subjected to poor health, malnutrition, endemic sexually transmitted diseases, and a myriad of social problems including prostitution, displacement, resettlement, and substance abuse. Lack of condom availability and use and the plethora of languages in which interventions must be communicated also pose obstacles. 860 languages are spoken by the 3 million first peoples in Papua New Guinea. As HIV sweeps across continents and through populations worldwide, these aforementioned conditions certainly predispose indigenous peoples to the risk of contracting and spreading HIV. The lack of reliable reporting systems to monitor health conditions and the incidence and prevalence of HIV among indigenous populations, and the corresponding lack of hard data make it impossible to reliably estimate the extent of HIV therein. Factors which increase the likelihood that HIV and AIDS will reach epidemic proportions among the indigenous are specially described for Amazonia, Guatemala, Papua New Guinea, Thailand, India, Africa, Australia, Canada, and the US. MESH HEADINGS: \*Acquired Immunodeficiency Syndrome **MESH HEADINGS: Africa MESH HEADINGS: Americas MESH HEADINGS: Asia** 

MESH HEADINGS: Asia, Southeastern **MESH HEADINGS: Australia MESH HEADINGS: Behavior MESH HEADINGS: Brazil** MESH HEADINGS: Canada **MESH HEADINGS: Central America** MESH HEADINGS: \*Condoms **MESH HEADINGS: Contraception** MESH HEADINGS: \*Contraception Behavior MESH HEADINGS: Culture MESH HEADINGS: Demography **MESH HEADINGS: Developed Countries MESH HEADINGS: Developing Countries MESH HEADINGS: Disease MESH HEADINGS: Economics MESH HEADINGS: \*Ethnic Groups MESH HEADINGS: Family Planning Services** MESH HEADINGS: Guatemala **MESH HEADINGS: \*HIV Infections MESH HEADINGS: India MESH HEADINGS: Infection** MESH HEADINGS: Latin America MESH HEADINGS: Melanesia **MESH HEADINGS: North America MESH HEADINGS: Pacific Islands** MESH HEADINGS: Papua New Guinea **MESH HEADINGS: Population MESH HEADINGS: Population Characteristics** MESH HEADINGS: \*Poverty **MESH HEADINGS: \*Rural Population** MESH HEADINGS: Sexual Behavior MESH HEADINGS: \*Sexually Transmitted Diseases **MESH HEADINGS: Social Problems MESH HEADINGS: Socioeconomic Factors MESH HEADINGS: South America** MESH HEADINGS: \*Substance-Related Disorders **MESH HEADINGS: Thailand MESH HEADINGS: United States MESH HEADINGS: Virus Diseases** KEYWORDS: \*Acquired Immunodeficiency Syndrome **KEYWORDS:** Africa **KEYWORDS:** Americas **KEYWORDS:** Asia **KEYWORDS:** Australia **KEYWORDS: Barrier Methods KEYWORDS: Behavior KEYWORDS: Brazil KEYWORDS:** Canada **KEYWORDS:** Central America **KEYWORDS: \*Condom KEYWORDS:** Contraception **KEYWORDS:** Contraceptive Methods KEYWORDS: \*Contraceptive Usage **KEYWORDS: Cultural Background KEYWORDS:** Demographic Factors **KEYWORDS: Developed Countries** 

**KEYWORDS:** Developing Countries **KEYWORDS:** Diseases **KEYWORDS: Economic Factors KEYWORDS: \*Ethnic Groups KEYWORDS:** Family Planning **KEYWORDS:** Guatemala **KEYWORDS: \*Hiv Infections KEYWORDS:** India **KEYWORDS: \*Indigenous Population KEYWORDS:** Infections **KEYWORDS:** Latin America **KEYWORDS:** Melanesia **KEYWORDS:** North America **KEYWORDS:** Northern America **KEYWORDS:** Oceania **KEYWORDS:** Papua New Guinea **KEYWORDS:** Population **KEYWORDS:** Population Characteristics **KEYWORDS:** \*Poverty **KEYWORDS:** \*Prostitutes **KEYWORDS: Reproductive Tract Infections KEYWORDS: \*Rural Population KEYWORDS: Sex Behavior KEYWORDS: \*Sexually Transmitted Diseases KEYWORDS: Social Problems KEYWORDS:** Socioeconomic Factors **KEYWORDS:** South America **KEYWORDS:** Southeastern Asia **KEYWORDS:** Southern Asia **KEYWORDS: \*Substance Addiction KEYWORDS:** Thailand **KEYWORDS: United States KEYWORDS:** Viral Diseases LANGUAGE: eng

639. ---. A Disaster Waiting to Happen.

Rec #: 1236

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: 250 million indigenous or first peoples inhabit 70 countries throughout the world. They are almost universally marginalized, impoverished, and denied access to adequate health care. They are therefore subjected to poor health, malnutrition, endemic sexually transmitted diseases, and a myriad of social problems including prostitution, displacement, resettlement, and substance abuse. Lack of condom availability and use and the plethora of languages in which interventions must be communicated also pose obstacles. 860 languages are spoken by the 3 million first peoples in Papua New Guinea. As HIV sweeps across continents and through populations worldwide, these aforementioned conditions certainly predispose indigenous peoples to the risk of contracting and spreading HIV. The lack of reliable reporting systems to monitor health conditions and the incidence and prevalence of HIV among indigenous populations, and the corresponding lack of hard data make it impossible to reliably estimate the extent of HIV therein. Factors which increase the likelihood that HIV and AIDS will reach epidemic proportions among the indigenous are specially described for Amazonia, Guatemala, Papua New Guinea, Thailand, India, Africa, Australia, Canada, and the US. MESH HEADINGS: \*Acquired Immunodeficiency Syndrome **MESH HEADINGS: Africa MESH HEADINGS: Americas** 

**MESH HEADINGS: Asia** MESH HEADINGS: Asia, Southeastern MESH HEADINGS: Australia **MESH HEADINGS: Behavior MESH HEADINGS: Brazil** MESH HEADINGS: Canada MESH HEADINGS: Central America MESH HEADINGS: \*Condoms MESH HEADINGS: Contraception MESH HEADINGS: \*Contraception Behavior **MESH HEADINGS: Culture** MESH HEADINGS: Demography **MESH HEADINGS: Developed Countries MESH HEADINGS: Developing Countries MESH HEADINGS: Disease MESH HEADINGS: Economics MESH HEADINGS: \*Ethnic Groups** MESH HEADINGS: Family Planning Services **MESH HEADINGS: Guatemala MESH HEADINGS: \*HIV Infections MESH HEADINGS: India MESH HEADINGS: Infection** MESH HEADINGS: Latin America **MESH HEADINGS: Melanesia MESH HEADINGS: North America MESH HEADINGS: Pacific Islands** MESH HEADINGS: Papua New Guinea **MESH HEADINGS: Population MESH HEADINGS: Population Characteristics** MESH HEADINGS: \*Poverty MESH HEADINGS: \*Rural Population MESH HEADINGS: Sexual Behavior MESH HEADINGS: \*Sexually Transmitted Diseases **MESH HEADINGS: Social Problems MESH HEADINGS: Socioeconomic Factors MESH HEADINGS: South America** MESH HEADINGS: \*Substance-Related Disorders **MESH HEADINGS: Thailand MESH HEADINGS: United States MESH HEADINGS: Virus Diseases** KEYWORDS: \*Acquired Immunodeficiency Syndrome **KEYWORDS:** Africa **KEYWORDS:** Americas **KEYWORDS:** Asia **KEYWORDS:** Australia **KEYWORDS: Barrier Methods KEYWORDS:** Behavior **KEYWORDS: Brazil KEYWORDS:** Canada **KEYWORDS:** Central America **KEYWORDS: \*Condom KEYWORDS:** Contraception **KEYWORDS:** Contraceptive Methods KEYWORDS: \*Contraceptive Usage **KEYWORDS: Cultural Background KEYWORDS: Demographic Factors** 

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 Mclaughlin, R. A. and Johnson, B. S. Optimizing Recoveries of Two Chlorotriazine Herbicide Metabolites and 11 Pesticides From Aqueous Samples Using Solid-Phase Extraction and Gas Chromatography-Mass Spectrometry. 1997; 790, (1-2): 161-167. Rec #: 2564

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A method was developed for solidphase extraction of two chlorotriazine herbicide metabolites, deethylatrazine (DEA) and deisopropylatrazine (DIA), from aqueous samples. Two C18 phases in cartridge format were compared and recoveries were found to be highly sensitive to sorbent amount, sample volume and presence of parent compounds. Recoveries were significantly improved using a partially nonendcapped C18 phase compared to the normal C18 phase, particularly for DIA, apparently due to polar interactions. Combinations of sample volume and sorbent amount were tested using deionized water to determine an optimal combination of 200 ml and 1.0 g, respectively. Recoveries from a variety of river, stream, runoff and ground waters averaged 105-116% and 109-117% at concentrations of 0.5-1.0 ng/ml for DIA and DEA, respectively, with minimum detection limits of 0.05 ng/ml. Other pesticides tested also have acceptable recoveries using this method. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Methods-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

641. ---. Optimizing Recoveries of Two Chlorotriazine Herbicide Metabolites and 11 Pesticides From Aqueous Samples Using Solid-Phase Extraction and Gas Chromatography-Mass Spectrometry. 1997; 790, (1-2): 161-167.

Rec #: 2564

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A method was developed for solidphase extraction of two chlorotriazine herbicide metabolites, deethylatrazine (DEA) and deisopropylatrazine (DIA), from aqueous samples. Two C18 phases in cartridge format were compared and recoveries were found to be highly sensitive to sorbent amount, sample volume and presence of parent compounds. Recoveries were significantly improved using a partially nonendcapped C18 phase compared to the normal C18 phase, particularly for DIA, apparently due to polar interactions. Combinations of sample volume and sorbent amount were tested using deionized water to determine an optimal combination of 200 ml and 1.0 g, respectively. Recoveries from a variety of river, stream, runoff and ground waters averaged 105-116% and 109-117% at concentrations of 0.5-1.0 ng/ml for DIA and DEA, respectively, with minimum detection limits of 0.05 ng/ml. Other pesticides tested also have acceptable recoveries using this method. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS:** Public Health: Environmental Health-Air **KEYWORDS: Pest Control** 

LANGUAGE: eng

McManus, P. S.; Proffer, T. J.; Berardi, R.; Gruber, B. R.; Nugent, J. E.; Ehret, G. R.; Ma, Z., and Sundin, G. W. Integration of Copper-Based and Reduced-Risk Fungicides for Control of Blumeriella jaapii on Sour Cherry. POP. psm@plantpath.wisc.edu//Department of Plant Pathology, University of Wisconsin, Madison WI/: ENV,MIXTURE; 2007; 91, (3): 294-300. Rec #: 90 Call Number: NO EFED CHEM (TFX), NO MIXTURE (CTN,CuOH,CuS), TARGET

(CuOH,CuS,TEZ) Notes: EcoReference No.: 156668 Chemical of Concern: CTN,CuOH,CuS,TEZ,TFX

McMurray, L. S.; Davidson, J. A.; Lines, M. D.; Leonforte, A., and Salam, M. U. Combining Management and Breeding Advances to Improve Field Pea (Pisum sativum L.) Grain Yields Under Changing Climatic Conditions in South-Eastern Australia. POP. [Davidson, JA] S Australian Res & Dev Inst SARDI, Adelaide, SA 5001, Australia [McMurray, LS//: SOIL,ENV,MIXTURE; 2011; 180, (1): 69-88. Rec #: 1270 Call Number: NO MIXTURE (CTN), OK (MZB) Notes: EcoReference No.: 156486 Chemical of Concern: CTN.MZB

McQuilken, M. P.; Litterick, A. M., and Hopkins, K. E. Evaluation of Fungicides Against Pestalotiopsis sydowiana on Calluna vulgaris and Rhododendron. POPENV; 1997; 18, 20-21. Rec #: 580
Call Number: NO EFED CHEM (TCM), NO ENDPOINT (CBD,CTN,MZB,TFR), TARGET (CBD,MZB,TFR)
Notes: EcoReference No.: 90906
Chemical of Concern: CBD,CTN,MZB,TCM,TFR

645. Mcquilken, M. P.; Litterick, A. M., and Hopkins, K. E. Evaluation of Fungicides Against Pestalotiopsis Sydowiana on Calluna Vulgaris and Rhododendron. 1997; 0, (18): 20-21. Rec #: 2572 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE PESTALOTIOPSIS-SYDOWIANA CALLUNA-VULGARIS RHODODENDRON PLANT PATHOGEN HOST PEST MANAGEMENT HORTICULTURE PROCHLORAZ FUNGICIDE CHLOROTHALONIL MANCOZEB IPRODIONE MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Ericaceae LANGUAGE: eng

McQuilken, M. P.; Litterick, A. M., and Hopkins, K. E. Evaluation of Fungicides Against Pestalotiopsis sydowiana on Calluna vulgaris and Rhododendron. POPENV; 1997; 18, 20-21. Rec #: 970 Call Number: NO ENDPOINT(MZB,CTN,TFR) Notes: EcoReference No.: 90906 Chemical of Concern: TCM,CBD,CTN,MZB,TFR 647. Mee Kin, Chai and Guan Huat, Tan. Headspace solid-phase microextraction for the evaluation of pesticide residue contents in cucumber and strawberry after washing treatment. 2010; 123, (3): 760-764. Rec #: 13042

Keywords: FOOD

Notes: Chemical of Concern: CTN

Abstract: Abstract: The headspace solid-phase microextraction was developed to examine the organophosphorus (diazinon, malathion, chloropyrifos, quinalphos, profenofos) and organochlorine (chlorothalonil,  $\hat{1}\pm$ -endosulfan and  $\hat{1}^2$ -endosulfan) pesticide residues in vegetable (cucumber) and fruit (strawberry) samples. The effects of washing by different solutions were evaluated for the reduction of organophosphorus and organochlorine pesticide residues contents. Gas chromatography with electron capture detection was used to analysis the investigated pesticides. The results showed that washing by a non-toxic solution can decrease the concentration of pesticide residues in the fruit and vegetable samples. The data further indicated that acetic acid was the most effective solution in removing the residues of the investigated pesticides from the fruit and vegetable samples when compared to sodium carbonate, sodium chloride and tap water. The amount of pesticides removed by solution washing is related to their water solubility and vapour pressure properties.

Keywords: Internet resource

[Amsterdam]: Elsevier Science

648. Mejia-Velazquez, G. M. and Rodriguez-Gallegos, M. Characteristics and Estimated Air Pollutant Emissions From Fuel Burning by the Industry and Vehicles in the Matamoros-Reynosa Border Region. 1997; 23, (5): 733-744.

Rec #: 2542

Keywords: FATE

LANGUAGE: eng

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This study characterized and estimated emissions of air pollutants from fuel burning on the Mexican side of the Lower Rio Grande border region, from Matamoros to Reynosa, Mexico. In the methodology of this study, emissions were estimated using emission factors obtained in a previous study in Monterrey, Mexico. Emissions were characterized and estimated for industrial sources by considering the type of source and fuel used. In the case of mobile sources, vehicles were classified by year model and then emissions were estimated using average emission factors calculated for each model. Preliminary results show that mobile sources account for approximately 80.8% of total emissions, followed by a power plant in Rio Bravo with 17.7%, and by industry in the region with only 1.5%. An important limitation in estimating air pollutant emissions is that specific emission factors for Mexican industry and vehicles must be obtained for each source type to be representative. MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** 

649. ---. Characteristics and Estimated Air Pollutant Emissions From Fuel Burning by the Industry and Vehicles in the Matamoros-Reynosa Border Region. 1997; 23, (5): 733-744. Rec #: 2542 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. This study characterized and estimated emissions of air pollutants from fuel burning on the Mexican side of the Lower Rio

KEYWORDS: Public Health: Environmental Health-Air

Grande border region, from Matamoros to Reynosa, Mexico. In the methodology of this study, emissions were estimated using emission factors obtained in a previous study in Monterrey, Mexico. Emissions were characterized and estimated for industrial sources by considering the type of source and fuel used. In the case of mobile sources, vehicles were classified by year model and then emissions were estimated using average emission factors calculated for each model. Preliminary results show that mobile sources account for approximately 80.8% of total emissions, followed by a power plant in Rio Bravo with 17.7%, and by industry in the region with only 1.5%. An important limitation in estimating air pollutant emissions is that specific emission factors for Mexican industry and vehicles must be obtained for each source type to be representative. MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS **MESH HEADINGS: WATER POLLUTION KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Public Health: Environmental Health-Air LANGUAGE: eng

 Mekenyan, O.; Roberts, D. W., and Karcher, W. Molecular Orbital Parameters as Predictors of Skin Sensitization Potential of Halo- and Pseudohalobenzenes Acting as Snar Electrophiles. 1997; 10, (9): 994-1000.

Rec #: 2534

Keywords: MODELING

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The electrophilic reactivity of a training set of 20 halo- and pseudohalobenzenes, 10 of which are reported skin sensitizers and 10 of which are reported nonsensitizers, has been modeled by MO-calculated indices using the AM1 and PM3 Hamiltonians. The electronic structures of parent molecules and the corresponding Meisenheimer intermediates (sigma-complexes) were evaluated. The NH2 group and the H atom were both studied as model nucleophile-derived substituents in the sigma-complexes. The LUMO e differences between the parent compounds and their Meisenheimer complexes together with the maximum acceptor superdelocalizabilities determined over the aromatic reaction sites were found to discriminate correctly the sensitizing/ reactive from nonsensitizing/unreactive compounds of the training set of 20 compounds. The predictive applicability of these MO indices was confirmed with a test set of seven further compounds for which sensitization data are reported in the literature.

- MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: DIAGNOSIS MESH HEADINGS: SKIN MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HYPERSENSITIVITY KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS: Integumentary System-General KEYWORDS: Toxicology-General KEYWORDS: Allergy LANGUAGE: eng
- 651. ---. Molecular Orbital Parameters as Predictors of Skin Sensitization Potential of Halo- and

Pseudohalobenzenes Acting as Snar Electrophiles. 1997; 10, (9): 994-1000. Rec #: 2534

Keywords: MODELING

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The electrophilic reactivity of a training set of 20 halo- and pseudohalobenzenes, 10 of which are reported skin sensitizers and 10 of which are reported nonsensitizers, has been modeled by MO-calculated indices using the AM1 and PM3 Hamiltonians. The electronic structures of parent molecules and the corresponding Meisenheimer intermediates (sigma-complexes) were evaluated. The NH2 group and the H atom were both studied as model nucleophile-derived substituents in the sigma-complexes. The LUMO e differences between the parent compounds and their Meisenheimer complexes together with the maximum acceptor superdelocalizabilities determined over the aromatic reaction sites were found to discriminate correctly the sensitizing/ reactive from nonsensitizing/unreactive compounds of the training set of 20 compounds. The predictive applicability of these MO indices was confirmed with a test set of seven further compounds for which sensitization data are reported in the literature.

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: DIAGNOSIS MESH HEADINGS: SKIN MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HYPERSENSITIVITY KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS: Integumentary System-General KEYWORDS: Toxicology-General KEYWORDS: Allergy LANGUAGE: eng

652. Mercier, J.; Stienstra, W. C., and Krupa, S. V. Reduction in Dollar Spot of Turf Associated With Applications of the Growth Regulator Paclobutrazol. 1998; 88, (9 suppl.): S62. Rec #: 2646 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT CREEPING BENTGRASS ANNUAL BLUEGRASS PLANT HOST PEST MANAGEMENT HORTICULTURE DOLLAR SPOT PACLOBUTRAZOL PLANT GROWTH REGULATOR CHLOROTHALONIL FUNGICIDE FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANT GROWTH REGULATORS/PHARMACOLOGY MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: PLANTS/DRUG EFFECTS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES MESH HEADINGS: GRASSES KEYWORDS: General Biology-Symposia KEYWORDS: Plant Physiology KEYWORDS: Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Gramineae LANGUAGE: eng

653. ---. Reduction in Dollar Spot of Turf Associated With Applications of the Growth Regulator Paclobutrazol. 1998; 88, (9 suppl.): S62. Rec #: 2646 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT CREEPING BENTGRASS ANNUAL BLUEGRASS PLANT HOST PEST MANAGEMENT HORTICULTURE DOLLAR SPOT PACLOBUTRAZOL PLANT GROWTH REGULATOR CHLOROTHALONIL FUNGICIDE FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANT GROWTH REGULATORS/PHARMACOLOGY MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: PLANTS/DRUG EFFECTS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: GRASSES **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Plant Physiology **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Gramineae LANGUAGE: eng

654. Migheli, Q. ; Aloi, C., and Guillino, M. L. Resistance of Botrytis-Elliptica to Fungicides. 1990; 0, (266): 429-436. Rec #: 1267 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM LILIUM CHLOROTHALONIL DICHLOFLUANID CARBENDAZIM DIETHOFENCARB CYPROCONAZOLE FENPROPIMORPH MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Liliaceae LANGUAGE: eng

655. ---. Resistance of Botrytis-Elliptica to Fungicides. 1990; 0, (266): 429-436. Rec #: 1267 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM LILIUM CHLOROTHALONIL DICHLOFLUANID CARBENDAZIM DIETHOFENCARB CYPROCONAZOLE FENPROPIMORPH MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS: Pest Control KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Liliaceae LANGUAGE: eng

656. Miles, A. K.; Willingham, S. L., and Cooke, A. W. Field Evaluation of a Plant Activator, Captan, Chlorothalonil, Copper Hydroxide, Iprodione, Mancozeb and Strobilurins for the Control of Citrus Brown Spot of Mandarin. 2005; 34, (1): 63-71. Rec #: 160 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 0815-3191 Descriptors: Integrated pest management Descriptors: Mandarin Descriptors: Orange

Descriptors: Induced resistance

Abstract: Brown spot (caused by Alternaria alternata) is a major disease of citrus in subtropical areas of Australia. A number of chemicals, the strobilurins azoxystrobin, trifloxystrobin, pyraclostrobin and methoxycrylate, a plant activator (acibenzolar), copper hydroxide, mancozeb, captan, iprodione and chlorothalonil/pyrimthanil were tested in the field for its control. Over three seasons, trees in a commercial orchard received 16, 14 and 7 fungicide sprays, respectively, commencing at flowering in the first season, and petal fall in the later seasons. In all experiments, the strobilurins used alone, or incorporated with copper and mancozeb, were as effective as, or better than the industry standard of copper and mancozeb alone. The only exception was trifloxystrobin, which when used alone was less effective than the industry standard. Acibenzolar used alone was ineffective. Applying a mixture of azoxystrobin and acibenzolar was found to reduce the incidence of brown spot compared with applying azoxystrobin alone but, in either case, disease levels were not found to be significantly different to the industry standard. Captan, iprodione and chlorothalonil/pyrimthanil were as effective as the industry standard. The incidence and severity of rind damage were significantly lowest in the azoxystrobin, methoxycrylate, iprodione and chlorothalonil/pyrimthanil treatments. Medium and high rates of trifloxystrobin (0.07 g/L, 0.15 g/L) and pyraclostrobin (0.8 g/L, 1.2 g/L) applied alone were the only treatments found to be IPM-incompatible as shown by the elevated level of scale infection on fruit. (copyright) Australasian Plant Pathology Society 2005. 35 refs. English Publication Type: Journal Publication Type: Article Country of Publication: Australia Classification: 92.10.4.2 CROP SCIENCE: Crop Protection: Fungi Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi -

- general Plant Science
- 657. Miliadis, G. E. Analysis of Pesticide Residues in Water Samples by Gas Capillary Chromatography. 1998; 61, (2): 255-260.

Rec #: 2613 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE PESTICIDE RESIDUES GAS CAPILLARY CHROMATOGRAPHY WATER SAMPLES METHODOLOGY POLLUTION ANALYTICAL METHOD GREECE EUROPE MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Biochemical Methods-General KEYWORDS: Biophysics-General Biophysical Techniques** KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Pest Control** LANGUAGE: eng

<sup>658. ---.</sup> Analysis of Pesticide Residues in Water Samples by Gas Capillary Chromatography. 1998; 61, (2):

255-260. Rec #: 2613 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE PESTICIDE RESIDUES GAS CAPILLARY CHROMATOGRAPHY WATER SAMPLES METHODOLOGY POLLUTION ANALYTICAL METHOD GREECE EUROPE MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biophysics-General Biophysical Techniques** KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Pest Control** LANGUAGE: eng

Miller, M. E.; Bruton, B. D., and Amador, J. M. Effects of Number and Timing of Chlorothalonil Applications on Onion Yield. POPSOIL,ENV,MIXTURE; 1986; 70, (9): 875-876. Rec #: 470 Call Number: NO ENDPOINT (CTN,MZB) Notes: EcoReference No.: 91820 Chemical of Concern: CTN,MZB

660. Miller, M. E.; Isakeit, T.; Bruton, B. D., and Zhang, J. X. Fungicidal Control of Didymella Bryoniae on Cantaloupe. 1998; 88, (9 suppl.): S62-s63. Rec #: 2647 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT DIDYMELLA-BRYONIAE CANTALOUPE PLANT PATHOGEN FUNGUS PLANT PEST MANAGEMENT HORTICULTURE GUMMY STEM BLIGHT BENOMYL FUNGICIDE CHLOROTHALONIL AZOXYSTROBIN CYPRODINIL FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomvcetes **KEYWORDS:** Cucurbitaceae

LANGUAGE: eng

Rec #: 2647

661. ---. Fungicidal Control of Didymella Bryoniae on Cantaloupe. 1998; 88, (9 suppl.): S62-s63.

Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT DIDYMELLA-BRYONIAE CANTALOUPE PLANT PATHOGEN FUNGUS PLANT PEST MANAGEMENT HORTICULTURE GUMMY STEM BLIGHT BENOMYL FUNGICIDE CHLOROTHALONIL AZOXYSTROBIN CYPRODINIL FUNGAL DISEASE **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES **MESH HEADINGS: FUNGI** MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Cucurbitaceae LANGUAGE: eng

 Millet, Maurice; Palm, Wolf-Ulrich, and Zetzsch, Cornelius. Abiotic Degradation of Halobenzonitriles: Investigation of the Photolysis in Solution. 1998 Sep; 41, (1): 44-50. Rec #: 69

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: This paper presents first experiments of laboratory investigations of the photodegradation by direct photolysis ([lambda]>290 nm) of cholorotahlonil, dichlobenil, chloroxynil, bromoxynil, and ioxynil in aqueous, pH-buffered, and organic solutions and the calculation of the quantum yields. The photolysis of chlorothalonil in water is low, with a corresponding low quantum yield ([Phi]=0.0001). Dichlobenil is photostable under the laboratory conditions used. The photoreactivity of bromoxynil and ioxynil was found to be comparable in aqueous solutions and about three times lower with respect to chloroxynil. The quantum yields obtained in water of chloroxynil, bromoxynil, and ioxynil are [Phi]=0.0060, 0.0093, and 0.0024, respectively. Half-lives of the pesticides in the environment with respect to direct irradiation are estimated using UV spectra and quantum yields as input variables obtained in the laboratory. http://www.sciencedirect.com/science/article/B6WDM-45JB828-14/2/d07b38d48873f7a41bdda7f1948add92

663. ---. Abiotic Degradation of Halobenzonitriles: Investigation of the Photolysis in Solution. 1998 Sep; 41, (1): 44-50.
Rec #: 69
Keywords: CHEM METHODS
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Abstract: This paper presents first experiments of laboratory investigations of the photodegradation by direct photolysis ([lambda]>290 nm) of cholorotahlonil, dichlobenil,

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Minton, E. B. Effects of Seed Treatment with Fungicides and Systemic Insecticides on Stand of Cotton. POPSOIL,ENV; 1972; 12, (1): 93-94. Rec #: 480 Call Number: NO MIXTURE (CLNB,CTN,Captan,TFN), OK (DS,PRT) Notes: EcoReference No.: 106342 Chemical of Concern: CLNB,CTN,Captan,DS,PRT,TFN

665. Miranda, R.; Guerrero, G., and Bravo, A. Structured Organization of the Different Domains From Cry1ab Toxin of Bacillus Thuringiensis in the Membrane-Inserted State. 1998; 36, (9): 1297. Rec #: 2635 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MEETING POSTER BACILLUS-THURINGIENSIS CRY 1 AB TOXIN BIOPESTICIDE POTASSIUM CHANNEL PORE FORMATION TOXICOLOGY MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MEMBRANES/PHYSIOLOGY MESH HEADINGS: METABOLISM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-Membrane Phenomena KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Toxicology-General KEYWORDS: Endospore-forming Gram-Positives (1992-) LANGUAGE: eng

666. ---. Structured Organization of the Different Domains From Cry1ab Toxin of Bacillus Thuringiensis in the Membrane-Inserted State. 1998; 36, (9): 1297. Rec #: 2635 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MEETING POSTER BACILLUS-THURINGIENSIS CRY 1 AB TOXIN BIOPESTICIDE POTASSIUM CHANNEL PORE FORMATION TOXICOLOGY MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MEMBRANES/PHYSIOLOGY MESH HEADINGS: METABOLISM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA KEYWORDS: General Biology-Symposia KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-Membrane Phenomena KEYWORDS: Metabolism-General Metabolism KEYWORDS: Toxicology-General KEYWORDS: Endospore-forming Gram-Positives (1992- ) LANGUAGE: eng

Mizens, M.; Killeen, J. C. Jr., and Eilrich, G. L. The Mutagenic Potential of Chlorothalonil: In Vivo Chromosome Aberration Studies. 1998; 403, (1/2): 269-272. Rec #: 720 Keywords: REFS CHECKED/ REVIEW Call Number: NO REVIEW(CTN) Notes: Chemical of Concern: CTN

668. ---. The Mutagenic Potential of Chlorothalonil: in Vivo Chromosome Aberration Studies. 1998; 403, (1-2): 269-272. 154854. Rec #: 8442
Keywords: REFS CHECKED, REVIEW
Notes: Chemical of Concern: CTN
Abstract: NO REFS CHECKED, NO REVIEW FY07 LAS 3/27 -COMPLETED 12/07//NONE TO ORDER//

669. Mogadati, P. S.; Louis, J. B., and Rosen, J. D. Multiresidue Procedure for 136 Pesticides in High Organic Content Soils. 1997; 214, (1-2): Agro 101. Rec #: 2525 Keywords: METHODS, FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PESTICIDES METHODOLOGY POLLUTION METHANOL EXTRACTANT SOLID-PHASE EXTRACTION CHEMICAL IONIZATION CHEMICAL TRAP MASS SPECTROMETRY SOIL PROPERTIES GC-MASS SPECTROMETRY GAS CHROMATOGRAPHY-MASS SPECTROMETRY CHLOROTHALONIL RESIDUE DETERMINATION CAPTAN FOLPET CAPTAFOL SOIL CONTAMINATION BIOCHEMISTRY AND BIOPHYSICS EXTRACTION METHOD ANALYTICAL METHOD ORGANIC MATTER CONTENT MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **MESH HEADINGS: METHODS** MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** General Biology-Symposia **KEYWORDS:** Biochemical Studies-General

KEYWORDS: Biophysics-General Biophysical Studies KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-General KEYWORDS: Pest Control LANGUAGE: eng

670. ---. Multiresidue Procedure for 136 Pesticides in High Organic Content Soils. 1997; 214, (1-2): Agro 101. Rec #: 2525 Keywords: METHODS, FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PESTICIDES METHODOLOGY POLLUTION METHANOL EXTRACTANT SOLID-PHASE EXTRACTION CHEMICAL IONIZATION CHEMICAL TRAP MASS SPECTROMETRY SOIL PROPERTIES GC-MASS SPECTROMETRY GAS CHROMATOGRAPHY-MASS SPECTROMETRY CHLOROTHALONIL RESIDUE DETERMINATION CAPTAN FOLPET CAPTAFOL SOIL CONTAMINATION BIOCHEMISTRY AND BIOPHYSICS EXTRACTION METHOD ANALYTICAL METHOD ORGANIC MATTER CONTENT MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Studies KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Public Health: Environmental Health-Air **KEYWORDS: Soil Science-General KEYWORDS:** Pest Control LANGUAGE: eng

Montano, L. M.; Campos, G.; Segura, P.; Vargas, M. H.; Ponce, H.; Bravo, J. L., and Selman, M. Effect of Ozone Exposure on the in-Vivo and in-Vitro Responsiveness of Guinea-Pig Airways. 1990; 141, (4 part 2): A476. Rec #: 1209 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT HISTAMINE AIRWAY HYPERREACTIVITY MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: GASES MESH HEADINGS: AMINO ACIDS MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS MESH HEADINGS: RESPIRATORY TRACT DISEASES/PHYSIOPATHOLOGY **MESH HEADINGS: POISONING** MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: IN VITRO MESH HEADINGS: TISSUE CULTURE MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: RODENTIA KEYWORDS: General Biology-Symposia KEYWORDS: Biochemistry-Gases (1970-) **KEYWORDS: Biochemical Studies-Proteins KEYWORDS:** Respiratory System-Pathology **KEYWORDS:** Toxicology-General **KEYWORDS:** In Vitro Studies KEYWORDS: Immunology and Immunochemistry-Immunopathology **KEYWORDS:** Allergy **KEYWORDS:** Caviidae LANGUAGE: eng

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KEYWORDS: Respiratory System-Pathology KEYWORDS: Toxicology-General KEYWORDS: In Vitro Studies KEYWORDS: Immunology and Immunochemistry-Immunopathology KEYWORDS: Allergy KEYWORDS: Caviidae LANGUAGE: eng

673. Moorman, G. W. and Lease, R. J. Residual Activity of Fungicides Applied to Geraniums in the Greenhouse. 1990; 80, (10): 979.
Rec #: 1251
Keywords: ABSTRACT
Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT PELARGONIUM-HORTORUM CULTIVAR RED ELITE BOTRYTIS-CINEREA ZINEB DICHLORAN CUPRIC HYDROXIDE VINCLOZOLIN CHLOROTHALONIL MANCOZEB PLANT FUNGUS FUNGICIDE AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: PLANTS KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Geraniaceae LANGUAGE: eng 674. ---. Residual Activity of Fungicides Applied to Geraniums in the Greenhouse. 1990; 80, (10): 979.

Rec #: 1251 Keywords: ABSTRACT Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT PELARGONIUM-HORTORUM CULTIVAR RED ELITE BOTRYTIS-CINEREA ZINEB DICHLORAN CUPRIC HYDROXIDE VINCLOZOLIN CHLOROTHALONIL MANCOZEB PLANT FUNGUS FUNGICIDE AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Geraniaceae

LANGUAGE: eng

675. Mori, T.; Fujie, K., and Katayama, A. Bacterial and Fungal Contributions to Chlorothalonil Degradation in Soil. 1998; 44, (3): 297-304.

Rec #: 500 Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The contributions of bacteria and fungi to the degradation of a chloroaromatic fungicide, chlorothalonil, in soil were evaluated quantitatively by a selective inhibition method. A mixture of ampicillin, chloramphenicol, and tetracycline was used to estimate the bacterial capacity, and cycloheximide to estimate the fungal capacity. A mixture of nutrient broth and yeast extract (NB+ YE) was added to the soil to minimize the partial sterilization effect by antibiotics. The degradation of chlorothalonil was measured for a period of 6 h when the degradation rate and the carbon dioxide evolution rate were constant. The contribution rates estimated with the addition of NB+ YE showed the same trend as the estimates with the addition of the dried powders of chlorothalonil susceptible microorganisms, indicating the validity of NB +YE as a substrate for the chlorothalonil-degrading microorganisms. The contribution of the degrading fungi increased in the soils receiving farmyard ma MESH HEADINGS: MICROBIOLOGICAL TECHNIQUES MESH HEADINGS: SOIL MICROBIOLOGY MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **MESH HEADINGS: BACTERIA MESH HEADINGS: FUNGI KEYWORDS:** Microbiological Apparatus **KEYWORDS:** Soil Microbiology KEYWORDS: Soil Science-Fertility and Applied Studies (1970-) **KEYWORDS:** Pest Control KEYWORDS: Bacteria-General Unspecified (1992-) **KEYWORDS:** Fungi-Unspecified

LANGUAGE: eng

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677. Morrall, R. Aa. Evolution of Lentil Diseases Over 25 Years in Western Canada. 1997; 19, (2): 197-207. Rec #: 2516

Keywords: NO TOX DATA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Lentil was first grown in Canada in 1969 and was relatively disease-free until 1978. By 1996 the crop occupied 300 000 ha annually. It is affected by three major diseases, ascochyta blight, anthracnose, and botrytis stem and pod rot. Ascochyta blight was reported in Saskatchewan in 1978; it causes major yield losses and seed discoloration, which is increased by late maturity and the practice of swathing. Horizontal spread of ascochyta blight from crop residues is limited, which is characteristic of rain-splash dispersal. Originally described as Ascochyta lentis, the pathogen is highly host specific, but morphologically indistinguishable from A. fabae, and was renamed A. fabae f. sp. lentis. A heterothallic Didymella teleomorph has been found in the USA, but not in Saskatchewan, even though both mating types are present. The pathogen population has increased in virulence since 1978 and the lentil cv. Laird, which was moderately resistant when released, is now highly sus MESH HEADINGS: EVOLUTION MESH HEADINGS: PLANTS/CYTOLOGY MESH HEADINGS: PLANTS/GENETICS MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: FUNGI MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: LEGUMES KEYWORDS:** Evolution **KEYWORDS:** Genetics and Cytogenetics-Plant **KEYWORDS: Ecology KEYWORDS:** Botany **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomycetes

KEYWORDS: Fungi Imperfecti or Deuteromycetes

KEYWORDS: Leguminosae LANGUAGE: eng

678. ---. Evolution of Lentil Diseases Over 25 Years in Western Canada. 1997; 19, (2): 197-207.

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Keywords: NO TOX DATA

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MESH HEADINGS: PLANTS/CYTOLOGY MESH HEADINGS: PLANTS/GENETICS MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: FUNGI MESH HEADINGS: VEGETABLES

MESH HEADINGS: FUNGI

MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PREVENTIVE MEDICINE

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA

MESH HEADINGS: MITOSPORIC FUNGI

MESH HEADINGS: LEGUMES

**KEYWORDS**: Evolution

**KEYWORDS:** Genetics and Cytogenetics-Plant

**KEYWORDS:** Ecology

**KEYWORDS:** Botany

KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi

KEYWORDS: Phytopathology-Parasitism and Resistance

KEYWORDS: Phytopathology-Disease Control

KEYWORDS: Pest Control

KEYWORDS: Ascomycetes

KEYWORDS: Fungi Imperfecti or Deuteromycetes

KEYWORDS: Leguminosae

LANGUAGE: eng

679. Morrison, L. S. and Russell, C. C. Timing of Fungicide - Adjuvant Mixtures for Control of Rose Blackspot. POPSOIL,ENV,MIXTURE; 1976; 60, (7): 634-636. Rec #: 1700 Call Number: NO MIXTURE (MZB), TARGET (BMY,CTN,MZB,TFR) Notes: EcoReference No.: 94599 Chemical of Concern: BMY,CTN,MZB,TFR

680. Mortazavi, S. A. In Vitro Assessment of Mucus/Mucoadhesive Interactions. Vol 124 iss oct 3 1995, p173-

182, (Ref 28).

Rec #: 2739 Keywords: NO TOX DATA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: IPA COPYRIGHT: ASHP To determine the nature of hydrogen bonding interactions between mucus gels and the model mucoadhesive polyacrylic acid, a logarithmic frequency sweep between 10 and 0.002 Hz was used to investigate the nature of interactions between homogenized mucus gels and carbomer 934P (carbopol 934P) at pH 6.2. The rheogram obtained was found to be intermediate between a physically entangled system and a cross-linked system, and was found to closely resemble that of a mixture of mucus glycoprotein and carbomer 934P (C934P). It was also found that the addition of the hydrogen bond breaking agents urea and potassium thiocyanate (KCNS) to a mixture of homogenized mucus934P resulted in a reduction in the storage modulus as well as the loss of modulus of the mixture. The addition of monosaccharides to the mucoadhesive polyacrylic acid (PAA) shifted the PAA carboxylic acid signals upfield and downfield, respectively. The incorporation of urea into C934P discs resulted in a reduction in their mucoadhesive strength in vitro. KEYWORDS: Carbomer 934P KEYWORDS: gels

KEYWORDS: gels KEYWORDS: mucoadhesion KEYWORDS: Polyacrylic acid KEYWORDS: Urea KEYWORDS: effects KEYWORDS: Polymers KEYWORDS: Polymers KEYWORDS: Excipients KEYWORDS: Mechanism of action KEYWORDS: Bioadhesion KEYWORDS: mucous membranes KEYWORDS: Carbopol 934P LANGUAGE: eng

681. ---. In Vitro Assessment of Mucus/Mucoadhesive Interactions. Vol 124 iss oct 3 1995, p173-182, (Ref 28). Rec #: 2739

Keywords: NO TOX DATA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: IPA COPYRIGHT: ASHP To determine the nature of hydrogen bonding interactions between mucus gels and the model mucoadhesive polyacrylic acid, a logarithmic frequency sweep between 10 and 0.002 Hz was used to investigate the nature of interactions between homogenized mucus gels and carbomer 934P (carbopol 934P) at pH 6.2. The rheogram obtained was found to be intermediate between a physically entangled system and a cross-linked system, and was found to closely resemble that of a mixture of mucus glycoprotein and carbomer 934P (C934P). It was also found that the addition of the hydrogen bond breaking agents urea and potassium thiocyanate (KCNS) to a mixture of homogenized mucus934P resulted in a reduction in the storage modulus as well as the loss of modulus of the mixture. The addition of monosaccharides to the mucoadhesive polyacrylic acid (PAA) shifted the PAA carboxylic acid signals upfield and downfield, respectively. The incorporation of urea into C934P discs resulted in a reduction in their mucoadhesive strength in vitro. **KEYWORDS:** Carbomer 934P **KEYWORDS**: gels **KEYWORDS:** mucoadhesion **KEYWORDS:** Polyacrylic acid **KEYWORDS:** Urea **KEYWORDS:** effects

KEYWORDS: Potassium thiocyanate KEYWORDS: Polymers KEYWORDS: Excipients KEYWORDS: Mechanism of action KEYWORDS: Bioadhesion KEYWORDS: mucous membranes KEYWORDS: Carbopol 934P LANGUAGE: eng

 Motonaga, K.; Takagi, K., and Matumoto, S. Suppression of Chlorothalonil Degradation in Soil After Repeated Application. 1998; 17, (8): 1469-1472. Rec #: 427

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Mechanisms of degradation suppression of chlorothalonil after repeated application were investigated. Under laboratory conditions, soil was treated sequentially with 40 mg/kg dry weight of chlorothalonil. This resulted in the degradation suppression of chlorothalonil and accumulation of the metabolite 4-hydroxy-2,5,6-trichloroisophthalonitrile (TPN-OH) in soil. After pretreatment with three kinds of chlorothalonil metabolite, only TPN-OH was found to suppress chlorothalonil degradation in soil. After the pretreatment of TPN-OH, residual chlorothalonil in soil at 1 week after application was 9 to 11% higher than those with pretreatment with other metabolites and control. The TPN-OH pretreatment also suppressed soil respiration and TPN-OH was more persistent in soil than chlorothalonil, indicating that toxicity of residual TPN-OH may suppress the degradation of chlorothalonil in soil.

MESH HEADINGS: METABOLISM

- MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: BIODEGRADATION MESH HEADINGS: INDUSTRIAL MICROBIOLOGY MESH HEADINGS: SOIL MICROBIOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Metabolism-General Metabolism KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Food and Industrial Microbiology-Biodegradation and Biodeterioration KEYWORDS: Soil Microbiology KEYWORDS: Pest Control LANGUAGE: eng
- 683. ---. Suppression of Chlorothalonil Degradation in Soil After Repeated Application. 1998; 17, (8): 1469-1472.

Rec #: 427

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Mechanisms of degradation suppression of chlorothalonil after repeated application were investigated. Under laboratory conditions, soil was treated sequentially with 40 mg/kg dry weight of chlorothalonil. This resulted in the degradation suppression of chlorothalonil and accumulation of the metabolite 4-hydroxy-2,5,6-trichloroisophthalonitrile (TPN-OH) in soil. After pretreatment with three kinds of chlorothalonil metabolite, only TPN-OH was found to suppress chlorothalonil degradation in soil. After the pretreatment of TPN-OH, residual chlorothalonil in soil at 1 week after application was 9 to 11% higher than those with pretreatment with other metabolites and control. The TPN-OH pretreatment also suppressed soil respiration and TPN-OH was more persistent in soil than chlorothalonil, indicating that toxicity of residual TPN-OH may suppress the degradation of

chlorothalonil in soil. MESH HEADINGS: METABOLISM MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: BIODEGRADATION MESH HEADINGS: INDUSTRIAL MICROBIOLOGY MESH HEADINGS: SOIL MICROBIOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Metabolism-General Metabolism KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Food and Industrial Microbiology-Biodegradation and Biodeterioration **KEYWORDS:** Soil Microbiology **KEYWORDS: Pest Control** LANGUAGE: eng

684. Moye, H. A.; Marshall, M. R., and Merlino, W. Extraction of Moderately Water Soluble Pesticides From Marine Waters Using Membrane and Bed Type Solid Phase Extraction Disks. 1997; 214, (1-2): Agro 99. Rec #: 2524 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT METHODOLOGY PESTICIDES SOLID-PHASE EXTRACTION ALACHLOR PESTICIDE **RESIDUE DETERMINATION MARINE WATER CONCENTRATION ATRAZINE** BROMACIL CHLOROTHALONIL CHLORPYRIFOS DIAZINON ENDOSULFAN SIMAZINE TRIFLURALIN POLLUTION BIOCHEMISTRY AND BIOPHYSICS BED TYPE DISK MEMBRANE TYPE DISK EXTRACTION METHOD MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Symposia **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Studies KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

 685. ---. Extraction of Moderately Water Soluble Pesticides From Marine Waters Using Membrane and Bed Type Solid Phase Extraction Disks. 1997; 214, (1-2): Agro 99. Rec #: 2524 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT METHODOLOGY PESTICIDES SOLID-PHASE EXTRACTION ALACHLOR PESTICIDE **RESIDUE DETERMINATION MARINE WATER CONCENTRATION ATRAZINE** BROMACIL CHLOROTHALONIL CHLORPYRIFOS DIAZINON ENDOSULFAN SIMAZINE TRIFLURALIN POLLUTION BIOCHEMISTRY AND BIOPHYSICS BED TYPE DISK MEMBRANE TYPE DISK EXTRACTION METHOD **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: General Biology-Symposia **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Studies KEYWORDS:** Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Public Health: Environmental Health-Air **KEYWORDS: Pest Control** LANGUAGE: eng

686. Muchovej, J. J. and Dhingra, O. D. Benzene and Ethanol for Treatment of Soybean Seeds with Systemic Fungicides. POP,REPSOIL,ENV,MIXTURE; 1979; 7, 449-454. Rec #: 260
Call Number: NO EFED CHEM (BNZ,TBA), NO ENDPOINT (BMY,CTN,ETHN,PNB) Notes: EcoReference No.: 72268
Chemical of Concern: BMY,BNZ,CTN,ETHN,PNB,TBA

687. Mugnier, J.; Chazalet, M.; Gaulliard, J. M.; Anelich, R. Y., and Gouot, J. M. Control of Seed, Soil-Borne and Foliar Fungal Diseases by Triticonazole Seed and Foliar Applications. GROENV,MIXTURE,TOP; 1994: 325-330. Rec #: 750
Call Number: NO EFED CHEM (CPZ,TDM,TTZ), NO MIXTURE (BMY,CBF,Captan), TARGET (BMY,CTN,Captan,FTF,IPD,PCZ,PPCP,PPCP2011,TEZ) Notes: EcoReference No.: 82848
Chemical of Concern: BMY,CBF,CPZ,CTN,Captan,FTF,IPD,PCZ,PPCP,TDM,TEZ,TTZ

Muir, D. C. ; Teixeira, C., and Wania, F. Empirical and Modeling Evidence of Regional Atmospheric Transport of Current-Use Pesticides. Rec #: 1154 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: Water samples from 30 lakes in Canada and the northeastern United States were analyzed for the occurrence of 27 current-use pesticides (CUPs). Eleven CUPs were frequently detected in lakes receiving agricultural inputs as well as in remote lakes hundreds of kilometers from known application areas. These included the triazine herbicide atrazine and its desethylated degradation product; the herbicides alachlor, metolachlor, and dacthal; the organophosphate insecticides chlorpyrifos, diazinon, and disulfoton; the organochlorine insecticides alpha-endosulfan and lindane; and the fungicides chlorothalonil and flutriafol. For six of the pesticides, empirical half-distances on the order of 560 to 1,820 km were estimated from the water-concentration gradient with latitude. For most of the pesticides, a suite of assessment models failed to predict such atmospheric long-range transport behavior, unless the effect of periods of lower hydroxyl radical concentrations and dry weather were taken into account. Observations and model results suggest that under the conditions prevailing in south-central Canada (relatively high latitude, low precipitation rates), many CUPs will be able to undergo regional-scale atmospheric transport and reach lakes outside areas of agricultural application. When assessing the potential of fairly reactive and water-soluble substances to undergo long-range transport, it is imperative to account for periods of no precipitation, to assure that degradation rate constants are correct, and to apply oxidant concentrations that are valid for the region and time period of interest.

MESH HEADINGS: Agriculture MESH HEADINGS: \*Air Movements MESH HEADINGS: Air Pollutants/\*analysis MESH HEADINGS: Canada MESH HEADINGS: \*Models, Theoretical MESH HEADINGS: Pesticides/\*analysis MESH HEADINGS: Solubility MESH HEADINGS: United States MESH HEADINGS: Water Pollutants, Chemical/\*analysis LANGUAGE: eng

689. ---. Empirical and Modeling Evidence of Regional Atmospheric Transport of Current-Use Pesticides.

Rec #: 1154

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Water samples from 30 lakes in Canada and the northeastern United States were analyzed for the occurrence of 27 current-use pesticides (CUPs). Eleven CUPs were frequently detected in lakes receiving agricultural inputs as well as in remote lakes hundreds of kilometers from known application areas. These included the triazine herbicide atrazine and its desethylated degradation product; the herbicides alachlor, metolachlor, and dacthal; the organophosphate insecticides chlorpyrifos, diazinon, and disulfoton; the organochlorine insecticides alpha-endosulfan and lindane; and the fungicides chlorothalonil and flutriafol. For six of the pesticides, empirical half-distances on the order of 560 to 1,820 km were estimated from the water-concentration gradient with latitude. For most of the pesticides, a suite of assessment models failed to predict such atmospheric long-range transport behavior, unless the effect of periods of lower hydroxyl radical concentrations and dry weather were taken into account. Observations and model results suggest that under the conditions prevailing in south-central Canada (relatively high latitude, low precipitation rates), many CUPs will be able to undergo regional-scale atmospheric transport and reach lakes outside areas of agricultural application. When assessing the potential of fairly reactive and water-soluble substances to undergo long-range transport, it is imperative to account for periods of no precipitation, to assure that degradation rate constants are correct, and to apply oxidant concentrations that are valid for the region and time period of interest. MESH HEADINGS: Agriculture

MESH HEADINGS: Agriculture MESH HEADINGS: \*Air Movements MESH HEADINGS: Air Pollutants/\*analysis MESH HEADINGS: Canada MESH HEADINGS: \*Models, Theoretical MESH HEADINGS: Pesticides/\*analysis MESH HEADINGS: Solubility MESH HEADINGS: United States MESH HEADINGS: Water Pollutants, Chemical/\*analysis LANGUAGE: eng Three Soil Hydrolases and Effects of Several Pesticides on Their Activities. 1990; 15, (4): 593-598.

Rec #: 1257

Keywords: BACTERIA Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Effects of pesticides on the activities of acid phosphatase, arylesterase and aryl acylamidase in soil were examined under upland field and/or laboratory conditions. We established methods to assay the activities of arylesterase and aryl acylamidase, while a known method was applied for acid phosphatase. Fenitrothion EC, chlorothalonil WP and paraquat SL were the main pesticides used and trichlorfon was additional for laboratory tests. Effects of the pesticides on the activities of acid phosphat arylesterase in soil were small or moderate when they were applied at conventional and 5-fold rates. Trichlorfon and fenitrothion EC inhibited the activity of aryl acylamidase, but the effect was temporary and the activity seemed to easily recover with the degradation of the pesticides or proliferation of microorganisms.

MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENZYMES/ANALYSIS MESH HEADINGS: ENZYMES/CHEMISTRY MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Methods **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS:** Enzymes-Methods **KEYWORDS:** Enzymes-Chemical and Physical KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Pest Control LANGUAGE: eng

691. ---. Enzymological Properties of Three Soil Hydrolases and Effects of Several Pesticides on Their Activities. 1990; 15, (4): 593-598.

Rec #: 1257

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Effects of pesticides on the activities of acid phosphatase, arylesterase and aryl acylamidase in soil were examined under upland field and/or laboratory conditions. We established methods to assay the activities of arylesterase and aryl acylamidase, while a known method was applied for acid phosphatase. Fenitrothion EC, chlorothalonil WP and paraquat SL were the main pesticides used and trichlorfon was additional for laboratory tests. Effects of the pesticides on the activities of acid phosphat arylesterase in soil were small or moderate when they were applied at conventional and 5-fold rates. Trichlorfon and fenitrothion EC inhibited the activity of aryl acylamidase, but the effect was temporary and the activity seemed to easily recover with the degradation of the pesticides or proliferation of microorganisms.

MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENZYMES/ANALYSIS MESH HEADINGS: ENZYMES/CHEMISTRY MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Methods KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Enzymes-Methods KEYWORDS: Enzymes-Chemical and Physical KEYWORDS: Soil Science-Physics and Chemistry (1970- ) KEYWORDS: Pest Control LANGUAGE: eng

692. Nash, M. A.; Hoffmann, A. A., and Thomson, L. J. Identifying Signature of Chemical Applications on Indigenous and Invasive Nontarget Arthropod Communities in Vineyards. 2010; 20, (6): 1693-1703. Rec #: 1560 Keywords: NO CONC,NO DURATION,SURVEY Call Number: NO CONC (CTN,Captan,CuOH,CuS,FDX,FRM,IPD,MFX,MZB,RMLX,SFR), NO DURATION (CTN,Captan,CuOH,CuS,FDX,FRM,IPD,MFX,MZB,RMLX,SFR), NO EFED CHEM (CYD,FHX,IDC,TFX), NO SURVEY (CTN,Captan,CuOH,CuS,FDX,FRM,IPD,MFX,MZB,RMLX,SFR), NO EFED CHEM (CYD,Gaptan,CuOH,CuS,FDX,FRM,IPD,MFX,MZB,RMLX,SFR) Notes: Chemical of Concern: CTN,CYD,Captan,CuOH,CuS,FDX,FHX,FRM,IDC,IPD,MFX,MZB,RMLX,SFR,TFX

693. Navarro, C.; Escolar, G.; Bravo, M. L.; Jimenez, E., and Bulbena, O. Effect of Zinc Acexamate and Ranitidine on Chronic Gastric Lesions in the Rat. 1990; 45, (3): 121-129. Rec #: 740 Keywords: HUMAN HEALTH Call Number: NO COC(CTN) Notes: Chemical of Concern: ACAC

- 694. Neher, O. T.; Johnston, M. R.; Zidack, N. K., and Jacobsen, B. J. Evaluation of Bacillus mycoides Isolate BmJ and B. mojavensis Isolate 203-7 for the Control of Anthracnose of Cucurbits Caused by Glomerella cingulata var. orbiculare. BCMSOIL,ENV,MIXTURE; 2009; 48, (2): 140-146. Rec #: 1130 Call Number: NO EFED CHEM (ABZM), NO MIXTURE (AZX,CTN) Notes: EcoReference No.: 156716 Chemical of Concern: ABZM,AZX,CTN
- 695. Nielsen, S. L. Chemicals Tested in the Laboratory for the Control of Black Current Gall Mite (Cecidophyopsis ribis) Westw. MORENV,MIXTURE; 1987; 91, (1): 89-94. Rec #: 1010 Call Number: NO CONTROL(ALL CHEMS) Notes: EcoReference No.: 77570 Chemical of Concern: TDF,OML,PRM,CYP,FNV,MOM,DM,Captan,BMY,CTN,FPP
- 696. Nigg, H. N.; Strandberg, J. O.; Beier, R. C.; Petersen, H. D., and Harrison, J. M. Furanocoumarins in Florida Celery Varieties Increased by Fungicide Treatment. BCMSOIL,ENV; 1997; 45, (4): 1430-1436. Rec #: 530 Call Number: OK(CuOH),NO CROP(CTN) Notes: EcoReference No.: 67323 Chemical of Concern: CuOH,CTN
- 697. Nishina, Takuro; Kien, Chu Ngoc; Noi, Nguyen Van; Ngoc, Ha Minh; Kim, Chul-Sa; Tanaka, Sota; Iwasaki, Kz, and Iwasaki, Kz. Pesticide Residues in Soils, Sediments, and Vegetables in the Red River Delta, Northern Vietnam. 2010 Oct; 169, (1-4): 285-297. Rec #: 11632

Keywords: SURVEY

Notes: Chemical of Concern: CTN

Abstract: Abstract: This study assessed pesticide residues in soils, sediments, and vegetables in the Xuan Khe and Hop Ly communes located along the Chau Giang River in the Red River Delta, northern Vietnam. Samples were collected from agricultural areas within and outside of embankments built to prevent flooding. In Xuan Khe, the soils outside of the embankment were more clayey with higher organic matter contents compared with the inside, due to selective deposition during river flooding. Many of the soils contained significant amounts of pesticides including dichlorodiphenyltrichloroethane (DDT), dicofol, isoprothiolane, and metalaxyl although their levels were below the maximum allowable concentration set by the Vietnamese government. The spectrum of DDT derivatives found suggested that the source of DDTs was not contaminated dicofol. Soils in Hop Ly resembled soils in Xuan Khe but were relatively sandy; one field showed appreciable contents of DDT derivatives. The ratios of (p,p super(')dichlorodiphenyldichloroethylen e + p,p super(')-dichlorodiphenyldichloroethane) / capital sigma DDT in the surface and subsurface soils in Hop Ly were 0.34 and 0.57, suggesting that the DDTs originated from recent application. Pesticide residues in soils were not likely to translocate into vegetable crops, except for metalaxyl. High concentrations of cypermethrins in kohlrabi leaves could be ascribed to foliar deposition. Date revised - 2010-10-01. Publication date - Oct 2010. Language of summary - English. Pages - 285-297. ProQuest ID - 808664537. Corporate institution

author - Nishina, Takuro; Kien, Chu Ngoc; Noi, Nguyen Van; Ngoc, Ha Minh; Kim, Chul-Sa; Tanaka, Sota; Iwasaki, Kz. DOI - OB-881358cd-a753-4fe8-bb9fmfgefd107; 13778243; 10.1007/s10661-009-1170-8; 0167-6369; 1573-2959

698. Nishiuchi, Y. Toxicity of Pesticides to Some Water Organisms. MORWATER, AQUA; 1972; 12, 122-128 (JPN) (ENG TRANSL).

Rec #: 1040

Call Number: NO CONTROL(ALL CHEMS)//NO RESIDUE

Notes: EcoReference No.: 10258

Chemical of Concern:

3CE,AC,AMTL,AMTR,AND,As,ATZ,BMC,BS,Captan,CBL,CPA,CPY,CTN,Cu,DBN,DCPA,D DT,DDVP,DLD,DMB,DMT,DPA,DSMA,DU,DZ,EDB,EDC,EN,EPTC,ES,ETN,Fe,FLAC,FML, FNT,FNTH,HCCH,Hg,HPT,LNR,MCAP,MCPB,MCPP1,MDT,MLN,MOM,MP,MTAS,NALED, Ni,NTCN,OPHP,Pb,PCB,PCP,PCZ,PEB,PHMD,PHSL,PHTH,PMT,PNB,PPX,PPZ,PRN,PSM,P YN,SFL,SID,STREP,SZ,TBC,TFN,THM,TPE,TPH,TPM,TRN,Zn

699. Nishiuchi, Y. and Yoshida, K. Toxicities of Pesticides to Some Fresh Water Snails. GRO, MOR, PHYAQUA, Unspecified; 1972; 12, 86-92 (JPN) (ENG ABS) (ENG TRANSL) (Author Communication Used). Rec #: 980 Call Number: NO CONTROL (ACR,BFL,CAP,CBL,CTN,CuOH,CuOX,CuS,DAED,DCF,DDVP,DMT,DOD,DZ,ES,FNT,Folpe t,KSM,MDT,MOM,MP,NaPCP,PAQT,PHMD,PPN,QOC,RTN,TBC,TBTO,TCF,TFN,Ziram), NO EFED CHEM (AMTR,AND,ANZ,CZE,DDT,DINO,EN,EPRN,ETN,HCCH,OTO,PEB,PHSL,PPCP,PRN,PYN, TPE, TPTH, Zineb), NO ENDPOINT (ACR.BFL,CAP,CBL,CTN,CuOH,CuOX,CuS,DAED,DCF,DDVP,DMT,DOD,DZ,ES,FNT,Folpe t,KSM,MDT,MOM,MP,NaPCP,PAQT,PHMD,PPN,QOC,RTN,TBC,TBTO,TCF,TFN,Ziram) Notes: EcoReference No.: 9158 Chemical of Concern: ACR,AMTR,AND,ANZ,BFL,CAP,CBL,CTN,CZE,CuOH,CuOX,CuS,DAED,DCF,DDT,DDVP, DINO,DMT,DOD,DZ,EN,EPRN,ES,ETN,FNT,Folpet,HCCH,KSM,MDT,MOM,MP,NaPCP,OT Q,PAQT,PEB,PHMD,PHSL,PPCP,PPN,PRN,PYN,QOC,RTN,TBC,TBTO,TCF,TDE,TFN,TPE,T PTH,Zineb,Ziram

700. ---. Toxicities of Pesticides to Some Fresh Water Snails. PHY,GROWATER,AQUA; 1972; 12, 86-92 (JPN) (ENG ABS) (ENG TRANSL) (Author Communication Used).

Rec #: 1030 Call Number: NO FOREIGN,CONTROL(ALL CHEMS) Notes: EcoReference No.: 9158 Chemical of Concern: AMTR,AND,CBL,CTN,CuOH,CuS,CZE,DCF,DDT,DDVP,DEM,DINO,DMT,DOD,DZ,EN,ES, ETN,FNT,Folpet,HCCH,MDT,MOM,MP,NPH,PAQT,PCP,PEB,PHMD,PHSL,PPN,PRN,PYN,R TN,TBC,TCF,TDE,TFN,Zineb,Ziram,Zn

701. Northover, J. and Ripley, B. D. Persistence of Chlorothalonil on Grapes and Its Effect on Disease Control and Fruit Quality. ACC,GRO,PHY,POP. 3677: SOIL,ENV; 1980; 28, (5): 971-974. Rec #: 540 Call Number: NO CROP(CTN),NO MIXTURE(MZB,DINO,PIM) Notes: EcoReference No.: 52739 Chemical of Concern: MZB,CTN,DINO,PIM

702. O'malley, M. A. Skin Reactions to Pesticides. 1997; 12, (2): 327-345.

Rec #: 2503

Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CASE STUDY LITERATURE REVIEW HUMAN OCCUPATIONAL HEALTH PESTICIDES TOXICOLOGY PESTICIDE TOXIN SKIN REACTIONS DERMATOSES INTEGUMENTARY SYSTEM OCCUPATIONAL SKIN DISEASE FUNGICIDES FUNGICIDE INSECTICIDES INSECTICIDE MITICIDE HERBICIDE CONTACT DERMATITIS TOXICITY PESTICIDE-INDUCED OCCUPATIONAL EXPOSURE INTEGUMENTARY SYSTEM DISEASE MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIOLOGY MESH HEADINGS: FOSSILS MESH HEADINGS: HOMINIDAE **KEYWORDS:** Integumentary System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Paleobiology **KEYWORDS:** Hominidae LANGUAGE: eng

703. ---. Skin Reactions to Pesticides. 1997; 12, (2): 327-345.

Rec #: 2503

Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM CASE STUDY LITERATURE REVIEW HUMAN OCCUPATIONAL HEALTH PESTICIDES TOXICOLOGY PESTICIDE TOXIN SKIN REACTIONS DERMATOSES INTEGUMENTARY SYSTEM OCCUPATIONAL SKIN DISEASE FUNGICIDES FUNGICIDE INSECTICIDES INSECTICIDE MITICIDE HERBICIDE CONTACT DERMATITIS TOXICITY PESTICIDE-INDUCED OCCUPATIONAL EXPOSURE INTEGUMENTARY SYSTEM DISEASE MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIOLOGY MESH HEADINGS: FOSSILS MESH HEADINGS: HOMINIDAE KEYWORDS: Integumentary System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Paleobiology KEYWORDS: Hominidae LANGUAGE: eng

704. O'Neill, T. M.; Cook, R. J., and Winter, A. Spray Timing and Control of Septoria tritici in Winter Wheat. POPSOIL,ENV; 1988; 9, 40-41. Rec #: 890
Call Number: NO EFED CHEM (TDM), NO MIXTURE (CAP,CBD,CTN), TARGET (PCZ,PPCP,PPCP2011)
Notes: EcoReference No.: 91154
Chemical of Concern: CAP,CBD,CTN,PCZ,PPCP,TDM

 705. ---. Spray Timing and Control of Septoria tritici in Winter Wheat. POPSOIL,ENV; 1988; 9, 40-41. Rec #: 1060 Call Number: NO MIXTURE(CTN,CAP),OK TARGET(PCZ) Notes: EcoReference No.: 91154 Chemical of Concern: CTN,PCZ,CBD,TDM,CAP

706. O'Neill, T. M.; Hanks, G. R., and Wilson, D. W. Control of Smoulder (Botrytis narcissicola) in Narcissus with Fungicides. POPSOIL,ENV,MIXTURE; 2004; 145, (1): 129-137. Rec #: 760
Call Number: EFFICACY (AZX,CTN,FUZ,IPD,TEZ,VCZ), NO EFED CHEM (CYD,ECZ,KRSM,TPM), NO MIXTURE (FUZ,TPM), TARGET (AZX,CTN,FUZ,IPD,TEZ,VCZ) Notes: EcoReference No.: 82373
Chemical of Concern: AZX,CTN,CYD,ECZ,FUZ,IPD,KRSM,PMY,TEZ,TPM,VCZ

707. ---. Control of Smoulder (Botrytis narcissicola) in Narcissus with Fungicides. GRO,POP,PHYSOIL,ENV,MIXTURE; 2004; 145, (1): 129-137. Rec #: 560 Call Number: OK(ALL CHEMS),NO MIXTURE(BMY,FUZ,IPD,TPE),NO CROP(CTN,MZB) Notes: EcoReference No.: 82373 Chemical of Concern: PMY,KRSM,TPE,IPD,FZN,DFC,CYD,FUZ,CTN,MZB,BMY,AZX,CBD,TEZ,VCZ,MPP

708. O'Neill, T. M. and Pye, D. Evaluation of Fungicides for Control of Chrysanthemum White Rust (Puccinia horiana). GRO,POPSOIL,ENV,MIXTURE; 1997; 18, 8-9. Rec #: 590
Call Number: NO EFED CHEM (OXC), NO ENDPOINT (AZX,MYC,MZB,PCZ,PPCP,PPCP2011), NO MIXTURE (CTN) Notes: EcoReference No.: 90905
Chemical of Concern: AZX,CTN,MYC,MZB,OXC,PCZ,PPCP

709. O'neill, T. M. and Pye, D. Evaluation of Fungicides for Control of Chrysanthemum White Rust Puccinia Horiana. 1997; 0, (18): 8-9.

Rec #: 2569 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE PUCCINIA-HORIANA CHRYSANTHEMUM WHITE RUST PEST MANAGEMENT MANCOZEB FUNGICIDE CHLOROTHALONIL FENPROPIMORPH PROPICONAZOLE AZOXYSTROBIN HORTICULTURE MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: BASIDIOMYCOTA **KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Basidiomycetes LANGUAGE: eng

710. O'Neill, T. M. and Pye, D. Evaluation of Fungicides for Control of Chrysanthemum White Rust (Puccinia horiana). POP,GROSOIL,ENV,MIXTURE; 1997; 18, 8-9. Rec #: 1070 Call Number: NO ENDPOINT(MZB,CTN,PCZ),NO MIXTURE(CTN) Notes: EcoReference No.: 90905 Chemical of Concern: MZB,CTN,PCZ,AZX,OXC,MYC

711. O'Neill, T. M.; Pye, D., and Locke, T. The Effect of Fungicides, Irrigation and Plant Density on the Development of Peronospora sparsa, the Cause of Downy Mildew in Rose and Blackberry. GRO,POP,PHYSOIL,ENV,MIXTURE; 2002; 140, (2): 207-214. Rec #: 1080
Call Number: NO ENDPOINT(FSTAl,FZN,MZB,PPM,CTN,Cu),NO MIXTURE(CMX,ODL,MLX,THM) Notes: EcoReference No.: 66768
Chemical of Concern: CMX,ODL,FSTAl,FZN,MZB,MLX,PPM,CTN,THM,Cu

712. Obana, H.; Akutsu, K.; Okihashi, M., and Hori, S. Multiresidue Analysis of Pesticides in Vegetables and Fruits Using Two-Layered Column With Graphitized Carbon and Water Absorbent Polymer. Rec #: 1255 Keywords: SURVEY, NO SPECIES (DEAD) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: A high-throughput multiresidue analysis of pesticides in non-fatty vegetables and fruits was developed. The method consisted of a single extraction and a single clean-up procedure. Food samples were extracted with ethyl acetate and the mixture of extract and food dregs were poured directly into the clean-up column. The clean-up column consisted of two layers of water-absorbent polymer (upper) and graphitized carbon (lower), which were packed in a reservoir (75 ml ) of a cartridge column. The polymer removed water in the extract while the carbon performed clean-up. In a recovery test, 110 pesticides were spiked and average recoveries were more than 95% from spinach and orange. Most pesticides were recovered in the range 70-115% with RSD usually < 10% for five experiments. The residue analyses were performed by the extraction of 12 pesticides from 13 samples. The two methods resulted in similar residue levels except chlorothalonil in celery, for which the result was lower with the proposed method. The results confirmed that the proposed method could be applied to monitoring of pesticide residue in

foods.

MESH HEADINGS: \*Food Contamination MESH HEADINGS: Fruit/\*chemistry MESH HEADINGS: Graphite MESH HEADINGS: Humans MESH HEADINGS: Pesticide Residues/\*analysis MESH HEADINGS: Polymers MESH HEADINGS: Vegetables/\*chemistry LANGUAGE: eng

713. ---. Multiresidue Analysis of Pesticides in Vegetables and Fruits Using Two-Layered Column With Graphitized Carbon and Water Absorbent Polymer.

Rec #: 1255

Keywords: SURVEY, NO SPECIES (DEAD)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: A high-throughput multiresidue analysis of pesticides in non-fatty vegetables and fruits was developed. The method consisted of a single extraction and a single clean-up procedure. Food samples were extracted with ethyl acetate and the mixture of extract and food dregs were poured directly into the clean-up column. The clean-up column consisted of two layers of water-absorbent polymer (upper) and graphitized carbon (lower), which were packed in a reservoir (75 ml ) of a cartridge column. The polymer removed water in the extract while the carbon performed clean-up. In a recovery test, 110 pesticides were spiked and average recoveries were more than 95% from spinach and orange. Most pesticides were recovered in the range 70-115% with RSD usually < 10% for five experiments. The residue analyses were performed by the extraction of 12 pesticides from 13 samples. The two methods resulted in similar residue levels except chlorothalonil in celery, for which the result was lower with the proposed method. The results confirmed that the proposed method could be applied to monitoring of pesticide residue in foods.

MESH HEADINGS: \*Food Contamination MESH HEADINGS: Fruit/\*chemistry MESH HEADINGS: Graphite MESH HEADINGS: Humans MESH HEADINGS: Pesticide Residues/\*analysis MESH HEADINGS: Polymers MESH HEADINGS: Vegetables/\*chemistry LANGUAGE: eng

714. Olien, W. C.; Miller, R. W. Jr.; Graham, C. J.; Taylor, E. R. Jr., and Hardin, M. E. Effects of Combined Applications of Ammonium Thiosulphate and Fungicides on Fruit Load and Blossom Blight and Their Phytotoxicity to Peach Trees. PHY,POPSOIL,ENV,MIXTURE; 1995; 70, (5): 847-854. Rec #: 970
Call Number: EFFICACY (CTN,SFR), NO EFED CHEM (NHTS,TPM), OK (BMY,Captan,IPD,PCZ,PPCP,PPCP2011,TFR,VCZ), TARGET (CTN,SFR) Notes: EcoReference No.: 96140
Chemical of Concern: BMY,CTN,Captan,IPD,NHTS,PCZ,PPCP,SFR,TFR,TPM,VCZ

715. Omura, M.; Hashimoto, K.; Ohta, K.; Iio, T.; Ueda, S.; Ando, K.; Hiraide, H., and Kinae, N. Relative Retention Time Diagram as a Useful Tool for Gas Chromatographic Analysis and Electron-Capture Detection of Pesticides. 1990; 73, (2): 300-306. Rec #: 1189
Keywords: METHODS
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. To establish efficient operating conditions for gas chromatographic (GC) analysis of pesticides that are detected by electron-capture detector (ECD), separation degrees of 40 pesticides and their relative retention times (RRT) vs aldrin were determined. Eleven liquid phases, categorized according to the McReynolds
constant (MC), were used: OV-1, OV-3, DC-550, and OV-17 as non- or low polar liquid phases  $(MC \mid 1000)$ , OV-22, OF-1, and XE-60 as medium polar liquid phases (1000,  $< MC \mid 2000)$ , PEG-20 liquid phases (2000 < MC), and a mixture of DC-200 and EPON 1009. An RRT diagram was prepared by plotting the RRT of each pesticide on the horizontal axis and the MC values on the vertical axis. The RRT diagram could be used to describe the properties of pesticides-their behavior on each liquid phase and the precise operational conditions for qualitative GC analysis. The non- or low polar liquid phases were best suited for GC analysis of organochlorine pesticides having low MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Biochemical Methods-General KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Agronomy-General **KEYWORDS:** Pest Control LANGUAGE: eng

716. ---. Relative Retention Time Diagram as a Useful Tool for Gas Chromatographic Analysis and Electron-Capture Detection of Pesticides. 1990; 73, (2): 300-306.
 Rec #: 1189

Keywords: METHODS

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MESH HEADINGS: FOOD TECHNOLOGY

MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Methods-General** KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Agronomy-General **KEYWORDS:** Pest Control LANGUAGE: eng

 717. Oubina, A.; Gascon, J., and Barcelo, D. Multianalyte Effect in the Determination of Cross-Reactivities of Pesticide Immunoassays in Water Matrices. 1997; 347, (1-2): 121-130. Rec #: 2509

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. An extension of Abraham's method to calculate cross-reactivity (CR) is presented. Over a wide concentration range the response curves of a cross-reactant were compared with those of a standard applied to four immunoassay commercial kits (benomyl/carbendazim, chlorothalonil, metolachlor and parathion-ethyl). Various doses of cross-reactants (0-1000 mug/l) were tested in the presence of various doses of the standard (0-100 mug/l). The results showed that the percentage of the cross-reactivity (%CR) decreased as a function of the concentration of cross-reactant present in the water and high %CR values were found in comparison with those reported in commercial kits. This indicates a better sensitivity for many analytes as compared to values actually reported in the ELISA (Enzyme-Linked ImmunoSorbent Assay) kits. Applications of the CR studies are also presented that should help in the acceptance or rejection of a concentration range of cross-reactants in a real sample. When

MESH HEADINGS: ECOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: IMMUNITY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Methods-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Immunology and Immunochemistry-General KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

718. ---. Multianalyte Effect in the Determination of Cross-Reactivities of Pesticide Immunoassays in Water Matrices. 1997; 347, (1-2): 121-130.

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MESH HEADINGS: ECOLOGY

MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: IMMUNITY MESH HEADINGS: AIR POLLUTION

MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Methods-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Immunology and Immunochemistry-General KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control

LANGUAGE: eng

719. P.P., Parsons. Chapter 91 - Mammalian Toxicokinetics and Toxicity of Chlorothalonil. Robert Krieger. Hayes' Handbook of Pesticide Toxicology (Third Edition). New York: Academic Press; 2010: 1951-1966. Rec #: 540 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ISSN/ISBN: 978-0-12-374367-1

720. Pariseau, J.; McKenna, P.; AboElkhair, M.; Saint-Louis, R.; Pelletier, E.; Davidson, T. J.; Tremblay, R.;

Berthe, F. C. J., and Siah, A. Effects of Pesticide Compounds (Chlorothalonil and Mancozeb) and Benzo(a)Pyrene Mixture on Aryl Hydrocarbon Receptor, p53 and Ubiquitin Gene Expression Levels in Haemocytes of Soft-Shell Clams (Mya arenaria). 2011; 20, (8): 1765-1772. Rec #: 1540 Keywords: MIXTURE Call Number: NO EFED CHEM (BAP), NO MIXTURE (CTN,ETHN,MZB) Notes: Chemical of Concern: BAP,CTN,ETHN,MZB

- Park, C. G.; Yoo, J. K., and Lee, J. O. Toxicity of Some Pesticides to Twospotted Spider Mite (Acari: Tetranychidae) and Its Predator Amblyseius womersleyi (Acari: Phytoseiidae). MOR,REP. Div. Dep. Plant Protection, Natl. Inst. Agric. Sci. and Technol., Suwon 441-707, South Korea////: ENV,MIXTURE; 1996; 35, (3): 232-237. Rec #: 110
  Call Number: NO ENDPOINT (CTN,FRM,Folpet), NO MIXTURE (Captan,MZB), TARGET (ABM,CTZ,DCF,DFZ,HTX,IMC) Notes: EcoReference No.: 156713
  Chemical of Concern: ABM,CTN,CTZ,Captan,DCF,DFZ,FRM,Folpet,HTX,IMC,MZB
- 722. Parungo, F. ; Nagamoto, C.; Hoyt, S., and Bravo-a, H. The Investigation of Air Quality and Acid Rain Over the Gulf of Mexico. 1990; 24, (1): 109-124.
  - Rec #: 1716

Keywords: NO TOX DATA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A research cruise was conducted in the summer of 1986 by a group of scientists from the U.S.A. and Mexico to investigate air chemistry over the Gulf of Mexico. Chemical, physical, meterological and oceanographic measurements were carried out to survey temporal and spatial variations of diverse parameters throughout the Gulf. Emphases were placed on air-sea-land exchange of gases and aerosols, natural air quality, transport of anthropogenic air pollution, and acid rain deposition to the Gulf. Although the prevailing winds were easterly from the sea during the cruise, the air was highly polluted with continental aerosols, probably caused by local shifting winds and the oscillation between sea breeze and land breeze. Aerosol number concentrations were measured from 105 cm-3 at ports to 103 cm-3 in the open Gulf. The average aerosol mass concentration wasarticles that contained Si, Al, Fe; 30% seasalt particles that contained Na+ and Cl-; and 10% anthropogenic sulfate and ni

MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: MINERALS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION **KEYWORDS: Ecology KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Biochemical Studies-Minerals KEYWORDS: Public Health: Environmental Health-Air LANGUAGE: eng

 723. ---. The Investigation of Air Quality and Acid Rain Over the Gulf of Mexico. 1990; 24, (1): 109-124. Rec #: 1716
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- Pasquini, R.; Scassellati-Sforzolini, G.; Dolara, P.; Pampanella, L.; Villarini, M.; Caderni, G.; Fazi, M., and Fatigoni, C. Assay of Linuron and a Pesticide Mixture Commonly Found in the Italian Diet, for Promoting Activity in Rat Liver Carcinogenesis. BCM,GRO,MORINJECT,ORAL; 1994; 75, (3-4): 170-176. Rec #: 220 Call Number: NO EFED CHEM (DPA,EPRN,PRN), NO MIXTURE (BMY,CPP,CPY,CTN,FRM,LNR,MDT,MP) Notes: EcoReference No.: 104817 Chemical of Concern: BMY,CPP,CPY,CTN,DPA,EPRN,FRM,LNR,MDT,MP,PRN
- 725. Patel, K.; Fussell, R. J.; Goodall, D. M., and Keely, B. J. Analysis of Pesticide Residues in Lettuce by Large Volume-Difficult Matrix Introduction-Gas Chromatography-Time of Flight-Mass Spectrometry (Lv-Dmi-Gc-Tof-Ms). Rec #: 2036 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: A multi-residue method is described that eliminates the need for a cleanup step and thus allows the rapid determination of pesticides in crude extracts of lettuce. Samples were extracted with a mixture of ethyl acetate, Na2SO4 and NaHCO3 and the crude extracts analysed directly using large volume-difficult matrix introduction (LV-DMI) in combination with gas chromatography-time of flight-mass spectrometry (GC-TOF-MS). The LV-DMI procedure described was evaluated for the analysis of dimethoate, pyrimethanil, chlorothalonil, vinclozolin, furalaxyl and oxadixyl. Satisfactory response was obtained at the lowest calibrated level (LCL) of 0.0025 microg ml(-1), with good linearity over the range 0.0025-0.5 microg ml(-1) (0.005-1.0 mg kg(-1) equivalent). Average recoveries between 73 and 118% were obtained at the 0.01-0.5 mg kg(-1) levels with RSD values < or = 13%. MESH HEADINGS: Automatic Data Processing/methods

MESH HEADINGS: Chromatography, Gas/methods MESH HEADINGS: Lettuce/\*chemistry MESH HEADINGS: Oxazoles/analysis MESH HEADINGS: Pesticide Residues/\*analysis MESH HEADINGS: Pyrimidines/analysis MESH HEADINGS: Spectrum Analysis/methods LANGUAGE: eng

726. ---. Analysis of Pesticide Residues in Lettuce by Large Volume-Difficult Matrix Introduction-Gas Chromatography-Time of Flight-Mass Spectrometry (Lv-Dmi-Gc-Tof-Ms). Rec #: 2036 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: A multi-residue method is described that eliminates the need for a cleanup step and thus allows the rapid determination of pesticides in crude extracts of lettuce. Samples were extracted with a mixture of ethyl acetate, Na2SO4 and NaHCO3 and the crude extracts analysed directly using large volume-difficult matrix introduction (LV-DMI) in combination with gas chromatography-time of flight-mass spectrometry (GC-TOF-MS). The LV-DMI procedure described was evaluated for the analysis of dimethoate, pyrimethanil, chlorothalonil, vinclozolin, furalaxyl and oxadixyl. Satisfactory response was obtained at the lowest calibrated level (LCL) of 0.0025 microg ml(-1), with good linearity over the range 0.0025-0.5 microg ml(-1) (0.005-1.0 mg kg(-1) equivalent). Average recoveries between 73 and 118% were obtained at the 0.01-0.5 mg kg(-1) levels with RSD values < or = 13%. MESH HEADINGS: Automatic Data Processing/methods MESH HEADINGS: Chromatography, Gas/methods MESH HEADINGS: Lettuce/\*chemistry MESH HEADINGS: Oxazoles/analysis MESH HEADINGS: Pesticide Residues/\*analysis MESH HEADINGS: Pyrimidines/analysis MESH HEADINGS: Spectrum Analysis/methods LANGUAGE: eng

- Paulus, A. O.; Nelson, J.; Besemer, S.; Brendler, B., and Hall, B. New Systemic Fungicides for Control of Ornamental and Vegetable Diseases. POPSOIL,ENV; 1980; 45, (2): 245-252. Rec #: 1470
  Call Number: NO EFED CHEM (ANZ,DINO,OTQ,OXC), NO MIXTURE (MZB), TARGET (BMY,CTN,MZB,TDF)
  Notes: EcoReference No.: 115895
  Chemical of Concern: ANZ,BMY,CTN,DINO,MZB,OTQ,OXC,TDF
- 728. Penuela, G. A. and Barcelo, D. Photodegradation and Stability of Chlorothalonil in Water Studied by Solid-Phase Disk Extraction, Followed by Gas Chromatographic Techniques. 1998; 823, (1-2): 81-90.

Rec #: 561

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Photodegradation of chlorothalonil was studied in deionized and ground water with sunlight and Suntest apparatus, with and without FeCI32O2 and TiO2/H2O2. After irradiation of the water samples spiked at 28-100 mug/l of chlorothalonil, the water solutions were preconcentrated using solid-phase disk extraction with C18 and analyzed by gas chromatography-electron capture and gas chromatography-mass spectrometric detection. The degradation products identified by GC-MS were: trichloro-1,3-dicyanobenzene, dichloro-1,3-dicyanobenzene and chloro-1,3-dicyanobenzene. The degradation kinetics followed a first order reaction and the R.S.D. of rate constants, for n=3, varied from 2 to 14%. Halflives varied between 0.7 and 101 h. The stability of chlorothalonil on C18 Empore disks was also investigated at 20eC, 4eC and -20eC for periods of up to 3 months. Chorothalonil was

not degraded on C18 Empore disks. MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: DARKNESS MESH HEADINGS: LIGHT MESH HEADINGS: LIGHTING MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Conservation **KEYWORDS: Biochemical Methods-General KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS: External Effects-Light and Darkness** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

729. ---. Photodegradation and Stability of Chlorothalonil in Water Studied by Solid-Phase Disk Extraction, Followed by Gas Chromatographic Techniques. 1998; 823, (1-2): 81-90.

Rec #: 561

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Photodegradation of chlorothalonil was studied in deionized and ground water with sunlight and Suntest apparatus, with and without FeCl32O2 and TiO2/H2O2. After irradiation of the water samples spiked at 28-100 mug/l of chlorothalonil, the water solutions were preconcentrated using solid-phase disk extraction with C18 and analyzed by gas chromatography-electron capture and gas chromatography-mass spectrometric detection. The degradation products identified by GC-MS were: trichloro-1,3dicyanobenzene, dichloro-1,3-dicyanobenzene and chloro-1,3-dicyanobenzene. The degradation kinetics followed a first order reaction and the R.S.D. of rate constants, for n=3, varied from 2 to 14%. Halflives varied between 0.7 and 101 h. The stability of chlorothalonil on C18 Empore disks was also investigated at 20eC, 4eC and -20eC for periods of up to 3 months. Chorothalonil was not degraded on C18 Empore disks. MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: DARKNESS MESH HEADINGS: LIGHT MESH HEADINGS: LIGHTING MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Conservation **KEYWORDS: Biochemical Methods-General** 

KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: External Effects-Light and Darkness KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

Pepin, H. S. and Ormrod, D. J. Control of Mummy Berry of Highbush Blueberry. POPSOIL,ENV,MIXTURE; 1974; 58, (9): 840-843. Rec #: 730
Call Number: EFFICACY (CAP,CTN), NO EFED CHEM (FBM,TBA,TPM), OK (BMY,TFR), TARGET (CAP,CTN,TBA) Notes: EcoReference No.: 95989
Chemical of Concern: BMY,CAP,CTN,FBM,TBA,TFR,TPM

731. Peralta, M. ; Bravo, A., and Soberon, M. Isolation and Characterization of Peptides From a Phage Variant Library Which Are Able of Binding to Cry1ab Delta-Endotoxin as Its Natural Receptor. 1998; 36, (9): 1297-1298. Rec #: 2636

Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MEETING POSTER BACILLUS-THURINGIENSIS DELTA-ENDOTOXIN INSECTICIDAL CRYSTAL PROTEINS CRY1 A B TOXIN BIOCHEMISTRY AND BIOPHYSICS TOXICOLOGY MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-General KEYWORDS: Endospore-forming Gram-Positives (1992-) LANGUAGE: eng

732. ---. Isolation and Characterization of Peptides From a Phage Variant Library Which Are Able of Binding to Cry1ab Delta-Endotoxin as Its Natural Receptor. 1998; 36, (9): 1297-1298. Rec #: 2636 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MEETING POSTER BACILLUS-THURINGIENSIS DELTA-ENDOTOXIN INSECTICIDAL CRYSTAL PROTEINS CRY1 A B TOXIN BIOCHEMISTRY AND BIOPHYSICS TOXICOLOGY MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-General KEYWORDS: Endospore-forming Gram-Positives (1992-)

LANGUAGE: eng

- Perez-Martinez, C.; Ferreras-Estrada, M. C.; Garcia-Iglesias, M. J.; Bravo-Moral, A. M.; Espinosa-Alvarez, J., and Escudero-Diez, A. Effects of In Utero Exposure to Nonsteroidal Estrogens on Mouse Testis. GRO,CEL,REPINJECT; 1997; 61, (2): 94-98. Rec #: 1160 Call Number: NO COC(CTN) Notes: EcoReference No.: 89799
- Pernezny, K.; Datnoff, L. E.; Mueller, T., and Collins, J. Losses in Fresh-Market Tomato Production in Florida due to Target Spot and Bacterial Spot and the Benefits of Protectant Fungicides. POP,PHYSOIL,ENV; 1996; 80, (5): 559-563. Rec #: 570 Call Number: OK TARGET,NO CROP(CTN),NO MIXTURE(MZB,CuOH,Maneb) Notes: EcoReference No.: 90066 Chemical of Concern: CTN,MZB,CuOH,Maneb
- Peshney, N. L. and Gade, S. H. Compatibility and Persistence of Fungicides with Monocrotophos and Urea on Chilli. GRO,POPSOIL,ENV,MIXTURE; 1991; 15, (1): 9-14. Rec #: 610
  Call Number: LITE EVAL CODED (TFR), NO EFED CHEM (DINO,TBA,TPM,Urea), OK (STRP), TARGET (CBD,CBX,CTN,Captan,DOD,FSTAL,IPD,MZB,PNB,SFR,THM,Ziram) Notes: EcoReference No.: 70135
  Chemical of Concern: CBD,CBX,CTN,Captan,DINO,DOD,FSTAL,IPD,MZB,PNB,SFR,STRP,TBA,TFR,THM,TPM,U rea,Ziram
- 736. ---. Compatibility and Persistence of Fungicides with Monocrotophos and Urea on Chilli. POPSOIL,ENV,MIXTURE; 1991; 15, (1): 9-14. Rec #: 580
  Call Number: LITE EVAL CODED(TFR),OK(ALL CHEMS),NO CROP(MZB,CTN,Captan) Notes: EcoReference No.: 70135
  Chemical of Concern: SFR,IPD,DINO,DOP,Cu,CTN,MZB,FSTA1,CBD,TBA,TPE,PNB,TFR,CBX,Ziram,Captan,THM
- 737. Peshney, N. L.; Khune, N. N., and Moghe, P. G. Laboratory Screening of Some Fungicides Against Puccinia recondita. POPENV,MIXTURE; 1980; 14, (2): 21-23. Rec #: 1420
  Call Number: NO EFED CHEM (Zineb), NO ENDPOINT (CBX), TARGET (BMY,CAP,CBD,CBX,CTN,DOD,MZB,PNB,TFR,Ziram) Notes: EcoReference No.: 93987
  Chemical of Concern: BMY,CAP,CBD,CBX,CTN,DOD,MZB,PNB,TFR,Zineb,Ziram
- Peterson, J. L. and Davis, S. H. Jr. Effect of Fungicides and Application Timing on Control of Azalea Petal Blight. POPSOIL,ENV,MIXTURE; 1977; 61, (3): 209-212. Rec #: 880
  Call Number: NO EFED CHEM (TPM), TARGET (BMY,CTN,TFR) Notes: EcoReference No.: 94598
  Chemical of Concern: BMY,CTN,TFR,TPM
- 739. Pethybridge, S. J.; Esker, P.; Dixon, P.; Hay, F.; Groom, T.; Wilson, C., and Nutter, F. W. Jr. Quantifying Loss Caused by Ray Blight Disease in Tasmanian Pyrethrum Fields. 2007; 91, (9): 1116-1121. Rec #: 13152
  Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: Abstract: The efficacy of newly implemented fungicide recommendations on reducing

the intensity of ray blight disease caused by Phoma ligulicola to achieve site-specific attainable vield potentials in Tasmanian pyrethrum fields was quantified over two seasons in 46 and 51 fields during the 2003 and 2004 growing seasons, respectively. Disease intensity and yield in two plots (10 x 24 m), one following the commercial fungicide protocol recommendations and the second receiving no fungicide, were assessed in each pyrethrum field. The commercial fungicide protocol consisted of one application of azoxystrobin at 150 g a.i./ha, followed by two applications of a tank mixture of difenoconazole at 125 g a.i./ha and chlorothalonil at 1,008 liters a.i./ha at 14- to 21-day intervals. This program resulted in significant decreases in defoliation severity and the incidence of stems and flowers with ray blight, and increases in the height of stems and number of flowers produced per stem in October and November. In plots receiving the commercial fungicide protocol, the dry weight of flowers was increased by 76 and 68% in 2003 and 2004, respectively. Moreover, pyrethrin yield increased by 81 and 78% when the commercial fungicide protocol was used compared with the nontreated plots. Tobit regression was used to examine the relationships and thresholds among disease intensity measures (defoliation severity, stem severity, and incidence of flowers with ray blight) assessed just prior to harvest. This regression utilized a leftcensored regression model to define subminimal thresholds, as none of the disease intensity measures could be less than 0. Defoliation severity had a threshold of 35.3% before stem severity linearly increased and a threshold of 38.2% before the incidence of flowers with ray blight linearly increased. Finally, the threshold for stem severity was 13.7% before the incidence of flowers with ray blight linearly increased. These thresholds can be used to assist growers in making disease management decisions with the objective of minimizing loss of flowers by maintaining defoliation severity below the critical point at which the incidence of flowers with ray blight begins to linearly increase.

Keywords: Phoma ligulicola Includes references 1022855493

 Pethybridge, Sarah J.; Hay, Frank S.; Groom, Tim, and Wilson, Calum R. Improving Fungicide-Based Management of Ray Blight Disease in Tasmanian Pyrethrum Fields. 2008; 92, (6): 887-895. Rec #: 13162

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: Ray blight disease, caused by Phoma ligulicola var. inoxydablis, is a serious threat to the Tasmanian pyrethrum industry. The management of this disease relies upon the strategic application of fungicides in early spring. A range of fungicides were assessed for their efficacy in controlling ray blight disease in Tasmanian pyrethrum fields, and the primary objective of this study was to increase fungicide options available to growers in different resistance groups. Fungicides were assessed under in vitro conditions, within five replicated-plot field trials over three seasons (2004 to 2006) and in single-plot trials over eight fields in 2005. In each of the field trials, regular assessments of disease intensity (defoliation severity and the incidence of stems with ray blight), stem height, and the number of flowers produced on each stem were made using stems as the primary sampling unit. Canopy reflectance at 830 nm and the Difference Vegetative Index, measured using a handheld multispectral radiometer, also were used to compare fungicide effects on green leaf area. The effect of fungicides on the dry weight of flowers, pyrethrin content within the flowers, flower maturity, and pyrethrin yield were determined. Under in vitro conditions, boscalid reduced both conidial germination and mycelial growth at concentrations of at least 0.16  $\hat{I}_{4g}$ /ml. In field trials 1 and 2 (in 2004), the premixed formulation of pyraclostrobin + boscalid (Pristine) increased pyrethrin yield by an average of 79% compared with nontreated plots over the two locations. Furthermore, in single-plot trials, pyraclostrobin + boscalid increased pyrethrin yield by 134 and 60% compared with the industry-recommended protocol (single application of azoxystrobin at 150 g a.i./ha [Amistar WG] and two additional applications of a tank mixture of difenoconazole at 125 g a.i./ha [Score] and chlorothalonil at 1,008 liters a.i./ha [Bravo 720] at 14to 21-day intervals) and nontreated plots, respectively. In field trials 3 (in 2005) and 4 and 5 (in 2006), similar yield benefits also were produced by applying pyraclostrobin (Cabrio SC) or boscalid (Filan) alone or in combination with chlorothalonil (Bravo 720) at 1.4 liters of product per hectare, regardless of the rates of pyraclostrobin (250 and 125 g a.i./ha) and boscalid (500 and 250 g a.i./ha) used. These data were used to recommend the incorporation of boscalid to improve

the fungicide-based management of ray blight disease. This decreases the number of applications of both strobilurin and triazole fungicides which have been used extensively for the management of ray blight and other diseases in Tasmanian pyrethrum fields and are prone to fungicide resistance development. Keywords: Phoma ligulicola var. inoxydablis

Keywords: Phoma ligulicola var. inoxydablis Includes references 1022967931

741. Petit, F.; Le Goff P; Cravedi, J. P.; Valotaire, Y., and Pakdel, F. Two Complementary Bioassays for Screening the Estrogenic Potency of Xenobiotics: Recombinant Yeast for Trout Estrogen Receptor and Trout Hepatocyte Cultures. 1997; 19, (3): 321-335.

Rec #: 2568

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A relation between the chemical structure of a xenobiotic and its steroidal action has not yet been clearly established. Thus, it is not possible to define the estrogenic potency of different xenobiotics. An assessment may be accomplished by the use of different bioassays. We have previously developed a yeast system highly and stably expressing rainbow trout estrogen receptor (rtER) in order to analyze the biological activity of the receptor. The recombinant yeast system appears to be a reliable, rapid and sensitive bioassay for the screening and determination of the direct interaction between ER and estrogenic compounds. This system was used in parallel with a more elaborate biological system, trout hepatocyte aggregate cultures, to examine the estrogenic potency of a wide spectrum of chemicals commonly found in the environment. In hepatocyte cultures, the vitellogenin gene whose expression is principally dependent upon estradiol was used as a biomarker. Moreover, comp

MESH HEADINGS: PLANTS/CYTOLOGY **MESH HEADINGS: ANIMALS** MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: STEROIDS MESH HEADINGS: STEROLS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Cytology and Cytochemistry-Plant **KEYWORDS:** Cytology and Cytochemistry-Animal **KEYWORDS: Biochemical Studies-Sterols and Steroids KEYWORDS:** Toxicology-General **KEYWORDS: Pest Control** LANGUAGE: eng

Petit, F.; Le Goff, P.; Cravedi, J. P.; Valotaire, Y., and Pakdel, F. Two Complementary Bioassays for Screening the Estrogenic Potency of Xenobiotics: Recombinant Yeast for Trout Estrogen Receptor and Trout Hepatocyte Cultures. 1997; 19, 321-335. Rec #: 860 Keywords: IN VITRO Call Number: NO EFED CHEM (CSF,DDM,DFPM,DLD,FZF,NYP,PCL), NO IN VITRO (24D,24DXY,ACR,ATZ,BPH,CBF,CTN,Captan,DBN,DDVP,DM,DMB,DU,EPTC,MP,PAQT,P CP,TDF,TFN,TRB) Notes: Chemical of Concern: 24D,24DXY,ACR,ATZ,BPH,CBF,CSF,CTN,Captan,DBN,DDM,DDVP,DFPM,DLD,DM,DMB, DU,EPTC,FZF,MP,NYP,PAQT,PCL,PCP,TDF,TFN,TRB

743. Petit, F.; Le Goff P; Cravedi, J. P.; Valotaire, Y., and Pakdel, F. Two Complementary Bioassays for

Screening the Estrogenic Potency of Xenobiotics: Recombinant Yeast for Trout Estrogen Receptor and Trout Hepatocyte Cultures. 1997; 19, (3): 321-335.

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Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A relation between the chemical structure of a xenobiotic and its steroidal action has not yet been clearly established. Thus, it is not possible to define the estrogenic potency of different xenobiotics. An assessment may be accomplished by the use of different bioassays. We have previously developed a yeast system highly and stably expressing rainbow trout estrogen receptor (rtER) in order to analyze the biological activity of the receptor. The recombinant yeast system appears to be a reliable, rapid and sensitive bioassay for the screening and determination of the direct interaction between ER and estrogenic compounds. This system was used in parallel with a more elaborate biological system, trout hepatocyte aggregate cultures, to examine the estrogenic potency of a wide spectrum of chemicals commonly found in the environment. In hepatocyte cultures, the vitellogenin gene whose expression is principally dependent upon estradiol was used as a biomarker. Moreover, comp

MESH HEADINGS: PLANTS/CYTOLOGY MESH HEADINGS: ANIMALS MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: STEROIDS MESH HEADINGS: STEROLS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Cytology and Cytochemistry-Plant KEYWORDS: Cytology and Cytochemistry-Animal **KEYWORDS: Biochemical Studies-Sterols and Steroids KEYWORDS:** Toxicology-General **KEYWORDS:** Pest Control LANGUAGE: eng

744. Petit, F.; Le Goff, P.; Cravedi, J. P.; Valotaire, Y., and Pakdel, F. Two Complementary Bioassays for Screening the Estrogenic Potency of Xenobiotics: Recombinant Yeast for Trout Estrogen Receptor and Trout Hepatocyte Cultures. 1997; 19, 321-335. 157753. Rec #: 8102 Keywords: IN VITRO Notes: Chemical of Concern: 24D,24DXY,ACR,ATZ,BPH,CBF,CSF,CTN,Captan,DBN,DDM,DDVP,DFPM,DLD,DM,DMB, DU,EPTC,FZF,MP,NYP,PAQT,PCL,PCP,TDF,TFN,TRB Abstract: NO IN VITRO Transferred from Elaine citations//Paper never received from lab//Nonylphenol 2005-text//ATZ IRED 2003-Text//Atrazine 2003-Text// (Was ECOREF# 86558)

Phipps, P. M. Control of Cylindrocladium Black Rot of Peanut with Soil Fumigants Having Methyl Isothiocyanate as the Active Ingredient. GRO,MORSOIL,ENV,MIXTURE; 1990; 74, (6): 438-441. Rec #: 360 Call Number: NO EFED CHEM (BORON,CaSO4,FNF), NO TOX DATA (ACR,ADC,BMY,BT,CBL,CTN,MTL), TARGET (BMY,DDMITC,MTAS) Notes: EcoReference No.: 91339 Chemical of Concern: ACR,ADC,BMY,BORON,BT,CBL,CTN,CaSO4,DDMITC,FNF,MTAS,MTL,NPA

- Phyu, Y. L.; Palmer, C. G.; Warne, M. S. J.; Hose, G. C.; Chapman, J. C., and Lim, R. P. A Comparison of Mixture Toxicity Assessment: Examining the Chronic Toxicity of Atrazine, Permethrin and Chlorothalonil in Mixtures to Ceriodaphnia cf. dubia. 2011; 85, (10): 1568-1573. Rec #: 1500 Keywords: MIXTURE Call Number: NO MIXTURE (ATZ,CTN,PMR) Notes: Chemical of Concern: ATZ,CTN,PMR
- 747. Pieczarka, D. J. Shallow Planting and Fungicide Application to Control Rhizoctonia Stalk Rot of Celery. 1981; 65, 879-880. Rec #: 800 Keywords: NO TOX DATA Call Number: NO TOX DATA Notes: Chemical of Concern: CTN
- 748. ---. Shallow Planting and Fungicide Application to Control Rhizoctonia Stalk Rot of Celery. 1981; 65, 879-880.
   Rec #: 2958
   Keywords: NO TOX DATA
   Notes: Chemical of Concern: CTN
   Abstract: BENEFICIAL EFFECTS//
   Abstract: 04/14/04
- 749. ---. Shallow Planting and Fungicide Application to Control Rhizoctonia Stalk Rot of Celery. SOIL; 1981;
   65, 879-880. Rec #: 870 Keywords: NO TOX DATA Call Number: NO TOX DATA (CTN) Notes: Chemical of Concern: CTN
- 750. ---. Shallow Planting and Fungicide Application to Control Rhizoctonia Stalk Rot of Celery. 1981; 65, 879-880.
  Rec #: 2958
  Keywords: NO TOX DATA
  Notes: Chemical of Concern: CTN
  Abstract: BENEFICIAL EFFECTS//
  Abstract: 04/14/04
- 751. ---. Shallow Planting and Fungicide Application to Control Rhizoctonia Stalk Rot of Celery. 1981; 65, 879-880. 157873.
   Rec #: 3702
   Keywords: NO TOX DATA
   Notes: Chemical of Concern: CTN
   Abstract: NO TOX DATA BENEFICIAL EFFECTS//
- 752. Pierce, L. and McCain, A. H. Anthracnose of Piggyback Plant Caused by Colletotrichum gloeosporioides (Penz.) Sacc. POPENV; 1990; 8, (4): 207-209. Rec #: 420 Call Number: TARGET (BMY,CTN,MZB) Notes: EcoReference No.: 94805 Chemical of Concern: BMY,CTN,MZB
- Piersma, A. H.; Verhoef, A.; Sweep, C. G. J.; De Jong, W. H., and Van Loveren, H. Developmental Toxicity but no Immunotoxicity in the Rat After Prenatal Exposure to Diethylstilbestrol. GRO,BEH,BCM,CELORAL; 2002; 174, (3): 173-181. Rec #: 1170

Call Number: NO COC(CTN) Notes: EcoReference No.: 90056

754. Pigati, R. L.; Dernoeden, P. H.; Grybauskas, A. P., and Momen, B. Simulated Rainfall and Mowing Impact Fungicide Performance When Targeting Dollar Spot in Creeping Bentgrass. 2010; 94, (5): 596-603.

Rec #: 13182

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: In this 2-year field study, four chemically diverse fungicides (i.e., chlorothalonil, boscalid, iprodione, and propiconazole) were evaluated for their ability to control dollar spot (Sclerotinia homoeocarpa) in creeping bentgrass (Agrostis stolonifera) as affected by simulated rain and mowing timing. Simulated rain (25 to 32 mm) was imposed about 30 min after fungicide application and was compared to rain-free plots. One set of plots was mowed in the morning when the canopy was wet with dew and compared to plots that were mowed when the canopy was dry in the afternoon. The percent reduction in dollar spot control associated with simulated-rain versus rain-free treatments in 2007 and 2008, respectively, was as follows: chlorothalonil 67 and 83%; propiconazole 42 and 79%; boscalid 48 and 70%; and iprodione 33 and 66%. When disease pressure was low, all fungicides subjected to simulated rain provided effective dollar spot control for 7 or more days following the initial application in each year. Across all fungicide-treated plots over 2 years, the average percent reduction in dollar spot severity in morning-mowed plots improved the performance of all fungicides. Keywords: boscalid

Includes references 1022989286

755. Pingarron, J. M.; Gonzalez, A., and Polo, L. M. Electroanalytical Study of Pirimicarb by Anodic Voltammetry at a Glassy Carbon Electrode in Aqueous and Acetonitrile Media. 1990; 2, (6): 493-498.

Rec #: 1717

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. An electroanalytical study of the oxidation process of pirimicarb at a glassy carbon electrode using different voltammetric techniques was carried out. Two media were used: aqueous Britton-Robinson buffer and acetonitrile (0.1 mol L-1 Bu4NClO4). Studies using linear sweep voltammetry (LSV) at a rotating disk electrode show that the limiting current becomes nondiffusion controlled at concentrations higher than 6.0 electrode process. The best detection and determination limits were obtained by differential pulse voltammetry at a stationary electrode in an acetonitrile medium. The differential pulse mode in an aqueous medium was used to determine pirimicarb in soil samples. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS:** Toxicology-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS: Soil Science-General** KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control LANGUAGE: eng

756. ---- Electroanalytical Study of Pirimicarb by Anodic Voltammetry at a Glassy Carbon Electrode in Aqueous and Acetonitrile Media. 1990; 2, (6): 493-498. Rec #: 1717 Keywords: METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. An electroanalytical study of the oxidation process of pirimicarb at a glassy carbon electrode using different voltammetric techniques was carried out. Two media were used: aqueous Britton-Robinson buffer and acetonitrile (0.1 mol L-1 Bu4NCIO4). Studies using linear sweep voltammetry (LSV) at a rotating disk electrode show that the limiting current becomes nondiffusion controlled at concentrations higher than 6.0 electrode process. The best detection and determination limits were obtained by differential pulse voltammetry at a stationary electrode in an acetonitrile medium. The differential pulse mode in an aqueous medium was used to determine pirimicarb in soil samples. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS

MESH HEADINGS: INSECTICIDES

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MESH HEADINGS: PESTICIDES

**KEYWORDS: Biochemical Methods-General** 

KEYWORDS: Biochemical Studies-General

KEYWORDS: Biophysics-General Biophysical Techniques

KEYWORDS: Toxicology-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-General KEYWORDS: Soil Science-Physics and Chemistry (1970-) KEYWORDS: Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control LANGUAGE: eng

757. Platt, H. W. Foliar Application of Fungicides Affects Occurrence of Potato Tuber Rots Caused by Four Foliar Pathogens. POPSOIL,ENV,MIXTURE; 1995; 16, (4): 341-346. Rec #: 1230 Call Number: TARGET (CTN,MLX,MZB) Notes: EcoReference No.: 94441 Chemical of Concern: CTN,MLX,MZB

758. Platt, H. W. and Maclean, V. M. Efficacy of Chemical Control Products for Control of Soil-Borne Potato Diseases Caused by Soil-Borne Fungal Pathogens in 1995. 1997; 0, (18): 16-17. Rec #: 1490 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE FUSARIUM-SPP RHIZOCTONIA-SOLANI STREPTOMYCES-SCABIES VERTICILLIUM-SPP POTATO PLANT PATHOGEN SOIL-BORNE DISEASE HOST PEST MANAGEMENT HORTICULTURE ORTHOCIDE FUNGICIDE BRAVO DITHANE FLUAZINAM POLYRAM MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: BACTERIA MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: STREPTOMYCETACEAE MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Diseases Caused by Bacteria KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control KEYWORDS: Streptomycetes and Related Genera (1992-) **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

759. Platt, H. W. and Reddin, R. Evaluation of Fungicides for Control of Potato Early Blight Alternaria Solani. 1996; 0, (17): 16-17. Rec #: 628 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM NOTE RESEARCH ARTICLE ALTERNARIA-SOLANI SOLANUM-TUBEROSUM POTATO PLANT PATHOGEN VEGETABLE CROP HOST HORTICULTURE PEST MANAGEMENT CROP

YIELD BRAVO 500 FUNGICIDE BRAVO ULTREX BRAVO ZN FLUAZINAM DITHANE KOCIDE RH7281FD PENNCOZEB POTATO EARLY BLIGHT FUNGAL DISEASE MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

760. ---. Evaluation of Fungicides for Control of Potato Early Blight Alternaria Solani. 1996; 128, (Suppl.): 16-17.
 Rec #: 2786

Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE ALTERNARIA-SOLANI POTATO PATHOGEN FUNGUS PLANT HOST PEST MANAGEMENT PESTICIDES AGRICHEMICAL EVALUATION CROP INDUSTRY HORTICULTURE POTATO EARLY BLIGHT BRAVO500 FUNGICIDE BRAVOULTREX BRAVO ZN DITHANE FLUAZINAM CROP YIELD FUNGAL DISEASE MH -VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

Platt, H. W. and Reddin, R. Fungicide Efficacies for Control of Early and Late Blight of Potatoes in 1995. GRO,POPSOIL,ENV,MIXTURE; 1997; 18, 18-19. Rec #: 120
Call Number: NO EFED CHEM (BDC,TPTH), NO ENDPOINT (CTN,CaCY,CuOH,MLX,MZB), NO MIXTURE (CuOH,MLX) Notes: EcoReference No.: 151316
Chemical of Concern: BDC,CTN,CaCY,CuOH,MLX,MZB,TPTH 762. ---. Fungicide Efficacies for Control of Early and Late Blight of Potatoes in 1995. 1997; 0, (18): 18-19. Rec #: 780 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE SOLANUM-TUBEROSUM ALTERNARIA-SOLANI PHYTOPHTHORA-INFESTANS POTATO CULTIVAR-GREEN MOUNTAIN HOST PLANT PATHOGEN PEST MANAGEMENT HORTICULTURE EARLY BLIGHT LATE BLIGHT CHLOROTHALONIL FUNGICIDE EFFICACY MANCOZEB DITHANE M45 KOCIDE BRAVO 500 ACROBAT CURZATE M8 FUNGAL DISEASE MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS: Pest Control KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Phycomycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

763. Platt, H. W.; Reddin, R., and Jenkins, S. Fungicide Efficacies for Control of Late Blight of Potatoes in 1996. 1998; 132, (Suppl.): 22-23. Rec #: 589 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE SOLANUM TUBEROSUM PHYTOPHTHORA INFESTANS POTATO PLANT VEGETABLE CROP HOST PHYTOPATHOGEN FUNGUS PEST MANAGEMENT PESTICIDES LATE BLIGHT BRAVO 500 FUNGICIDE CURZATE M8 DITHANE RIDOMIL MZ KOCIDE 101 SUPERTIN RIDOMIL GOLD BRAVO ACROBAT MZ BRAVO WS FLUAZINAM TATTOO C HORTICULTURE INFECTION FUNGAL DISEASE MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **MESH HEADINGS: PHYCOMYCETES** MESH HEADINGS: PLANTS **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Phycomycetes

KEYWORDS: Solanaceae LANGUAGE: eng

764. ---. Fungicide Efficacies for Control of Late Blight of Potatoes in 1996. 1998; 0, (19): 22-23.

Rec #: 2757 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE PHYTOPHTHORA INFESTANS SOLANUM TUBEROSUM PLANT PATHOGEN HOST CULTIVAR-GREEN MOUNTAIN HORTICULTURE PEST MANAGEMENT PESTICIDES LATE BLIGHT BRAVO FUNGICIDE EFFICACY DITHANE ACROBAT KOCIDE RIDOMIL FLUAZINAM FUNGAL DISEASE MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS: Pest Control KEYWORDS:** Phycomycetes **KEYWORDS:** Solanaceae LANGUAGE: eng

Pleasant, J. M.; Burt, R. F., and Frisch, J. C. Integrating Mechanical and Chemical Weed Management of Corn (Zea mays). 1994; 8, (2): 217-223. Rec #: 810 Keywords: MIXTURE Call Number: NO COC(CTN),NO CONTROL(ATZ,PDM) Notes: Chemical of Concern: ATZ,PDM

766. Pogoda, J. M. and Preston-Martin, S. Household Pesticides and Risk of Pediatric Brain Tumors. 1997; 105, (11): 1214-1220.

Rec #: 2566

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A follow-up to a population-based case-control study of pediatric brain tumors in Los Angeles County, California, involving mothers of 224 cases and 218 controls, investigated the risk of household pesticide use from pregnancy to diagnosis. Risk was significantly elevated for prenatal exposure to flea/tick pesticides (odds ratio (OR) = 1.7; 95% confidence interval (CI), 1.1-2.6), particularly among subjects less than 5 years old at diagnosis (OR = 2.5; CI, 1.2-5.5). Prenatal risk was highest for mothers who prepared, applied, or cleaned up flea/tick products themselves (OR = 2.2; CI, 1.1-4.2; for subjects < 5 years of age, OR = 5.4; CI, 1.3-22.3). A significant trend of increased risk with increased exposure was observed for number of pets treated (p = 0.04). Multivariate analysis of types of flea/tick products indicated that sprays/foggers were the only products significantly related to risk (OR = 10.8; CI, 1.3-89.1). Elevated risks were not observed for termite or 1 MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NERVOUS SYSTEM DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: CHILD DEVELOPMENT MESH HEADINGS: PEDIATRICS MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS: Biochemical Studies-General KEYWORDS:** Nervous System-Pathology **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis **KEYWORDS:** Pediatrics KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS:** Pest Control **KEYWORDS:** Hominidae LANGUAGE: eng

767. ---. Household Pesticides and Risk of Pediatric Brain Tumors. 1997; 105, (11): 1214-1220.

Rec #: 2566

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A follow-up to a population-based case-control study of pediatric brain tumors in Los Angeles County, California, involving mothers of 224 cases and 218 controls, investigated the risk of household pesticide use from pregnancy to diagnosis. Risk was significantly elevated for prenatal exposure to flea/tick pesticides (odds ratio (OR) = 1.7; 95% confidence interval (CI), 1.1-2.6), particularly among subjects less than 5 years old at diagnosis (OR = 2.5; CI, 1.2-5.5). Prenatal risk was highest for mothers who prepared, applied, or cleaned up flea/tick products themselves (OR = 2.2; CI, 1.1-4.2; for subjects < 5 years of age, OR = 5.4; CI, 1.3-22.3). A significant trend of increased risk with increased exposure was observed for number of pets treated (p = 0.04). Multivariate analysis of types of flea/tick products indicated that sprays/foggers were the only products significantly related to risk (OR = 10.8; CI, 1.3-89.1). Elevated risks were not observed for termite or 1 MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NERVOUS SYSTEM DISEASES/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: CHILD DEVELOPMENT MESH HEADINGS: PEDIATRICS MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE **KEYWORDS:** Biochemical Studies-General **KEYWORDS:** Nervous System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis **KEYWORDS:** Pediatrics KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS:** Pest Control **KEYWORDS:** Hominidae

LANGUAGE: eng

Pohronezny, K.; Francis, J., and Fong, W. G. Strategies for Chemical Control of Snap Bean Rust in Florida and Their Compatibility with Canadian Residue Tolerances. ACC,POPSOIL,ENV,MIXTURE; 1987; 71, (7): 639-642. Rec #: 900
Call Number: EFFICACY (Maneb), NO EFED CHEM (BTN), NO ENDPOINT (CTN,Maneb), NO MIXTURE (MZB,SFR), OK (TDF)
Notes: EcoReference No.: 111273
Chemical of Concern: BTN,CTN,MZB,Maneb,SFR,TDF

769. Porrini, C. ; Celli, G., and Radeghieri, P. Monitoring of Pesticides Through the Use of Honeybees as Bioindicators of the Emilia-Romagna Coastline (1995-1996). 1998; 88, (3-4): 243-252. Rec #: 2593

Keywords: SURVEY

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. For some time the honeybee has proven to be an excellent bioindicator of pesticides. This technique was used between 1995 and 1996 in the coastal regions of Emilia-Romagna where 21 monitoring stations were employed. A sample of dead bees was analysed in the laboratory every time the critical threshold of the death rate was exceeded. In 1995 a particularly worrisome situation came to light with the discovery of lindane in two inhabited areas of Ravenna where the use of this substance could not be justified by the local conditions. Dangerous and obsolete molecules such as parathion and endosulfan also indicate the difficulty of local agriculture in relinquishing the old methods of protecting cultivation. In any case, the area studied in these two years showed an overall medium-low level of contamination. The model proposed for processing the data proved to be optimum for this type of environmental study.

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: HYMENOPTERA **KEYWORDS: Biochemical Studies-General** KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Agronomy-General **KEYWORDS: Pest Control KEYWORDS:** Invertebrata **KEYWORDS:** Hymenoptera LANGUAGE: eng

 770. ---. Monitoring of Pesticides Through the Use of Honeybees as Bioindicators of the Emilia-Romagna Coastline (1995-1996). 1998; 88, (3-4): 243-252. Rec #: 2593 Keywords: SURVEY Notes: Chemical of Concern: CTN

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sample of dead bees was analysed in the laboratory every time the critical threshold of the death rate was exceeded. In 1995 a particularly worrisome situation came to light with the discovery of lindane in two inhabited areas of Ravenna where the use of this substance could not be justified by the local conditions. Dangerous and obsolete molecules such as parathion and endosulfan also indicate the difficulty of local agriculture in relinquishing the old methods of protecting cultivation. In any case, the area studied in these two years showed an overall medium-low level of contamination. The model proposed for processing the data proved to be optimum for this type of environmental study. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: HYMENOPTERA **KEYWORDS: Biochemical Studies-General** KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Agronomy-General **KEYWORDS:** Pest Control **KEYWORDS:** Invertebrata **KEYWORDS: Hymenoptera** LANGUAGE: eng

Porter, D. M. and Lankow, R. K. Growth of Sclerotinia minor on Media Containing Chlorothalonil and Benomyl. POPENV; 1981; 65, (7): 591-594. Rec #: 230 Call Number: TARGET (BMY,CTN) Notes: EcoReference No.: 156699 Chemical of Concern: BMY,CTN

772. Potter, T. L.; Wauchope, R. D., and Culbreath, A. K. Accumulation and Decay of Chlorothalonil and Selected Metabolites in Surface Soil Following Foliar Application to Peanuts. 2001; 35, 2634-2639. 158195. Rec #: 9082 Keywords: NO TOX DATA Notes: Chemical of Concern: CTN Abstract: NO TOX DATA//ABSTRACT: One of the principal uses of the fungicide, chlorothalonil, is control of foliar peanut diseases. Recent assessments indicate its runoff from treated fields in southeastern states presents risks to aquatic life. Two factors that control its runoff are how much reaches soil surfaces and degradation rates. To address these questions and to evaluate accumulation and decay of key metabolites, soil samples (0-2 cm) were collected after seven chlorothalonil applications on experimental peanut plots in south central Georgia during the 1999 growing season. At the start of and during laboratory incubations, samples were analyzed for the parent and degradates by HPLC-PDA-APCI-MS. The maximum observed residue levels were after the second application, after which canopy closure reduced soil deposition from later applications to 5-10% of applied amounts. After the last spray, < 5% of the cumulative chlorothalonil applied was detected in the soil. Foliar interception and dissipation and rapid soil degradation contributed to low residue levels. Soil half-lives were < 1-3.5 days for chlorothalonil and 10-22 days for its principal degradate, 4-hydroxychlorothalonil. Other daughter and granddaughter products were detected, some of which accumulated during the growing

season. Results emphasize the plant canopy role in controlling the amount of fungicide sprays that reach soil surfaces and suggest concentration-dependent chlorothalonil degradation with degradation rates increasing as soil loading decreases. The study indicates that the 30-day field half-life often used for risk assessments of this pesticide is too long for one of its most important agronomic uses, i.e., in southeastern peanut production. It also indicates that the principal metabolites are more persistent than the parent, and more study is needed to identify and quantify their fate pathways. MESH HEADINGS: Agriculture MESH HEADINGS: Biodegradation, Environmental MESH HEADINGS: Chromatography, High Pressure Liquid **MESH HEADINGS: Environmental Monitoring** MESH HEADINGS: Fungicides, Industrial/chemistry/\*metabolism/pharmacokinetics **MESH HEADINGS: Half-Life** MESH HEADINGS: Nitriles/chemistry/\*metabolism/pharmacokinetics **MESH HEADINGS: Pesticide Residues MESH HEADINGS: Plants MESH HEADINGS: Risk Assessment** MESH HEADINGS: Soil Pollutants/analysis/\*metabolism **MESH HEADINGS: Tissue Distribution MESH HEADINGS: Water Movements** LANGUAGE: eng

Presnell, T. L. and Nicholas, D. D. Evaluation of Combinations of Low Hazard Biocides in Controlling Mold and Stain Fungi on Southern Pine. MOR,POPENV,ORAL; 1990; 40, (2): 57-61. Rec #: 560
Call Number: NO DURATION (BOR,CBD,CTN,CXL,NaPCP,OTN,ZnO), NO MIXTURE (BOR,CBD,CTN,CXL,NaPCP,OTN,ZnO)
Notes: EcoReference No.: 106153
Chemical of Concern: BOR,CBD,CTN,CXL,NaPCP,OTN,ZnO

Priestley, R. H.; Parry, D. W., and Knight, C. Yield Responses from Fungicide Treatment of Cereal, Oilseed Rape, and Perennial Ryegrass Trials in England and Wales. POPSOIL,ENV; 1985: 383-387. Rec #: 1210 Call Number: OK(PCZ),NO MIXTURE(CBD,TDF,CAP,CTN,CBD,MLX,MZB,VCZ) Notes: EcoReference No.: 73064 Chemical of Concern: PCZ,CBD,TDF,CAP,CTN,CBD,MLX,MZB,VCZ

775. Prieto Figueroa, &Nbsp and J. Efectividad de fungicidas sistemicos y de contacto para el control de sigatoka negra (Mycosphaerella fijiensis Morelet) en guineo en Isabela, Puerto Rico. 2010. Rec #: 11402

Keywords: NON-ENGLISH

Notes: Chemical of Concern: CTN

Abstract: End Page: 107

Abstract: Black Sigatoka (BS) Mycosphaerella fijiensis (anamorph Pseudocercospora fijiensis) is the most limiting disease for banana production in Puerto Rico. A field experiment was established at Isabela Station to study a spray program based on the systemic and contact fungicides registered in Puerto Rico for BS control. The experimental design was a RCB with four replicates and six treatments. Treatments evaluated were: 1. Rotation azoxystrobin (Abound) + Contact Fungicides mancozeb (Dithane F-45) or chlorothalonil (Bravo weatherstik); 2. Rotation propiconazole (Tilt) + chlorothalonil or mancozeb; 3) Rotation azoxystrobin (Abound) + propiconazole (Tilt) + chlorothalonil or mancozeb; 4. Contact Fungicides chlorothalonil or mancozeb; 5. Orchard oil BVA #15 and 6. Absolute control (untreated plots). Fungicide applications were conducted from ground level with a motorized backpack sprayer calibrated to deliver a total volume of 85-110L/ha. Fungicides were sprayed in an oil-water emulsion, an oil mixture, or in a water-emulsion, at intervals of 14 days during rainy season and 21 days during dry

season. A total of eight sprays were applied during the banana plant crop. Two of these sprays were made with systemic fungicides (Tilt or Abound) and the rest were with the contact fungicides (mancozeb and chlorothalonil ) Results indicated that temperature played an important role on disease development in Puerto Rico. Relative Humidity (RH) had a good Spearman's coefficient value (rho =0.62) with YDL; indicating that RH is important during the first stages of BS development. Rho values for rainfall were in general low, indicating that this variable is not very good to predict BS development during the development of the banana plant crop at Isabela, Puerto Rico. The spray program with mancozeb and chlorothalonil (treatment 4) reached the best values for bunch weight when compared with the other treatments studied. A bunch weight reduction of 44.7% was observed when the absolute control, treatment 6 (16.11 kg/bunch) was compared with treatment 4 (29.15 kg/bunch), indicating the importance of BS control on bananas in Puerto Rico. Plant Pathology

 Pylypiw, H. M Jr. Rapid Gas Chromatographic Method for the Multiresidue Screening of Fruits and Vegetables for Organochlorine and Organophosphate Pesticides. 1993; 76, (6): 1369-1373. Rec #: 2068

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A rapid and reliable method was developed for the determination of pesticides in fruits and vegetables. A 100 g sample is extracted with a mixture of 200 mL petroleum ether and 100 mL 2-propanol. The extract is backwashed 4 times, twice with aqueous sodium sulfate and twice with 350 mL distilled water, and then dried over 15 g sodium sulfate. The dried extract is analyzed by capillary gas chromatography with selective organochlorine and organophosphorus detection. The method determines primarily nonpolar pesticides, with recoveries ranging from 81 to 114%, and has an average limit of detection of 10 ppb for both detectors. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT **MESH HEADINGS: NUTS** MESH HEADINGS: VEGETABLES MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS:** Food Technology-Fruits KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods

**KEYWORDS:** Pest Control

KEYWORDS: Economic Entomology-Chemical and Physical Control LANGUAGE: eng

777. ---. Rapid Gas Chromatographic Method for the Multiresidue Screening of Fruits and Vegetables for Organochlorine and Organophosphate Pesticides. 1993; 76, (6): 1369-1373.

Rec #: 2068 Keywords: METHODS

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Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A rapid and reliable method was developed for the determination of pesticides in fruits and vegetables. A 100 g sample is extracted with a mixture of 200 mL petroleum ether and 100 mL 2-propanol. The extract is backwashed 4 times, twice with aqueous sodium sulfate and twice with 350 mL distilled water, and then dried over 15 g sodium sulfate. The dried extract is analyzed by capillary gas chromatography with selective organochlorine and organophosphorus detection. The method determines primarily nonpolar pesticides, with recoveries ranging from 81 to 114%, and has an average limit of detection of 10 ppb for both detectors. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT **MESH HEADINGS: NUTS MESH HEADINGS: VEGETABLES** MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS:** Food Technology-Fruits KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods **KEYWORDS:** Pest Control

- KEYWORDS: Economic Entomology-Chemical and Physical Control
  - LANGUAGE: eng
- Pylypiw, H. M Jr; Arsenault, T. L.; Thetford, C. M., and Mattina, M. Ji. Suitability of Microwave-Assisted Extraction for Multiresidue Pesticide Analysis of Produce. 1997; 45, (9): 3522-3528. Rec #: 874 Keywords: FOOD Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A systematic study of the microwave-assisted extraction of field-incurred pesticide residues from several crop matrices was

conducted. Five crops consisting of beets, cucumbers, lettuce, peppers, and tomatoes were grown and treated in the field with seven pesticides, dacthal, chlorpyrifos, chlorothalonil, diazinon, permethrin, methoxychlor, and azinphos-methyl. Values were determined for the microwave extraction parameters, time and temperature, which resulted in efficient recovery over the selected pesticides and crops. The microwave settings were shown to be dependent on both crop matrix and pesticide. Recovery of the fungicide chlorothalonil was highly dependent on temperature, while the remaining pesticides tested were not so demanding. Using the selected microwave time and temperature values, pesticide recoveries from the microwave method were then compared with those of the conventional method. Statistical comparison of pesticide recoveries and method reproducibil

**MESH HEADINGS: ISOTOPES** MESH HEADINGS: RADIATION MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: VEGETABLES MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: VEGETABLES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS **KEYWORDS:** Radiation-Radiation and Isotope Techniques **KEYWORDS:** Biochemical Methods-General **KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Food Technology-General **KEYWORDS:** Food Technology-Fruits **KEYWORDS:** Toxicology-Foods **KEYWORDS:** Horticulture-Vegetables **KEYWORDS:** Pest Control **KEYWORDS:** Chenopodiaceae **KEYWORDS:** Compositae **KEYWORDS:** Cucurbitaceae **KEYWORDS:** Solanaceae LANGUAGE: eng

 779. Que Hee, S. S. and Zainal, H. Permeation of Chlorothalonil Through Nitrile Gloves: Collection Solvent Effects in the Closed-Loop Permeation Method. Rec #: 10832 Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The aim was to measure the permeation of the fungicide chlorothalonil from Bravo Ultrex through disposable (Safeskin) and chemically protective (Solvex) nitrile glove materials in a closed-loop ASTM type permeation cell system employing different collection side solvents. The permeated fungicide was measured in the collection medium by the internal standard

method through capillary gas chromatography-mass spectrometry and selective ion monitoring using m/z 222 (internal standard 4,4'-dichlorobiphenyl), and 224 and 226 (chlorothalonil). The permeated glove materials did not show swelling or shrinkage and infrared reflectance changes. Different permeated masses for the same glove material for aqueous emulsion challenges of 2.2 mg/mL Bravo Ultrex for 8 h were observed for different solvents with isopropanol>hexane>water for Safeskin, and isopropanol=hexane>water for Solvex. Solvex gloves always permeated less than Safeskin gloves for the same challenge time. When challenges with solid Bravo Ultrex occurred, chlorothalonil was still found in the collection side in the same solvent order as for the aqueous emulsion challenges, with Solvex always less than Safeskin for the same collection solvent and same challenge time. Kinetic experiments showed isopropanol was not a suitable collection solvent for Safeskin for 4 and 8 h. Hexane was not a valid collection solvent for Solvex and Safeskin for 8 h, but was better than isopropanol. MESH HEADINGS: Fungicides, Industrial/\*chemistry MESH HEADINGS: Gas Chromatography-Mass Spectrometry MESH HEADINGS: \*Gloves, Protective MESH HEADINGS: Nitriles/\*chemistry MESH HEADINGS: Permeability **MESH HEADINGS: Reference Standards MESH HEADINGS: Solubility MESH HEADINGS: Solvents** MESH HEADINGS: Spectrophotometry, Infrared MESH HEADINGS: Water eng

- 780. Quellet, M. ; Bonin, J.; Rodrigue, J.; Desgranges, J. L., and Lair, S. Hindlimb Deformities (Ectromelia, Ectrodactyly) in Free-Living Anurans From Agricultural Habitats. 1997; 33, (1): 95-104. Rec #: 2680
  - Keywords: SURVEY

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. High prevalences of hindlimb deformities were recorded in wild-caught green frogs (Rana clamitans), northern leopard frogs (Rana pipiens), American toads (Bufo americanus), and bullfrogs (Rana catesbeiana) from agricultural sites exposed to pesticide runoff in the St. Lawrence River Valley of Quebec, Canada, between July and September 1992 and 1993. Of 853 metamorphosing anurans examined in 14 farmland habitats, 106 (12%; range 0 to 69%) had severe degrees of ectromelia and ectrodactyly, compared to only two (0.7%; range 0 to 7.7%) of 271 in 12 control sites. However, the variation in the proportion of deformities among sites was too large to conclude that there was a significant difference between control and pesticide-exposed habitats. Clinical signs varied and were characterized by segmental hypoplasia or agenesis of affected limbs. Conspicuous abnormalities interfered with swimming and hopping, and likely constituted a survival handicap. Because of circumstances an

MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: CHORDATA **MESH HEADINGS: EXTREMITIES** MESH HEADINGS: ANIMAL MESH HEADINGS: ADIPOSE TISSUE/PATHOLOGY MESH HEADINGS: ADIPOSE TISSUE/PHYSIOPATHOLOGY MESH HEADINGS: BONE DISEASES/PATHOLOGY MESH HEADINGS: BONE DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: CONNECTIVE TISSUE DISEASES/PATHOLOGY MESH HEADINGS: CONNECTIVE TISSUE DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: FASCIA/PATHOLOGY MESH HEADINGS: FASCIA/PHYSIOPATHOLOGY MESH HEADINGS: JOINT DISEASES/PATHOLOGY MESH HEADINGS: JOINT DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES **MESH HEADINGS: ABNORMALITIES** MESH HEADINGS: EMBRYOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ANURA **KEYWORDS: Ecology** KEYWORDS: Chordate Body Regions-Extremities (1970-) **KEYWORDS:** Bones **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Developmental Biology-Embryology-Descriptive Teratology and Teratogenesis **KEYWORDS:** Agronomy-General **KEYWORDS:** Pest Control **KEYWORDS:** Salientia LANGUAGE: eng

781. ---. Hindlimb Deformities (Ectromelia, Ectrodactyly) in Free-Living Anurans From Agricultural Habitats. 1997; 33, (1): 95-104.

Rec #: 2680 Keywords: SURVEY Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. High prevalences of hindlimb deformities were recorded in wild-caught green frogs (Rana clamitans), northern leopard frogs (Rana pipiens), American toads (Bufo americanus), and bullfrogs (Rana catesbeiana) from agricultural sites exposed to pesticide runoff in the St. Lawrence River Valley of Quebec, Canada, between July and September 1992 and 1993. Of 853 metamorphosing anurans examined in 14 farmland habitats, 106 (12%; range 0 to 69%) had severe degrees of ectromelia and ectrodactyly, compared to only two (0.7%; range 0 to 7.7%) of 271 in 12 control sites. However, the variation in the proportion of deformities among sites was too large to conclude that there was a significant difference between control and pesticide-exposed habitats. Clinical signs varied and were characterized by segmental hypoplasia or agenesis of affected limbs. Conspicuous abnormalities interfered with swimming and hopping, and likely constituted a survival handicap. Because of circumstances an

MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: CHORDATA MESH HEADINGS: EXTREMITIES MESH HEADINGS: ANIMAL MESH HEADINGS: ADIPOSE TISSUE/PATHOLOGY MESH HEADINGS: ADIPOSE TISSUE/PHYSIOPATHOLOGY MESH HEADINGS: BONE DISEASES/PATHOLOGY MESH HEADINGS: BONE DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: CONNECTIVE TISSUE DISEASES/PATHOLOGY MESH HEADINGS: CONNECTIVE TISSUE DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: FASCIA/PATHOLOGY MESH HEADINGS: FASCIA/PHYSIOPATHOLOGY MESH HEADINGS: JOINT DISEASES/PATHOLOGY MESH HEADINGS: JOINT DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: ABNORMALITIES MESH HEADINGS: EMBRYOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT

MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ANURA KEYWORDS: Ecology KEYWORDS: Chordate Body Regions-Extremities (1970- ) KEYWORDS: Bones KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Developmental Biology-Embryology-Descriptive Teratology and Teratogenesis KEYWORDS: Agronomy-General KEYWORDS: Pest Control KEYWORDS: Salientia LANGUAGE: eng

Quinto, I.; Martire, G.; Vricella, G.; Riccardi, F.; Perfumo, A.; Giulivo, R., and Delorenzo, F. Screening of 24 Pesticides by Salmonella Microsome Assay Mutagenicity of Benazolin Etoxuron and Paraxon. 1981; 85, (4): 165.
Rec #: 2755
Keywords: BACTERIA
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: HEEP COPYRIGHT: BIOL ABS. ABSTRACT HUMAN FOOD CHAIN CONTAMINATION RAT LIVER AMINOCARB BENTHIOCARB BENAZOLIN BINAPACRYL CHLORFENSON CHLOROPHACINONE CHLOROTHALONIL
CHLORTHAL CRIMIDINE CYHEXATIN DEMETON-S METHYL SULFOXIDE DIALIFOR DIMETILAN DISULFOTON ENDOSULFAN FUBERIDAZOLE METALDEHYDE
METHOXYCHLOR METOXURON NEOSAR PARAOXON PHENCAPTON PHORATE THIABENDAZOLE HERBICIDE INSECTICIDE
LANGUAGE: eng

 783. ---. Screening of 24 Pesticides by Salmonella Microsome Assay Mutagenicity of Benazolin Etoxuron and Paraxon. 1981; 85, (4): 165. Rec #: 2755 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: HEEP COPYRIGHT: BIOL ABS. ABSTRACT HUMAN FOOD CHAIN CONTAMINATION RAT LIVER AMINOCARB BENTHIOCARB BENAZOLIN BINAPACRYL CHLORFENSON CHLOROPHACINONE CHLOROTHALONIL CHLORTHAL CRIMIDINE CYHEXATIN DEMETON-S METHYL SULFOXIDE DIALIFOR DIMETILAN DISULFOTON ENDOSULFAN FUBERIDAZOLE METALDEHYDE METHOXYCHLOR METOXURON NEOSAR PARAOXON PHENCAPTON PHORATE THIABENDAZOLE HERBICIDE INSECTICIDE LANGUAGE: eng

784. R'houma, A.; Cherif, M., and Boubaker, A. Effect of Nitrogen Fertilizing, Green Pruning and Fungicide Treatments on Botrytis Bunch Rot of Grapes. 1998; 80, (2): 115-124. Rec #: 2659

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Grape vineyard culture practices including nitrogen fertilization, removal of leaves, and thinning of clusters, as well as fungicide treatments were evaluated for their effect on the development of Botrytis bunch rot. High nitrogen fertilization predisposed grapevines to infection by Botrytis cinerea and increased disease severity. Latent infection of cups and berries as well as visible infection of clusters increased as the rate of ammonium nitrate amendment increased. Conversely, removal of leaves around clusters, when practiced two or three times during the season, and thinning of berries significantly reduced

Botrytis bunch rot development and resulted in less latent and visibly infected clusters and berries. These green pruning practices also attenuated the beneficial effects of nitrogen fertilization on disease development. In vitro experiments revealed that among the tested fungicides, Vinchlozoline, Chlorothalonil, and Dichlofluanide were effective in completely MESH HEADINGS: FRUIT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS: Horticulture-Small Fruits** KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Vitaceae LANGUAGE: eng

- 785. Rajarajeswari, N. V. L. and Satyanarayana, B. Control of Seed-Borne Fungi in Chillies. PHY,POP,REPSOIL,ENV,MIXTURE; 1994; 22, (1): 115-116. Rec #: 740 Call Number: EFFICACY (CBD,CTN,Captan,MZB,THM), TARGET (CBD,CTN,Captan,MZB,THM) Notes: EcoReference No.: 91005 Chemical of Concern: CBD,CTN,Captan,MZB,THM
- 786. Ranney, C. D. Multiple Cottonseed Treatments: Effects on Germination, Seedling Growth, and Survival. GRO,MOR,POP,REPSOIL,ENV,MIXTURE; 1972; 12, (3): 346-350. Rec #: 760
  Call Number: LITE EVAL CODED (DS,TCMTB), NO EFED CHEM (TZL), NO MIXTURE (CTN), OK (CBX,CLNB,Captan,THM)
  Notes: EcoReference No.: 70506
  Chemical of Concern: CBX,CLNB,CTN,Captan,DS,TCMTB,THM,TZL

787. Raut, B. T. and Somani, R. B. Efficacy of Different Fungicides. I. Field Trials on Pod Blight of Gram. POPSOIL,ENV; 1990; 14, (1): 31-34. Rec #: 1870
Call Number: EFFICACY (CBD,CTN,FSTAL,IPD,MZB,Ziram), TARGET (CBD,CTN,FSTAL,IPD,MZB,Ziram) Notes: EcoReference No.: 156234
Chemical of Concern: CBD,CTN,FSTAL,IPD,MZB,Ziram

Readman, J. W.; Albanis, T. A.; Barcelo, D.; Galassi, S.; Tronczynski, J., and Gabrielides, G. P. Fungicide Contamination of Mediterranean Estuarine Waters: Results From a Med Pol Pilot Survey. 1997 Apr; 34, (4): 259-263. Rec #: 83 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: Fungicides are used extensively in agriculture. Negligible information is, however, available concerning the potential for these compounds to reach and impact estuarine and marine systems. To investigate possible contamination of the Mediterranean Sea from this class of agrochemicals, a pilot survey was undertaken during 1994. Riverine, estuarine and marine water samples were taken from the Ebro Delta, Spain, the Rhone Delta in the south of France, the River Po in Italy/Northern Adriatic sea and the Amvrakikos and Thermaikos Gulfs in Greece. They were analysed for selected fungicides which are used extensively in the countries involved. Compounds screened for included: captafol; captan; carbendazim; chlorothalonil; dicloran; ethirimol; folpet; fenpropimorph; metalaxyl; and vinclozolin. Results from the survey indicate that most of these fungicides are insufficiently persistent to impact estuarine and marine environments. Some, however, were detected during this survey: dicloran (Rhone Delta); carbendazim (Ebro Delta); captafol (River Po and N. Adriatic); captan (Greek rivers and lagoons); folpet (River Po, N. Adriatic and Loudias River, Greece); and vinclozolin (River Po). Contamination in these instances was generally restricted to drainage canals and riverine samples and was associated with known agricultural applications. http://www.sciencedirect.com/science/article/B6V6N-3SVYS1K-K/2/c60ce32c592fc4582dc81b33d3f904a8

789. ---. Fungicide Contamination of Mediterranean Estuarine Waters: Results From a Med Pol Pilot Survey. 1997 Apr: 34. (4): 259-263.

Rec #: 83

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: Fungicides are used extensively in agriculture. Negligible information is, however, available concerning the potential for these compounds to reach and impact estuarine and marine systems. To investigate possible contamination of the Mediterranean Sea from this class of agrochemicals, a pilot survey was undertaken during 1994. Riverine, estuarine and marine water samples were taken from the Ebro Delta, Spain, the Rhone Delta in the south of France, the River Po in Italy/Northern Adriatic sea and the Amvrakikos and Thermaikos Gulfs in Greece. They were analysed for selected fungicides which are used extensively in the countries involved. Compounds screened for included: captafol; captan; carbendazim; chlorothalonil; dicloran; ethirimol; folpet; fenpropimorph; metalaxyl; and vinclozolin. Results from the survey indicate that most of these fungicides are insufficiently persistent to impact estuarine and marine environments. Some, however, were detected during this survey: dicloran (Rhone Delta); carbendazim (Ebro Delta); captafol (River Po and N. Adriatic); captan (Greek rivers and lagoons); folpet (River Po, N. Adriatic and Loudias River, Greece); and vinclozolin (River Po). Contamination in these instances was generally restricted to drainage canals and riverine samples and was associated with known agricultural applications. http://www.sciencedirect.com/science/article/B6V6N-3SVYS1K-K/2/c60ce32c592fc4582dc81b33d3f904a8

790. Reddy, M. V. and Singh, K. B. Management of Ascochyta Blight of Chickpea Through Integration of Host Plant Tolerance and Foliar Spraying of Chlorothalonil. 1990; 18, (1): 65-70. Rec #: 548

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A field trial was conducted for three seasons (1982/83, 1983/84, and 1985/86) at Tel Hadya, Syria, to evaluate effect of foliar spraying of chlorothalonil (Bravo 500) on Ascochyta blight severity and yield in a blight tolerant Kabuli chickpea cultivar ILC 482. One spray during the vegetative stage (VS) significantly reduced blight severity on leaves and stems in some seasons as compared to nonsprayed plots. Two sprays, one each during the VS and reproductive stage (RS) or both in RS significantly reduced blight severity on leaves, stems and pods and also increased yield in some seasons. Two sprays of chlorothalonil, one each during the seedling and early podding stages on an average of two seasons gave the highest cost-benefit ratio of 1:5 for controlling Ascochyta blight. MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: BIOPHYSICS

MESH HEADINGS: PLANTS/PHYSIOLOGY

MESH HEADINGS: PLANTS/METABOLISM

MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT

MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/ANATOMY & HISTOLOGY **MESH HEADINGS: REPRODUCTION** MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI **MESH HEADINGS: LEGUMES KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Plant Physiology **KEYWORDS:** Plant Physiology **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Leguminosae LANGUAGE: eng

791. Reis, P. R.; Chiavegato, L. G.; Moraes, G. J.; Alves, E. B., and Sousa, E. O. Agrochemical Selectivity to Predaceous Mite Iphiseiodes Zuluagai Denmark & Muma (Acari: Phytoseiidae). 1998. Rec #: 311 Keywords: NON-ENGLISH Notes: Chemical of Concern: CTN Abstract: Portuguese Original Title: Seletividade de Agroquimicos ao Acaro Predador Iphiseiodes zuluagai Denmark & Muma (Acari: Phytoseiidae) ISSN: 0301-8059 Descriptors: Article Subject Terms: Insecticides Descriptors: Pesticide resistance Descriptors: Toxicity testing Descriptors: Article Taxonomic Terms: Phytoseiidae Descriptors: Iphiseiodes zuluagai Abstract: The side-effects of agrochemical to Iphiseiodes zuluagai Denmark & Muma (Acari: Phytoseiidae) were studied in laboratory using the residual contact spray method in glass surface. Forty-two plant protection products, used in Brazilian citrus orchards, were tested. Mite mortality and fecundity were evaluated for eight days. Tested products were ranked in toxicity classes, according to IOBC/WPRS system, by the total effect (combination of mortality and reproduction effect). The results showed that ca. 26% of the tested products were harmless (captan, clofentezine, fenbutatin oxide, fosetyl, hexythiazox, copper hydroxide, naled, copper oxychloride, cuprous oxide and tetradifon), 14% slightly harmful (abamectin, chlorothalonil, copper sulphate, thiophanatemethyl (PM) and ziram), 7% moderately harmful (sulfur, parathion-methyl and thiophanate-methyl (SC)) and 52% harmful to the mite (acrinathrin, amitraz, azinphos-ethyl, azocyclotin, benomyl, bifenthrin, bromopropylate, carbaryl, carbosulfan, chlorfenapyr, cyhexatin, dicofol, fenpropathrin, fenpyroximate, mancozeb, mineral and vegetable oils, phosmet, propargite, quinomethionate, triazophos and vamidothion).

English; Portuguese Publication Type: Journal Article Classification: Z 05183 Toxicology & resistance Entomology Abstracts

792. ---. Agrochemical Selectivity to Predaceous Mite Iphiseiodes Zuluagai Denmark & Muma (Acari: Phytoseiidae). 1998.

Rec #: 311 Keywords: NON-ENGLISH Notes: Chemical of Concern: CTN Abstract: Original Title: Seletividade de Agroquimicos ao Acaro Predador Iphiseiodes zuluagai Denmark & Muma (Acari: Phytoseiidae) ISSN: 0301-8059 Descriptors: Article Subject Terms: Insecticides Descriptors: Pesticide resistance **Descriptors:** Toxicity testing Descriptors: Article Taxonomic Terms: Phytoseiidae Descriptors: Iphiseiodes zuluagai Abstract: The side-effects of agrochemical to Iphiseiodes zuluagai Denmark & Muma (Acari: Phytoseiidae) were studied in laboratory using the residual contact spray method in glass surface. Forty-two plant protection products, used in Brazilian citrus orchards, were tested. Mite mortality and fecundity were evaluated for eight days. Tested products were ranked in toxicity classes, according to IOBC/WPRS system, by the total effect (combination of mortality and reproduction effect). The results showed that ca. 26% of the tested products were harmless (captan, clofentezine, fenbutatin oxide, fosetyl, hexythiazox, copper hydroxide, naled, copper oxychloride, cuprous oxide and tetradifon), 14% slightly harmful (abamectin, chlorothalonil, copper sulphate, thiophanatemethyl (PM) and ziram), 7% moderately harmful (sulfur, parathion-methyl and thiophanate-methyl (SC)) and 52% harmful to the mite (acrinathrin, amitraz, azinphos-ethyl, azocyclotin, benomyl, bifenthrin, bromopropylate, carbaryl, carbosulfan, chlorfenapyr, cyhexatin, dicofol, fenpropathrin, fenpyroximate, mancozeb, mineral and vegetable oils, phosmet, propargite, quinomethionate, triazophos and vamidothion).

English; Portuguese

Publication Type: Journal Article

Classification: Z 05183 Toxicology & resistance Entomology Abstracts Portuguese

793. Restrepo, M.; Munoz, N.; Day, N. E.; Parra, J. E.; De Romero L, and Nguyen-Dinh, X. Prevalence of Adverse Reproductive Outcomes in a Population Occupationally Exposed to Pesticides in Colombia. 1990; 16, (4): 232-238.

Rec #: 1718

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A prevalence survey of adverse reproductive outcomes was carried out in a population of 8867 persons (2951 men and 5916 women) who had been working in the floriculture industry in the Bogota area of Columbia for at least six months. These workers were exposed to 127 different types of pesticides. The prevalence rates for abortion, prematurity, stillbirths, and malformations were estimated for pregnancies occurring among the female workers and the wives of the male workers before and after they started working in floriculture, and these rates were related to various degrees of exposure. A moderate increase in the prevalence of abortion, prematurity, and congenital malformations was detected for pregnancies occurring after the start of work in floriculture.

MESH HEADINGS: HUMAN

MESH HEADINGS: SOCIAL BEHAVIOR MESH HEADINGS: ECOLOGY

MESH HEADINGS: GENITALIA/PATHOLOGY

MESH HEADINGS: GENITALIA/PHYSIOPATHOLOGY

MESH HEADINGS: REPRODUCTION

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: ANIMAL MESH HEADINGS: EMBRYO MESH HEADINGS: FETAL DISEASES MESH HEADINGS: HUMAN MESH HEADINGS: LARVA MESH HEADINGS: EMBRYOLOGY MESH HEADINGS: ABNORMALITIES MESH HEADINGS: EMBRYOLOGY MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE **KEYWORDS: Social Biology KEYWORDS:** Reproductive System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Developmental Biology-Embryology-Pathological KEYWORDS: Developmental Biology-Embryology-Descriptive Teratology and Teratogenesis KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS:** Horticulture-Flowers and Ornamentals **KEYWORDS:** Pest Control **KEYWORDS:** Hominidae LANGUAGE: eng

794. ---. Prevalence of Adverse Reproductive Outcomes in a Population Occupationally Exposed to Pesticides in Colombia. 1990; 16, (4): 232-238.

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MESH HEADINGS: SOCIAL BEHAVIOR

MESH HEADINGS: ECOLOGY

MESH HEADINGS: GENITALIA/PATHOLOGY

MESH HEADINGS: GENITALIA/PHYSIOPATHOLOGY

MESH HEADINGS: REPRODUCTION

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: ANIMAL

MESH HEADINGS: EMBRYO MESH HEADINGS: FETAL DISEASES MESH HEADINGS: HUMAN MESH HEADINGS: LARVA MESH HEADINGS: EMBRYOLOGY MESH HEADINGS: ABNORMALITIES MESH HEADINGS: EMBRYOLOGY MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS:** Social Biology KEYWORDS: Reproductive System-Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Developmental Biology-Embryology-Pathological KEYWORDS: Developmental Biology-Embryology-Descriptive Teratology and Teratogenesis KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS:** Horticulture-Flowers and Ornamentals **KEYWORDS:** Pest Control **KEYWORDS:** Hominidae LANGUAGE: eng

795. Rhodes, L. H. and Larsen, P. O. Effects of Fungicides on Mycorrhizal Development of Creeping Bentgrass. POPSOIL,ENV; 1981; 65, 145-147. Rec #: 630 Call Number: OK(ALL CHEMS),OK TARGET(Maneb,CTN) Notes: EcoReference No.: 72273 Chemical of Concern: CLNB,ANZ,BMY,IPD,PNB,CTN,TDF,Maneb

796. Rice, Clifford P. and Chernyak, Sergei M. Marine Arctic Fog: an Accumulator of Currently Used Pesticide. 1997 Aug; 35, (4): 867-878.

Rec #: 81

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: Coincident samples of arctic marine fog and air were found to contain the following pesticides, chlorpyril chlorothalonil, metolachlor, terbufos and trifluralin. The levels of the different pesticides in the fog ranged from 0.08 to 12 ng/L and for the air from < 0.1 to 5.0 pg/m3. Field derived air-water partition coefficients (Henry's law contstants-HLCs) were calculated from the paired air and water concentrations for chlorpyrifos and trifluralin. Comparisons of the field measured HLC values with laboratory determined HLCs (based on distilled water and on the fogwater itself) indicated that the pesticides were enriched in the field collected fogwater. The enrichments apwear to be predominantly caused by surface interaction processes. Concentrations of the pesticides in the fog were much higher than adjoining compartments of snow, ice, air, water or microlayer. Exchanges at these interfaces may be a common occurrence in the Arctic especially since fogs are common over much of the area.

http://www.sciencedirect.com/science/article/B6V74-3T7J0WW-

2D/2/61e21cb970de5dfe890f9d13b2e4cc29

797. ---. Marine Arctic Fog: an Accumulator of Currently Used Pesticide. 1997 Aug; 35, (4): 867-878.

Rec #: 81

Keywords: FATE

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Abstract: Coincident samples of arctic marine fog and air were found to contain the following pesticides, chlorpyril chlorothalonil, metolachlor, terbufos and trifluralin. The levels of the different pesticides in the fog ranged from 0.08 to 12 ng/L and for the air from < 0.1 to 5.0 pg/m3. Field derived air-water partition coefficients (Henry's law contstants-HLCs) were calculated from the paired air and water concentrations for chlorpyrifos and trifluralin. Comparisons of the field measured HLC values with laboratory determined HLCs (based on distilled water and on the fogwater itself) indicated that the pesticides were enriched in the field collected fogwater. The enrichments apwear to be predominantly caused by surface interaction processes. Concentrations of the pesticides in the fog were much higher than adjoining compartments of snow, ice, air, water or microlayer. Exchanges at these interfaces may be a common occurrence in the Arctic especially since fogs are common over much of the area.

http://www.sciencedirect.com/science/article/B6V74-3T7J0WW-2D/2/61e21cb970de5dfe890f9d13b2e4cc29

798. Richard, M. Pesticides-Friend or Foe? 1998; 37, (8): 19-25.

Rec #: 2602

Keywords: REVIEW

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Pesticides, where used correctly, can save up to 40% in crop losses; however, when pesticides are mal-, mis- or over-used the environmental and public health consequences can be very considerable. The United Nations has issued a list of chemicals that are banned or severely restricted in use; many of the chemicals on this list are pesticides. Whilst the use of highly persistent pesticides such as DDT has proved very effective in the eradication of diseases such as malaria, the adverse effects to the natural environment have been devastating - whole populations of birds have been eliminated. Within the former Soviet Union, the use of highly persistent pesticides was widespread; this has resulted in contamination of both crops, with pesticide residues well in excess of internationally acceptable maximum residue limits, and water resources to such high level that remediation through natural processes will take decades, or by xenobiotic or physicochemical processes will be MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: HUMAN

MESH HEADINGS: SOCIAL BEHAVIOR

MESH HEADINGS: ECOLOGY

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: AIR POLLUTION

MESH HEADINGS: SOIL POLLUTANTS

MESH HEADINGS: WATER POLLUTION

MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT

MESH HEADINGS: SOIL

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

KEYWORDS: General Biology-Institutions

**KEYWORDS: Social Biology** 

KEYWORDS: Biochemical Studies-General

KEYWORDS: Toxicology-Environmental and Industrial Toxicology

KEYWORDS: Public Health: Environmental Health-Air

KEYWORDS: Agronomy-General
KEYWORDS: Pest Control LANGUAGE: eng

799. ---. Pesticides-Friend or Foe? 1998; 37, (8): 19-25.

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KEYWORDS: Toxicology-Environmental and Industrial Toxicology

KEYWORDS: Public Health: Environmental Health-Air

KEYWORDS: Agronomy-General

KEYWORDS: Pest Control

LANGUAGE: eng

800. Ritter, W. F. Pesticide Contamination of Ground Water in the Usa a Review. 1990; 25, (1): 1-30. Rec #: 1685 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM REVIEW MATHEMATICAL MODEL DRINKING WATER APPLICATION EFFICIENCY WATER POLLUTION WATER RESOURCES USA MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES

MESH HEADINGS: MATHEMATICS

MESH HEADINGS: STATISTICS

MESH HEADINGS: BIOLOGY

MESH HEADINGS: ECOLOGY

MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Conservation **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

801. ---. Pesticide Contamination of Ground Water in the Usa a Review. 1990; 25, (1): 1-30.

Rec #: 1685 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM REVIEW MATHEMATICAL MODEL DRINKING WATER APPLICATION EFFICIENCY WATER POLLUTION WATER **RESOURCES USA** MESH HEADINGS: CONSERVATION OF NATURAL RESOURCES MESH HEADINGS: MATHEMATICS MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: FRESH WATER MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** General Biology-Conservation **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

Robinson, D. E.; Soltani, N.; Hamill, A. S., and Sikkema, P. H. Weed Control in Processing Tomato (Lycopersicon esculentum) with Rimsulfuron and Thifensulfuron Applied Alone or with Chlorothalonil or Copper Pesticides. POPSOIL,ENV,MIXTURE; 2006; 41, (5): 1295-1297. Rec #: 1060 Call Number: NO EFED CHEM (RIM), NO MIXTURE (CTN,CuOH,MBZ), OK (THF) Notes: EcoReference No.: 120620 Chemical of Concern: CTN,CuOH,MBZ,RIM,THF

 Robison, W. L.; Bogen, K. T., and Conrado, C. L. An Updated Dose Assessment for Resettlement Options at Bikini Atoll--a U.s. Nuclear Test Site. 1997; 73, (1): 100-114.

Rec #: 2833

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: On 1 March 1954, a nuclear weapon test, code-named BRAVO, conducted at Bikini Atoll in the northern Marshall Islands contaminated the major residence island. There has been a continuing effort since 1977 to refine dose assessments for resettlement options at Bikini Atoll. Here we provide a radiological dose assessment for the main residence island, Bikini, using extensive radionuclide concentration data derived from analysis of food crops, ground water, cistern water, fish and other marine species, animals, air, and soil collected at Bikini Island as part of our continuing research and monitoring program that began in 1978. The unique composition of coral soil greatly alters the relative contribution of 137Cs and 90Sr to the total estimated dose relative to expectations based on North American and European soils. Without counter measures, 137Cs produces 96% of the estimated dose for returning residents, mostly through uptake from the soil to terrestrial food crops but also from external gamma exposure. The doses are calculated assuming a resettlement date of 1999. The estimated maximum annual effective dose for current island conditions is 4.0 mSv when imported foods, which are now an established part of the diet, are available. The 30-, 50-, and 70-y integral effective doses are 91 mSv, 130 mSv, and 150 mSv, respectively. A detailed uncertainty analysis for these dose estimates is presented in a companion paper in this issue. We have evaluated various countermeasures to reduce 137Cs in food crops. Treatment with potassium reduces the uptake of 137Cs into food crops, and therefore the ingestion dose, to about 5% of pretreatment levels and has essentially no negative environmental consequences. We have calculated the dose for the rehabilitation scenario where the top 40 cm of soil is removed in the housing and village area, and the rest of the island is treated with potassium fertilizer; the maximum annual effective dose is 0.41 mSv and the 30-, 50-, and 70-y integral effective doses are 9.8 mSv, 14 mSv, and 16 mSv, respectively.

MESH HEADINGS: Cesium Radioisotopes/analysis MESH HEADINGS: Micronesia MESH HEADINGS: \*Nuclear Warfare MESH HEADINGS: Potassium/pharmacology MESH HEADINGS: \*Radiation Dosage MESH HEADINGS: Soil Pollutants, Radioactive/analysis LANGUAGE: eng

804. ---. An Updated Dose Assessment for Resettlement Options at Bikini Atoll--a U.s. Nuclear Test Site. 1997; 73, (1): 100-114.

Rec #: 2833

Keywords: HUMAN HEALTH

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now an established part of the diet, are available. The 30-, 50-, and 70-y integral effective doses are 91 mSv, 130 mSv, and 150 mSv, respectively. A detailed uncertainty analysis for these dose estimates is presented in a companion paper in this issue. We have evaluated various countermeasures to reduce 137Cs in food crops. Treatment with potassium reduces the uptake of 137Cs into food crops, and therefore the ingestion dose, to about 5% of pretreatment levels and has essentially no negative environmental consequences. We have calculated the dose for the rehabilitation scenario where the top 40 cm of soil is removed in the housing and village area, and the rest of the island is treated with potassium fertilizer; the maximum annual effective dose is 0.41 mSv and the 30-, 50-, and 70-y integral effective doses are 9.8 mSv, 14 mSv, and 16 mSv, respectively.

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805. Robison, W. L. and Sun, C. The Use of Comparative 137cs Body Burden Estimates From Environmental Data/Models and Whole Body Counting to Evaluate Diet Models for the Ingestion Pathway. 1997; 73, (1): 152-166.

Rec #: 2841

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Rongelap and Utirik Atolls were contaminated on 1 March 1954, by a U.S. nuclear test at Bikini Atoll code named BRAVO. The people at both atolls were removed from their atolls in the first few days after the detonation and were returned to their atolls at different times. Detailed studies have been carried out over the years by Lawrence Livermore National Laboratory (LLNL) to determine the radiological conditions at the atolls and estimate the doses to the populations. The contribution of each exposure pathway and radionuclide have been evaluated. All dose assessments show that the major potential contribution to the estimated dose is 137Cs uptake via the terrestrial food chain. Brookhaven National Laboratory (BNL) has carried out an extensive whole body counting program at both atolls over several years to directly measure the 137Cs body burden. Here we compare the estimates of the body burdens from the LLNL environmental method with body burdens measured by the BNL whole body counting method. The combination of the results from both methods is used to evaluate proposed diet models to establish more realistic dose assessments. Very good agreement is achieved between the two methods with a diet model that includes both local and imported foods. Other diet models greatly overestimate the body burdens (i.e., dose) observed by whole body counting. The upper 95% confidence limit of interindividual variability around the population mean value based on the environmental method is similar to that calculated from direct measurement by whole body counting. Moreover, the uncertainty in the population mean value based on the environmental method is in very good agreement with the whole body counting data. This provides additional confidence in extrapolating the estimated doses calculated by the environmental method to other islands and atolls. MESH HEADINGS: Body Burden MESH HEADINGS: Cesium Radioisotopes/administration & amp MESH HEADINGS: dosage/\*analysis **MESH HEADINGS: Diet** 

MESH HEADINGS: Humans MESH HEADINGS: Micronesia MESH HEADINGS: \*Nuclear Warfare LANGUAGE: eng

806. ---. The Use of Comparative 137cs Body Burden Estimates From Environmental Data/Models and Whole Body Counting to Evaluate Diet Models for the Ingestion Pathway. 1997; 73, (1): 152-166. Rec #: 2841 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN

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MESH HEADINGS: Body Burden MESH HEADINGS: Cesium Radioisotopes/administration & amp MESH HEADINGS: dosage/\*analysis MESH HEADINGS: Diet MESH HEADINGS: Humans MESH HEADINGS: Micronesia MESH HEADINGS: \*Nuclear Warfare LANGUAGE: eng

 Rogers, P. M. and Stevenson, W. R. Aggressiveness and Fungicide Sensitivity of Alternaria dauci from Cultivated Carrot. 2010; 94, (4): 405-412.

Rec #: 13262

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: Isolates of Alternaria dauci causing Alternaria leaf blight (ALB) were collected from commercial carrot (Daucus carota var. sativus) fields in northeastern North America during 2004. Twenty-two isolates representing a range of genetic diversity were analyzed for their aggressiveness on three commercial carrot varieties (Bolero, Enterprise, and Heritage) varying in disease susceptibility as well as their in vitro response to three fungicides (azoxystrobin, chlorothalonil, and boscalid) commonly used for ALB control. Severity of leaf and petiole blight and leaf chlorosis varied among isolates and carrot varieties in each of three experiments. Visible differences in disease severity, which ranged from 10.9 to 45.1% of the leaf area affected, were apparent 16 days after inoculation. Intensity of chlorosis correlated strongly with blight severity among all isolates. Significant differences were noted among carrot varieties in response to ALB. These varieties may prove useful as differentials capable of distinguishing isolates because variety by isolate interactions were detected. Inhibition of conidial germination ranged from 0.01 to 0.37  $\hat{I}L'g/ml$  for azoxystrobin, 0.009 to 0.08  $\hat{I}L'g/ml$  for chlorothalonil, and 0.09 to 0.59  $\hat{I}L'g/ml$  for boscalid. On average, isolates were more sensitive to chlorothalonil than to azoxystrobin and boscalid. No significant correlation was noted between fungicide sensitivity and aggressiveness. These data provide evidence for phenotypic diversity among A. dauci isolates collected from areas of commercial carrot production.

Keywords: azoxystrobin

Includes references 1022989092

808. Rohel, E. A.; Laurent, P.; Fraaije, B. A.; Cavelier, N., and Hollomon, D. W. Quantitative Pcr Monitoring of the Effect of Azoxystrobin Treatments on Mycosphaerella Graminicola Epidemics in the Field. 2002; 58, (3): 248-254.

Rec #: 644

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Quantitative PCR and visual monitoring of Mycosphaerella graminicola epidemics were performed to investigate the effect of curative and preventative applications of azoxystrobin in wheat field crops. A non-systemic protectant and a systemic curative fungicide, chlorothalonil and epoxiconazole, respectively, were used as references. PCR diagnosis detected leaf infection by M graminicola 3 weeks before symptom appearance, thereby allowing a clear distinction between curative and preventative treatments. When applied 1 week after the beginning of infection, azoxystrobin curative activity was intermediate between chlorothalonil (low effect) and epoxiconazole. When applied preventatively, none of the fungicides completely prevented leaf infection. There was some indication that azoxystrobin preventative treatments may delay fungal DNA increase more than epoxiconazole at the beginning of leaf infection. Both curative and preventative treatments increased the time lapse between the earliest PCR detection and the measurement of a 10% necrotic leaf area. Azoxystrobin only slightly decreased the speed of necrotic area increase compared with epoxiconazole. Hence, azoxystrobin activity toward M graminicola mainly resides in lengthening the time lapse between the earliest PCR detection and the measurement of a 10% necrotic leaf area. Information generated in this way is useful for optimal positioning of azoxystrobin treatments on M graminicola.

MESH HEADINGS: Acrylates/\*toxicity

MESH HEADINGS: Ascomycota/drug effects/\*genetics/growth & amp

MESH HEADINGS: development

MESH HEADINGS: DNA, Fungal/genetics/isolation & amp

MESH HEADINGS: purification

MESH HEADINGS: Epoxy Compounds/toxicity

MESH HEADINGS: Fungicides, Industrial/toxicity

MESH HEADINGS: Methacrylates

MESH HEADINGS: Nitriles/toxicity

MESH HEADINGS: Plant Diseases/microbiology

MESH HEADINGS: Plant Leaves/microbiology

MESH HEADINGS: Polymerase Chain Reaction/\*methods

MESH HEADINGS: Pyrimidines/\*toxicity

**MESH HEADINGS: Time Factors** 

MESH HEADINGS: Triazoles/toxicity

MESH HEADINGS: Triticum/microbiology

LANGUAGE: eng

809. Rojas-Campos, N.; Sigaran, M. F.; Bravo, A. V.; Jimenez-Ulate, F., and Correa, P. Salt Enhances the Mutagenicity of Nitrosated Black Beans. 1990; 14, (1): 1-3. Rec #: 1206 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM HUMAN GASTRIC CARCINOGENESIS PATHOGENIC DIET MESH HEADINGS: MINERALS MESH HEADINGS: MINERALS MESH HEADINGS: MINERALS MESH HEADINGS: MINERALS MESH HEADINGS: NUTRITIONAL REQUIREMENTS MESH HEADINGS: DIET MESH HEADINGS: IATROGENIC DISEASE

MESH HEADINGS: FOOD TECHNOLOGY

MESH HEADINGS: FRUIT **MESH HEADINGS: NUTS** MESH HEADINGS: VEGETABLES MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: CARCINOGENS MESH HEADINGS: HOMINIDAE **KEYWORDS: Biochemical Studies-Minerals KEYWORDS:** Metabolism-Minerals **KEYWORDS:** Nutrition-Minerals **KEYWORDS:** Nutrition-Pathogenic Diets **KEYWORDS:** Food Technology-Fruits **KEYWORDS:** Toxicology-Foods KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis **KEYWORDS:** Hominidae LANGUAGE: eng

810. ---. Salt Enhances the Mutagenicity of Nitrosated Black Beans. 1990; 14, (1): 1-3.

Rec #: 1206 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM HUMAN GASTRIC CARCINOGENESIS PATHOGENIC DIET MESH HEADINGS: MINERALS MESH HEADINGS: MINERALS/METABOLISM MESH HEADINGS: MINERALS MESH HEADINGS: NUTRITIONAL REQUIREMENTS MESH HEADINGS: DIET MESH HEADINGS: IATROGENIC DISEASE MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT **MESH HEADINGS: NUTS** MESH HEADINGS: VEGETABLES MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: CARCINOGENS MESH HEADINGS: HOMINIDAE **KEYWORDS:** Biochemical Studies-Minerals **KEYWORDS:** Metabolism-Minerals **KEYWORDS:** Nutrition-Minerals **KEYWORDS:** Nutrition-Pathogenic Diets **KEYWORDS:** Food Technology-Fruits **KEYWORDS:** Toxicology-Foods KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis **KEYWORDS:** Hominidae LANGUAGE: eng

811. Rosanoff, K. A. and Siegel, M. R. Mechanism of Action and Fate of the Fungicide Chlorothalonil (2,4,5,6-

Tetrachloroisophthalonitrile) in Biological Systems. 3. Interaction with Mammalian DNA, Histones, and Isolated Rat Liver Nuclei. 1981; 16, 120-128. Rec #: 120 Keywords: IN VITRO Call Number: NO IN VITRO (CTN) Notes: Chemical of Concern: CTN

 Rosanoff, Kenneth A. and Siegel, Malcolm R. Mechanism of Action and Fate of the Fungicide Chlorothalonil (2,4,5,6-Tetrachloroisophthalonitrile) in Biological Systems 3. Interaction With Mammalian Dna, Histones, and Isolated Rat Liver Nuclei. 1981 Oct; 16, (2): 120-128. Rec #: 121

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: The reactions of chlorothalonil with calf thymus histones, DNA, and isolated rat liver nuclei were studied utilizing labeled fungicide, polyacrylamide gel electrophoresis, and nucleohistone thermal denaturation. The reaction was dependent on pH, type of histones, and the histone and fungicide concentrations. In addition, two types of fungicide-histone binding patterns were observed. These patterns were characterized by the amount of label bound to protein after dialysis or after dialysis and acid precipitation. There was little binding of chlorothalonil to DNA. Polyacrylamide gel patterns of treated lysine-rich calf thymus histones were characterized by a loss of up to 80% of the stained protein without a change in the migration of the bands. Gel patterns of treated calf thymus whole histones were characterized by small variations in band density and minor loss of stained protein. The results of thermal denaturation experiments using chlorothalonil-treated lysine-rich histones and nontreated calf thymus DNA were not different from those using nontreated histones. Almost all of the radioactivity from [14C]chlorothalonil was bound by isolated rat liver nuclei. The binding patterns observed with rat liver nuclei were very similar to those using purified histones. Fractionation of proteins from treated nuclei revealed that the label was unequally distributed between the nuclear sap protein, ribonucleoprotein, and deoxyribonucleoprotein. http://www.sciencedirect.com/science/article/B6WP8-4DXK9YC-VW/2/6eb757611e541f7f75549c6effe3f0b1

 813. ---. Mechanism of Action and Fate of the Fungicide Chlorothalonil (2,4,5,6-Tetrachloroisophthalonitrile) in Biological Systems 3. Interaction With Mammalian Dna, Histones, and Isolated Rat Liver Nuclei. 1981 Oct; 16, (2): 120-128.

Rec #: 121

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: The reactions of chlorothalonil with calf thymus histones, DNA, and isolated rat liver nuclei were studied utilizing labeled fungicide, polyacrylamide gel electrophoresis, and nucleohistone thermal denaturation. The reaction was dependent on pH, type of histones, and the histone and fungicide concentrations. In addition, two types of fungicide-histone binding patterns were observed. These patterns were characterized by the amount of label bound to protein after dialysis or after dialysis and acid precipitation. There was little binding of chlorothalonil to DNA. Polyacrylamide gel patterns of treated lysine-rich calf thymus histones were characterized by a loss of up to 80% of the stained protein without a change in the migration of the bands. Gel patterns of treated calf thymus whole histones were characterized by small variations in band density and minor loss of stained protein. The results of thermal denaturation experiments using chlorothalonil-treated lysine-rich histones and nontreated calf thymus DNA were not different from those using nontreated histones. Almost all of the radioactivity from [14C]chlorothalonil was bound by isolated rat liver nuclei. The binding patterns observed with rat liver nuclei were very similar to those using purified histones. Fractionation of proteins from treated nuclei revealed that the label was unequally distributed between the nuclear sap protein, ribonucleoprotein, and deoxyribonucleoprotein. http://www.sciencedirect.com/science/article/B6WP8-4DXK9YC-VW/2/6eb757611e541f7f75549c6effe3f0b1

814. Rosenkranz, H. S. and Klopman, G. 'Cryptic' Mutagens and Carcinogenicity. 1990; 5, (2): 199-202.

Rec #: 850 Keywords: BACTERIA/ MODELING Call Number: NO CONTROL(ALL CHEMS) Notes: Chemical of Concern: BNZ,TCDD,TVP,DCB,EAC,CHD,CTN,HPT,4CE,AND,DCF,ISO,DDT

815. ---. 'cryptic' Mutagens and Carcinogenicity. 1990; 5, (2): 199-202. 159661. Rec #: 5672 Keywords: BACTERIA,MODELING Notes: Chemical of Concern: 4CE,AND,BNZ,CHD,CTN,DCB,DCF,DDT,DXN,EAC,HPT,ISO,TCDD,TVP Abstract: NO BACTERIA,NO MODELING

816. ---. Structural Basis of Carcinogenicity in Rodents of Genotoxicants and Non-Genotoxicants. 1990; 228, (2): 105-124.
Rec #: 840
Keywords: MODELING
Call Number: NO CONTROL(ALL CHEMS)
Notes: Chemical of Concern:
BNZ,PPO,TCDD,DNT,Captan,CHD,CTN,HPT,TXP,3CE,AND,ASCN,DCF,ISO,Ziram,DLD,EG
L,FMU,PCL,ADC,ANZ,DCB,DDT,EN,EDTA,HCCH,MEN,MXC,PL,PPB,AMTL,ETHN,BZO,S
CA,CBL,NAPH,PAH,BZD,ATP,EGY,ETN,PPN

817. ---. Structural Basis of Carcinogenicity in Rodents of Genotoxicants and Non-Genotoxicants. 1990; 228, (2): 105-124. 159662. Rec #: 5682

Keywords: MODELING Notes: Chemical of Concern: 3CE,ADC,AMTL,AND,ANZ,ASCN,ATP,BNZ,BZD,BZO,CBL,CHD,CTN,Captan,DCB,DCF,D DT,DLD,DNT,DPDP,DXN,EDTA,EGL,EGY,EN,ETHN,ETN,FMU,HCCH,HPT,ISO,MEN,MX C,NAPH,PAH,PCL,PL,PPB,PPCP,PPN,PPO,SCA,TCDD,TXP,Ziram Abstract: NO MODELING Dep. Environ. Health Sci., Sch. Med., Case Western Reserve Univ., Cleveland, Ohio 44106//

818. Rosenkranz, H. S. and Klopman, G. The Structural Basis of the Mutagenicity of Chemicals in Salmonella Typhimurium: the National Toxicology Program Data Base. 1990; 228, (1): 51-80. Rec #: 1670 Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A portion of the U.S. National Toxicology Program (NTP) Salmonella typhimurium mutagenicity data base was analyzed by CASE, an artificial intelligence SAR system. CASE identified 13 structural determinants which, with a high probability  $(p \mid 0.05)$  predicted the likelihood of mutagenicity of the 243 chemicals in the data base (sensitivity = 0.989; specificity = 0.950) as well as of chemicals not included in the data base. CASE also identified an additional set of structures which were highly predictive of mutagenic potency (sensitivity = 0.949; specificity = 1.00). Even though there is little among the chemicals included in the NTP and Gene-Tox Salmonella data bases, CASE found significant similarities between the structural determinants of the mutagenicity in the two data bases, thereby validating the analyses and indicating a commonality in the structural basis of mutagenicity. **MESH HEADINGS: COMPUTER SYSTEMS** MESH HEADINGS: BIOLOGY MESH HEADINGS: DOCUMENTATION MESH HEADINGS: INFORMATION SYSTEMS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY

MESH HEADINGS: BACTERIA/PHYSIOLOGY MESH HEADINGS: BACTERIA/METABOLISM MESH HEADINGS: BACTERIA/GENETICS MESH HEADINGS: VIRUSES/GENETICS MESH HEADINGS: ENTEROBACTERIACEAE KEYWORDS: General Biology-Information KEYWORDS: Biochemical Studies-General KEYWORDS: Toxicology-General KEYWORDS: Physiology and Biochemistry of Bacteria KEYWORDS: Genetics of Bacteria and Viruses KEYWORDS: Enterobacteriaceae (1979- ) LANGUAGE: eng

Rec #: 1670

819. ---. The Structural Basis of the Mutagenicity of Chemicals in Salmonella Typhimurium: the National Toxicology Program Data Base. 1990; 228, (1): 51-80.

Keywords: BACTERIA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A portion of the U.S. National Toxicology Program (NTP) Salmonella typhimurium mutagenicity data base was analyzed by CASE, an artificial intelligence SAR system. CASE identified 13 structural determinants which, with a high probability  $(p \mid 0.05)$  predicted the likelihood of mutagenicity of the 243 chemicals in the data base (sensitivity = 0.989; specificity = 0.950) as well as of chemicals not included in the data base. CASE also identified an additional set of structures which were highly predictive of mutagenic potency (sensitivity = 0.949; specificity = 1.00). Even though there is little among the chemicals included in the NTP and Gene-Tox Salmonella data bases, CASE found significant similarities between the structural determinants of the mutagenicity in the two data bases, thereby validating the analyses and indicating a commonality in the structural basis of mutagenicity. **MESH HEADINGS: COMPUTER SYSTEMS** MESH HEADINGS: BIOLOGY MESH HEADINGS: DOCUMENTATION MESH HEADINGS: INFORMATION SYSTEMS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/PHYSIOLOGY MESH HEADINGS: BACTERIA/METABOLISM **MESH HEADINGS: BACTERIA/GENETICS** MESH HEADINGS: VIRUSES/GENETICS MESH HEADINGS: ENTEROBACTERIACEAE **KEYWORDS:** General Biology-Information **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-General **KEYWORDS:** Physiology and Biochemistry of Bacteria **KEYWORDS:** Genetics of Bacteria and Viruses KEYWORDS: Enterobacteriaceae (1979-) LANGUAGE: eng

Rovesti, L. and Deseo, K. V. Compatibility of Chemical Pesticides with the Entomopathogenic Nematodes, Steinernema carpocapsae Weiser and S.feltiae Filipjev (Nematoda: Steinernematidae).
BEH,PHYWATER,AQUA; 1990; 36, (2): 237-245. Rec #: 1250 Call Number: NO COC(CTN),NO ENDPOINT(ALL CHEMS) Notes: EcoReference No.: 70083 Chemical of Concern: FMP,PPG,AMZ,AND,MOM,PRT,MTAS,DZ,PRN,PPHD,ES,PAQT,ACR,DOD,CYX,TFN,OXF,

## PHMD,LNR,PNB,PZM

- Royal, S. S.; Brecke, B. J.; Shokes, F. M., and Colvin, D. L. Influence of Broadleaf Weeds on Chlorothalonil Deposition, Foliar Disease Incidence, and Peanut (Arachis hypogaea) Yield. POP. D.L. Colvin, Zeneca Ag Products, Box 117, Whitakers, NC 27891//: SOIL,ENV; 1997; 11, (1): 51-58. Rec #: 680 Call Number: NO CONTROL (CTN,PDM) Notes: EcoReference No.: 94683 Chemical of Concern: CTN,PDM
- 822. ---. Influence of Broadleaf Weeds on Chlorothalonil Deposition, Foliar Disease Incidence, and Peanut (Arachis hypogaea) Yield. D.L. Colvin, Zeneca Ag Products, Box 117, Whitakers, NC 27891: 1997; 11, (1): 51-58. Rec #: 1260 Call Number: NO EFFECT(CTN) Notes: Chemical of Concern: CTN
- 823. Ruano-Rossil, J. M.; Radcliffe, E. B., and Ragsdale, D. W. Disruption of Entomopathogenic Fungi of Green Peach Aphid, Myzus persicae (Sulzer), by Fungicides Used to Control Potato Late Blight

In: Dedryver, et. al. (Eds), Aphids in a New Millenium, 6th Int. Sympos. Aphids in a New Millennium, INRA, Versailles. 2002: 365-370 (PUBL AS ECOREF# 150987).
Rec #: 1360
Keywords: PUBL AS
Call Number: NO EFED CHEM (TPTH), NO PUBL AS (CTN,MEM,MZB)
Notes: Chemical of Concern: CTN,MEM,MZB,TPTH

824. ---. Disruption of Entomopathogenic Fungi of Green Peach Aphid, Myzus Persicae (Sulzer), by Fungicides Used to Control Potato Late Blight

in: Dedryver, Et. Al. (Eds), Aphids in a New Millenium, 6th Int. Sympos. Aphids in a New Millennium, Inra, Versailles. 2002: 365-370 (PUBL AS ECOREF# 150987). 272598.
Rec #: 9152
Keywords: PUBL AS
Notes: Chemical of Concern: CTN,MEM,MZB,TPTH
Abstract: NO PUBL AS PUBL AS ECOREF# 150987//Attached to 150987// ECOREF#150987
has an enpoint while this paper does not// (Was ECOREF# 150989)

Rudgard, S. A.; Pettitt, T. R., and Hadley, P. Tenacity, Biological Activity and Redistribution of Copper Fungicides on Cocoa in Controlled Environments. ACC,POPSOIL,ENV; 1990; 9, (4): 281-288. Rec #: 1270 Call Number: OK(CuO,CuOH),NO MIXTURE(CTN) Notes: EcoReference No.: 90238 Chemical of Concern: CuO,CuOH,CTN

826. Ryals, S. C.; Genter, M. B., and Leidy, R. B. Assessment of Surface Water Quality on Three Eastern North Carolina Golf Courses. 1998; 17, (10): 1934-1942.
Rec #: 948

Keywords: EFFLUENT
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The golf course industry has become increasingly aware of potential problems related to pesticide and fertilizer movement from soil into surface water and groundwater. Recently, the industry has started to change application practices and pesticide formulations and to participate in routine monitoring studies. Three southeastern North Carolina golf courses agreed to participate in a surface water quality study to

determine the movement of fertilizers and related pesticides into surface waters. All three golf courses have ponds that provide irrigation water, from which samples were collected every two weeks. Each course has a sandy loam soil and adjoins wetlands, saline marshes, or elevated water tables. The data indicate that impact to the surface waters from the courses was minimal. Of the four pesticides (atrazine, chlorothalonil (Daconil), chlorpyrifos (Dursban), and 2,4-dichlorophenoxyacetic acid) and two nutrients (nitrogen and phosphate) surveyed, only 16 samples

MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-General KEYWORDS: Pest Control LANGUAGE: eng

827. ---. Assessment of Surface Water Quality on Three Eastern North Carolina Golf Courses. 1998; 17, (10): 1934-1942.

Rec #: 948

Keywords: EFFLUENT

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The golf course industry has become increasingly aware of potential problems related to pesticide and fertilizer movement from soil into surface water and groundwater. Recently, the industry has started to change application practices and pesticide formulations and to participate in routine monitoring studies. Three southeastern North Carolina golf courses agreed to participate in a surface water quality study to determine the movement of fertilizers and related pesticides into surface waters. All three golf courses have ponds that provide irrigation water, from which samples were collected every two weeks. Each course has a sandy loam soil and adjoins wetlands, saline marshes, or elevated water tables. The data indicate that impact to the surface waters from the courses was minimal. Of the four pesticides (atrazine, chlorothalonil (Daconil), chlorpyrifos (Dursban), and 2,4-dichlorophenoxyacetic acid) and two nutrients (nitrogen and phosphate) surveyed, only 16 samples

MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-General KEYWORDS: Pest Control LANGUAGE: eng

 Ryan, C. P. Seasonal Development of Dollar Spot Epidemics in Maryland and Nitrogen Effects on Fungicide Performance in Creeping Bentgrass. POPSOIL, ENV, MIXTURE; 2011: 153 p. (UMI# 1496359). Rec #: 1770 Call Number: EFFICACY (CTN), NO EFED CHEM (BSC,DTP,NHSO4,Urea), NO EFFECT (BS,FTL,IPD,MFX,MYC,PCZ,PPCP,PPCP2011,PPM,QNC,RMLX,SFZ), OK (KNO3,NHN), TARGET (CTN) Notes: EcoReference No.: 155931 Chemical of Concern: BS,BSC,CTN,DTP,FTL,IPD,KNO3,MFX,MYC,NHN,NHSO4,PCZ,PPCP,PPM,QNC,RMLX,SF Z,Urea

829. Saka, M.; Iijima, K.; Odanaka, Y., and Kato, Y. Supercritical Fluid Extraction of Pesticides in Fruits and Vegetables: Application of New Polymer Absorbent. 1998; 23, (4): 414-418. Rec #: 2344 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE PLANT PLANT FRUIT VEGETABLE SUPERCRITICAL FLUID EXTRACTION PESTICIDES POLYMER ABSORBENT DIATOMACEOUS EARTH SILICAGEL METHODOLOGY LABORATORY METHOD MESH HEADINGS: ECOLOGY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS **KEYWORDS: Ecology KEYWORDS:** Pest Control **KEYWORDS:** Plantae-Unspecified LANGUAGE: eng

- 830. Sakai, M. Determination of Pesticides and Chronic Test with Daphnia magna for Rainwater Samples. 2002; 37, (3): 247-254. Rec #: 860 Keywords: MIXTURE Call Number: NO MIXTURE(DDVP,FNT,CTN) Notes: Chemical of Concern: DDVP,FNT,CTN,PZM
- 831. ---. Determination of Pesticides and Chronic Test With Daphnia Magna for Rainwater Samples. 2002; 37, (3): 247-254. 160061. Rec #: 9272 Keywords: MIXTURE Notes: Chemical of Concern: CTN,DDVP,DS,FNT,PZM Abstract: NO MIXTURE Yokohama Environmental Research Institute, Isogo, Japan//tz880231@city.yokohama.jp//Journal of environmental science and health. Part. B, pesticides, food contaminants, and agricultural wastes//
- 832. Samanta, S.; Kole, R. K.; Ganguly, L. K., and Chowdhury, A. Photochemical Transformation of the Fungicide Chlorothalonil by Ultra Violet Radiation. GROENV; 1997; 59, (3): 367-374. Rec #: 640
  Call Number: OK TARGET(CTN)
  Notes: EcoReference No.: 90085
  Chemical of Concern: CTN
- 833. Sato, T.; Taguchi, M.; Nagase, H.; Kito, H., and Niikawa, M. Augmentation of Allergic Reactions by Several Pesticides. 1998; 126, (1): 41-53. Rec #: 2589 Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The augmentative effects of several

pesticides on histamine release from mast cells of rats that had been sensitized passively by antidinitrophenol (DNP) monoclonal IgE antibodies were investigated in vitro. Various pesticides, especially phenthoate (PAP), chlornitrofen (CNP) and paraquat (PQ), increased histamine release. This increase was not observed in histamine release with non-antigen or induction by calcium ionophore A23187 or compound 48/80. Passive cutaneous anaphylaxis (PCA) was examined, and an increase of PCA was observed with PAP and PQ, but not with CNP, while an increase of tumor necrosis factor-alpha (TNF-alpha) production was observed with CNP and PQ, but not PAP. These results suggest that various pesticides as environmental pollutants exacerbate allergic diseases.

MESH HEADINGS: ANIMALS MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AMINO ACIDS MESH HEADINGS: PEPTIDES **MESH HEADINGS: PROTEINS** MESH HEADINGS: CARBOHYDRATES MESH HEADINGS: INFLAMMATION/PATHOLOGY MESH HEADINGS: HEMATOLOGIC DISEASES/PATHOLOGY MESH HEADINGS: HEMATOLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY MESH HEADINGS: ENDOCRINE GLANDS MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: IMMUNITY. CELLULAR MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: MURIDAE **KEYWORDS:** Cytology and Cytochemistry-Animal **KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Proteins KEYWORDS: Biochemical Studies-Carbohydrates KEYWORDS:** Pathology **KEYWORDS: Blood KEYWORDS: Blood KEYWORDS: Endocrine System-General KEYWORDS:** Integumentary System-Pathology **KEYWORDS:** Toxicology-General KEYWORDS: Immunology and Immunochemistry-Immunopathology **KEYWORDS:** Allergy

KEYWORDS: Pest Control KEYWORDS: Economic Entomology-Biological Control KEYWORDS: Muridae LANGUAGE: eng

834. ---. Augmentation of Allergic Reactions by Several Pesticides. 1998; 126, (1): 41-53.

Rec #: 2589

Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The augmentative effects of several pesticides on histamine release from mast cells of rats that had been sensitized passively by antidinitrophenol (DNP) monoclonal IgE antibodies were investigated in vitro. Various pesticides, especially phenthoate (PAP), chlornitrofen (CNP) and paraquat (PQ), increased histamine release. This increase was not observed in histamine release with non-antigen or induction by calcium ionophore A23187 or compound 48/80. Passive cutaneous anaphylaxis (PCA) was examined, and an increase of PCA was observed with PAP and PQ, but not with CNP, while an increase of tumor necrosis factor-alpha (TNF-alpha) production was observed with CNP and PQ, but not PAP. These results suggest that various pesticides as environmental pollutants exacerbate allergic diseases.

MESH HEADINGS: ANIMALS MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AMINO ACIDS MESH HEADINGS: PEPTIDES **MESH HEADINGS: PROTEINS** MESH HEADINGS: CARBOHYDRATES MESH HEADINGS: INFLAMMATION/PATHOLOGY MESH HEADINGS: HEMATOLOGIC DISEASES/PATHOLOGY MESH HEADINGS: HEMATOLOGIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PATHOLOGY MESH HEADINGS: LYMPHATIC DISEASES/PHYSIOPATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PATHOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOPATHOLOGY MESH HEADINGS: HEMATOPOIETIC SYSTEM/PHYSIOLOGY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: LYMPH/PHYSIOLOGY MESH HEADINGS: LYMPHATIC SYSTEM/PHYSIOLOGY MESH HEADINGS: RETICULOENDOTHELIAL SYSTEM/PHYSIOLOGY MESH HEADINGS: ENDOCRINE GLANDS MESH HEADINGS: SKIN DISEASES/PATHOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: IMMUNITY, CELLULAR MESH HEADINGS: HYPERSENSITIVITY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: MURIDAE **KEYWORDS:** Cytology and Cytochemistry-Animal **KEYWORDS: Biochemical Studies-General** 

KEYWORDS: Biochemical Studies-Proteins KEYWORDS: Biochemical Studies-Carbohydrates KEYWORDS: Pathology KEYWORDS: Blood KEYWORDS: Blood KEYWORDS: Endocrine System-General KEYWORDS: Integumentary System-Pathology KEYWORDS: Toxicology-General KEYWORDS: Toxicology-General KEYWORDS: Immunology and Immunochemistry-Immunopathology KEYWORDS: Allergy KEYWORDS: Pest Control KEYWORDS: Economic Entomology-Biological Control KEYWORDS: Muridae LANGUAGE: eng

835. Schepers, H. T. A. M. Persistence of the Protectant Efficacy of Potato late Blight Fungicides. POPSOIL,ENV; 2000; 65, (2b): 789-798. Rec #: 1500 Call Number: NO EFED CHEM (CMX,PPMH), NO MIXTURE (MZB,Maneb), TARGET (CTN,FNZ) Notes: EcoReference No.: 108293 Chemical of Concern: CMX,CTN,DMX,FNZ,MZB,Maneb,PPMH

836. Schippers, N. and Schwack, W. Phototransformation of imidacloprid on isolated tomato fruit cuticles and on tomato fruits. 2010; 98, (1): 57-60.

Rec #: 15702

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: Abstract: Imidacloprid, a neonicotinoid insecticide, is widely used in plant protection to prevent crop losses. The objective of this study was to show the photochemical fate of imidacloprid on plant Surfaces by irradiation experiments oil isolated tomato fruit cuticles and tomato fruits (Lycopersicon esculentum Mill) Imidacloprid spiked samples were irradiated both under sunlight simulator and natural sunlight conditions for 24 Ill, which resulted in recoveries of 23% and 24%, respectively, if isolated cuticles were studied. On whole tomato fruits, recoveries were 33% and 71%. respectively Similar results were obtained oil cuticles spiked with the formulation Confidor and irradiated under natural sunlight However, oil tomato fruits the application of Confidor resulted in a higher loss (56%) of imidacloprid During all irradiation experiments both on cuticles and whole fruits, 1-[(6-chloropyridin-3-yl)methyl]imidazolidin-2imine was generally formed at 10-14 mol%, but different other photoproducts were also detected in low amounts, whereas N-nitrosoimidacloprid was only detected under natural sunlight conditions Rapid photodegradation of imidacloprid could be demonstrated in all experiments The identified photoproducts, 1-[(6-chloropyridin-3-yl)methyl]imidazolidin-2-imine and Nnitrosoimidacloprid, are possible reaction partners for plant cuticle constituents to form Cuticle bound residues. (C) 2009 Elsevier B V All rights reserved. Keywords: Imidacloprid, Photodegradation, Tomato, Cuticle ISI Document Delivery No.: 553EV

837. Schmidt, R. E.; Zhang, X., and Chalmers, D. R. Response of Photosynthesis and Superoxide Dismutase to Silica Applied to Creeping Bentgrass Grown Under Two Fertility Levels. BCM,PHY,POPSOIL,ENV,MIXTURE; 1999; 22, (11): 1763-1773. Rec #: 830 Call Number: NO EFED CHEM (Urea), NO EFFECT (CTN), OK (KSI) Notes: EcoReference No.: 101356 Chemical of Concern: CTN,KSI,Urea

838. Schnabel, G. and Layne, D. R. Comparison of Reduced-Application and Sulfur-Based Fungicide Programs

on Scab Intensity, Fruit Quality, and Cost of Disease Control on Peach. BCM,GRO,POPSOIL,ENV,MIXTURE; 2004; 88, (2): 162-166. Rec #: 300 Call Number: LITE EVAL CODED (SFR), NO MIXTURE (AZX,CTN,Captan) Notes: EcoReference No.: 90237 Chemical of Concern: AZX,CTN,Captan,SFR

 839. ---. Comparison of Reduced-Application and Sulfur-Based Fungicide Programs on Scab Intensity, Fruit Quality, and Cost of Disease Control on Peach. GRO,POPSOIL,ENV; 2004; 88, (2): 162-166. Rec #: 1310 Call Number: OK(SFR),NO MIXTURE(CTN,Captan,AZX) Notes: EcoReference No.: 90237 Chemical of Concern: CTN,Captan,AZX,SFR

840. Schnabel, W. E. and White, D. M. The Effect of Mycorrhizal Fungi on the Fate of Aldrin: Phytoremediation Potential. GRO,ACC,BCM,PHYSOIL,ENV; 2001; 3, (2): 221-241. Rec #: 1320 Keywords: FATE Call Number: NO CONTROL(AND),NO MIXTURE(CTN) Notes: EcoReference No.: 89656 Chemical of Concern: AND,CTN

841. Schnelle, M. A. and Hensley, D. L. Effects of Pesticides upon Nitrogen Fixation and Nodulation by Dry Bean. BCM,GRO. 368: SOIL,ENV; 1990; 28, 83-88. Rec #: 1330
Call Number: LITE EVAL CODED(DZ),NO CROP(CTN,Captan,MLN,Maneb),OK(ALL CHEMS,TARGET-CBL)
Notes: EcoReference No.: 53973
Chemical of Concern: CTN,Captan,BMY,FNV,SXD,DCF,MLN,BT,TFN,ACR,Maneb,EPTC,PNB,ES,DZ,CBL

842. Schoene, P. ; Lennartz, B., and Oerke, E. C. Fungicide Sensitivity of Fungi Used for Biocontrol of Perthotrophic Pathogens. POPENV,MIXTURE; 1999: 477-482. Rec #: 650
Call Number: NO CONTROL (AZX,CBD,CTN,Folpet,MEM,MZB,PCZ,PPCP,PPCP2011,TEZ), NO EFED CHEM (QXY,TDM), TARGET (AZX,CBD,Folpet,MEM,MZB,PCZ,PPCP,PPCP2011,TEZ) Notes: EcoReference No.: 101848
Chemical of Concern: AZX,CBD,CTN,Folpet,MEM,MZB,PCZ,PPCP,QXY,TDM,TEZ

843. Sedegui, M.; Carroll, R. B.; Hamlen, R. A.; Whittington, D. P., and Power, R. Comparison of Assays for Measuring Sensitivity of Phytophthora Infestans to Fungicides. 1998; 88, (9 suppl.): S132. Rec #: 2654 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS PATHOGEN PHYTOPATHOLOGY FUNGICIDE SENSITIVITY CHLOROTHALONIL FUNGICIDE OXADIXYL METALAXYL CYMOXANIL PEST MANAGEMENT PESTICIDES MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES KEYWORDS: General Biology-Symposia KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Phycomycetes LANGUAGE: eng

844. ---. Comparison of Assays for Measuring Sensitivity of Phytophthora Infestans to Fungicides . 1998; 88, (9 suppl.): S132. Rec #: 2654 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS PATHOGEN PHYTOPATHOLOGY FUNGICIDE SENSITIVITY CHLOROTHALONIL FUNGICIDE OXADIXYL METALAXYL CYMOXANIL PEST MANAGEMENT PESTICIDES MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES KEYWORDS:** General Biology-Symposia KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS: Pest Control KEYWORDS:** Phycomycetes LANGUAGE: eng

845. Seif, A. A. and Hillocks, R. J. Chemical Control of Phaeoramularia Fruit and Leaf Spot of Citrus in Kenya. POP. A.A. Seif, Department of Agriculture, University of Reading, Earley Gate, Reading RG6 6AT, United Kingdom//: SOIL,ENV; 1997; 16, (2): 141-145. Rec #: 540 Call Number: EFFICACY (CTN,CuOH), NO EFED CHEM (CPZ,TDM), OK (BMY,FUZ,PCZ,PPCP,PPCP2011,TDF,TEZ), TARGET (CTN,CuOH) Notes: EcoReference No.: 64296 Chemical of Concern: BMY,CPZ,CTN,CuOH,FUZ,PCZ,PPCP,TDF,TDM,TEZ

846. ---. Chemical Control of Phaeoramularia Fruit and Leaf Spot of Citrus in Kenya. POP,REP. A.A. Seif, Department of Agriculture, University of Reading, Earley Gate, Reading RG6 6AT, United Kingdom: SOIL,ENV; 1997; 16, (2): 141-145. Rec #: 670 Call Number: OK(ALL CHEMS),NO CROP(CTN) Notes: EcoReference No.: 64296 Chemical of Concern: TDM,BMY,CTN,CuOH,CPZ,FUZ,PCZ,TEZ,TDF

847. Sellin Jeffries, Marlo K; Conoan, Nicholas H; Cox, Marc B; Sangster, Jodi L; Balsiger, Heather a; Bridges, Andrew a; Cowman, Tim; Knight, Lindsey a; Bartelt-Hunt, Shannon L; Kolok, Alan S, and Kolok, Alan S. The Anti-Estrogenic Activity of Sediments From Agriculturally Intense Watersheds: Assessment Using in Vivo and in Vitro Assays. 2011 Sep; 105, (1-2): 189-198. Rec #: 11552

Keywords: SEDIMENT, MIXTURE

Notes: Chemical of Concern: CTN

Abstract: Abstract: The goal of the current study was to determine whether sediments from agriculturally intense watersheds can act as a potential source of anti-estrogenic endocrinedisrupting compounds. The specific objectives of the current study were to determine (1) whether female fathead minnows (Pimephales promelas) experience alterations in endocrine function when exposed to sediments collected from agriculturally intense watersheds and (2) if these sediments display anti-estrogenic activity in an in vitro assay. In addition, sediment samples were analyzed for the presence of steroid hormones and pesticides associated with local agricultural practices. To accomplish this, sediments and water were collected from three sites within two agriculturally intense Nebraska watersheds (Bow Creek and the Elkhorn River). In 2009, minnows were exposed to sediment and/or water collected from the two Bow Creek sites (East Bow Creek and the Confluence) in the laboratory, while in 2010, minnows were exposed to sediment and/or water from East Bow Creek, the Confluence and the Elkhorn River. Following the 7-day exposure period, the hepatic mRNA expression of two-estrogen responsive genes, estrogen receptor alpha (ER alpha) and vitellogenin (Vtg) was determined. In 2009, females exposed to Confluence sediments, in the presence of laboratory water or Confluence water, experienced significant reductions in ER alpha expression relative to unexposed and Confluence water-exposed females. The defeminization of these females suggests the presence of a biologically available antiestrogenic compound in sediments collected from this site. In 2010, sediments were assessed for anti-estrogenic activity on days 0 and 7 of the exposure period using a 4-h yeast estrogen screen. Lipophilic extracts (LEs) of day 0 sediments collected from the Confluence and the Elkhorn River induced significant reductions in the estrogenic reporter activity of treated yeast cultures suggesting the presence of a lipophilic anti-estrogenic compound in these extracts. Chemical analysis revealed the presence of a variety of steroid hormones, including those associated with the production of beef cattle (i.e. beta -trenbolone, alpha -zearalanol and alpha -zearalenol), in sediments indicating that compounds utilized by local beef cattle operations are capable of entering nearby watersheds. Overall, the results of this study indicate that an environmentally relevant anti-estrogenic compound is present in sediments from agriculturally intense watersheds and that this compound is bioavailable to fish. Furthermore, the presence of steroid hormones in sediments from these watersheds provides evidence indicating that steroids are capable of sorbing to sediments. Date revised - 2012-01-01. Publication date - Sep 2011. Language of summary -English. Pages - 189-198. ProQuest ID - 886010585. Corporate institution author - Sellin Jeffries, Marlo K; Conoan, Nicholas H; Cox, Marc B; Sangster, Jodi L; Balsiger, Heather A; Bridges, Andrew A; Cowman, Tim; Knight, Lindsey A; Bartelt-Hunt, Shannon L; Kolok, Alan S. DOI -OB-e10f9426-fe0a-4c95-b11dcsaobj201; 15378914; CS1149752; 10.1016/j.aquatox.2011.04.008; 0166-445X

- 848. Seth Carley, D. Potential Use of Hyper-Spectral and Multi-Spectral Remote Sensing Imagery to Enhance Management of Peanut (Arachis hypogaea L.). PHY,POPSOIL,ENV,MIXTURE; 2006: 181 p. (UMI# 3247082). Rec #: 1110 Call Number: NO EFED CHEM (ACF,IAZ,PRC,TFX), NO MIXTURE (CTN,PCZ,PPCP,PPCP2011,PRC,TEZ,TFX), OK (24DB,ADC,BT,CLT,PAQT,PQT,Zn) Notes: EcoReference No.: 156250 Chemical of Concern: 24DB,ACF,ADC,BT,CLT,CTN,IAZ,PAQT,PCZ,PPCP,PQT,PRC,TEZ,TFX,Zn
- 849. Settle, D.; Fry, J., and Tisserat, N. Dollar Spot and Brown Patch Fungicide Management Strategies in Four Creeping Bentgrass Cultivars. POP,PHYSOIL,ENV; 2001; 41, (4): 1190-1197. Rec #: 680 Call Number: OK(IPD),OK TARGET(CTN),NO MIXTURE(TDF,FTL,AZX) Notes: EcoReference No.: 89879 Chemical of Concern: IPD,CTN,TDF,FTL,AZX

850. Shah, P. A.; Douro-Kpindou, O.-K.; Sidibe, A.; Daffe, C. O.; Van der Pauw, H., and Lomer, C. J. Effects of the Sunscreen Oxybenzone on Field Efficacy and Persistence of Metarhizium flavoviride conidia Against Kraussella amabile (Orthoptera: Acrididae) in Mali, West Africa. 1998; 8, (3): 357-364.
Rec #: 890
Keywords: BIOLOGICAL TOXICANT Call Number: NO COC(CTN) Notes: Chemical of Concern: CTN

851. Shah, R. G.; Lagueux, J.; Kapur, S.; Levallois, P.; Ayotte, P.; Tremblay, M.; Zee, J., and Poirier, G. G. -32p-Postlabeling Analysis of Dna-Adducts Generated by the Metabolites of the Pesticides Guthion Lorox Sencor Reglone Daconil and Admire. 1997; 38, (0): 332. Rec #: 898 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT RAT ANIMAL MODEL DNA-ADDUCTS ANALYSIS P-32-POSTLABELING ANALYSIS GUTHION TOXICOKINETICS PESTICIDE LOROX SENCOR REGLONE DACONIL ADMIRE TOXICOLOGY BIOCHEMISTRY AND BIOPHYSICS ANALYTICAL METHOD MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NUCLEIC ACIDS **MESH HEADINGS: PURINES** MESH HEADINGS: PYRIMIDINES MESH HEADINGS: METABOLISM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MURIDAE **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Toxicology-General **KEYWORDS:** Pest Control **KEYWORDS:** Muridae LANGUAGE: eng

852. ---. -32p-Postlabeling Analysis of Dna-Adducts Generated by the Metabolites of the Pesticides Guthion Lorox Sencor Reglone Daconil and Admire. 1997; 38, (0): 332. Rec #: 898 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT RAT ANIMAL MODEL DNA-ADDUCTS ANALYSIS P-32-POSTLABELING ANALYSIS GUTHION TOXICOKINETICS PESTICIDE LOROX SENCOR REGLONE DACONIL ADMIRE TOXICOLOGY BIOCHEMISTRY AND BIOPHYSICS ANALYTICAL METHOD MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: NUCLEIC ACIDS MESH HEADINGS: PURINES MESH HEADINGS: PYRIMIDINES MESH HEADINGS: METABOLISM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MURIDAE KEYWORDS: General Biology-Symposia KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS: Metabolism-General Metabolism KEYWORDS: Toxicology-General KEYWORDS: Pest Control KEYWORDS: Muridae LANGUAGE: eng

853. Shah, R. G. ; Lagueux, J.; Kapur, S.; Levallois, P.; Ayotte, P.; Tremblay, M.; Zee, J., and Poirier, G. G. \*. Determination of Genotoxicity of the Metabolites of the Pesticides Guthion, Sencor, Lorox, Reglone, Daconil and Admire by Super(32)P-Postlabeling. 1997. Rec #: 336 Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: ISSN: 0300-8177 Descriptors: Article Subject Terms: genotoxicity Descriptors: pesticides

Descriptors: DNA adducts

Abstract: Commercial formulations of the pesticides: Guthion (azinphos methyl), Sencor (metribuzin), Lorox (linuron), Reglone (diquat), Daconil (chlorothalonil) and Admire (imidacloprid) were studied for their genotoxicity by super(32)P-postlabeling. Metabolites of the pesticides were obtained enzymatically using arochlor induced rat liver S9 fraction, in an NADPH generating system. The resulting metabolites were reacted with calf thymus DNA and the DNA was analyzed for presence of adducts by either the nuclease P1 or butanol enrichment. Nuclease P1 enrichment resulted in adducts for all the pesticides. Compared to the level of adducts in control DNA, the levels in pesticide-treated DNA were higher for all the pesticides, except Daconil. The increase in adduct numbers for pesticide-treated DNAs ranged from 4.9-12.4 times the control-DNA indicating pesticide genotoxicity in this in vitro system. Enrichment using butanol extraction gave three adducts unique to Sencor-DNA. These adducts were different from those obtained with nuclease P1 enrichment of the same. B( alpha )P was the positive control for the in vitro metabolism, and two adduct enrichment procedures: nuclease P1 digestion and butanol extraction.

English

Publication Type: Journal Article Classification: X 24135 Biochemistry Toxicology Abstracts

## 854. Shah, R. G.; Lagueux, J.; Kapur, S.; Levallois, P.; Ayotte, P.; Tremblay, M.; Zee, J., and Poirier, G. G. Determination of Genotoxicity of the Metabolites of the Pesticides Guthion, Sencor, Lorox, Reglone, Daconil and Admire by 32p-Postlabeling. 1997; 169, (1-2): 177-184. Rec #: 489 Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Commercial formulations of the pesticides: Guthion (azinphos methyl), Sencor (metribuzin), Lorox (linuron), Reglone (diquat), Daconil (chlorothalonil) and Admire (imidacloprid) were studied for their genotoxicity by 32P-postlabeling. Metabolites of the pesticides were obtained enzymatically using arochlor induced rat liver S9 fraction, in an NADPH generating system. The resulting metabolites were reacted with calf thymus DNA and the DNA was analyzed for presence of adducts by either the nuclease P1 or butanol enrichment. Nuclease P1 enrichment resulted in adducts for all the pesticides. Compared to the level of adducts in control DNA, the levels in pesticide-treated DNA were higher for all the pesticides, except Daconil. The increase in adduct numbers for pesticide-treated DNAs ranged from 4.9-12.4 times the control-DNA indicating pesticide genotoxicity in this in vitro system. Enrichment using butanol extraction gave three adducts unique to Sencor-DNA. These adducts were different from those obtained with nuclease P1 enrichment of the same. B(alpha)P was the positive control for the in vitro metabolism, and two adduct enrichment procedures: nuclease P1 digestion and butanol extraction.

MESH HEADINGS: Adenosine Triphosphate MESH HEADINGS: Animal MESH HEADINGS: Aspergillus Nuclease S1 **MESH HEADINGS: Butanols MESH HEADINGS: Cattle** MESH HEADINGS: Chromatography, Thin Laver MESH HEADINGS: DNA/\*DRUG EFFECTS MESH HEADINGS: DNA Adducts/\*ANALYSIS MESH HEADINGS: Microsomes, Liver/METABOLISM MESH HEADINGS: Pesticides/METABOLISM MESH HEADINGS: Pesticides/\*TOXICITY MESH HEADINGS: Phosphorus Radioisotopes **MESH HEADINGS: Rats** MESH HEADINGS: Support, Non-U.S. Gov't MESH HEADINGS: Thymus Gland LANGUAGE: eng

855. Shah, R. G. ; Lagueux, J.; Kapur, S.; Levallois, P.; Ayotte, P.; Tremblay, M.; Zee, J., and Poirier, G. G. \*. Determination of Genotoxicity of the Metabolites of the Pesticides Guthion, Sencor, Lorox, Reglone, Daconil and Admire by Super(32)P-Postlabeling. 1997. Rec #: 336

Kee #. 550 Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: ISSN: 0300-8177 Descriptors: Article Subject Terms: genotoxicity Descriptors: pesticides Descriptors: DNA adducts

Abstract: Commercial formulations of the pesticides: Guthion (azinphos methyl), Sencor (metribuzin), Lorox (linuron), Reglone (diquat), Daconil (chlorothalonil) and Admire (imidacloprid) were studied for their genotoxicity by super(32)P-postlabeling. Metabolites of the pesticides were obtained enzymatically using arochlor induced rat liver S9 fraction, in an NADPH generating system. The resulting metabolites were reacted with calf thymus DNA and the DNA was analyzed for presence of adducts by either the nuclease P1 or butanol enrichment. Nuclease P1 enrichment resulted in adducts for all the pesticides. Compared to the level of adducts in control DNA, the levels in pesticide-treated DNA were higher for all the pesticides, except Daconil. The increase in adduct numbers for pesticide-treated DNAs ranged from 4.9-12.4 times the control-DNA indicating pesticide genotoxicity in this in vitro system. Enrichment using butanol extraction gave three adducts unique to Sencor-DNA. These adducts were different from those obtained with nuclease P1 enrichment of the same. B( alpha )P was the positive control for the in vitro metabolism, and two adduct enrichment procedures: nuclease P1 digestion and butanol extraction.

English

Publication Type: Journal Article Classification: X 24135 Biochemistry Toxicology Abstracts

856. Shah, R. G.; Lagueux, J.; Kapur, S.; Levallois, P.; Ayotte, P.; Tremblay, M.; Zee, J., and Poirier, G. G. Determination of Genotoxicity of the Metabolites of the Pesticides Guthion, Sencor, Lorox, Reglone, Daconil and Admire by 32p-Postlabeling. 1997; 169, (1-2): 177-184. Rec #: 489 Keywords: IN VITRO Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Commercial formulations of the pesticides: Guthion (azinphos methyl), Sencor (metribuzin), Lorox (linuron), Reglone (diquat), Daconil (chlorothalonil) and Admire (imidacloprid) were studied for their genotoxicity by 32P-postlabeling. Metabolites of the pesticides were obtained enzymatically using arochlor induced rat liver S9 fraction, in an NADPH generating system. The resulting metabolites were reacted with calf thymus DNA and the DNA was analyzed for presence of adducts by either the nuclease P1 or butanol enrichment. Nuclease P1 enrichment resulted in adducts for all the pesticides. Compared to the level of adducts in control DNA, the levels in pesticide-treated DNA were higher for all the pesticides, except Daconil. The increase in adduct numbers for pesticide-treated DNAs ranged from 4.9-12.4 times the control-DNA indicating pesticide genotoxicity in this in vitro system. Enrichment using butanol extraction gave three adducts unique to Sencor-DNA. These adducts were different from those obtained with nuclease P1 enrichment of the same. B(alpha)P was the positive control for the in vitro metabolism, and two adduct enrichment procedures: nuclease P1 digestion and butanol extraction.

MESH HEADINGS: Adenosine Triphosphate MESH HEADINGS: Animal MESH HEADINGS: Aspergillus Nuclease S1 **MESH HEADINGS: Butanols MESH HEADINGS: Cattle** MESH HEADINGS: Chromatography, Thin Layer MESH HEADINGS: DNA/\*DRUG EFFECTS MESH HEADINGS: DNA Adducts/\*ANALYSIS MESH HEADINGS: Microsomes, Liver/METABOLISM MESH HEADINGS: Pesticides/METABOLISM MESH HEADINGS: Pesticides/\*TOXICITY MESH HEADINGS: Phosphorus Radioisotopes **MESH HEADINGS: Rats** MESH HEADINGS: Support, Non-U.S. Gov't MESH HEADINGS: Thymus Gland LANGUAGE: eng

857. Shama, S. M.; Amer, M. A., and El-Farnawany, M. A. Greenhouse Evaluation of Adjuvants for Effective Control of Downy Mildew (Pseudoperenospora Cubensis) of Cucumber (Cucumis Sativus L.) With Fungicides. 1998; 63, (3b): 1057-1066. Rec #: 2402

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Cultivation of cucumber (Cucumis sativus L.) under greenhouse has recently become very important in Egypt and occupies a large area in Alexandria and Beheira. Downy mildew caused by (Pseudoperenospora cubensis) is one of the most serious disease and has resulted into considerable reduction in the yield potential and quality of cucumber fruits in the past few years. In greenhouse investigations, different adjuvant types such as surfactant types, oil type and plastic emulsion were tested together with the fungicides: Daconil, Scoure and Topas. Scoure was the best fungicide when used alone even at half recommended dose or in combinations with adjuvants. At all adjuvant types, SCS 2660, SCS 3592 and silicon adjuvant "Atplus" 470 gave the best performance for the fungicides and the other adjuvants differed considerably in their influence on the efficacy of the fungicides. The moderate concentration of plastic emulsion adjuvant (5 ml plastic emulsion + 0.2 g gelatin/MESH HEADINGS: VEGETABLES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PREVENTIVE MEDICINE

MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Phycomycetes KEYWORDS: Cucurbitaceae LANGUAGE: eng

858. Sherrard, R. M.; Bearr, J. S.; Murray-Gulde, C. L.; Rodgers, J. H. Jr., and Shah, Y. T. Feasibility of Constructed Wetlands for Removing Chlorothalonil and Chlorpyrifos from Aqueous Mixtures. MORAQUA; 2004; 127, (3): 385-394. Rec #: 610 Call Number: NO MIXTURE (CPY,CTN) Notes: EcoReference No.: 92742 Chemical of Concern: CPY,CTN

859. Shtienberg, D.; Blachinsky, D.; Kremer, Y.; Ben-Hador, G., and Dinoor, A. Integration of Genotype and Age-Related Resistances to Reduce Fungicide Use in Management of Alternaria Diseases of Cotton and Potato. POPENV,MIXTURE; 1995; 85, (9): 995-1002. Rec #: 1390 Call Number: NO EFED CHEM (DFC), TARGET (CTN,MZB,Maneb,TEZ) Notes: EcoReference No.: 110990 Chemical of Concern: CTN,DFC,MZB,Maneb,TEZ

860. Shtienberg, D. and Fry, W. E. Quantitative Analysis of Host Resistance, Fungicide and Weather Effects on Potato Early and Late Blight Using Computer Simulation Models. 1990; 67, (5): 277-286. Rec #: 1697 Keywords: MODELING Notes: Chemical of Concern: CTN

MESH HEADINGS: BIOCHEMISTRY

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Models which simulate the development of potato early blight, potato late blight and fungicide dynamics were used to analyze the effects of host resistance, fungicide and weather on individual and combined epidemics of these diseases. Fungicide and host resistance effects were based on (accurately reflected) products and cultivars available to commercial potato growers in northeastern USA. Moderate resistance to early blight had a 2-3 fold greater effect than did moderate resistance to late blight in suppressing early and late blight, respectively. Analysis of simulation experiments indicated that replacement of an early blight susceptible cultivar with a cultivar moderately resistant to the disease would permit a reduction in the fungicide application frequency from once every week to once every two weeks without loss of disease suppression. Fungicide effect in suppressing late blight was 2-3 fold greater than in suppressing early blight. Variation in seasonal weather ( MESH HEADINGS: COMPUTER SYSTEMS MESH HEADINGS: BIOLOGY MESH HEADINGS: DOCUMENTATION MESH HEADINGS: INFORMATION SYSTEMS MESH HEADINGS: MATHEMATICS MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS

MESH HEADINGS: VEGETABLES MESH HEADINGS: IMMUNITY, NATURAL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Information **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Vegetables **KEYWORDS:** Phytopathology-Parasitism and Resistance **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS: Pest Control KEYWORDS:** Solanaceae LANGUAGE: eng

 461. ---. Quantitative Analysis of Host Resistance, Fungicide and Weather Effects on Potato Early and Late Blight Using Computer Simulation Models. 1990; 67, (5): 277-286.

Rec #: 1697

Keywords: MODELING

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Models which simulate the development of potato early blight, potato late blight and fungicide dynamics were used to analyze the effects of host resistance, fungicide and weather on individual and combined epidemics of these diseases. Fungicide and host resistance effects were based on (accurately reflected) products and cultivars available to commercial potato growers in northeastern USA. Moderate resistance to early blight had a 2-3 fold greater effect than did moderate resistance to late blight in suppressing early and late blight, respectively. Analysis of simulation experiments indicated that replacement of an early blight susceptible cultivar with a cultivar moderately resistant to the disease would permit a reduction in the fungicide application frequency from once every week to once every two weeks without loss of disease suppression. Fungicide effect in suppressing late blight was 2-3 fold greater than in suppressing early blight. Variation in seasonal weather (

MESH HEADINGS: COMPUTER SYSTEMS

MESH HEADINGS: BIOLOGY

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- MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL
- MESH HEADINGS: PEST CONTR MESH HEADINGS: PESTICIDES
- MESH HEADINGS: PLANTS

KEYWORDS: General Biology-Information KEYWORDS: Mathematical Biology and Statistical Methods KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Parasitism and Resistance KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Solanaceae LANGUAGE: eng

 Shukla, C. S.; Thakur, M. P., and Agrawal, K. C. Effect of Systemic Fungicides on Growth and Inhibition of Different Species of Pleurotus. 1998; 11, (1): 45-50.

Rec #: 2660

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Effect of six systemic fungicides on radial growth and inhibition of seven species of Pleurotus indicated Apron to be the best fungicide as there was no reduction on radial growth at 50, 75 and 100 ppm concentration. The mean radial growth of all Pleurotus spp. at different concentration was maximum on Apron (89-66 mm) followed by 69.13 and 48.2 mm on Bavistin and Topsin M respectively as against 90 mm on control plates. At lower concentration (50 ppm), the growth of Pleurotus spp., on Apron, Bavistin and Topsin M ranged between 89.5 to 61.5 mm but as the concentration was increased, there was reduction in growth of Pleurotus spp. Of seven species of Pleurotus, P. fossulatus was found to exhibit less inhibition in growth by different systemic fungicides in comparison to other species at all concentration. It shows higher tolerance of P. fossulatus to different systemic fungicides. MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: ENVIRONMENTAL POLLUTION MESH HEADINGS: PLANT DISEASES MESH HEADINGS: WEATHER MESH HEADINGS: PLANT DISEASES

MESH HEADINGS: PREVENTIVE MEDICINE

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES MESH HEADINGS: BASIDIOMYCOTA

KEYWORDS: Toxicology-General

KEYWORDS: Horticulture-Vegetables

KEYWORDS: Phytopathology-Diseases Caused by Fungi

KEYWORDS: Phytopathology-Nonparasitic Diseases

KEYWORDS: Phytopathology-Disease Control

KEYWORDS: Pest Control

**KEYWORDS:** Basidiomycetes

LANGUAGE: eng

863. Shunthirasingham, C.; Gouin, T.; Lei, Y. D.; Ruepert, C.; Castillo, L. E., and Wania, F. CURRENT-USE PESTICIDE TRANSPORT TO COSTA RICA'S HIGH-ALTITUDE TROPICAL CLOUD FOREST. 2011; 30, (12): 2709-2717. Rec #: 15802 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: Abstract: To gain insight into the atmospheric transport and deposition of organic contaminants in high-altitude forests in the humid tropics, pesticides were analyzed in air, water, and soil samples from Costa Rica. Passive samplers deployed across the country revealed annually averaged air concentrations of chlorothalonil, endosulfan, and pendimethalin that were higher in areas with intensive agricultural activities than in more remote areas. Atmospheric concentrations were particularly high in the intensively cultivated central valley. Only endosulfan and its degradation products were found in soils sampled along an altitudinal transect on the northern side of Volcano Turrialba, which is facing heavily cultivated coastal plains. Consistent with calculations of cold trapping in tropical mountains, concentrations of endosulfan sulfate increased with altitude. Pesticide levels in lake, creek, fog, and arboreal water samples from high-elevation cloud forests were generally below 10 ng center dot L(-1). Endosulfan sulfate was the most abundant pesticide in water, with concentrations ranging from 0.4 to 9.4 ng center dot L(-1). Its levels were highest in water sampled from bromeliads. Levels of total endosulfan in water are much lower than the reported median lethal concentration (LC50) value for acute toxicity of alpha-endosulfan to tadpoles. Although this suggests that the presence of pesticide might not have a direct impact on amphibian populations, the possibility of effects of chronic exposure to a mixture of substances cannot be excluded. Fog was relatively enriched in some of the analyzed pesticides, such as dacthal and chlorothalonil, and may constitute an important deposition pathway to high-altitude tropical cloud forest. Environ. Toxicol. Chem. 2011;30:2709-2717. (C) 2011 SETAC

Keywords: Pesticides, Atmospheric transport, Tropical cloud forest, Mountain cold ISI Document Delivery No.: 853GB

864. Shunthirasingham, C; Oyiliagu, Ce; Cao, X; Gouin, T; Wania, F; Lee, S-C; Pozo, K; Harner, T; Muir, Dcg, and Shunthirasingham, C. Spatial and Temporal Pattern of Pesticides in the Global Atmosphere. 2010 Sep; 12, (9): 1650-1657.

Rec #: 11642

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: Abstract: As part of the Global Atmospheric Passive Sampling (GAPS) study, XADresin based passive samplers are being deployed for consecutive one-year periods at numerous sites on all seven continents to determine annually averaged concentrations of persistent organic pollutants. Concentrations of banned organochlorine pesticides as well as a number of current-use pesticides in samples from the first four years, roughly coinciding with 2005, 2006, 2007 and 2008, show distinct spatial and temporal patterns. Whereas organochlorine pesticides such as alpha - and gamma -hexachlorocyclohexane, endosulfans, DDT and its metabolites, and chlordane-related compounds tend to be more prevalent in developing countries, especially in Asia, concentrations of current use pesticides such as trifluralin and chlorothalonil are often higher in Europe and North America. Based on 15 stations with four years of data, levels of hexachlorobenzene, hexachlorocyclohexanes and chlordanes decline in most world regions, which may reflect decreased usage in response to global restrictions. Levels of organochlorine pesticides in India, however, remain exceptionally high. Concentrations of alpha -endosulfan, chlorothalonil and trifluralin decrease in the European atmosphere during the sampling periods, indicating reduced usage. Consistently high alpha / gamma -HCH ratios in air samples from high Northern latitudes confirm that re-volatilization from the Arctic Ocean is a significant source of alpha -HCH. The highest levels of alpha -HCH, however, occur in conjunction with high gamma -HCH levels, suggesting that lindane use is now the major source of alpha -HCH to the global atmosphere. Although a wide variety of sampling site types aids in characterizing the entire global concentration variability of a pesticide, it also increases greatly the number of sites required for a robust regional differentiation. Date revised - 2010-12-01. Publication date - Sep 2010. Language of summary - English. Location - PN, Arctic Ocean; North America; ISW, India; ANE, Europe; INW, Asia. Pages - 1650-1657. ProQuest ID - 821735592. Corporate institution author -Shunthirasingham, C; Oyiliagu, CE; Cao, X; Gouin, T; Wania, F; Lee, S-C; Pozo, K; Harner, T; Muir, DCG. DOI - MD-0015106662; 14017274; CS1143837; 10.1039/c0em00134a; 1464-0325

 Sianosz, J. C. and Stanosz, G. R. A Medium to Enhance Identification of Septoria Musiva From Poplar Cankers. 2002. Rec #: 231 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 1437-4781

Abstract: A series of experiments was conducted to determine the relative tolerance in vitro of an isolate of Septoria musiva (a fungus that causes a severely damaging stem canker disease of poplars) for selected chemicals. Inhibition of diameter growth of this fungus on a V-8 vegetable juice-based medium with captan, chlorothalonil, iprodione, mancozeb and streptomycin sulphate at concentrations, respectively, of 50, 1, 10, 10, and 100 mg l<sup>-1</sup> was relatively low compared to inhibition of eight other fungi cultured from cankers on poplars. In addition, the presence of captan stimulated profuse sporulation of the fungus. These properties assisted in the identification of S. musiva from cankers resulting from artificial inoculation of poplar branches in the field.

21 refs.

English; French; German

Publication Type: Journal

Publication Type: Article

Country of Publication: Germany

Classification: 92.11.1.2 PLANT PATHOLOGY AND SYMBIOSES: Plant Pathology: Fungi - general

Classification: 92.10.3 CROP SCIENCE: Tree Growth and Forest Management Plant Science

 Sicbaldi, F.; Sarra, A., and Copeta, G. L. Diatomaceous Earth-Assisted Extraction for the Multiresidue Determination of Pesticides. 1997; 765, (1): 23-30.

Rec #: 2879

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. An effective multiresidue diatomaceous earth-assisted extraction and gas chromatographic-electron capture detection and thermionic sensitive detection of over 90 pesticides belonging to several chemical families is described. The homogeneous vegetal sample pulp was mixed with diatomaceous earth to obtain a free-flowing powder which was extracted with ethyl acetate. Recoveries of several pesticides including apolar and polar ones were tested in 10 replicates on apple material and the analysis performed on two GLC systems, each one equipped with two columns of different polarities and two detectors. The recovery of pesticide residues belonging to different chemical classes on the matrix studied was satisfactory (72-116%) for the pesticides studied and no further clean-up was required for subsequent gas chromatographic analysis. Results are discussed according to the combination column-detector used.

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: BIOPHYSICS/METHODS

KEYWORDS: Biochemical Studies-General

KEYWORDS: Biophysics-General Biophysical Techniques

LANGUAGE: eng

867. ---. Diatomaceous Earth-Assisted Extraction for the Multiresidue Determination of Pesticides. 1997; 765, (1): 23-30.

Rec #: 2879

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

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two detectors. The recovery of pesticide residues belonging to different chemical classes on the matrix studied was satisfactory (72-116%) for the pesticides studied and no further clean-up was required for subsequent gas chromatographic analysis. Results are discussed according to the combination column-detector used. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Techniques LANGUAGE: eng

 Sigler, William V. and Turco, Ronald F. The Impact of Chlorothalonil Application on Soil Bacterial and Fungal Populations as Assessed by Denaturing Gradient Gel Electrophoresis. 2002 Sep; 21, (2): 107-118.

Rec #: 42

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: The impact of the fungicide chlorothalonil on dominant bacterial and fungal populations following application to turfgrass, forest, and agricultural soils was investigated. Chlorothalonil was applied to each soil at three rates, representing 0.2, 1 and 5 times the recommended label rate for turfgrass, and incubated for a 2-week period. Changes to the microbial community caused by the chlorothalonil application were assessed following DNA extraction, PCR-amplification using both bacteria domain- and fungal-specific primers, then separation with denaturing gradient gel electrophoresis (DGGE). Digitized DGGE images were used to determine two parameters: the number of bands per lane and the Shannon-Wiener index of diversity (H'), both of which were used only for comparison of the different treatments, and not as true diversity measurements. Bands appearing to be either enhanced or inhibited as a result of the chlorothalonil treatment were excised and sequenced. Increased rates of chlorothalonil impacted eight bacterial populations (two inhibitions, four enhancements, and two non-specific responses) and four fungal populations (all inhibitions). Band number and H' indicated an altered but not significantly different (P<0.05) bacterial and fungal community structure following chlorothalonil application. Sequencing of excised DGGE bands indicated an impact on several groups of bacteria (Cytophaga-Flavobacterium-Bacteroides, [alpha]-, [beta]-, [gamma]-, and [delta]-proteobacteria) and two fungal taxa (zygomycota and ascomycota). Although changes to the overall community structure of dominant species were non-significant, we conclude that following a single chlorothalonil application and a short incubation period, community changes including both enhancement and inhibition of a variety of dominant organisms can occur. Bacteria/ DGGE/ Soil microbial diversity/Fungi/Fungicide http://www.sciencedirect.com/science/article/B6T4B-46FJ64F-3/2/349ca1ab653b437c9cc8f03ef803b13a

869. Singh, D. Fungicidal Spray Schedule for Economical Management of Potato Late Blight in North-Western Hills of India. POP. Dep. Plant Pathol., Himachal Pradesh Krishi Vishvavidyalaya, Palampur 176 062, Himachal Pradesh, India//: SOIL,ENV,MIXTURE; 1996; 26, (3): 252-255. Rec #: 280 Call Number: EFFICACY (CTN,MMM,MZB), NO MIXTURE (MMM), TARGET (CTN,MMM,MZB) Notes: EcoReference No.: 151172 Chemical of Concern: CTN,MMM,MZB

870. Singh, D.; Vijay, D., and Pal, J. Evaluation of Fungicidal Spray Schedules Against Late Blight (Phytophthora infestans) in Summer and Spring Potato in Kangra Hills of Himachal Pradesh. PHY,POP. Dep. Plant Pathol., Himachal Pradesh Krishi Vishvavidyalaya, Palampur 176 062, India////: SOIL,ENV; 1998; 68, (10): 704-708. Rec #: 130 Call Number: EFFICACY (CAP,MLX,MZB,PPM), NO EFED CHEM (ODL), NO MIXTURE (CTN) Notes: EcoReference No.: 151269 Chemical of Concern: CAP,CTN,MLX,MZB,ODL,PPM

- 871. ---. Evaluation of Fungicidal Spray Schedules Against Late Blight (Phytophthora Infestans) in Summer and Spring Potato in Kangra Hills of Himachal Pradesh. 1998; 68, (10): 704-708. Rec #: 2405 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE SOLANUM TUBEROSUM PHYTOPHTHORA INFESTANS POTATO HOST PLANT FUNGUS PLANT PATHOGEN LATE BLIGHT PEST MANAGEMENT FUNGICIDAL SPRAYING COPPER OXYCHLORIDE FUNGICIDE MANCOZEB METALAXYL CAPTAFOL CHLOROTHALONIL PROPAMOCARB FUNGAL DISEASE DISEASE CONTROL METHOD HIMACHAL PRADESH KANGRA HILLS INDIA MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Phycomycetes **KEYWORDS:** Solanaceae LANGUAGE: eng 872. Sininger, Y. S.; Cone-Wesson, B.; Folsom, R. C.; Gorga, M. P.; Vohr, B. R.; Widen, J. E.; Ekelid, M., and
- 872. Sininger, Y. S.; Cone-Wesson, B.; Folsom, R. C.; Gorga, M. P.; Vohr, B. R.; Widen, J. E.; Ekelid, M., and Norton, S. J. Identification of Neonatal Hearing Impairment: Auditory Brain Stem Responses in the Perinatal Period.

Rec #: 788

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: OBJECTIVES: 1) To describe the auditory brain stem response (ABR) measurement system and optimized methods used for study of newborn hearing screening. 2) To determine how recording and infant factors related to the screening, using well-defined, specific ABR outcome measures. DESIGN: Seven thousand one hundred seventy-nine infants, 4478 from the neonatal intensive care unit (NICU) and the remaining from the well-baby nursery, were evaluated with an automated ABR protocol in each ear. Two channel recordings were obtained (vertex to mastoid or channel A and vertex to nape of neck or channel B) in response to click stimuli of 30 and 69 dB nHL in all infants as well as 50 dB nHL in infants who did not meet criteria for response at 30 dB. Criteria for response included F(SP) > or = 3.1 and a tester-judgment of response. Criteria could be met in the first or repeat test with a maximum of 6144 accepted sweeps per test. RESULTS: More than 99% of infants could complete the ABR protocol. More than 90% of NICU and well-baby nursery infants " passed" given the strict criteria for response, whereas 86% of those with high risk factors met criterion for ABR response detection. The number of infants who did not meet ABR response criteria in one or both ears was systematically related to stimulus level with the largest group not meeting criteria at 30 dB followed by 50 and 69 dB nHL. Meeting criteria on the ABR was positively correlated with the amplitude of wave V, with low noise and low electrode impedance. Factors that predicted how many sweeps would be needed to reach criterion F(SP) included noise level of the test site, state of the baby (for example, quiet sleep versus crying), recording noise, electrode impedance and

response latency. Channel A (vertex to mastoid) reached criterion more often than channel B (vertex to nape of neck) due to higher noise in channel B. Average total test time for 30 dB nHL screening in both ears was under 8 minutes. Well babies with risk factors took slightly longer to evaluate than other groups with this automated ABR procedure and have higher noise levels. CONCLUSIONS: ABR implemented with an automated detection algorithm using a 30 dB nHL click stimulus is reliable technique for rapid assessment of auditory status in newborns. Factors other than hearing loss that influenced the test result include infant state, electrode location and impedance, testing site, and infant risk status. Even so, ABRs were reliably recorded in the vast majority of babies under circumstances in which most babies are found in the perinatal period. **MESH HEADINGS: Acoustic Impedance Tests MESH HEADINGS: Algorithms** MESH HEADINGS: Child, Preschool MESH HEADINGS: Evoked Potentials, Auditory, Brain Stem/\*physiology MESH HEADINGS: Hearing Disorders/\*diagnosis/\*epidemiology **MESH HEADINGS: Humans MESH HEADINGS: Infant** MESH HEADINGS: Infant, Newborn MESH HEADINGS: Learning/physiology MESH HEADINGS: \*Neonatal Screening MESH HEADINGS: Noise/adverse effects LANGUAGE: eng

873. ---. Identification of Neonatal Hearing Impairment: Auditory Brain Stem Responses in the Perinatal Period. Rec #: 788

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: OBJECTIVES: 1) To describe the auditory brain stem response (ABR) measurement system and optimized methods used for study of newborn hearing screening. 2) To determine how recording and infant factors related to the screening, using well-defined, specific ABR outcome measures. DESIGN: Seven thousand one hundred seventy-nine infants, 4478 from the neonatal intensive care unit (NICU) and the remaining from the well-baby nursery, were evaluated with an automated ABR protocol in each ear. Two channel recordings were obtained (vertex to mastoid or channel A and vertex to nape of neck or channel B) in response to click stimuli of 30 and 69 dB nHL in all infants as well as 50 dB nHL in infants who did not meet criteria for response at 30 dB. Criteria for response included F(SP) > or = 3.1 and a tester-judgment of response. Criteria could be met in the first or repeat test with a maximum of 6144 accepted sweeps per test. RESULTS: More than 99% of infants could complete the ABR protocol. More than 90% of NICU and well-baby nursery infants " passed" given the strict criteria for response, whereas 86% of those with high risk factors met criterion for ABR response detection. The number of infants who did not meet ABR response criteria in one or both ears was systematically related to stimulus level with the largest group not meeting criteria at 30 dB followed by 50 and 69 dB nHL. Meeting criteria on the ABR was positively correlated with the amplitude of wave V, with low noise and low electrode impedance. Factors that predicted how many sweeps would be needed to reach criterion F(SP) included noise level of the test site, state of the baby (for example, quiet sleep versus crying), recording noise, electrode impedance and response latency. Channel A (vertex to mastoid) reached criterion more often than channel B (vertex to nape of neck) due to higher noise in channel B. Average total test time for 30 dB nHL screening in both ears was under 8 minutes. Well babies with risk factors took slightly longer to evaluate than other groups with this automated ABR procedure and have higher noise levels. CONCLUSIONS: ABR implemented with an automated detection algorithm using a 30 dB nHL click stimulus is reliable technique for rapid assessment of auditory status in newborns. Factors other than hearing loss that influenced the test result include infant state, electrode location and impedance, testing site, and infant risk status. Even so, ABRs were reliably recorded in the vast majority of babies under circumstances in which most babies are found in the perinatal period. **MESH HEADINGS: Acoustic Impedance Tests MESH HEADINGS: Algorithms** 

MESH HEADINGS: Child, Preschool MESH HEADINGS: Evoked Potentials, Auditory, Brain Stem/\*physiology MESH HEADINGS: Hearing Disorders/\*diagnosis/\*epidemiology MESH HEADINGS: Humans MESH HEADINGS: Infant MESH HEADINGS: Infant, Newborn MESH HEADINGS: Learning/physiology MESH HEADINGS: \*Neonatal Screening MESH HEADINGS: Noise/adverse effects LANGUAGE: eng

- 874. Sitaramaiah, K. and Hanuman, L. N. Effect of Fungicides on Phytophthora capsici Wilt Disease in Betelvine. POPENV; 1997; 27, (3): 330-331. Rec #: 690 Call Number: OK(MLX,TARGET-MZB,CTN) Notes: EcoReference No.: 89785 Chemical of Concern: MLX,MZB,CTN
- 875. Slimak, K. M. Avoidance Response as a Sublethal Effect of Pesticides on Lumbricus terrestris (Oligochaeta). BEHSOIL,ENV; 1997; 29, (3-4): 713-715. Rec #: 240
  Call Number: NO CONTROL (ACP,CBL,CTN,Captan,DZ,MAL,MLN), NO EFED CHEM (HCCH,PPCP), NO ENDPOINT (ACP,CBL,CTN,Captan,DZ,MAL,MLN) Notes: EcoReference No.: 92008
  Chemical of Concern: ACP,CBL,CTN,Captan,DZ,HCCH,MAL,MLN,PPCP

876. Smilanick, J. L.; Hoffmann, J. A.; Cashion, N. L., and Prescott, J. M. Evaluation of Seed and Foliar Fungicides for Control of Karnal Bunt of Wheat. GRO,POPENV,TOP; 1987; 71, (1): 94-96. Rec #: 1370 Call Number: NO COC(CTN),NO MIXTURE(CBX,PNB),OK(PCZ,ILL,TDM,TBA,BMY,TDF,BTN,THM,Maneb,CuOH,OXC),NO CROP(MZB) Notes: EcoReference No.: 89999 Chemical of Concern: MZB,PCZ,ILL,TDM,TBA,BMY,TDF,BTN,THM,Maneb,PNB,CuOH,OXC,CBX

877. Smiley, P. C.; King, K. W., and Fausey, N. R. Public health perspectives of channelized and unchannelized headwater streams in central Ohio: a case study. 2010; 8, (3): 577-592.
Rec #: 15822
Keywords: SURVEY
Notes: Chemical of Concern: CTN
Abstract: Abstract: Headwater streams constitute the majority of watersheds in the United States

Abstract: Abstract: Headwater streams constitute the majority of watersheds in the United States and many in the midwest have been channelized for agricultural drainage. Public health implications of water chemistry and aquatic insects within channelized and unchannelized headwater streams have not been explored. We sampled water chemistry and aquatic insects in two channelized and two unchannelized headwater streams in central Ohio from December 2005 until November 2008. Maximum concentrations of ammonium, nitrate plus nitrite, and chlorothalonil were greater in channelized streams. Nitrate plus nitrite and atrazine also exceeded drinking water standards more often in channelized streams. Maximum concentrations of simazine and the percentage of times it exceeded the drinking water standards were greater in unchannelized streams. The predicted hazard potential of nutrient and pesticide mixtures was greater in channelized streams. Biting dipterans did not exhibit consistent abundance was greater in channelized streams. Biting dipterans did not exhibit consistent abundance trends and only differed between stream types in the summer and fall. Our results suggest that if whole stream uptake of nutrients and pesticides is minimal in channelized headwater streams then nutrient and pesticide inputs from these streams may impact downstream drinking water sources. Our results also suggest channelized and unchannelized headwater streams are not serving as a significant source of mosquitoes. Keywords: agriculture, aquatic insects, drinking water, headwater streams, ISI Document Delivery No.: 649LP

- 878. Smiley, R. W. Nontarget Effects of Pesticides on Turfgrasses. 1981; 65, (1): 17-23. Rec #: 920 Keywords: REFS CHECKED/ REVIEW Call Number: NO REVIEW,NO REFS CHECKED Notes: Chemical of Concern: PNB,CYP,CTN
- 879. ---. Nontarget Effects of Pesticides on Turfgrasses. SOIL; 1981; 65, (1): 17-23. Rec #: 970 Keywords: REFS CHECKED, REVIEW Call Number: NO REFS CHECKED (CTN, CYP, PNB), NO REVIEW (CTN, CYP, PNB) Notes: Chemical of Concern: CTN, CYP, PNB
- 880. ---. Nontarget Effects of Pesticides on Turfgrasses. 1981; 65, (1): 17-23. 161770. Rec #: 3662 Keywords: REFS CHECKED, REVIEW Notes: Chemical of Concern: CTN, CYP, PNB Abstract: NO REFS CHECKED, NO REVIEW BPK 11/03//
- 881. Smilowitz, Z.; Cox, D. L.; Rebarchak, P., and Yocum, J. Control of Colorado Potato Beetle on Potato, 1987. POPENV,MIXTURE; 1991; 16, 100-102 (64E). Rec #: 350
  Call Number: LITE EVAL CODED (CPY), NO CONTROL (ADC), NO MIXTURE (CTN,MTPN,MZB), OK (EFV), TARGET (ADC,CYF,HFR,MTPN) Notes: EcoReference No.: 108974
  Chemical of Concern: ADC,CPY,CTN,CYF,EFV,HFR,MTPN,MZB
- 882. Smith, F. D.; Phipps, P. M., and Stipes, R. J. Fluazinam: A New Fungicide for Control of Sclerotinia Blight and Other Soilborne Pathogens of Peanut. POPSOIL,ENV,MIXTURE; 1992; 19, (2): 115-120. Rec #: 1220 Call Number: EFFICACY (CTN), OK (DCNA,FNZ,IPD), TARGET (CTN) Notes: EcoReference No.: 92219 Chemical of Concern: CTN,DCNA,FNZ,IPD
- 883. Solel, Z.; Oren, Y., and Kimchi, M. Control of Alternaria Brown Spot of Minneola Tangelo with Fungicides. POPSOIL,ENV; 1997; 16, (7): 659-664. Rec #: 640
  Call Number: NO EFED CHEM (DFC), TARGET (CTN,Captan,CuOH,FNZ,Folpet,IPD,MEM,MZB,Maneb,TEZ) Notes: EcoReference No.: 90073
  Chemical of Concern: CTN,Captan,CuOH,DFC,FNZ,Folpet,IPD,MEM,MZB,Maneb,TEZ

 884. ---. Control of Alternaria Brown Spot of Minneola Tangelo with Fungicides. POP,CELSOIL,ENV; 1997; 16, (7): 659-664. Rec #: 700 Call Number: OK(ALL CHEMS),OK TARGET,NO CROP(Captan,Maneb,CTN,Folpet) Notes: EcoReference No.: 90073 Chemical of Concern: IPD,Captan,Folpet,Maneb,MEM,CuOH,CTN,FZN,TEZ

885. Somerville, L. The Metabolism of Fungicides. 1986; 16, (10-11): 1017-1030.
 Rec #: 1688

Keywords: REVIEW

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Of the three main groups of pesticides (insecticides, fungicides and herbicides), fungicides have probably the longest history, dating back to the accidental discovery in 1882 of Bordeaux mixture and the value of copper-based preparations for the control of vine downy mildew disease. In more recent times a wide range of fungicides have become available, including compounds with not only protectant but systemic activity, and total world-wide sales in 1983 were estimated at 2.8 billion dollars. This review attempts to summarize the current state of knowledge as it relates to the metabolism in animals and plants of examples of several of the major fungicide groups. Specifically the metabolism of maneb, mancozeb, zineb, captan, chlorothalonil, benomyl, triadimefon, triadimenol and cymoxanil are discussed. MESH HEADINGS: Animals MESH HEADINGS: Fungicides, Industrial/\*metabolism MESH HEADINGS: Humans LANGUAGE: eng

886. ---. The Metabolism of Fungicides. 1986; 16, (10-11): 1017-1030.

Rec #: 1688

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MESH HEADINGS: Humans LANGUAGE: eng

887. Sonnenschein, C. and Soto, A. M. An Updated Review of Environmental Estrogen and Androgen Mimics and Antagonists. 1998; 65, (1-6): 143-150.

Rec #: 2611

Keywords: REVIEW

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. For the last 40 y, substantial evidence has surfaced on the hormone-like effects of environmental chemicals such as pesticides and industrial chemicals in wildlife and humans. The endocrine and reproductive effects of these chemicals are believed to be due to their ability to: (1) mimic the effect of endogenous hormones, (2) antagonize the effect of endogenous hormones, (3) disrupt the synthesis and metabolism of endogenous hormones, and (4) disrupt the synthesis and metabolism of hormone receptors. The discovery of hormone-like activity of these chemicals occurred long after they were released into the environment. Aviation crop dusters handling DDT were found to have reduced sperm counts, and workers at a plant producing the insecticide kepone were reported to have lost their libido, became impotent and had low sperm counts. Subsequently, experiments conducted in lab animals demonstrated unambiguously the estrogenic activity of these pesticides. Manmade compounds used

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: DIAGNOSIS MESH HEADINGS: GENITALIA MESH HEADINGS: REPRODUCTION MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: PUBLIC HEALTH KEYWORDS: Biochemical Studies-General KEYWORDS: Reproductive System-General KEYWORDS: Toxicology-General KEYWORDS: Public Health-General and Miscellaneous LANGUAGE: eng

Sonnenschein, C. and Soto, A. M. An Updated Review of Environmental Estrogen and Androgen Mimics and Antagonists. 1998; 65, (1-6): 143-150. Rec #: 1200 Keywords: REFS CHECKED,REVIEW Call Number: NO EFED CHEM (BDC,CHD,CZE,DDT,DLD,HCCH,HPT,MRX,MXC,PCB,PCL,PPCP,PYN,TXP,Zineb), NO REFS CHECKED (24D,24DXY,ACR,ATZ,CBF,CBL,CPY,CTN,DCF,DCPA,DZ,ES,ES1,ES2,HXZ,MEM,MLN,M TL,MTPN,Maneb,PPZ,RTN,SZ,TFN,THM,Ziram), NO REVIEW (24D,24DXY,ACR,ATZ,CBF,CBL,CPY,CTN,DCF,DCPA,DZ,ES,ES1,ES2,HXZ,MEM,MLN,M TL,MTPN,Maneb,PPZ,RTN,SZ,TFN,THM,Ziram) Notes: Chemical of Concern: 24D,24DXY,ACR,ATZ,BDC,CBF,CBL,CHD,CPY,CTN,CZE,DCF,DCPA,DDT,DLD,DZ,ES,ES 1,ES2,HCCH,HPT,HXZ,MEM,MLN,MRX,MTL,MTPN,MXC,Maneb,PCB,PCL,PPCP,PPZ,PYN ,RTN,SZ,TFN,THM,TXP,Zineb,Ziram

 Sonnenschein, C. and Soto, A. M. An Updated Review of Environmental Estrogen and Androgen Mimics and Antagonists. 1998; 65, (1-6): 143-150.

Rec #: 2611

Keywords: REVIEW

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. For the last 40 y, substantial evidence has surfaced on the hormone-like effects of environmental chemicals such as pesticides and industrial chemicals in wildlife and humans. The endocrine and reproductive effects of these chemicals are believed to be due to their ability to: (1) mimic the effect of endogenous hormones, (2) antagonize the effect of endogenous hormones, (3) disrupt the synthesis and metabolism of endogenous hormone, and (4) disrupt the synthesis and metabolism of hormone receptors. The discovery of hormone-like activity of these chemicals occurred long after they were released into the environment. Aviation crop dusters handling DDT were found to have reduced sperm counts, and workers at a plant producing the insecticide kepone were reported to have lost their libido, became impotent and had low sperm counts. Subsequently, experiments conducted in lab animals demonstrated unambiguously the estrogenic activity of these pesticides. Manmade compounds used

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: DIAGNOSIS MESH HEADINGS: GENITALIA MESH HEADINGS: REPRODUCTION MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: PUBLIC HEALTH KEYWORDS: Biochemical Studies-General KEYWORDS: Reproductive System-General KEYWORDS: Toxicology-General KEYWORDS: Public Health-General and Miscellaneous LANGUAGE: eng

890. Sonnenschein, C. and Soto, A. M. An Updated Review of Environmental Estrogen and Androgen Mimics and Antagonists. 1998; 65, (1-6): 143-150. 174761.

Rec #: 8482 Keywords: REFS CHECKED,REVIEW Notes: Chemical of Concern: 24D,24DXY,ACR,ATZ,BDC,CBF,CBL,CHD,CPY,CTN,CZE,DCF,DCPA,DDT,DLD,DZ,ES,ES 1,ES2,HCCH,HPT,HXZ,MEM,MLN,MRX,MTL,MTPN,MXC,Maneb,PCB,PCL,PPCP,PPZ,PYN ,RTN,SZ,TFN,THM,TXP,Zineb,Ziram Abstract: NO REFS CHECKED,NO REVIEW Searched FY04 ALP 11/03//Nonylphenol 2005text// (Was ECOREF# 70037)

- 891. Soos, J. M.; Stuve, O.; Youssef, S.; Bravo, M.; Johnson, H. M.; Weiner, H. L., and Zamvil, S. S. Cutting Edge: Oral Type I IFN-Tau Promotes a Th2 Bias and Enhances Suppression of Autoimmune Encephalomyelitis by Oral Glatiramer Acetate. 2002; 169, (5): 2231-2235. Rec #: 940
  Keywords: HUMAN HEALTH Call Number: NO COC(CTN) Notes: Chemical of Concern: CTN
- 892. Soroka, J. J. and Mackay, P. A. Population Growth of the Pea Aphid, Acyrthosiphon pisum (Harris) (Homoptera: Aphididae), and Plant Response to Aphid Numbers in Commercially Grown Field Peas in Manitoba. POP,GROSOIL,ENV; 1990; 122, (11/12): 1201-1210. Rec #: 1390 Call Number: NO COC(CTN),OK(DMT),NO TARGET,NO CROP(MLN) Notes: EcoReference No.: 89774 Chemical of Concern: MLN,DMT

893. Soto Estrada, A. Peach Rust Caused by Tranzschelia discolor in California: Histology of Infection and Colonization Processes, Epidemiology, and Management. POPENV; 2002: 143 p. (UMI #3053689). Rec #: 310
Call Number: NO EFED CHEM (TPM), TARGET (AZX,BMY,CTN,MYC,PCZ,PPCP,PPCP2011,SFR,TEZ) Notes: EcoReference No.: 156430
Chemical of Concern: AZX,BMY,CTN,MYC,PCZ,PPCP,SFR,TEZ,TPM

894. Spermon, J. R.; Ramos, L.; Wetzels, A. M.; Sweep, C. G.; Braat, D. D.; Kiemeney, L. A., and Witjes, J. A. Sperm Integrity Pre- and Post-Chemotherapy in Men With Testicular Germ Cell Cancer. Rec #: 2074

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BACKGROUND: While (partial) recovery of spermatogenesis, observed by means of standard semen analysis, has been seen in testicular cancer patients after chemotherapy with cisplatin, sperm genomic integrity and its implication for the patient's fertility are poorly understood. METHODS: Semen and serum from 22 patients treated for testicular cancer were analysed pre- and post-chemotherapy. Besides routine semen analysis, sperm samples were evaluated by computerized karyometric image analysis (CKIA), chromomycin-A3 assay (CMA3, chromatin condensation) and TdT-mediated dUTP nick-end labelling assay (TUNEL, DNA damage). Serum FSH, LH and testosterone concentrations were measured. RESULTS: Ejaculate volume decreased post-chemotherapy (P < 0.05). External sperm characteristics (CKIA morphometry) and sperm counts did not deteriorate after chemotherapy. An improvement in DNA condensation was assessed after chemotherapy (37 versus 50% and 47.5 versus 63.7% for CMA3 and CKIA respectively; both P < 0.005); yet a high percentage of TUNEL-positive sperm was found in the samples (21 versus 25% for pre- and post-chemotherapy samples respectively). These values were significantly higher than those of a convenience sample of normozoospermic males attending pre-IVF screening. Serum FSH and LH (IU/I) increased after chemotherapy compared with pretreatment levels (8.1 versus 16.7 and 4.5 vs 6.8; both P < 0.05, respectively). CONCLUSIONS: Despite the improvement in sperm chromatin packaging after chemotherapy, an
abnormally high percentage of DNA-damaged sperm was found in these samples. As sperm quality does not reach normal levels after treatment, it remains difficult to outline the best strategy and guidance concerning fertility potential of testicular cancer patients. **MESH HEADINGS: Adult** MESH HEADINGS: Bleomycin/analogs & amp MESH HEADINGS: derivatives/therapeutic use MESH HEADINGS: Cisplatin/therapeutic use MESH HEADINGS: DNA Damage/drug effects MESH HEADINGS: Drug Therapy, Combination MESH HEADINGS: Etoposide/therapeutic use MESH HEADINGS: Follicle Stimulating Hormone/blood **MESH HEADINGS: Humans** MESH HEADINGS: In Situ Nick-End Labeling MESH HEADINGS: Luteinizing Hormone/blood MESH HEADINGS: Male MESH HEADINGS: Neoplasms, Germ Cell and Embryonal/\*drug therapy/\*physiopathology MESH HEADINGS: Semen/chemistry MESH HEADINGS: Sperm Count MESH HEADINGS: Spermatogenesis/drug effects MESH HEADINGS: Spermatozoa/\*cytology/drug effects MESH HEADINGS: Testicular Neoplasms/\*drug therapy/\*physiopathology MESH HEADINGS: Testosterone/blood

LANGUAGE: eng

895. ---. Sperm Integrity Pre- and Post-Chemotherapy in Men With Testicular Germ Cell Cancer.

Rec #: 2074

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BACKGROUND: While (partial) recovery of spermatogenesis, observed by means of standard semen analysis, has been seen in testicular cancer patients after chemotherapy with cisplatin, sperm genomic integrity and its implication for the patient's fertility are poorly understood. METHODS: Semen and serum from 22 patients treated for testicular cancer were analysed pre- and post-chemotherapy. Besides routine semen analysis, sperm samples were evaluated by computerized karyometric image analysis (CKIA), chromomycin-A3 assay (CMA3, chromatin condensation) and TdT-mediated dUTP nick-end labelling assay (TUNEL, DNA damage). Serum FSH, LH and testosterone concentrations were measured. RESULTS: Ejaculate volume decreased post-chemotherapy (P < 0.05). External sperm characteristics (CKIA morphometry) and sperm counts did not deteriorate after chemotherapy. An improvement in DNA condensation was assessed after chemotherapy (37 versus 50% and 47.5 versus 63.7% for CMA3 and CKIA respectively; both P < 0.005); yet a high percentage of TUNEL-positive sperm was found in the samples (21 versus 25% for pre- and post-chemotherapy samples respectively). These values were significantly higher than those of a convenience sample of normozoospermic males attending pre-IVF screening. Serum FSH and LH (IU/I) increased after chemotherapy compared with pretreatment levels (8.1 versus 16.7 and 4.5 vs 6.8; both P < 0.05, respectively). CONCLUSIONS: Despite the improvement in sperm chromatin packaging after chemotherapy, an abnormally high percentage of DNA-damaged sperm was found in these samples. As sperm quality does not reach normal levels after treatment, it remains difficult to outline the best strategy and guidance concerning fertility potential of testicular cancer patients. **MESH HEADINGS: Adult** MESH HEADINGS: Bleomycin/analogs & amp

MESH HEADINGS: derivatives/therapeutic use

MESH HEADINGS: Cisplatin/therapeutic use

MESH HEADINGS: DNA Damage/drug effects

MESH HEADINGS: Drug Therapy, Combination

MESH HEADINGS: Etoposide/therapeutic use

MESH HEADINGS: Follicle Stimulating Hormone/blood

MESH HEADINGS: Humans MESH HEADINGS: In Situ Nick-End Labeling MESH HEADINGS: Luteinizing Hormone/blood MESH HEADINGS: Male MESH HEADINGS: Neoplasms, Germ Cell and Embryonal/\*drug therapy/\*physiopathology MESH HEADINGS: Semen/chemistry MESH HEADINGS: Sperm Count MESH HEADINGS: Spermatogenesis/drug effects MESH HEADINGS: Spermatozoa/\*cytology/drug effects MESH HEADINGS: Testicular Neoplasms/\*drug therapy/\*physiopathology MESH HEADINGS: Testosterone/blood LANGUAGE: eng

- Staley, Z. R.; Rohr, J. R., and Harwood, V. J. The effect of agrochemicals on indicator bacteria densities in outdoor mesocosms. 2010; 12, (12): 3150-3158.
  - Rec #: 15852

Keywords: BACTERIA

Notes: Chemical of Concern: CTN

Abstract: Abstract: P>Water bodies, which are monitored for microbial water quality by quantification of faecal indicator organisms (IOs), can contain various zoonotic pathogens contributed by livestock waste and other sources. Sediments can serve as reservoirs of IOs and other enteric microorganisms, including pathogens. Agrochemicals may influence the survival of these microorganisms in water bodies impacted by livestock waste by enhancing or reducing their survival. Complex, 1100 l, freshwater mesocosms containing leaf litter, zooplankton, periphyton, phytoplankton, and invertebrate and vertebrate animals were used to investigate the response of Escherichia coli and enterococci to agrochemicals. Replicate tanks were treated with atrazine, malathion, chlorothalonil and inorganic fertilizer, either alone at 1x or 2x their expected environmental concentrations (EECs) or in pair-wise combinations at their EECs. IOs inoculated in sediment (similar to 104 cfu per 100 ml) were enumerated over 28 days. IOs generally declined over time, but manova revealed that addition of fertilizer and atrazine resulted in significantly greater IO densities. Malathion, chlorothalonil and agrochemical concentration (1x vs 2x) did not significantly affect IO densities and no significant interactions between agrochemicals were noted. The augmentation of IO densities in sediments by fertilizer and atrazine may impact their reliability as accurate predictors of water quality and human health risk, and indicates the need for a better understanding of the fate of IOs and enteric pathogens in sediments exposed to agrochemicals.

Keywords: PESTICIDE ENVIRONMENTAL RISK, RECREATIONAL WATER-QUALITY, ISI Document Delivery No.: 689WN

- 897. Stansly, P. A. and Conner, J. M. Control of Southern Armyworm with Bacillus thuringiensis in Staked Tomato, Fall 1994. POPSOIL, ENV, MIXTURE; 1996; 21, 191-(141E). Rec #: 1090 Call Number: NO EFFECT (CTN, CuOH, MBCP, Maneb) Notes: EcoReference No.: 152994 Chemical of Concern: CTN, CuOH, MBCP, Maneb
- 898. Stansly, P. A. and Orellana M, G. J. Field Manipulation of Nomuraea rileyi (Moniliales: Moniliaceae): Effects on Soybean Defoliators in Coastal Ecuador. 1990; 83, (6): 2193-2195. Rec #: 970 Keywords: MIXTURE Call Number: NO MIXTURE(BMY,CTN) Notes: Chemical of Concern: BMY,CTN
- 899. ---. Field Manipulation of Nomuraea Rileyi (Moniliales: Moniliaceae): Effects on Soybean Defoliators in Coastal Ecuador. 1990; 83, (6): 2193-2195. 162310. Rec #: 5692

Keywords: MIXTURE Notes: Chemical of Concern: BMY,CTN Abstract: NO MIXTURE Southwest Florida Res. Education Cent., P.O. Drawer 5127, Immokalee, Fla. 33034-9716//

900. Stefani, R. ; Buzzi, M., and Grazzi, R. Supercritical Fluid Extraction of Pesticide Residues in Fortified Apple Matrices. 1997; 782, (1): 123-132.

Rec #: 1478

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In the present work, by means of the supercritical fluid extraction (SFE) technique, we developed a method for pesticide residue extraction which proved fast and effective in extracting the largest possible number of plant protection products in a short time and with acceptable recoveries and reproducibility. We observed the recoveries in fortified apple matrices while the instrument conditions varied, and obtained eventually parameters which allowed us to extract - by one and the same method - 92 pesticides, with good levels of recovery and reproducibility. Then, the pesticides were assessed by means of multiresidue methods, gas chromatography and high-performance liquid chromatography.

MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: VEGETABLES MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biophysics-General Biophysical Techniques** KEYWORDS: Food Technology-General **KEYWORDS:** Food Technology-Fruits KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods LANGUAGE: eng

901. ---. Supercritical Fluid Extraction of Pesticide Residues in Fortified Apple Matrices. 1997; 782, (1): 123-

132. Rec #: 1478

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In the present work, by means of the supercritical fluid extraction (SFE) technique, we developed a method for pesticide residue extraction which proved fast and effective in extracting the largest possible number of plant protection products in a short time and with acceptable recoveries and reproducibility. We observed the recoveries in fortified apple matrices while the instrument conditions varied, and obtained eventually parameters which allowed us to extract - by one and the same method - 92 pesticides, with good levels of recovery and reproducibility. Then, the pesticides were assessed by means of multiresidue methods, gas chromatography and high-performance liquid chromatography.

MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: VEGETABLES MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY **KEYWORDS:** Biochemical Methods-General **KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS:** Food Technology-General **KEYWORDS:** Food Technology-Fruits KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods LANGUAGE: eng

- 902. Stein, Jeffrey M. and Kirk, William W. Field Optimization of Dimethomorph for the Control of Potato Late Blight Phytophthora Infestans: Application Rate, Interval, and Mixtures. 2003 May; 22, (4): 609-614.
  - Rec #: 34

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Aspects concerning the field use of dimethomorph for the control of foliar and tuber potato late blight were examined. When application rate and interval manipulation for a season-long dimethomorph and mancozeb mixture was performed, the rate increasing through the season and 80% of full rate programs had equal final foliar blight control as the full rate program, regardless of interval. The minimum application rate for control equivalent to the full rate program was 1.34 kg ha-1 week-1. When dimethomorph was tank-mixed with one of three protectant fungicides and integrated into a chlorothalonil-based late blight control program, all programs were as effective as the season-long chlorothalonil program. None of the mixtures were more effective than the others. When tank-mixed with pyraclostrobin and alternated with chlorothalonil applications, rate reduction to 50% of full rate gave foliar blight control equivalent to a full rate, for a dimethomorph and pyraclostrobin mixture and pyraclostrobin alone. Solanum tuberosum/Oomycete/ Disease control http://www.sciencedirect.com/science/article/B6T5T-47YY4BX-4/2/899028a170ca11cece49454392ee9045

903. Stellwagen, D. and Shatz, C. J. An Instructive Role for Retinal Waves in the Development of

Retinogeniculate Connectivity. 2002; 33, (3): 357-367.

Rec #: 1214

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: A central hypothesis of neural development is that patterned activity drives the refinement of initially imprecise connections. We have examined this hypothesis directly by altering the frequency of spontaneous waves of activity that sweep across the mammalian retina prior to vision. Activity levels were increased in vivo using agents that elevate cAMP. When one eye is made more active, its layer within the LGN is larger despite the other eye having normal levels of activity. Remarkably, when the frequency of retinal waves is increased in both eyes, normally sized layers form. Because relative, rather than absolute, levels of activity between the eyes regulate the amount of LGN territory devoted to each eye, we conclude that

activity acts instructively to guide binocular segregation during development. **MESH HEADINGS: Animals** MESH HEADINGS: Animals, Newborn MESH HEADINGS: Bicyclo Compounds, Heterocyclic/pharmacology MESH HEADINGS: Cholera Toxin/pharmacology MESH HEADINGS: Cyclic AMP/analogs & amp MESH HEADINGS: derivatives/\*metabolism MESH HEADINGS: Dendrites/ultrastructure **MESH HEADINGS: Ferrets** MESH HEADINGS: Fluorescent Dyes/administration & amp MESH HEADINGS: dosage/metabolism MESH HEADINGS: Forskolin/pharmacology **MESH HEADINGS: Functional Laterality** MESH HEADINGS: Geniculate Bodies/anatomy & amp MESH HEADINGS: histology/\*metabolism MESH HEADINGS: Histocytochemistry MESH HEADINGS: Nicotinic Agonists/pharmacology MESH HEADINGS: Patch-Clamp Techniques MESH HEADINGS: Pyridines/pharmacology MESH HEADINGS: Retina/cytology/drug effects/growth & amp MESH HEADINGS: development/\*physiology MESH HEADINGS: Retinal Ganglion Cells/cytology MESH HEADINGS: Vision, Binocular/physiology MESH HEADINGS: Visual Pathways/growth & amp MESH HEADINGS: development/\*physiology LANGUAGE: eng

904. ---. An Instructive Role for Retinal Waves in the Development of Retinogeniculate Connectivity. 2002; 33, (3): 357-367.

Rec #: 1214

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: A central hypothesis of neural development is that patterned activity drives the refinement of initially imprecise connections. We have examined this hypothesis directly by altering the frequency of spontaneous waves of activity that sweep across the mammalian retina prior to vision. Activity levels were increased in vivo using agents that elevate cAMP. When one eye is made more active, its layer within the LGN is larger despite the other eye having normal levels of activity. Remarkably, when the frequency of retinal waves is increased in both eyes, normally sized layers form. Because relative, rather than absolute, levels of activity between the eyes regulate the amount of LGN territory devoted to each eye, we conclude that activity acts instructively to guide binocular segregation during development.

**MESH HEADINGS: Animals** 

MESH HEADINGS: Animals, Newborn

MESH HEADINGS: Bicyclo Compounds, Heterocyclic/pharmacology

MESH HEADINGS: Cholera Toxin/pharmacology

MESH HEADINGS: Cyclic AMP/analogs & amp

MESH HEADINGS: derivatives/\*metabolism

MESH HEADINGS: Dendrites/ultrastructure

MESH HEADINGS: Ferrets

MESH HEADINGS: Fluorescent Dyes/administration & amp

MESH HEADINGS: dosage/metabolism

MESH HEADINGS: Forskolin/pharmacology

MESH HEADINGS: Functional Laterality

MESH HEADINGS: Geniculate Bodies/anatomy & amp

MESH HEADINGS: histology/\*metabolism

MESH HEADINGS: Histocytochemistry

MESH HEADINGS: Nicotinic Agonists/pharmacology MESH HEADINGS: Patch-Clamp Techniques MESH HEADINGS: Pyridines/pharmacology MESH HEADINGS: Retina/cytology/drug effects/growth & amp MESH HEADINGS: development/\*physiology MESH HEADINGS: Retinal Ganglion Cells/cytology MESH HEADINGS: Vision, Binocular/physiology MESH HEADINGS: Visual Pathways/growth & amp MESH HEADINGS: development/\*physiology LANGUAGE: eng

905. Stephenson, G. R.; Phatak, S. C.; Makowski, R. I., and Bouw, W. J. Phytotoxic Interactions Involving Metribuzin and Other Pesticides in Tomatoes. GRO,POPSOIL,ENV,MIXTURE; 1980; 60, 167-175. Rec #: 1410 Call Number: LITE EVAL CODED(DZ),NO CROP(MLN,MZB,CTN,Maneb),OK(ES,CBF,DEM,MVP,TFN,TARGET-CBL) Notes: EcoReference No.: 26089 Chemical of Concern: MBZ,CBL,DZ,ES,MLN,CBF,DEM,MVP,CTN,MZB,Maneb,TFN

906. Stevens, C.; Khan, V. A.; Ploper, L. D.; Backman, P.; Rodriguez-Kabana, R.; Collins, D. J.; Brown, J. E., and Wilson, M. A. Reduction of Tomato Early Blight by Combining Soil Solarization and Biological Control Strategies. 1997; 32, (4): 600-601. Rec #: 2508 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT BACILLUS-CEREUS TOMATO BIOLOGICAL CONTROL AGENT HOST HORTICULTURE EARLY BLIGHT SOIL SOLARIZATION BIOLOGICAL CONTROL BLACK PLASTIC MULCH ROW COVERING CHLOROTHALONIL FUNGICIDE PLASTICULTURE PEST MANAGEMENT INFECTION FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: VEGETABLES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia KEYWORDS: Soil Science-Fertility and Applied Studies (1970-) **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control KEYWORDS: Endospore-forming Gram-Positives (1992-) **KEYWORDS:** Solanaceae LANGUAGE: eng

 907. ---. Reduction of Tomato Early Blight by Combining Soil Solarization and Biological Control Strategies. 1997; 32, (4): 600-601. Rec #: 2508 Keywords: ABSTRACT Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT BACILLUS-CEREUS TOMATO BIOLOGICAL CONTROL AGENT HOST HORTICULTURE EARLY BLIGHT SOIL SOLARIZATION BIOLOGICAL CONTROL BLACK PLASTIC MULCH ROW COVERING CHLOROTHALONIL FUNGICIDE PLASTICULTURE PEST MANAGEMENT INFECTION FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: VEGETABLES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia KEYWORDS: Soil Science-Fertility and Applied Studies (1970-) **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control KEYWORDS: Endospore-forming Gram-Positives (1992-) **KEYWORDS:** Solanaceae LANGUAGE: eng

908. Stimmann, M. W. and Ferguson, M. P. Potential Pesticide Use Cancellations in California. SOIL; 1990; 44, (4): 12-16. Rec #: 1000 Keywords: NO TOX DATA Call Number: NO EFED CHEM (DINO,EPRN,ETN,HCCH,ODZ,PPCP,PPHD,PRN,TBA,TPM,Zineb), NO TOX DATA (24DXY,ACP,ACR,ATZ,AZ,BMY,CBF,CLP,CPY,CTN,CYP,Captan,DDVP,DMT,DU,DZ,ES,F olpet,LNR,MDT,MEM,MFD,MLN,MOM,MTL,MZB,Maneb,Naled,OYZ,PAQT,PMR,PMT,PNB ,PRT,PSM,SZ,TFN) Notes: Chemical of Concern: 24DXY,ACP,ACR,ATZ,AZ,BMY,CBF,CLP,CPY,CTN,CYP,Captan,DDVP,DINO,DMT,DU,DZ ,EPRN,ES,ETN,Folpet,HCCH,LNR,MDT,MEM,MFD,MLN,MOM,MTL,MZB,Maneb,Naled,OD Z,OYZ,PAQT,PMR,PMT,PNB,PPCP,PPHD,PRN,PRT,PSM,SZ,TBA,TFN,TPM,Zineb

- 909. ---. Potential Pesticide Use Cancellations in California. 1990; 44, (4): 12-16. 162530. Rec #: 5352 Keywords: NO TOX DATA Notes: Chemical of Concern: 24DXY,ACP,ACR,ATZ,AZ,BMY,CBF,CLP,CPY,CTN,CYP,Captan,DDVP,DINO,DMT,DU,DZ ,EPRN,ES,ETN,Folpet,HCCH,LNR,MDT,MEM,MFD,MLN,MOM,MTL,MZB,Maneb,Naled,OD Z,OYZ,PAQT,PMR,PMT,PNB,PPCP,PPHD,PRN,PRT,PSM,SZ,TBA,TFN,TPM,Zineb Abstract: NO TOX DATA Calif agric//
- 910. Stimmann, M. W. and Ferguson, M. P. Progress Report Vice President's Task Force on Pest Control Alternatives Potential Pesticide Use Cancellations in California Usa. 1990; 44, (4): 12-16. Rec #: 1221 Keywords: NO TOX DATA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM FARMING INDUSTRY

CROP INDUSTRY AGRICHEMICAL BAN LEGISLATION GOVERNMENT REGULATION SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 FEDERAL INSECTICIDE FUNGICIDE AND RODENTICIDE ACT ENVIRONMENTAL PROTECTION ACT OF MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS **KEYWORDS:** General Biology-Institutions **KEYWORDS: Biochemical Studies-General KEYWORDS:** Agronomy-General **KEYWORDS: Pest Control KEYWORDS:** Economic Entomology-General LANGUAGE: eng

911. ---. Progress Report Vice President's Task Force on Pest Control Alternatives Potential Pesticide Use Cancellations in California Usa. 1990; 44, (4): 12-16. Rec #: 1221 Keywords: NO TOX DATA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM FARMING INDUSTRY CROP INDUSTRY AGRICHEMICAL BAN LEGISLATION GOVERNMENT REGULATION SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 FEDERAL INSECTICIDE FUNGICIDE AND RODENTICIDE ACT ENVIRONMENTAL PROTECTION ACT OF MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS **KEYWORDS:** General Biology-Institutions **KEYWORDS: Biochemical Studies-General KEYWORDS:** Agronomy-General **KEYWORDS: Pest Control KEYWORDS:** Economic Entomology-General LANGUAGE: eng 912. Stoffella, P. J. and Sonoda, R. M. Reduction of Onion Yields by Chlorothalonil.

912. Stoffelia, P. J. and Sonoda, R. M. Reduction of Onion Yields by Chlorothalonii. GRO,POPSOIL,ENV,MIXTURE; 1982; 17, (4): 628-629. Rec #: 720 Call Number: NO CROP(CTN,MZB) Notes: EcoReference No.: 25831 Chemical of Concern: MZB,CTN

- 913. Strider, D. L. Resistance of Kalanchoe to Powdery Mildew and Efficacy of Fungicides for Control of the Disease. POPSOIL, ENV, MIXTURE; 1976; 60, (1): 45-48. Rec #: 1540 Call Number: NO EFED CHEM (DINO, TPM), NO MIXTURE (MZB), TARGET (BMY,CTN,MZB,SFR,TFR) Notes: EcoReference No.: 94600 Chemical of Concern: BMY,CTN,DINO,MZB,SFR,TFR,TPM
- 914. ---. Resistance of Rieger elatior Begonias to Powdery Mildew and Efficacy of Fungicides for Control of the Disease. PHY, POPSOIL, ENV, MIXTURE; 1974; 58, (10): 875-878. Rec #: 1550 Call Number: NO EFED CHEM (DINO, TPM), TARGET (BMY, CTN, CuOH, SFR, TFR) Notes: EcoReference No.: 95967 Chemical of Concern: BMY,CTN,CuOH,DINO,SFR,TFR,TPM
- 915. Sturup, S.; Dahlgaard, H., and Nielsen, S. C. High Resolution Inductively Coupled Plasma Mass Spectrometry for the Trace Determination of Plutonium Isotopes and Isotope Ratios in Environmental Samples. 1998; 13, (12): 1321-1326. Rec #: 2371

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A high resolution inductively coupled plasma mass spectrometric (HR-ICP-MS) method for the determination of plutonium isotopes and the 240Pu/239Pu isotope ratio utilising ultrasonic nebulisation was developed. Total plutonium concentrations (239+240Pu) measured in environmental samples by this HR-ICP-MS method were in good agreement with data obtained from alpha-spectrometry. Quantification was performed by both external calibration and isotope dilution and the best agreement was found by applying isotope dilution. Detection limits of 5, 1 and 1 fg ml-1 were found for 239Pu, 240Pu and 242Pu, respectively. These represent total amounts of 50, 10 and 10 fg or 0.1, 0.08 and 0.002 mBq of the three isotopes in a 10 ml sample volume. The precision (RSD) on the measurement of the 240Pu/239Pu ratio in environmental samples was approximately 2%, which is close to the theoretical precision (Poisson statistics). The influence of dwell time, number of sweeps and sample uptake rate

**MESH HEADINGS: ISOTOPES** MESH HEADINGS: RADIATION MESH HEADINGS: MINERALS/ANALYSIS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: RADIATION DOSAGE **KEYWORDS: Radiation-Radiation and Isotope Techniques KEYWORDS: Biochemical Methods-Minerals KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Public Health: Environmental Health-Radiation Health LANGUAGE: eng

916. ---- High Resolution Inductively Coupled Plasma Mass Spectrometry for the Trace Determination of Plutonium Isotopes and Isotope Ratios in Environmental Samples. 1998; 13, (12): 1321-1326. Rec #: 2371

Keywords: FATE Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A high resolution inductively coupled plasma mass spectrometric (HR-ICP-MS) method for the determination of plutonium isotopes and the 240Pu/239Pu isotope ratio utilising ultrasonic nebulisation was developed. Total

plutonium concentrations (239+240Pu) measured in environmental samples by this HR-ICP-MS method were in good agreement with data obtained from alpha-spectrometry. Quantification was performed by both external calibration and isotope dilution and the best agreement was found by applying isotope dilution. Detection limits of 5, 1 and 1 fg ml-1 were found for 239Pu, 240Pu and 242Pu, respectively. These represent total amounts of 50, 10 and 10 fg or 0.1, 0.08 and 0.002 mBg of the three isotopes in a 10 ml sample volume. The precision (RSD) on the measurement of the 240Pu/239Pu ratio in environmental samples was approximately 2%, which is close to the theoretical precision (Poisson statistics). The influence of dwell time, number of sweeps and sample uptake rate MESH HEADINGS: ISOTOPES MESH HEADINGS: RADIATION MESH HEADINGS: MINERALS/ANALYSIS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: RADIATION DOSAGE **KEYWORDS:** Radiation-Radiation and Isotope Techniques **KEYWORDS: Biochemical Methods-Minerals KEYWORDS: Biophysics-General Biophysical Techniques** KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Environmental Health-Radiation Health

LANGUAGE: eng

- 917. Sturz, A. V. and Peters, R. D. Endophyte-mediated disease suppression induced by application of metalaxyl-m to potato foliage. 2007; 29, (2): 131-140.
  - Rec #: 15882

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: A 2-year field study was undertaken to examine the effect of the systemic fungicide metalaxyl-m (the R enantiomer of metalaxyl) on endophytic populations of bacteria in tubers of potatoes (Solarium tuberosum) 'Russet Burbank'. The frequency (population density) of bacterial endophytes with antibiosis activity against Phytophthora erythroseptica and Fusarium avenaceum was not independent of fungicide regime, according to Fisher's exact test (two-tailed; P = 0.0032). Significantly more strains with antibiosis activity (in vitro) were recovered from the tubers of plants treated with metalaxyl-m. A weak, but statistically significant (P = 0.01) increase in the strength of antibiosis activity of tuber bacterial endophytes against selected phytopathogens occurred in plants that received foliar fungicide spray programmes incorporating metalaxyl-m (Ridomil Gold (R) MZ 68 WP (wettable powder)) in addition to chlorothalonil (Bravo (R) 500), as compared with plants that received Bravo 500 applications only. Disease development was significantly (P = 0.01) reduced in tubers from plants receiving metalaxyl-m treatments, following tuber inoculation with P. erythroseptica or F. avenaceum. Indices for evenness of distribution and for diversity of bacterial species recovered from potato tubers were significantly higher (P = 0.05) in plants receiving metalaxyl-m treatments. It would appear that, in stimulating a more biodiverse endophyte community, metalaxyl-m may be inducing a form of defensive mutualism amongst bacterial endophytes (a chemically induced endophyte-mediated disease suppression), thereby reducing phytopathogen colonization, including that of the fusaria, against which metalaxyl-m has no direct fungicidal activity.

Keywords: bacteria, endophytes, induced disease suppression, mefenoxam, ISI Document Delivery No.: 214LU

918. Subrahmanyam, P. and Hassane, H. Response of Six Groundnut (Arachis hypogaea L.) Cultivars to Fungicidal Control of Leaf Spots in Niger. 1990; 67, (4): 331-336. Rec #: 990 Keywords: MIXTURE Call Number: NO MIXTURE Notes: EcoReference No.: 75548 Chemical of Concern: DMT,CTN,Captan,THM,CBD,CYP

- 919. ---. Response of Six Groundnut (Arachis hypogaea L.) Cultivars to Fungicidal Control of Leaf Spots in Niger. SOIL; 1990; 67, (4): 331-336. Rec #: 1010 Keywords: MIXTURE Call Number: NO MIXTURE (CBD,CTN,Captan,DMT,THM) Notes: Chemical of Concern: CBD,CTN,Captan,DMT,THM
- 920. ---. Response of Six Groundnut (Arachis Hypogaea L.) Cultivars to Fungicidal Control of Leaf Spots in Niger. 1990; 67, (4): 331-336. 162719. Rec #: 5702 Keywords: MIXTURE Notes: Chemical of Concern: CBD,CTN,Captan,DMT,THM Abstract: NO MIXTURE Was Ecoref 75548// (Was ECOREF# 75548)

921. Sumaya, C. G.; Carrillo, G.; Donnelly, K. C., and Parrish, J. A. Linking Community Outreach and Education With Research to Improve the Health of a Population. Rec #: 933 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: The Community Outreach and Education Program (COEP) primarily focuses on translating the research findings of the Center for Environmental and Rural Health (CERH) and educating the rural communities of the Texas-Mexico border. A research project, "Estudio Por Ninos Saludables en Rio Bravo" was established through funds from a USEPA STAR grant and NIEHS Centers at Texas A& M and Rutgers Universities to investigate childhood exposure to pesticides. This research showed that children ages 6 to 48 months had a median exposure level to pesticides comparable to the 90th percentile from the CDC's NHANES study and that simple behavioral changes could drastically reduce potential exposures. The COEP's approach to reducing childhood exposures to pesticides was to conduct town meetings in Rio Bravo, TX to identify means of preventing children's exposure to pesticides. Local promotoras (community health workers) will be trained in pesticide and other environmental health problems affecting this population, in collaboration with the Laredo Health Department. The promotoras and colonia residents will receive a pre-intervention assessment prior to training and a post-intervention assessment after completion of the first training. This pilot program will include a bilingual environmental health curriculum to evaluate the effectiveness of the type of

> intervention used and an appropriate manner of delivery for this target population. The COEP is an important complement to research to expand communication in the target population and to evaluate the utility of preventive measures. Future plans include: expanding our bilingual curriculum to other environmentally related health issues and other geographic areas along the Texas-Mexico border and to link this program with Mexico health departments to reach communities on both sides of the Texas border.

MESH HEADINGS: Humans MESH HEADINGS: \*Research

MESH HEADINGS: \*Keseach MESH HEADINGS: \*Health MESH HEADINGS: Health Education/\*METHODS/LEGISLATION & amp MESH HEADINGS: AMP MESH HEADINGS: JURISPRUDENCE MESH HEADINGS: \*Government Programs MESH HEADINGS: Texas LANGUAGE: eng

 922. ---. Linking Community Outreach and Education With Research to Improve the Health of a Population. Rec #: 933
 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The Community Outreach and Education Program (COEP) primarily focuses on translating the research findings of the Center for Environmental and Rural Health (CERH) and educating the rural communities of the Texas-Mexico border. A research project, "Estudio Por Ninos Saludables en Rio Bravo" was established through funds from a USEPA STAR grant and NIEHS Centers at Texas A& M and Rutgers Universities to investigate childhood exposure to pesticides. This research showed that children ages 6 to 48 months had a median exposure level to pesticides comparable to the 90th percentile from the CDC's NHANES study and that simple behavioral changes could drastically reduce potential exposures. The COEP's approach to reducing childhood exposures to pesticides was to conduct town meetings in Rio Bravo, TX to identify means of preventing children's exposure to pesticides. Local promotoras (community health workers) will be trained in pesticide and other environmental health problems affecting this population, in collaboration with the Laredo Health Department. The promotoras and colonia residents will receive a pre-intervention assessment prior to training and a post-intervention assessment after completion of the first training. This pilot program will include a bilingual environmental health curriculum to evaluate the effectiveness of the type of intervention used and an appropriate manner of delivery for this target population. The COEP is an important complement to research to expand communication in the target population and to evaluate the utility of preventive measures. Future plans include: expanding our bilingual curriculum to other environmentally related health issues and other geographic areas along the Texas-Mexico border and to link this program with Mexico health departments to reach communities on both sides of the Texas border. **MESH HEADINGS: Humans** MESH HEADINGS: \*Research **MESH HEADINGS: \*Health** MESH HEADINGS: Health Education/\*METHODS/LEGISLATION & amp MESH HEADINGS: AMP MESH HEADINGS: JURISPRUDENCE MESH HEADINGS: \*Government Programs **MESH HEADINGS: Texas** 

LANGUAGE: eng

 923. Sun, L. C.; Clinton, J. H.; Kaplan, E., and Meinhold, C. B. 137cs Exposure in the Marshallese Populations: an Assessment Based on Whole-Body Counting Measurements (1989-1994). 1997; 73, (1): 86-99. Rec #: 2821

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The Marshall Islands were the site of numerous tests of nuclear weapons by the United States. From 1946 to 1958, nuclear devices were detonated at Enewetak and Bikini Atolls. Following the inadvertent contamination of the northern islands downwind of the 1954 Bravo Test, Brookhaven National Laboratory became involved in the medical care and the radiological safety of the affected populations. One important technique employed in assessing the internally deposited radionuclides is whole-body counting. To estimate current and future exposures to 137Cs, data from 1989 to 1994 were analyzed and are reported in this paper. During this period, 3,618 measurements were made for the Marshallese. The cesium body contents were assumed to result from a series of chronic intakes. Also, it was assumed that cesium activity in the body reaches a plateau that is maintained over 365 d. We estimated the annual effective dose rate for each population, derived from the recommendations of the International Commission on Radiological Protection. The average 137Cs uptake measured by the whole-body counting method varies from one population to another; it was consistent with measurements of external exposure rate. The analysis, though based on limited data, indicates that there is no statistical support for a seasonal effect on 137Cs uptake. The critical population group for cesium uptake is adult males. Within the 5-y monitoring period, all internal exposures to 137Cs were less than 0.2 mSv y(-1). Similarly, a persistent average cesium effective dose rate of 2 microSv y(-1) was determined for Majuro residents.

MESH HEADINGS: Adolescent

MESH HEADINGS: Adult MESH HEADINGS: Body Burden MESH HEADINGS: Cesium Radioisotopes/\*analysis MESH HEADINGS: Child MESH HEADINGS: Child, Preschool MESH HEADINGS: Environmental Exposure MESH HEADINGS: Humans MESH HEADINGS: Infant MESH HEADINGS: Infant, Newborn MESH HEADINGS: Micronesia MESH HEADINGS: Micronesia MESH HEADINGS: \*Nuclear Warfare MESH HEADINGS: Radiation Dosage MESH HEADINGS: Seasons MESH HEADINGS: Time Factors LANGUAGE: eng

924. ---. 137cs Exposure in the Marshallese Populations: an Assessment Based on Whole-Body Counting Measurements (1989-1994). 1997; 73, (1): 86-99.

Rec #: 2821

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MESH HEADINGS: Adolescent

MESH HEADINGS: Adult

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MESH HEADINGS: Child

MESH HEADINGS: Child, Preschool

MESH HEADINGS: Environmental Exposure

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MESH HEADINGS: Infant, Newborn

MESH HEADINGS: Micronesia

MESH HEADINGS: \*Nuclear Warfare

MESH HEADINGS: Radiation Dosage

MESH HEADINGS: Seasons

MESH HEADINGS: Time Factors

LANGUAGE: eng

925. Sunder, S.; Satyavir, and Singh, A. Evaluation of Fungicides for the Management of Bakanae Disease of Rice. 1998; 28, (3): 251-258.

Rec #: 2425

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In vitro growth inhibition tests revealed that the fungicides varied considerably in their toxicity to Fusarium moniliforme. The EC50 values of fungicides ranged from 0.4 to 87.1 mug/ml and EC90 were in the range of 0.9) to > 1500 mug/ml ai. Among seven fungicides, MEMC, carbendazim, propiconazole, flusilazole, thiophanate-methyl, chlorothalonil and thiram, carbendazim proved most inhibitory with EC90 value of 0.9 mug/ml ai followed by propiconazole and MEMC (EC90 4.0 mug/ml ai). Seed-borne infe ction of F. moniliforme from grains of paddy cv Taraori Basmati and Haryana Gaurav was reduced significantly at both concentrations and at all soaking periods (10 min to 36 h) of six fungicides tested, MEMC being the most effective. Surface washing of steeped grains with sterilized distilled water before plating caused substantial decrease in efficacy of fungicides on both cultivars. All the fungicide-treatments except thiram (2.0 g/l) reduced the bakanae incidence and increase

MESH HEADINGS: CEREALS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: GRASSES **KEYWORDS: Agronomy-Grain Crops** KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Gramineae LANGUAGE: eng

926. Suzuki, M. Role of Adsorption in Water Environment Processes. 1997; 35, (7): 1-11.

Rec #: 2479 Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Aqueous phase adsorption isotherms and adsorption rates am reviewed. Among numbers of isotherm equations, a combination of adsorption potential and solvophobic concept was applicable to interpreting adsorption equilibrium data obtained for agrochemicals on activated carbon fiber. Intraparticle diffusion becomes the rate-limiting stop in liquid phase adsorption on granular activated carbons. Correlation of diffusion coefficients based on surface diffusion mechanisms is introduced. As topics related to adsorption, sediment water partition, biological activated carbon, removal of volatile organics and nutrient removal are briefly reviewed. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: SANITATION MESH HEADINGS: SEWAGE

**KEYWORDS: Biochemical Studies-General** 

KEYWORDS: Biophysics-Molecular Properties and Macromolecules KEYWORDS: Public Health: Environmental Health-Sewage Disposal and Sanitary Measures LANGUAGE: eng

927. ---. Role of Adsorption in Water Environment Processes. 1997; 35, (7): 1-11.

Rec #: 2479 Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Aqueous phase adsorption isotherms and adsorption rates am reviewed. Among numbers of isotherm equations, a combination of adsorption potential and solvophobic concept was applicable to interpreting adsorption equilibrium data obtained for agrochemicals on activated carbon fiber. Intraparticle diffusion becomes the rate-limiting stop in liquid phase adsorption on granular activated carbons. Correlation of diffusion coefficients based on surface diffusion mechanisms is introduced. As topics related to adsorption, sediment water partition, biological activated carbon, removal of volatile organics and nutrient removal are briefly reviewed.

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: BIOPHYSICS

MESH HEADINGS: MACROMOLECULAR SYSTEMS

MESH HEADINGS: MOLECULAR BIOLOGY

MESH HEADINGS: SANITATION

MESH HEADINGS: SEWAGE

KEYWORDS: Biochemical Studies-General

**KEYWORDS: Biophysics-Molecular Properties and Macromolecules** 

KEYWORDS: Public Health: Environmental Health-Sewage Disposal and Sanitary Measures LANGUAGE: eng

928. Suzuki, T.; Komatsu, M., and Isono, H. Cytotoxicity of Organochlorine Pesticides and Lipid Peroxidation in Isolated Rat Hepatocytes. 1997; 20, (3): 271-274.

Rec #: 524

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The cytotoxicity and lipid peroxidation of pesticides containing a halogen group were examined in isolated rat hepatocytes. We examined 9 pesticides of 3 different representative chemical families, chlorinated aromatic fungicides (pentachlorophenol (PCP), pentachloronitrobenzene (PCNB), chlorothalonil, fthalide), polyhaloalkylated thio fungicides (dichlofluanid, captan) and diphenyl ether herbicide (2,4-dichlorophenyl 4-nitrophenyl ether (NIP), 4-nitrophenyl2,4,6-trichlorophenyl ether (CNP), chlomethoxynil). The contents of the hydroperoxides in phospholipid, phosphatidylcholine hydroperoxide (PCOOH) and phosphatidylethanolamine hydroperoxide (PEOOH) were determined by the HPLCchemiluminescence (CL-HPLC) method, which is sensitive and specific for lipid hydroperoxide. Chlorothalonil, dichlofluanid and captan were the most potent cytotoxicants evaluated by lactate dehydrogenase (LDH) leakage. PCP, NIP and CNP exhibited intermediate cytotoxicity. PCNB, fthalide and chlomethoxynil showed low cytotoxicity. The cellular phospholipid hydroperoxide (PCOOH and PEOOH) levels were remarkably increased by chlorothalonil (PCOOH, 23 times and PEOOH, 7 times), dichlofluanid (PCOOH, 523 times and PEOOH, 22 times) and captan (PCOOH, 518 times and PEOOH, 16 times) as compared with the control group. The PCOOH content was slightly increased by PCP (4.8 times) and NIP (6.3 times), whereas the other 4 pesticides did not change the phospholipid hydroperoxide level. Severe cytotoxicity was observed with a remarkable increase of phospholipid hydroperoxide by chlorothalonil, dichlofluanid and captan.

**MESH HEADINGS: Animals** 

MESH HEADINGS: Cell Survival/drug effects

MESH HEADINGS: Chromatography, High Pressure Liquid

MESH HEADINGS: Glutathione/metabolism

MESH HEADINGS: Insecticides/\*toxicity

MESH HEADINGS: L-Lactate Dehydrogenase/metabolism MESH HEADINGS: Lipid Peroxidation/\*drug effects MESH HEADINGS: Liver/cytology/drug effects/\*metabolism MESH HEADINGS: Male MESH HEADINGS: Oxidation-Reduction MESH HEADINGS: Rats MESH HEADINGS: Rats, Wistar MESH HEADINGS: Thiobarbituric Acid Reactive Substances/metabolism LANGUAGE: eng

929. ---. Cytotoxicity of Organochlorine Pesticides and Lipid Peroxidation in Isolated Rat Hepatocytes. 1997; 20, (3): 271-274.

Rec #: 524

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: The cytotoxicity and lipid peroxidation of pesticides containing a halogen group were examined in isolated rat hepatocytes. We examined 9 pesticides of 3 different representative chemical families, chlorinated aromatic fungicides (pentachlorophenol (PCP), pentachloronitrobenzene (PCNB), chlorothalonil, fthalide), polyhaloalkylated thio fungicides (dichlofluanid, captan) and diphenyl ether herbicide (2,4-dichlorophenyl 4-nitrophenyl ether (NIP), 4-nitrophenyl2,4,6-trichlorophenyl ether (CNP), chlomethoxynil). The contents of the hydroperoxides in phospholipid, phosphatidylcholine hydroperoxide (PCOOH) and phosphatidylethanolamine hydroperoxide (PEOOH) were determined by the HPLCchemiluminescence (CL-HPLC) method, which is sensitive and specific for lipid hydroperoxide. Chlorothalonil, dichlofluanid and captan were the most potent cytotoxicants evaluated by lactate dehydrogenase (LDH) leakage. PCP, NIP and CNP exhibited intermediate cytotoxicity. PCNB, fthalide and chlomethoxynil showed low cytotoxicity. The cellular phospholipid hydroperoxide (PCOOH and PEOOH) levels were remarkably increased by chlorothalonil (PCOOH, 23 times and PEOOH, 7 times), dichlofluanid (PCOOH, 523 times and PEOOH, 22 times) and captan (PCOOH, 518 times and PEOOH, 16 times) as compared with the control group. The PCOOH content was slightly increased by PCP (4.8 times) and NIP (6.3 times), whereas the other 4 pesticides did not change the phospholipid hydroperoxide level. Severe cytotoxicity was observed with a remarkable increase of phospholipid hydroperoxide by chlorothalonil, dichlofluanid and captan.

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MESH HEADINGS: Cell Survival/drug effects

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MESH HEADINGS: Glutathione/metabolism

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MESH HEADINGS: L-Lactate Dehydrogenase/metabolism

MESH HEADINGS: Lipid Peroxidation/\*drug effects

MESH HEADINGS: Liver/cytology/drug effects/\*metabolism

MESH HEADINGS: Male

MESH HEADINGS: Oxidation-Reduction

MESH HEADINGS: Rats

MESH HEADINGS: Rats, Wistar

MESH HEADINGS: Thiobarbituric Acid Reactive Substances/metabolism

LANGUAGE: eng

930. Swai, F. B. and Kilambo, D. L. Economic Aspects of Coffee Berry Disease Control in Tanzania. 1997; 0, (0): 383-386.
Rec #: 688
Keywords: NO TOX DATA
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM BOOK CHAPTER
MEETING PAPER MEETING POSTER COFFEE HOST PEST MANAGEMENT

HORTICULTURE COFFEE BERRY DISEASE ECONOMICS COST BENEFIT ANALYSIS BRAVO FUNGICIDE DYRENE DACONIL TANZANIA ETHIOPIAN REGION MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: FRUIT **MESH HEADINGS: NUTS** MESH HEADINGS: TROPICAL CLIMATE MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Tropical and Subtropical Fruits and Nuts KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Rubiaceae LANGUAGE: eng

931. ---. Economic Aspects of Coffee Berry Disease Control in Tanzania. 1997; 0, (0): 383-386. Rec #: 688

> Keywords: NO TOX DATA Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM BOOK CHAPTER MEETING PAPER MEETING POSTER COFFEE HOST PEST MANAGEMENT HORTICULTURE COFFEE BERRY DISEASE ECONOMICS COST BENEFIT ANALYSIS BRAVO FUNGICIDE DYRENE DACONIL TANZANIA ETHIOPIAN REGION MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: TROPICAL CLIMATE MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Tropical and Subtropical Fruits and Nuts KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Rubiaceae LANGUAGE: eng

932. Swanson, M. B.; Davis, G. A.; Kincaid, L. E.; Schultz, T. W.; Bartmess, J. E.; Jones, S. L., and George, E. L. A Screening Method for Ranking and Scoring Chemicals by Potential Human Health and Environmental Impacts. 1997; 16, (2): 372-383. Rec #: 2777 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Potential impacts of chemical

releases are often evaluated by regulators, industry, and others to set regulatory action priorities, to make business decisions, and to target pollution prevention efforts. A chemical ranking and scoring method entitled "Chemical Hazard Evaluation for Management Strategies" (CHEMS-1) has been developed as a screening tool to provide a relative assessment of chemical hazards to human health and the environment. The purpose of this method is to place chemical release data

into perspective by evaluating both the toxic effects of chemicals and the potential exposure to those chemicals. This is done by combining measures of chemical toxicity pertaining to both human health and the environment with chemical release amounts and information on environmental persistence and bioaccumulation. The CHEMS-1 was initially developed to select priority chemicals for assessing safer substitutes for major product and process uses, where chemicals were select MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-General LANGUAGE: eng

933. ---. A Screening Method for Ranking and Scoring Chemicals by Potential Human Health and Environmental Impacts. 1997; 16, (2): 372-383.

> Rec #: 2777 Keywords: REVIEW Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Potential impacts of chemical releases are often evaluated by regulators, industry, and others to set regulatory action priorities, to make business decisions, and to target pollution prevention efforts. A chemical ranking and scoring method entitled "Chemical Hazard Evaluation for Management Strategies" (CHEMS-1) has been developed as a screening tool to provide a relative assessment of chemical hazards to human health and the environment. The purpose of this method is to place chemical release data into perspective by evaluating both the toxic effects of chemicals and the potential exposure to those chemicals. This is done by combining measures of chemical toxicity pertaining to both human health and the environment with chemical release amounts and information on environmental persistence and bioaccumulation. The CHEMS-1 was initially developed to select priority chemicals for assessing safer substitutes for major product and process uses, where chemicals were select

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-General LANGUAGE: eng

934. Swiatek, J. and Gulanowski, B. Some Aspects of Lead(Ii) Dna Interactions. 1990; 37, (1): 7-20.

Rec #: 1756 Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The interaction of Pb(II) ions with calf-thymus DNA was studied by differential pulse polarography, sweep voltammetry, cyclic voltammetry, chromatography on hydroxyapatite and viscosity measurements. Pb(II) ions may interact with nucleic acid via phosphate groups causing some stabilization of the DNA structures. However, the more specific interaction occurs with nucleic bases. The latter interaction destabilizes the nucleic acid structure and leads to inter- and intra-chain binding. MESH HEADINGS: ANIMALS MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: NUCLEIC ACIDS MESH HEADINGS: PURINES MESH HEADINGS: PYRIMIDINES **MESH HEADINGS: MINERALS** MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: ARTIODACTYLA KEYWORDS: Cytology and Cytochemistry-Animal **KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS: Biochemical Studies-Minerals KEYWORDS:** Biophysics-General Biophysical Techniques KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Bovidae LANGUAGE: eng 935. ---. Some Aspects of Lead(Ii) Dna Interactions. 1990; 37, (1): 7-20. Rec #: 1756 Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The interaction of Pb(II) ions with calf-thymus DNA was studied by differential pulse polarography, sweep voltammetry, cyclic voltammetry, chromatography on hydroxyapatite and viscosity measurements. Pb(II) ions may interact with nucleic acid via phosphate groups causing some stabilization of the DNA structures. However, the more specific interaction occurs with nucleic bases. The latter interaction destabilizes the nucleic acid structure and leads to inter- and intra-chain binding. MESH HEADINGS: ANIMALS MESH HEADINGS: CYTOLOGY MESH HEADINGS: HISTOCYTOCHEMISTRY MESH HEADINGS: NUCLEIC ACIDS **MESH HEADINGS: PURINES** MESH HEADINGS: PYRIMIDINES MESH HEADINGS: MINERALS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: ARTIODACTYLA **KEYWORDS:** Cytology and Cytochemistry-Animal **KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS: Biochemical Studies-Minerals** KEYWORDS: Biophysics-General Biophysical Techniques **KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Bovidae LANGUAGE: eng

936. Tahir, M.; Muhibullah; Shah, M., and Saifullah. The Effect of Different Spray Fungicides on Downy Mildew and Yield of Onion. 1990; 6, (4): 377-380. Rec #: 695
Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Eight different fungicides i.e. Antracol-70 WP, Liromanzeb-80 WP Daconil-75 WP, Ridomil MZ-72 WP, Duter-WP, Polyram Combi, Tri-Meltox forte and Cupravit were tested after against downy mildew (Personospora destructor) of onion (Allium cepa L.) under field conditions. Antracol-70 WP (0.2%) was the most

effective fungicide followed by Ridomil MZ-72 WP, (0.2%) Polyram combi (0.15%) and others. Fungicides increased the bulb yield by 8 to 52% over control. 52% increase in Antracol-70 WP, 42% in Ridomil MZ-72 WP, 27% Duter, 26% in Liromanzeb, 23% in Polyram combi, 22% in Tri-Miltox forte, 29% in Daconil and 8% in Cupravit were obtained. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: PHYCOMYCETES MESH HEADINGS: PLANTS **KEYWORDS: Biochemical Studies-General KEYWORDS:** Plant Physiology **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Phycomycetes **KEYWORDS:** Liliaceae LANGUAGE: eng

937. Takagi, K. and Ueji, M. Use, Research and Development of Pesticides in Relation to Sustainable Agriculture in Japan. 1997; 31, (1): 13-20. Rec #: 2796 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. To promote sustainable agriculture in Japan, the use of, and research and development strategy for, synthetic pesticides were studied. The following aspects were investigated: (1) history of pesticide use in Japan, (2) benefits and risks of pesticide use, (3) changes of pesticide properties, and (4) effects of pesticides on ecosystems. Based on the results of the investigation, optimum method of pesticide use and research and development strategy to promote sustainable agriculture were proposed. MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** Agronomy-General **KEYWORDS:** Pest Control KEYWORDS: Economic Entomology-Chemical and Physical Control LANGUAGE: eng

938. ---. Use, Research and Development of Pesticides in Relation to Sustainable Agriculture in Japan. 1997; 31,

(1): 13-20. Rec #: 2796 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. To promote sustainable agriculture in Japan, the use of, and research and development strategy for, synthetic pesticides were studied. The following aspects were investigated: (1) history of pesticide use in Japan, (2) benefits and risks of pesticide use, (3) changes of pesticide properties, and (4) effects of pesticides on ecosystems. Based on the results of the investigation, optimum method of pesticide use and research and development strategy to promote sustainable agriculture were proposed. MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Agronomy-General **KEYWORDS: Pest Control** KEYWORDS: Economic Entomology-Chemical and Physical Control LANGUAGE: eng

939. Takagi, K.; Wada, H., and Yamazaki, S. Effect of Long-Term Application of a Fungicide, Chlorothalonil (TPN) on Upland Ecosystem. POP,SYS,BCMSOIL,ENV,MIXTURE; 1991; 37, (4): 583-590. Rec #: 1430 Call Number: NO ENDPOINT(CTN,HCCH) Notes: EcoReference No.: 89888 Chemical of Concern: CTN,HCCH

940. Tappan, C.; Krause, C. R., and Powell, C. C Jr. The Use of Electron Beam Analysis to Determine the Deposition of Chlorothalonil Smoke Particles in a Greenhouse. 1997; 15, (1): 19-22. Rec #: 935
 Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Electron beam analysis (EBA) was used to measure chlorothalonil smoke particles on artificial target surfaces in greenhouses. Particles between 0.4 mum (0.000016 in) and 3.0 mum in diameter were found to vary significantly in number with location within a poinsettia canopy and with distance from the source of the smoke. Particles did not vary significantly in size either within the canopy or with distance from the source. No measurable residue was found when the greenhouse was not tightly sealed. EBA proved to be a viable method of investigating fungicide smoke deposition and can provide precise information about the environmental fate of pesticides related to application technology. MESH HEADINGS: PHOTOGRAPHY MESH HEADINGS: BIOLOGY MESH HEADINGS: MICROSCOPY, ELECTRON/METHODS MESH HEADINGS: BIOLOGY MESH HEADINGS: ISOTOPES MESH HEADINGS: RADIATION MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Methods KEYWORDS: Microscopy Techniques-Electron Microscopy KEYWORDS: Radiation-Radiation and Isotope Techniques KEYWORDS: Biochemical Methods-General KEYWORDS: Horticulture-General KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control LANGUAGE: eng

941. ---. The Use of Electron Beam Analysis to Determine the Deposition of Chlorothalonil Smoke Particles in a Greenhouse. 1997; 15, (1): 19-22.

Rec #: 935 Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Electron beam analysis (EBA) was used to measure chlorothalonil smoke particles on artificial target surfaces in greenhouses. Particles between 0.4 mum (0.000016 in) and 3.0 mum in diameter were found to vary significantly in number with location within a poinsettia canopy and with distance from the source of the smoke. Particles did not vary significantly in size either within the canopy or with distance from the source. No measurable residue was found when the greenhouse was not tightly sealed. EBA proved to be a viable method of investigating fungicide smoke deposition and can provide precise information about the environmental fate of pesticides related to application technology. MESH HEADINGS: PHOTOGRAPHY MESH HEADINGS: BIOLOGY

- MESH HEADINGS: MICROSCOPY, ELECTRON/METHODS
- MESH HEADINGS: BIOLOGY
- MESH HEADINGS: ISOTOPES
- MESH HEADINGS: RADIATION
- MESH HEADINGS: BIOCHEMISTRY/METHODS
- MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT
- MESH HEADINGS: PLANT DISEASES
- MESH HEADINGS: PREVENTIVE MEDICINE
- MESH HEADINGS: HERBICIDES
- MESH HEADINGS: PEST CONTROL
- MESH HEADINGS: PESTICIDES
- KEYWORDS: Methods
- KEYWORDS: Microscopy Techniques-Electron Microscopy
- KEYWORDS: Radiation-Radiation and Isotope Techniques
- KEYWORDS: Biochemical Methods-General
- KEYWORDS: Horticulture-General
- KEYWORDS: Phytopathology-Disease Control
- KEYWORDS: Pest Control LANGUAGE: eng
- 942. Teather, K.; Harris, M.; Boswell, J., and Gray, M. Effects of Acrobat MZ and Tattoo C on Japanese Medaka (Oryzias latipes) Development and Adult Male Behavior. BEH,GRO,MOR,PHYAQUA; 2001; 51, (4): 419-430. Rec #: 430 Call Number: NO EFED CHEM (PPMH), NO MIXTURE (CTN) Notes: EcoReference No.: 60156 Chemical of Concern: CTN,PPMH
- 943. ---. Effects of Acrobat MZ and Tattoo C on Japanese Medaka (Oryzias latipes) Development and Adult Male Behavior. MOR,BEH,GRO,PHYAQUA; 2001; 51, (4): 419-430.

Rec #: 1470 Call Number: NO MIXTURE(PPMH,CTN),NO COC(Maneb),OK(DMH) Notes: EcoReference No.: 60156 Chemical of Concern: DMH,PPMH,CTN

944. Temple, P. J.; Jones, T. E., and Lennox, R. W. Yield Loss Assessments for Cultivars of Broccoli, Lettuce, and Onion Exposed to Ozone . 1990; 66, (4): 289-300. Rec #: 1732 Keywords: NO TOXICANT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The effects of the photochemical oxidant air pollutant ozone (O3) on growth and yield of three garden crops, broccoli (Brassica oleracea L.), lettuce (Lactuca sativa L.), and onion (Allium cepa L.) were studied in an open-top chamber experiment conducted in the field in southern California. Four cultivars each of leaf lettuce, broccoli, and globe onion were exposed to charcoal-filtered air (CF), non-filtered (NF) air, or NF plus 1.5 times ambient O3 concentration for 4 weeks after germination in January or February until harvest. Exposures lasted 31 days for lettuce, 55 to 78 days for broccoli, and 105 days for onion. Results showed that despite severe O3 injury to outer leaves, lettuce yields were not affected by O3. Broccoli also was resistant to O3 and no growth reduction was observed at ambient O3 concentrations. Onions were more susceptible to O3, but only one cv. 'Rio Bravo' had significant yield losses (ca. 5%) at ambient O3 levels. These results suggest that, in MH -CIRCADIAN RHYTHM MESH HEADINGS: PERIODICITY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS **MESH HEADINGS: GASES** MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: VEGETABLES MESH HEADINGS: ENVIRONMENTAL POLLUTION MESH HEADINGS: PLANT DISEASES MESH HEADINGS: WEATHER MESH HEADINGS: PLANTS **MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS** KEYWORDS: Circadian Rhythms and Other Periodic Cycles **KEYWORDS: Ecology** KEYWORDS: Biochemistry-Gases (1970-) KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Horticulture-Vegetables **KEYWORDS:** Phytopathology-Nonparasitic Diseases **KEYWORDS:** Liliaceae **KEYWORDS:** Compositae **KEYWORDS:** Cruciferae LANGUAGE: eng

945. ---. Yield Loss Assessments for Cultivars of Broccoli, Lettuce, and Onion Exposed to Ozone. 1990; 66, (4): 289-300.
Rec #: 1732 Keywords: NO TOXICANT Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The effects of the photochemical oxidant air pollutant ozone (O3) on growth and yield of three garden crops, broccoli (Brassica oleracea L.), lettuce (Lactuca sativa L.), and onion (Allium cepa L.) were studied in an open-top chamber experiment conducted in the field in southern California. Four cultivars each of leaf lettuce, broccoli, and globe onion were exposed to charcoal-filtered air (CF), non-filtered (NF) air, or NF plus 1.5 times ambient O3 concentration for 4 weeks after germination in January or February until harvest. Exposures lasted 31 days for lettuce, 55 to 78 days for broccoli, and 105 days for onion. Results showed that despite severe O3 injury to outer leaves, lettuce yields were not affected by O3. Broccoli also was resistant to O3 and no growth reduction was observed at ambient O3 concentrations. Onions were more susceptible to O3, but only one cv. 'Rio Bravo' had significant yield losses (ca. 5%) at ambient O3 levels. These results suggest that, in MH -CIRCADIAN RHYTHM MESH HEADINGS: PERIODICITY MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS **MESH HEADINGS: GASES** MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: VEGETABLES MESH HEADINGS: ENVIRONMENTAL POLLUTION MESH HEADINGS: PLANT DISEASES MESH HEADINGS: WEATHER MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS MESH HEADINGS: PLANTS **KEYWORDS:** Circadian Rhythms and Other Periodic Cycles **KEYWORDS: Ecology** KEYWORDS: Biochemistry-Gases (1970-) KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Horticulture-Vegetables **KEYWORDS:** Phytopathology-Nonparasitic Diseases **KEYWORDS:** Liliaceae **KEYWORDS:** Compositae **KEYWORDS:** Cruciferae LANGUAGE: eng

946. Tenotio, S. ; Sanchez, J., and Bravo, A. Differences in Mode of Action of Domain I From Cry4a and Cry11a Toxins From Bacillus Thuringiensis in Mosquito Midgut Membranes. 1998; 36, (9): 1298. Rec #: 2637 Keywords: BIOLOGICAL TOXICANT, IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MEETING POSTER BACILLUS-THURINGIENSIS MOSQUITO CRY4A DOMAIN I CRY11A MIDGUT TOXICOLOGY BIOCHEMISTRY AND BIOPHYSICS DIGESTIVE SYSTEM MEMBRANE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/CLASSIFICATION MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA MESH HEADINGS: DIPTERA KEYWORDS: General Biology-Symposia KEYWORDS: Biochemical Studies-General KEYWORDS: Toxicology-General KEYWORDS: Bacteriology KEYWORDS: Endospore-forming Gram-Positives (1992- ) KEYWORDS: Diptera LANGUAGE: eng

947. ---. Differences in Mode of Action of Domain I From Cry4a and Cry11a Toxins From Bacillus Thuringiensis in Mosquito Midgut Membranes. 1998; 36, (9): 1298. Rec #: 2637 Keywords: BIOLOGICAL TOXICANT, IN VITRO Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT MEETING POSTER BACILLUS-THURINGIENSIS MOSQUITO CRY4A DOMAIN I CRY11A MIDGUT TOXICOLOGY BIOCHEMISTRY AND BIOPHYSICS DIGESTIVE SYSTEM **MEMBRANE** MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/CLASSIFICATION MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA MESH HEADINGS: DIPTERA **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-General **KEYWORDS:** Bacteriology KEYWORDS: Endospore-forming Gram-Positives (1992-) **KEYWORDS:** Diptera LANGUAGE: eng

- 948. Textor, S. C.; Bravo, E. L.; Fouad, F. M., and Tarazi, R. C. Hyperkalemia in Azotemic Patients During Angiotensin-Converting Enzyme Inhibition and Aldosterone Reduction With Captopril. 1982; 73, (5): 719-725.
  - Rec #: 1841

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Thirty-three hypertensive patients with a wide range of renal function were studied during initiation of angiotensin-converting enzyme inhibition with captopril to evaluate changes in potassium levels concomitant with reduction of aldosterone excretion. Ten patients (Group I) with low levels of plasma renin activity had no change in either aldosterone excretion or potassium during the first week of therapy. Twenty-three other patients (Group II) had decreased aldosterone excretion of an average of 63 percent, often reversing secondary hyperaldosteronism. This was associated with a rise in serum potassium from 3.6 +/- 0.1 to 4.4 +/- 0.1 mEq/liter (p less than 0.001). Serum potassium levels during captopril therapy were inversely related to glomerular filtration rate (creatinine clearance) and transiently exceeded 6.0 mEq/liter in markedly azotemic subjects. Despite rising potassium levels, nine patients had reduced aldosterone excretion to subnormal levels, sometimes for many months. During initiation of converting-enzyme inhibition, potassium-sparing agents and supplements should be discontinued and serum potassium levels should be monitored closely, particularly in patients with imparied renal function.

MESH HEADINGS: Adolescent

MESH HEADINGS: Adult **MESH HEADINGS: Aged** MESH HEADINGS: Aldosterone/blood MESH HEADINGS: \*Aldosterone Antagonists MESH HEADINGS: \*Angiotensin-Converting Enzyme Inhibitors MESH HEADINGS: Captopril/\*therapeutic use **MESH HEADINGS: Female MESH HEADINGS: Glomerular Filtration Rate MESH HEADINGS: Humans** MESH HEADINGS: Hyperkalemia/\*chemically induced MESH HEADINGS: Hypertension, Renovascular/blood/drug therapy **MESH HEADINGS: Male** MESH HEADINGS: Middle Aged MESH HEADINGS: Potassium/blood MESH HEADINGS: Proline/\*analogs & amp **MESH HEADINGS: derivatives** MESH HEADINGS: Renin/blood MESH HEADINGS: Uremia/\*drug therapy LANGUAGE: eng

949. ---. Hyperkalemia in Azotemic Patients During Angiotensin-Converting Enzyme Inhibition and Aldosterone Reduction With Captopril. 1982; 73, (5): 719-725.

Rec #: 1841

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Thirty-three hypertensive patients with a wide range of renal function were studied during initiation of angiotensin-converting enzyme inhibition with captopril to evaluate changes in potassium levels concomitant with reduction of aldosterone excretion. Ten patients (Group I) with low levels of plasma renin activity had no change in either aldosterone excretion or potassium during the first week of therapy. Twenty-three other patients (Group II) had decreased aldosterone excretion of an average of 63 percent, often reversing secondary hyperaldosteronism. This was associated with a rise in serum potassium from 3.6 +/- 0.1 to 4.4 +/- 0.1 mEq/liter (p less than 0.001). Serum potassium levels during captopril therapy were inversely related to glomerular filtration rate (creatinine clearance) and transiently exceeded 6.0 mEq/liter in markedly azotemic subjects. Despite rising potassium levels, nine patients had reduced aldosterone excretion to subnormal levels, sometimes for many months. During initiation of converting-enzyme inhibition, potassium-sparing agents and supplements should be discontinued and serum potassium levels should be monitored closely, particularly in patients with imparied renal function.

MESH HEADINGS: Adolescent

MESH HEADINGS: Adult

MESH HEADINGS: Aged

MESH HEADINGS: Aldosterone/blood

MESH HEADINGS: \*Aldosterone Antagonists

MESH HEADINGS: \*Angiotensin-Converting Enzyme Inhibitors

MESH HEADINGS: Captopril/\*therapeutic use

MESH HEADINGS: Female

MESH HEADINGS: Glomerular Filtration Rate

**MESH HEADINGS: Humans** 

MESH HEADINGS: Hyperkalemia/\*chemically induced

MESH HEADINGS: Hypertension, Renovascular/blood/drug therapy

MESH HEADINGS: Male

MESH HEADINGS: Middle Aged

MESH HEADINGS: Potassium/blood

MESH HEADINGS: Proline/\*analogs & amp

**MESH HEADINGS: derivatives** 

MESH HEADINGS: Renin/blood MESH HEADINGS: Uremia/\*drug therapy LANGUAGE: eng

950. Theoduloz, C.; Roman, P.; Bravo, J.; Padilla, C.; Vasquez, C.; Meza-Zepeda, L., and Meza-Basso, L. Relative Toxicity of Native Chilean Bacillus Thuringiensis Strains Against Scrobipalpuloides Absoluta (Lepidoptera: Gelechiidae). 1997; 82, (4): 462-468. Rec #: 2830 Keywords: BIOLOGICAL TOXICANT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The larva of Scrobipalpuloides absoluta, a South American moth, is the most devastating insect pest of tomato production in Chile. The potential for using bacterial insecticides was studied analysing the relative toxicity of native Bacillus thuringiensis (BT) isolates belonging to the Chilean collection. The polymerase chain reaction (PCR) technique was used in order to facilitate the prescreening. Mixtures of homologous specific primers to regions within genes encoding CryI, CryIII and CryIV crystal proteins were employed to generate a PCR product profile of each BT isolate. Four isolates were selected and further characterized by means of SDS-PAGE, Western blot and bioassays on fourthinstar S. absoliita larvae. Relative toxicities were evaluated by LD50 determinations. The entomocidal activity of isolate 121e, an autoagglutinating strain, was threefold higher than toxin synthesized by B. thuringiensis var. kurstaki. This native strain was also active against Culex pi MESH HEADINGS: NUCLEIC ACIDS **MESH HEADINGS: PURINES** MESH HEADINGS: PYRIMIDINES MESH HEADINGS: AMINO ACIDS **MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS** MESH HEADINGS: DNA REPLICATION MESH HEADINGS: TRANSCRIPTION, GENETIC MESH HEADINGS: TRANSLATION, GENETIC MESH HEADINGS: AMINO ACIDS/METABOLISM MESH HEADINGS: PEPTIDES/METABOLISM MESH HEADINGS: PROTEINS/METABOLISM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: BACTERIA/PHYSIOLOGY MESH HEADINGS: BACTERIA/METABOLISM **MESH HEADINGS: BACTERIA** MESH HEADINGS: VEGETABLES **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: PEST CONTROL, BIOLOGICAL MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA MESH HEADINGS: PLANTS MESH HEADINGS: DIPTERA MESH HEADINGS: LEPIDOPTERA **KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS: Biochemical Studies-Proteins KEYWORDS:** Replication **KEYWORDS:** Metabolism-Proteins

KEYWORDS: Toxicology-General KEYWORDS: Physiology and Biochemistry of Bacteria KEYWORDS: Medical and Clinical Microbiology-Bacteriology KEYWORDS: Horticulture-Vegetables KEYWORDS: Pest Control KEYWORDS: Economic Entomology-Biological Control KEYWORDS: Invertebrata KEYWORDS: Endospore-forming Gram-Positives (1992- ) KEYWORDS: Solanaceae KEYWORDS: Diptera KEYWORDS: Lepidoptera LANGUAGE: eng

951. ---. Relative Toxicity of Native Chilean Bacillus Thuringiensis Strains Against Scrobipalpuloides Absoluta (Lepidoptera: Gelechiidae). 1997; 82, (4): 462-468.

Rec #: 2830

Keywords: BIOLOGICAL TOXICANT

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The larva of Scrobipalpuloides absoluta, a South American moth, is the most devastating insect pest of tomato production in Chile. The potential for using bacterial insecticides was studied analysing the relative toxicity of native Bacillus thuringiensis (BT) isolates belonging to the Chilean collection. The polymerase chain reaction (PCR) technique was used in order to facilitate the prescreening. Mixtures of homologous specific primers to regions within genes encoding CryI, CryIII and CryIV crystal proteins were employed to generate a PCR product profile of each BT isolate. Four isolates were selected and further characterized by means of SDS-PAGE, Western blot and bioassays on fourth-instar S. absoliita larvae. Relative toxicities were evaluated by LD50 determinations. The entomocidal activity of isolate 121e, an autoagglutinating strain, was threefold higher than toxin synthesized by B. thuringiensis var. kurstaki. This native strain was also active against Culex pi MESH HEADINGS: NUCLEIC ACIDS

MESH HEADINGS: PURINES

MESH HEADINGS: PYRIMIDINES

MESH HEADINGS: AMINO ACIDS

MESH HEADINGS: PEPTIDES

MESH HEADINGS: PROTEINS MESH HEADINGS: DNA REPLICATION

MESH HEADINGS: TRANSCRIPTION, GENETIC

MESH HEADINGS: TRANSLATION, GENETIC

MESH HEADINGS: AMINO ACIDS/METABOLISM

MESH HEADINGS: PEPTIDES/METABOLISM

MESH HEADINGS: PROTEINS/METABOLISM MESH HEADINGS: POISONING

MESH HEADINGS: ANIMALS, LABORATORY

MESH HEADINGS: BACTERIA/PHYSIOLOGY

MESH HEADINGS: BACTERIA/METABOLISM MESH HEADINGS: BACTERIA

MESH HEADINGS: VEGETABLES

MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

MESH HEADINGS: ARACHNIDA

MESH HEADINGS: ENTOMOLOGY/ECONOMICS

MESH HEADINGS: PEST CONTROL, BIOLOGICAL

MESH HEADINGS: ANIMAL

MESH HEADINGS: DISEASE

MESH HEADINGS: INSECTS/PARASITOLOGY

MESH HEADINGS: GRAM-POSITIVE ENDOSPORE-FORMING BACTERIA **MESH HEADINGS: PLANTS** MESH HEADINGS: DIPTERA MESH HEADINGS: LEPIDOPTERA **KEYWORDS: Biochemical Studies-Nucleic Acids KEYWORDS:** Biochemical Studies-Proteins **KEYWORDS:** Replication **KEYWORDS:** Metabolism-Proteins **KEYWORDS:** Toxicology-General KEYWORDS: Physiology and Biochemistry of Bacteria KEYWORDS: Medical and Clinical Microbiology-Bacteriology **KEYWORDS:** Horticulture-Vegetables **KEYWORDS: Pest Control KEYWORDS: Economic Entomology-Biological Control KEYWORDS:** Invertebrata KEYWORDS: Endospore-forming Gram-Positives (1992-) **KEYWORDS:** Solanaceae **KEYWORDS:** Diptera **KEYWORDS:** Lepidoptera LANGUAGE: eng

952. Thomas, K. V. Determination of Selected Antifouling Booster Biocides by High-Performance Liquid Chromatography-Atmospheric Pressure Chemical Ionisation Mass Spectrometry. 1998; 825, (1): 29-35.

Rec #: 2337

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A simple and rapid technique is described for the quantitative determination of four antifouling booster biocides (diuron, 4,5dichloro-2-n-octyl-4-isothazolin-3-one (Kathon 5287), (2-thiocyanomethylthio)benzothiazole (TCMTB) and (2,3,5,6-tetrachloro-4-methylsulphonyl) (TCMS pyridine) in aqueous samples. The analytes were extracted with high recoveries (ca. 100 | 15%) from 2.7-1 water samples, using C18 solid-phase extraction. Sample extracts were quantitatively analysed by reversed-phase HPLC and polarity switching atmospheric pressure chemical ionisation (APCI) MS using selective ion monitoring. Limits of detection for the four compounds were: diuron, 1 ng/l, Kathon 5287, 1 ng/l, TCMTB, 1 ng/l and TCMS pyridine, 5 ng/l. Analysis of samples collected from various UK marinas showed detectable concentrations of diuron to be present, however, concentrations of other three booster biocides were below their respective limit of detection. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS:** Toxicology-General **KEYWORDS:** Pest Control

LANGUAGE: eng

 953. ---. Determination of Selected Antifouling Booster Biocides by High-Performance Liquid Chromatography-Atmospheric Pressure Chemical Ionisation Mass Spectrometry. 1998; 825, (1): 29-35. Rec #: 2337 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A simple and rapid technique is described for the quantitative determination of four antifouling booster biocides (diuron, 4,5dichloro-2-n-octyl-4-isothazolin-3-one (Kathon 5287), (2-thiocyanomethylthio)benzothiazole (TCMTB) and (2,3,5,6-tetrachloro-4-methylsulphonyl) (TCMS pyridine) in aqueous samples. The analytes were extracted with high recoveries (ca. 100 | 15%) from 2.7-1 water samples, using C18 solid-phase extraction. Sample extracts were quantitatively analysed by reversed-phase HPLC and polarity switching atmospheric pressure chemical ionisation (APCI) MS using selective ion monitoring. Limits of detection for the four compounds were: diuron, 1 ng/l, Kathon 5287, 1 ng/l, TCMTB, 1 ng/l and TCMS pyridine, 5 ng/l. Analysis of samples collected from various UK marinas showed detectable concentrations of diuron to be present, however, concentrations of other three booster biocides were below their respective limit of detection. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Methods-General KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS:** Toxicology-General **KEYWORDS:** Pest Control LANGUAGE: eng

954. Thomas, Kevin V.; McHugh, Mathew, and Waldock, Mike. Antifouling Paint Booster Biocides in Uk Coastal Waters: Inputs, Occurrence and Environmental Fate. 2002 Jul 3; 293, (1-3): 117-127. Rec #: 44

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: This study considered the inputs of antifouling paint booster biocides into the aquatic environment directly from painted hulls and high pressure hosing operations, the occurrence of booster biocides in marinas, harbours and docks, and the influence of degradation and watersediment partition on their environmental fate. Irgarol 1051, the Irgarol 1051 degradation product GS26575, diuron, and the diuron degradation products 1-(3-chlorophenyl)-3,1-dimethylurea (CPDU), 1-(3,4-dichlorophenyl)-3-methylurea (DCPMU) and 1-(3,4-dichlorophenyl)urea (DCPU) were all detected at measurable concentrations in surface waters. Irgarol 1051, GS26575 and diuron were also detected in bottom sediments. A preliminary study of biocide input during both normal use and foreshore hull hosing showed that hosing may be a significant point source input and also be a cause for future concern since much of this input is in the form of paint particles. Field based measurements and laboratory experiments showed that Irgarol 1051 and diuron persist in the water column, due to a low affinity to partition onto sedimentary material and high resistance to degradation. Other biocides such as chlorothalonil, dichlofluanid, and Sea-Nine 211 were all found to be rapidly removed from the water column and be less persistent. Booster biocides/ Irgarol 1051/ Diuron/ Sea-Nine 211/ TCMTB/ Dichlofluanid/ Chlorothalonil http://www.sciencedirect.com/science/article/B6V78-44XC9NT-3/2/75b30a493d753dabb730f4affb4b92ef

955. ---. Antifouling Paint Booster Biocides in Uk Coastal Waters: Inputs, Occurrence and Environmental Fate. 2002 Jul 3; 293, (1-3): 117-127.

Rec #: 44

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956. Thomas, Marielle; Lazartigues, Ang+ lique; Banas, Damien; Brun-Bellut, Jean, and Feidt, Cyril. Organochlorine pesticides and polychlorinated biphenyls in sediments and fish from freshwater cultured fish ponds in different agricultural contexts in north-eastern France. 2012 Mar 1-; 77, (0): 35-44.

Rec #: 750

Keywords: MIXTURE, SURVEY

Notes: Chemical of Concern: CTN

Abstract: Organochlorine pesticides (HCB, HCH with +\_-, +\_-, and +| isomers, heptachlor, cisheptachlor epoxyde, trans-heptachlor epoxyde, endosulfan with +\_- and +\_ isomers, sulfate endosulfan, o,p $\Gamma$ Ç\_-DDT, p,p $\Gamma$ Ç\_-DDT, o,p $\Gamma$ Ç\_-DDE, p,p $\Gamma$ Ç\_-DDE, o,p $\Gamma$ Ç\_-DDD, p,p $\Gamma$ Ç\_-DDD, chlorothalonil, alachlor, aldrin, dieldrin, methoxychlor, oxychlordane, chlordane with +\_- and +| isomers, p,p $\Gamma$ Ç\_-dicofol and o,p $\Gamma$ Ç\_-dicofol) and indicators PCBs (IUPAC nos. 28, 52, 101, 118, 138, 153, and 180) were studied both in sediments and muscles of farmed fish species (Cyprinus carpio and Perca fluviatilis). Samples were collected from fish ponds located in the hydrographic basin of the Moselle River (Lorraine Region, France). OCPs and PCBs were present at low concentrations both in sediments and fish muscles. Concerning sediments,  $\Gamma$ ećDDTs revealed concentrations ranging from 0.2 to 2.30 g $\Gamma$ eć1 dw and  $\Gamma$ ećPCBs ranged from 0.3 to 3.5 ng g $\Gamma$ eć1 dw. Concerning fish muscles, the highest concentrations in OCPs were those of p,p $\Gamma$ C\_-,DDE, with average concentrations of 0.57-

\_0.44 ng gFeĆ1 ww for carp and 0.58-

 $_0.29\&$ #xa0;ng gFęĆ1 ww for perch. The contamination profiles proved to be different depending on the fish species. Indeed, HCH-isomers, HCB, and dieldrin were detected only for the carp and always at low concentrations. For example, the highest concentration of HCHs was observed for +\_-HCH with a mean value of 0.64-

\_0.15 ng gFęĆ1 ww for carp. As for PCBs, the levels of FęćPCBs ranged from 0.3 to 6.4 ng gFęĆ1 ww in carp muscles and from 0.90 to 5.60 ng gFęĆ1 ww in perch muscles. Organochlorine pesticides/ Polychlorinated biphenyls/ Fish farming/ Sediments/ Ponds

- 957. Thomidis, T. and Michailidis, Z. Preliminary Evaluation of Nine Fungicides for Control of Phytophthora cactorum and P. citrophthora Associated with Crown Rot in Peach Trees. PHY,GROSOIL,ENV; 2002; 30, (1): 52-60.
  Rec #: 770
  Call Number: LITE EVAL CODED(CuS,CuOH),OK(ALL CHEMS),TARGET(CTN,Captan) Notes: EcoReference No.: 70508
  Chemical of Concern: PNB,Cu,CTN,PPM,Captan,CuS,CuOH,FSTAI,MLX
- 958. Thompson, D. C. and Biehn, W. L. Minor-Use Fungicide and Nematicide Registration Update (NOT DUPLICATE). 1997; 87, (6 suppl.): S96-s97. Rec #: 1448

Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT TRICHODERMA-HAMATUM FLAVOBACTERIUM-BALASTINUM CROPS BIOLOGICAL CONTROL AGENT HOST PEST MANAGEMENT CROP INDUSTRY FUNGICIDE **REGISTRATION NEMATICIDE REGISTRATION FOSETYL-AL FUNGICIDE** CHLOROTHALONIL FENARIMOL TRIADIMEFON MANCOZEB PROPICONAZOLE DAMPING-OFF ROOT-ROT HORTICULTURE UPDATE MINOR USE FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: GRAM-NEGATIVE AEROBIC BACTERIA MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia **KEYWORDS:** Horticulture-General KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control KEYWORDS: Gram-Negative Aerobic Rods and Cocci (1992-) **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Angiospermae LANGUAGE: eng

959. ---. Minor-Use Fungicide and Nematicide Registration Update (NOT DUPLICATE). 1997; 87, (6 suppl.): S96-s97.

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KEYWORDS: Angiospermae LANGUAGE: eng

960. Trout, C. L. and Ristaino, J. B. Fungicides and Mating Type Change in Phytophthora Infestans. 1998; 88, (9 suppl.): S90. Rec #: 2648 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS PATHOGEN FUNGUS INFECTION PEST MANAGEMENT PHYTOPATHOLOGY MATING TYPE CHANGE FUNGICIDES METALAXYL FUNGICIDE MEFENOXAM CHLOROTHALONIL TATTOO C PROPAMOCARB HYDROCHLORIC ACID BENOMYL LATE BLIGHT LONG TERM SURVIVAL ENHANCEMENT FUNGAL APHRODISIAC ACTIVITY SEXUAL REPRODUCTION STIMULATION PESTICIDES **REPRODUCTION FUNGAL DISEASE** MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/ANATOMY & HISTOLOGY MESH HEADINGS: REPRODUCTION MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: PHYCOMYCETES KEYWORDS: General Biology-Symposia **KEYWORDS:** Plant Physiology KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Phycomycetes LANGUAGE: eng 961. ---. Fungicides and Mating Type Change in Phytophthora Infestans. 1998; 88, (9 suppl.): S90. Rec #: 2648 Keywords: ABSTRACT

Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT PHYTOPHTHORA-INFESTANS PATHOGEN FUNGUS INFECTION PEST MANAGEMENT PHYTOPATHOLOGY MATING TYPE CHANGE FUNGICIDES METALAXYL FUNGICIDE MEFENOXAM CHLOROTHALONIL TATTOO C PROPAMOCARB HYDROCHLORIC ACID BENOMYL LATE BLIGHT LONG TERM SURVIVAL ENHANCEMENT FUNGAL APHRODISIAC ACTIVITY SEXUAL REPRODUCTION STIMULATION PESTICIDES REPRODUCTION FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/ANATOMY & HISTOLOGY MESH HEADINGS: REPRODUCTION MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PHYCOMYCETES KEYWORDS: General Biology-Symposia KEYWORDS: Plant Physiology KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Phytopathology-Disease Control

962. Trueman, C. L.; McDonald, M. R.; Gossen, B. D., and McKeown, A. W. Evaluation of disease forecasting programs for management of septoria late blight (Septoria apiicola) on celery. 2007; 29, (4): 330-339.

Rec #: 15942

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: Septoria late blight caused by Septoria apiicola damages celery leaves (Apium graveolens), but its main impact is on the marketability of petioles. Three field trials (two in 2005 and one in 2006) were conducted at the Holland-Bradford Marsh, Ontario, to determine whether the number of fungicide applications required to manage septoria late blight could be reduced compared with the standard calendar spray program and whether disease management could be improved. Two disease forecasting programs (Tomcast at three disease severity value (DSV) thresholds and the Septoria Predictor) were assessed relative to a 7-day calendar spray program and a nonsprayed control. Each fungicide timing treatment, which entailed application of the fungicide Bravo 500 (chlorothalonil 50% a.i.) alternating with Champ 2FL (copper hydroxide 37.5% a.i.), was compared with Pristine WG (pyraclostrobin 12.8%. boscalid 25.2% a.i.) alternating with Champ 2FL on each of two celery cultivars. Pristine consistently provided superior control of septoria late blight compared with Bravo. Treatments were applied to two susceptible celery cultivars 'Florida 683' and 'Sabroso'. Both cultivars responded in a similar manner to the treatments. Fungicide applications timed according to Tomcast at a DSV threshold of 10 or the Septoria Predictor resulted in septoria late blight severity levels on leaves and petioles comparable to the calendar spray program. Fungicide applications were reduced by 1 for the Septoria Predictor, by 1 to 3 for Tomcast at DSV threshold 10, and by 2 to 4 for Tomcast at DSV threshold 15. However, a yield reduction of 15% occurred in one trial when application of Bravo/Champ were timed according to Tomcast at DSV 15, indicating that the DSV 15 threshold was not always adequate for septoria late blight management using Bravo. Keywords: disease management, Tomcast, Septoria Predictor, integrated pest ISI Document Delivery No.: 277ZQ

- 963. Uddin, W.; Soika, M. D.; McNitt, A. S., and Fidanza, M. Effects of Timing of Ethofumesate Application on Severity of Gray Leaf Spot of Perennial Ryegrass Turf. CELSOIL,ENV; 2004; 88, (10): 1146-1152. Rec #: 1510 Call Number: OK(EFS),NO MIXTURE(ALL CHEMS) Notes: EcoReference No.: 89852 Chemical of Concern: CTN,PCZ,TPM,IPD,FTL,AZX,EFS
- 964. Vaishnav, K. A.; Patel, V. A.; Dhedhi, B. M., and Kikani, B. K. Efficacy and Economy of Different Fungicides Against Rust Disease of Groundnut. POPSOIL, ENV, MIXTURE; 1991; 21, (2): 164-165.

Rec #: 330 Call Number: EFFICACY (CAP,CBD,CTN,Captan,MZB), NO EFED CHEM (TPM), TARGET (CAP,CBD,CTN,Captan,MZB,TPM) Notes: EcoReference No.: 154079 Chemical of Concern: CAP,CBD,CTN,Captan,MZB,TPM

965. Vakalounakis, D. J. and Malathrakis, N. E. A Cucumber Disease Caused by Alternaria alternata and Its Control. GRO,POP,REPSOIL,ENV,MIXTURE; 1988; 121, (4): 325-336. Rec #: 380
Call Number: EFFICACY (CTN,MZB), NO EFED CHEM (CMX), NO ENDPOINT (BMY,CuOH,DCNA,FSTAL,MEM,TFR), NO MIXTURE (CMX), TARGET (BMY,CTN,Captan,CuOH,DCNA,FSTAL,Folpet,IPD,MEM,TFR,VCZ) Notes: EcoReference No.: 96122
Chemical of Concern: BMY,CMX,CTN,Captan,CuOH,DCNA,FSTAL,Folpet,IPD,MEM,MZB,TFR,VCZ

966. Vali, R. J. and Moorman, G. W. Effects of Fungicide Spray Regimens on Disease Control and Development of Dicarboximide Resistance in Botrytis-Cinerea. 1990; 80, (1): 124. Rec #: 1675 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT FUNGUS GERANIUM VINCLOZOLIN CHLOROTHALONIL CROP INDUSTRY AGRICULTURE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes **KEYWORDS:** Geraniaceae LANGUAGE: eng

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968. Van Beelen P and Doelman, P. Significance and Application of Microbial Toxicity Tests in Assessing Ecotoxicological Risks of Contaminants in Soil and Sediment. 1997; 34, (3): 455-499. Rec #: 2761

Keywords: REVIEW

Notes: Chemical of Concern: CTN

**KEYWORDS: Biochemical Studies-Minerals** 

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Micro-organisms are vital for soil fertility and for the degradation of organic matter and pollutants in soils and sediments. Due to their function and ubiquitous presence micro-organisms can act as an environmentally very relevant indicator of pollution. Microbial tests should be used discriminatory for the establishment of soil and sediment quality guidelines. This review gives an evaluation of microbial toxicity tests and a novel method to derive quality guidelines. Long term microbial tests are generally less sensitive than short term tests. The toxic effects can be obscured by the activity of a few resistant micro-organisms, when for example soil respiration is used as a sum parameter during a long incubation period. Mineralization tests with high substrate concentrations which enable growth, are less sensitive than similar tests with low concentrations of substrate. The latter tests are more relevant for natural ecosystems. The often applied microbial toxicity tes MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: MINERALS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: SOIL MICROBIOLOGY MESH HEADINGS: SOIL MESH HEADINGS: ANIMAL MESH HEADINGS: PHYSIOLOGY, COMPARATIVE MESH HEADINGS: PROTOZOA/ULTRASTRUCTURE MESH HEADINGS: PROTOZOA/PHYSIOLOGY MESH HEADINGS: PATHOLOGY MESH HEADINGS: MICROBIOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: INVERTEBRATES **KEYWORDS: Ecology**
KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Microbiology KEYWORDS: Soil Science-Physics and Chemistry (1970-) KEYWORDS: Invertebrata KEYWORDS: Microorganisms-Unspecified KEYWORDS: Plantae-Unspecified KEYWORDS: Invertebrata-Unspecified LANGUAGE: eng

969. ---. Significance and Application of Microbial Toxicity Tests in Assessing Ecotoxicological Risks of Contaminants in Soil and Sediment. 1997; 34, (3): 455-499.

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Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Micro-organisms are vital for soil fertility and for the degradation of organic matter and pollutants in soils and sediments. Due to their function and ubiquitous presence micro-organisms can act as an environmentally very relevant indicator of pollution. Microbial tests should be used discriminatory for the establishment of soil and sediment quality guidelines. This review gives an evaluation of microbial toxicity tests and a novel method to derive quality guidelines. Long term microbial tests are generally less sensitive than short term tests. The toxic effects can be obscured by the activity of a few resistant micro-organisms, when for example soil respiration is used as a sum parameter during a long incubation period. Mineralization tests with high substrate concentrations which enable growth, are less sensitive than similar tests with low concentrations of substrate. The latter tests are more relevant for natural ecosystems. The often applied microbial toxicity tes MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: MINERALS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: SOIL MICROBIOLOGY MESH HEADINGS: SOIL MESH HEADINGS: ANIMAL MESH HEADINGS: PHYSIOLOGY, COMPARATIVE MESH HEADINGS: PROTOZOA/ULTRASTRUCTURE MESH HEADINGS: PROTOZOA/PHYSIOLOGY MESH HEADINGS: PATHOLOGY MESH HEADINGS: MICROBIOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: INVERTEBRATES **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-Minerals KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Soil Microbiology KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Invertebrata **KEYWORDS:** Microorganisms-Unspecified **KEYWORDS:** Plantae-Unspecified KEYWORDS: Invertebrata-Unspecified

LANGUAGE: eng

970. Van Emon Jm and Mumma, R. O. Acs American Chemical Society Symposium Series No. 442 Immunochemical Methods for Environmental Analysis 198th National Meeting Miami Beach Florida Usa September 10-15 1989. 1990; 198th national meeting, miami beach, florida, usa, september 10-15, 1989. X+229p. American chemical society: washington, d.c., Usa. Illus. Isbn 0-8412-1875-7.; 0, (0): X+229p. Rec #: 1764 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM BOOK HUMAN FOOD CONTAMINANTS ENVIRONMENTAL CONTAMINANTS ENVIRONMENTAL TOXINS MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AMINO ACIDS MESH HEADINGS: PEPTIDES MESH HEADINGS: PROTEINS MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: IMMUNITY MESH HEADINGS: IMMUNOCHEMISTRY/INSTRUMENTATION MESH HEADINGS: IMMUNOCHEMISTRY/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HOMINIDAE **KEYWORDS: Biochemical Methods-General KEYWORDS:** Biochemical Studies-General **KEYWORDS: Biochemical Studies-Proteins KEYWORDS:** Biophysics-Molecular Properties and Macromolecules **KEYWORDS:** Food Technology-General **KEYWORDS:** Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Immunology and Immunochemistry-General KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Hominidae LANGUAGE: eng

971. ---. Acs American Chemical Society Symposium Series No. 442 Immunochemical Methods for Environmental Analysis 198th National Meeting Miami Beach Florida Usa September 10-15 1989. 1990; 198th national meeting, miami beach, florida, usa, september 10-15, 1989. X+229p. American chemical society: washington, d.c., Usa. Illus. Isbn 0-8412-1875-7.; 0, (0): X+229p. Rec #: 1764 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM BOOK HUMAN FOOD CONTAMINANTS ENVIRONMENTAL CONTAMINANTS ENVIRONMENTAL TOXINS MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AMINO ACIDS MESH HEADINGS: PEPTIDES **MESH HEADINGS: PROTEINS** MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MACROMOLECULAR SYSTEMS MESH HEADINGS: MOLECULAR BIOLOGY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: IMMUNITY MESH HEADINGS: IMMUNOCHEMISTRY/INSTRUMENTATION MESH HEADINGS: IMMUNOCHEMISTRY/METHODS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HOMINIDAE **KEYWORDS: Biochemical Methods-General KEYWORDS:** Biochemical Studies-General **KEYWORDS: Biochemical Studies-Proteins KEYWORDS:** Biophysics-Molecular Properties and Macromolecules KEYWORDS: Food Technology-General **KEYWORDS:** Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Immunology and Immunochemistry-General KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Hominidae LANGUAGE: eng

972. Van Kraaij, D. J.; Jansen, R. W.; Sweep, F. C., and Hoefnagels, W. H. Neurohormonal Effects of Furosemide Withdrawal in Elderly Heart Failure Patients With Normal Systolic Function. Rec #: 1005

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BACKGROUND: In heart failure patients, diuretics cause reninangiotensin-aldosterone system (RAS) activation, which may lead to increased morbidity and mortality despite short-term symptomatic improvement. AIM: To determine changes in RAS activation and clinical correlates following furosemide withdrawal in elderly heart failure patients without left ventricular systolic dysfunction. METHODS AND RESULTS: We performed clinical assessments and laboratory determinations of aldosterone, plasma renin activity (PRA), atrial natriuretic peptide (ANP), norepinephrine, and endothelin in 29 heart failure patients [aged 75.1+/-0.7 (mean+/-S.E.M.) years], before, 1 and 3 months after placebo-controlled furosemide withdrawal. Recurrent congestion occurred in 2 of 19 patients withdrawn, and in 1 of 10 patients continuing on furosemide. Three months after withdrawal, PRA had decreased -1.61+/-0.71 nmol/l/h (P < 0.05). Decreases in aldosterone levels did not reach significance (-0.17+/-0.38 nmol/l). The decreases in PRA after withdrawal correlated with decreases in systolic (r(s)=0.61, P=0.020) and diastolic blood pressure (r(s)=0.80, P=0.01). Successful withdrawal was associated with increases in norepinephrine (+0.58+/-0.22 nmol/l) and ANP (+3.5+/-1.3 pmol/l) (P < 0.05) after 1 month, but these changes did not persist after 3 months. Endothelin levels did not change in both groups. CONCLUSION: Successful furosemide withdrawal in elderly heart failure patients

causes persistent decreases in RAS activation. **MESH HEADINGS: Aged** MESH HEADINGS: Aldosterone/metabolism MESH HEADINGS: Angiotensin-Converting Enzyme Inhibitors/therapeutic use MESH HEADINGS: Atrial Natriuretic Factor/blood/drug effects MESH HEADINGS: Blood Pressure/drug effects/physiology MESH HEADINGS: Body Weight/drug effects/physiology MESH HEADINGS: Diuretics/\*adverse effects MESH HEADINGS: Double-Blind Method MESH HEADINGS: Echocardiography MESH HEADINGS: Epinephrine/metabolism **MESH HEADINGS: Female MESH HEADINGS: Follow-Up Studies** MESH HEADINGS: Furosemide/\*adverse effects MESH HEADINGS: Heart Failure, Congestive/complications/\*drug therapy/\*physiopathology MESH HEADINGS: Heart Rate/drug effects/physiology **MESH HEADINGS: Humans MESH HEADINGS: Male** MESH HEADINGS: Neurotransmitter Agents/\*metabolism MESH HEADINGS: Norepinephrine/metabolism MESH HEADINGS: Patient Compliance MESH HEADINGS: Renin/blood/drug effects MESH HEADINGS: Renin-Angiotensin System/\*drug effects/\*physiology **MESH HEADINGS: Statistics** MESH HEADINGS: Stroke Volume/drug effects/physiology MESH HEADINGS: Substance Withdrawal Syndrome/\*etiology MESH HEADINGS: Systole/drug effects/physiology **MESH HEADINGS: Time Factors MESH HEADINGS: Treatment Outcome** MESH HEADINGS: Ventricular Function, Left/\*drug effects/\*physiology LANGUAGE: eng

## 973. ---. Neurohormonal Effects of Furosemide Withdrawal in Elderly Heart Failure Patients With Normal Systolic Function.

Rec #: 1005

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BACKGROUND: In heart failure patients, diuretics cause reninangiotensin-aldosterone system (RAS) activation, which may lead to increased morbidity and mortality despite short-term symptomatic improvement. AIM: To determine changes in RAS activation and clinical correlates following furosemide withdrawal in elderly heart failure patients without left ventricular systolic dysfunction. METHODS AND RESULTS: We performed clinical assessments and laboratory determinations of aldosterone, plasma renin activity (PRA), atrial natriuretic peptide (ANP), norepinephrine, and endothelin in 29 heart failure patients [aged 75.1+/-0.7 (mean+/-S.E.M.) years], before, 1 and 3 months after placebo-controlled furosemide withdrawal. Recurrent congestion occurred in 2 of 19 patients withdrawn, and in 1 of 10 patients continuing on furosemide. Three months after withdrawal, PRA had decreased -1.61+/-0.71 nmol/l/h (P < 0.05). Decreases in aldosterone levels did not reach significance (-0.17+/-0.38 nmol/l). The decreases in PRA after withdrawal correlated with decreases in systolic (r(s)=0.61, P=0.020) and diastolic blood pressure (r(s)=0.80, P=0.01). Successful withdrawal was associated with increases in norepinephrine (+0.58+/-0.22 nmol/l) and ANP (+3.5+/-1.3 pmol/l) (P < 0.05) after 1 month, but these changes did not persist after 3 months. Endothelin levels did not change in both groups. CONCLUSION: Successful furosemide withdrawal in elderly heart failure patients causes persistent decreases in RAS activation.

MESH HEADINGS: Aged

MESH HEADINGS: Aldosterone/metabolism

MESH HEADINGS: Angiotensin-Converting Enzyme Inhibitors/therapeutic use MESH HEADINGS: Atrial Natriuretic Factor/blood/drug effects MESH HEADINGS: Blood Pressure/drug effects/physiology MESH HEADINGS: Body Weight/drug effects/physiology MESH HEADINGS: Diuretics/\*adverse effects MESH HEADINGS: Double-Blind Method MESH HEADINGS: Echocardiography MESH HEADINGS: Epinephrine/metabolism **MESH HEADINGS: Female MESH HEADINGS: Follow-Up Studies** MESH HEADINGS: Furosemide/\*adverse effects MESH HEADINGS: Heart Failure, Congestive/complications/\*drug therapy/\*physiopathology MESH HEADINGS: Heart Rate/drug effects/physiology **MESH HEADINGS: Humans** MESH HEADINGS: Male MESH HEADINGS: Neurotransmitter Agents/\*metabolism MESH HEADINGS: Norepinephrine/metabolism **MESH HEADINGS: Patient Compliance** MESH HEADINGS: Renin/blood/drug effects MESH HEADINGS: Renin-Angiotensin System/\*drug effects/\*physiology **MESH HEADINGS: Statistics** MESH HEADINGS: Stroke Volume/drug effects/physiology MESH HEADINGS: Substance Withdrawal Syndrome/\*etiology MESH HEADINGS: Systole/drug effects/physiology **MESH HEADINGS: Time Factors MESH HEADINGS: Treatment Outcome** MESH HEADINGS: Ventricular Function, Left/\*drug effects/\*physiology LANGUAGE: eng

## 974. Van, P. U. L. W Aj; De Leeuw F a Am; Van Jaarsveld Ja; Van, D. E. R. Gaag Ma, and Sliggers, G. J. The Potential for Long-Range Transboundary Atmospheric Transport. 1998; 37, (1): 113-141. Rec #: 2597

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A simple generic procedure was developed to determine the potential for long-range transboundary atmospheric transport of substances by means of the residence time of the substance in air. The atmospheric residence time, taua, is defined here as the time period in which the mass of the pollutant in the atmospheric boundary layer is reduced by 50%. This was calculated using first-order and time-averaged reaction rates for the removal processes of dry and wet deposition, and degradation in air. The dry deposition process is described by means of an effective deposition velocity which accounts for the possible re-emission of the substance. Examples of the atmospheric residence time for a number of pesticides, chemicals and combustion products are presented. The atmospheric residence time is recommended as a criterion in screening methods and risk assessments that consider the spatial extent of atmospheric long-range transport of substances.

MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: MOVEMENT MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS: Movement (1971- ) KEYWORDS: Public Health: Environmental Health-Air LANGUAGE: eng

975. ---. The Potential for Long-Range Transboundary Atmospheric Transport. 1998; 37, (1): 113-141.

Rec #: 2597

Keywords: FATE Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A simple generic procedure was developed to determine the potential for long-range transboundary atmospheric transport of substances by means of the residence time of the substance in air. The atmospheric residence time, taua, is defined here as the time period in which the mass of the pollutant in the atmospheric boundary layer is reduced by 50%. This was calculated using first-order and time-averaged reaction rates for the removal processes of dry and wet deposition, and degradation in air. The dry deposition process is described by means of an effective deposition velocity which accounts for the possible re-emission of the substance. Examples of the atmospheric residence time for a number of pesticides, chemicals and combustion products are presented. The atmospheric residence time is recommended as a criterion in screening methods and risk assessments that consider the spatial extent of atmospheric long-range transport of substances. MESH HEADINGS: CLIMATE

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MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: MOVEMENT MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS: Movement (1971- ) KEYWORDS: Public Health: Environmental Health-Air LANGUAGE: eng

976. Vawdrey, L. L.; Langdon, P., and Westerhuis, D. Aetiology, effect of chemicals, and influence of fruit exudates, insects and fruit maturity on the incidence of fruit speckle of banana. 2010; 39, (6): 524-529.

Rec #: 15982

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: The symptoms of fruit speckle of banana are minute reddish-brown to black spots (0.5-1 mm in diameter) often with an oil-soaked or water-soaked margin. Research was conducted into the aetiology, aspects of epidemiology and chemical control of fruit speckle. In a field planting of Lady-finger banana, bunches injected at bunch emergence with the fungicide azoxystrobin (0.15 g a.i./L) and sprayed fortnightly with azoxystrobin (0.25 g a.i./L) significantly reduced the number of speckle lesions/cm(2) compared with bunches injected and sprayed fortnightly with insecticides indicating fruit speckle was caused by fungi. Of the 11 species of fungi recovered from speckle lesions, only Colletotrichum musae, Fusarium oxysporum and F. semitectum reproduced speckle-like symptoms on young fruit. Studies on fruit speckle epidemiology showed spraying young fruit with a 10% sap solution before inoculation with Fusarium spp. caused a 3-fold increase in the number of speckle lesions but had much less of an effect on the incidence of speckle following inoculation with C. musae. Fruit was also shown to be less susceptible to fruit speckle as it matured. The presence of flower thrips had little effect on the incidence of speckle on fruit inoculated with C. musae but caused a 10-fold increase in the incidence of speckle on fruit inoculated with Fusarium spp. In an in vitro experiment, the fungicides propineb, azoxystrobin, trifloxystrobin, copper oxide, mancozeb and chlorothalonil effectively reduced the disease compared with the inoculated control. Keywords: Central American speckle, Deightoniella spot, salt and pepper spot,

ISI Document Delivery No.: 658VE

977. Vazquez, B.; Elvira, C.; Levenfeld, B.; Pascual, B.; GoÑ I, I.; Gurruchaga, M.; Ginebra, M. P.; Gil, F. X.; Planell, J. A.; Liso, P. A.; Rebuelta, M.; San Rom&Aacute, and N, J. Application of Tertiary Amines With Reduced Toxicity to the Curing Process of Acrylic Bone Cements. Rec #: 968

Keywords: NO SPECIES

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: 4-Dimethylaminobenzyl alcohol (DMOH) and 4-dimethylaminobenzyl methacrylate (DMMO) were used as the activators in the benzoyl peroxide initiated redox polymerization for the preparation of acrylic bone cement based on poly(methylmethacrylate) beads of different particle size. The residual monomer content of the cured cements was about 2 wt %, independent of the redox system used in the polymerization, indicating that the activating effect of the tertiary aromatic amines DMOH or DMMO was sufficient to reach a polymerization conversion similar to that obtained with the benzoyl peroxide (BPO) N,N-dimethyl-4-toluidine (DMT) system. The BPO/DMOH and BPO/DMMO redox systems provided exotherms of decreasing peak temperature and increasing setting time, and the cured materials presented higher average molecular weight and similar glass transition temperatures in comparison with those obtained when DMT was used as the activator. In addition, these activators are three times less toxic than the classical DMT.

MESH HEADINGS: Acrylates/\*chemistry/toxicity

MESH HEADINGS: Amines/\*chemistry/toxicity

MESH HEADINGS: Bone Cements/\*chemistry/toxicity

MESH HEADINGS: Chromatography, Gel

MESH HEADINGS: Differential Thermal Analysis

MESH HEADINGS: Elasticity

MESH HEADINGS: Magnetic Resonance Spectroscopy

MESH HEADINGS: Methylmethacrylates

MESH HEADINGS: Molecular Weight

MESH HEADINGS: Oxidation-Reduction

MESH HEADINGS: Particle Size

LANGUAGE: eng

978. ---. Application of Tertiary Amines With Reduced Toxicity to the Curing Process of Acrylic Bone

Cements.

Rec #: 968

Keywords: NO SPECIES

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: 4-Dimethylaminobenzyl alcohol (DMOH) and 4-dimethylaminobenzyl methacrylate (DMMO) were used as the activators in the benzoyl peroxide initiated redox polymerization for the preparation of acrylic bone cement based on poly(methylmethacrylate) beads of different particle size. The residual monomer content of the cured cements was about 2 wt %, independent of the redox system used in the polymerization, indicating that the activating effect of the tertiary aromatic amines DMOH or DMMO was sufficient to reach a polymerization conversion similar to that obtained with the benzoyl peroxide (BPO) N,N-dimethyl-4-toluidine (DMT) system. The BPO/DMOH and BPO/DMMO redox systems provided exotherms of decreasing peak temperature and increasing setting time, and the cured materials presented higher average molecular weight and similar glass transition temperatures in comparison with those obtained when DMT was used as the activator. In addition, these activators are three times less toxic than the classical DMT.

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**MESH HEADINGS: Elasticity** 

MESH HEADINGS: Magnetic Resonance Spectroscopy MESH HEADINGS: Methylmethacrylates MESH HEADINGS: Molecular Weight MESH HEADINGS: Oxidation-Reduction MESH HEADINGS: Particle Size LANGUAGE: eng

979. Venette, J. R. Reduction in Bean Rust Control With Delayed Applications of Chlorothalonil Au - Gross Pl. 1998; 88, (9 suppl.): S115. Rec #: 879 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT UROMYCES-APPENDICULATUS-VAR-APPENDICULATUS PHASEOLUS-VULGARIS DRY BEAN PLANT PATHOGEN HOST HORTICULTURE PEST MANAGEMENT CHLOROTHALONIL FUNGICIDE BEAN RUST FUNGAL DISEASE NORTH DAKOTA USA **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: BASIDIOMYCOTA MESH HEADINGS: LEGUMES **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Basidiomycetes **KEYWORDS:** Leguminosae LANGUAGE: eng 980. ---. Reduction in Bean Rust Control With Delayed Applications of Chlorothalonil Au - Gross Pl. 1998; 88,

(9 suppl.): S115. Rec #: 879 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT UROMYCES-APPENDICULATUS-VAR-APPENDICULATUS PHASEOLUS-VULGARIS DRY BEAN PLANT PATHOGEN HOST HORTICULTURE PEST MANAGEMENT CHLOROTHALONIL FUNGICIDE BEAN RUST FUNGAL DISEASE NORTH DAKOTA USA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES

MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: BASIDIOMYCOTA MESH HEADINGS: LEGUMES KEYWORDS: General Biology-Symposia KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Basidiomycetes KEYWORDS: Leguminosae LANGUAGE: eng

Rec #: 2471

981. Verstraete, W. and Devliegher, W. Formation of Non-Bioavailable Organic Residues in Soil: Perspectives for Site Remediation. 1996; 7, (6): 471-485.

Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Whenever possible, total clean-up of soils and sediments should have priority over methods to contain the pollutants in the soil environment in a way which reduces their potential eco-toxicological effects. Nevertheless, often a very important fraction of the pollutant remains non-available to the cleaning process, either physico-chemical or biological. This constitutes a major obstacle for both environmental technologists and legislators. Yet, the concept of non-extractable organic residues is well accepted in the EU-legislation for pesticides. In this context, an assessment is made to bind organic pollutants to soil. Physical sorption (comprising surface adsorption, absorption and migration in micro- and nanopores) and chemical binding are examined in terms of quantities and kinetics. Chemical binding offers at present no direct possibilities for practice. Making toxic pollutants less bioavailable by increasing physical sorption represents a pragmatic approach to cont MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: METABOLISM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: MICROBIOLOGY MESH HEADINGS: MICROBIOLOGICAL TECHNIQUES **MESH HEADINGS: SANITATION** MESH HEADINGS: SEWAGE MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIODEGRADATION MESH HEADINGS: INDUSTRIAL MICROBIOLOGY MESH HEADINGS: SOIL MESH HEADINGS: MICROBIOLOGY **KEYWORDS:** Biochemical Studies-General **KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Toxicology-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Microorganisms **KEYWORDS:** Microbiological Apparatus KEYWORDS: Public Health: Environmental Health-Sewage Disposal and Sanitary Measures KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Food and Industrial Microbiology-Biodegradation and Biodeterioration KEYWORDS: Soil Science-Physics and Chemistry (1970-)

KEYWORDS: Microorganisms-Unspecified LANGUAGE: eng

982. ---. Formation of Non-Bioavailable Organic Residues in Soil: Perspectives for Site Remediation. 1996; 7, (6): 471-485. Rec #: 2471 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Whenever possible, total clean-up of soils and sediments should have priority over methods to contain the pollutants in the soil environment in a way which reduces their potential eco-toxicological effects. Nevertheless, often a very important fraction of the pollutant remains non-available to the cleaning process, either physico-chemical or biological. This constitutes a major obstacle for both environmental technologists and legislators. Yet, the concept of non-extractable organic residues is well accepted in the EU-legislation for pesticides. In this context, an assessment is made to bind organic pollutants to soil. Physical sorption (comprising surface adsorption, absorption and migration in micro- and nanopores) and chemical binding are examined in terms of quantities and kinetics. Chemical binding offers at present no direct possibilities for practice. Making toxic pollutants less bioavailable by increasing physical sorption represents a pragmatic approach to cont MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: METABOLISM MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: MICROBIOLOGY MESH HEADINGS: MICROBIOLOGICAL TECHNIQUES MESH HEADINGS: SANITATION MESH HEADINGS: SEWAGE MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIODEGRADATION MESH HEADINGS: INDUSTRIAL MICROBIOLOGY MESH HEADINGS: SOIL MESH HEADINGS: MICROBIOLOGY **KEYWORDS: Biochemical Studies-General KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Toxicology-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Microorganisms **KEYWORDS:** Microbiological Apparatus KEYWORDS: Public Health: Environmental Health-Sewage Disposal and Sanitary Measures KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Food and Industrial Microbiology-Biodegradation and Biodeterioration KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Microorganisms-Unspecified LANGUAGE: eng

983. Vigreux, C.; Poul, J. M.; Deslandes, E.; Lebailly, P.; Godard, T.; Sichel, F.; Henry-Amar, M., and Gauduchon, P. Dna Damaging Effects of Pesticides Measured by the Single Cell Gel Electrophoresis Assay (Comet Assay) and the Chromosomal Aberration Test, in Chok1 Cells. 1998 Nov 9; 419, (1-3): 79-90. Rec #: 67 Keywords: IN VITRO Notes: Chemical of Concern: CTN Abstract: One herbicide (isoproturon), two fungicides (carbendazim and chlorothalonil) and etoposide (an effective antitumor agent used as a positive control), were tested for their ability to induce cytotoxic and genotoxic effects in Chinese Hamster Ovary (CHOK1) cells. Etoposide induced DNA damage detectable both by the alkaline Single Cell Gel Electrophoresis (SCGE) assay and the chromosomal aberration (CA) test in absence of noticeable cytotoxicity. With the SCGE assay, a clear induction of DNA damage was observed for chlorothalonil within a 0.2 to 1 [mu]M concentration range. In the CA test, chlorothalonil gave also positive results, inducing mainly chromosome breaks. In contrast, no DNA damage was observed with the SCGE assay for carbendazim and isoproturon. In the CA test, carbendazim induced only numerical aberrations in the concentration range of 25 [mu]M to 100 [mu]M, and isoproturon did not induce any significant increase in CA. In conclusion, chlorothalonil appears genotoxic in proliferative CHOK1 cells, and as expected, the aneugenic compound, carbendazim, did not induce DNA strand breaks in the SCGE assay. SCGE assay/ CA test/ DNA damage/ Pesticide/ Etoposide/ Cytotoxicity http://www.sciencedirect.com/science/article/B6T2D-3V4J6JF-9/2/c0033fe167707f977ed854a141d453fe

984. ---. Dna Damaging Effects of Pesticides Measured by the Single Cell Gel Electrophoresis Assay (Comet Assay) and the Chromosomal Aberration Test, in Chok1 Cells. 1998 Nov 9; 419, (1-3): 79-90. Rec #: 67

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: One herbicide (isoproturon), two fungicides (carbendazim and chlorothalonil) and etoposide (an effective antitumor agent used as a positive control), were tested for their ability to induce cytotoxic and genotoxic effects in Chinese Hamster Ovary (CHOK1) cells. Etoposide induced DNA damage detectable both by the alkaline Single Cell Gel Electrophoresis (SCGE) assay and the chromosomal aberration (CA) test in absence of noticeable cytotoxicity. With the SCGE assay, a clear induction of DNA damage was observed for chlorothalonil within a 0.2 to 1 [mu]M concentration range. In the CA test, chlorothalonil gave also positive results, inducing mainly chromosome breaks. In contrast, no DNA damage was observed with the SCGE assay for carbendazim and isoproturon. In the CA test, carbendazim induced only numerical aberrations in the concentration range of 25 [mu]M to 100 [mu]M, and isoproturon did not induce any significant increase in CA. In conclusion, chlorothalonil appears genotoxic in proliferative CHOK1 cells, and as expected, the aneugenic compound, carbendazim, did not induce DNA strand breaks in the SCGE assay. SCGE assay/ CA test/ DNA damage/ Pesticide/ Etoposide/ Cytotoxicity http://www.sciencedirect.com/science/article/B6T2D-3V4J6JF-9/2/c0033fe167707f977ed854a141d453fe

985. Vimala Devi, P. S.; Chowdary, A., and Prasad, Y. G. Compatibility of Entomopathogenic Fungus Nomuraea rileyi with Commonly Used Pesticides. POP,REP. psvimaladevi@rediffmail.com//: SOIL,ENV; 2002; 72, (6): 370-372. Rec #: 330 Call Number: NO ENDPOINT (CBD,CTN,CYP,DM,DMT,ES,FNV,MZB), TARGET (CBD,MZB) Notes: EcoReference No.: 93432 Chemical of Concern: CBD,CTN,CYP,DM,DMT,ES,FNV,MZB

986. ---. Compatibility of Entomopathogenic Fungus Nomuraea Rileyi With Commonly Used Pesticides . 2002. Rec #: 238
Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ISSN: 0019-5022
Descriptors: Nomuraea rileyi Descriptors: Insecticides
Descriptors: Fungicides
Descriptors: Fungicides
Descriptors: Neem Abstract: In an experiment conducted during 1999, an incorporation of neem (Azadirachta indica A. Juss.) seed-kernel extract into Saboraud's maltose agar medium fortified with yeast 0.5% extract did not cause inhibition of growth of the local isolate of the entomopathogenic fungus Nomuraea rileyi (Farlow) Samson. Compatibility study undertaken for N. rileyi with the fungicides and insecticides commonly used on groundnut (Arachis hypogaea L.), cotton (Gossyppium hirsutum L.) and soybean [Glycine max (L.) Merr.] by the poison-food technique revealed that chlorothalonil, cypermethrin and fenvalerate were compatible with Nomuraea rileyi. 9 refs. English Publication Type: Journal Publication Type: Article Country of Publication: India Classification: 92.10.4.7 CROP SCIENCE: Crop Protection: Resistance of pests Plant Science

- 987. Voulvoulis, N.; Scrimshaw, M. D., and Lester, J. N. Comparative Environmental Assessment of Biocides Used in Antifouling Paints. 2002; 47, (7): 789-795. Rec #: 1070 Keywords: REVIEW Call Number: NO REVIEW(TBT,CTN,Du) Notes: Chemical of Concern: TBT,CTN,Du
- 988. ---. Comparative Environmental Assessment of Biocides Used in Antifouling Paints. 2002; 47, (7): 789-795. 165127. Rec #: 9282 Keywords: REFS CHECKED,REVIEW Notes: Chemical of Concern: CTN,DU,TBT Abstract: NO REFS CHECKED,NO REVIEW LAS FY07 03/27 -COMPLETED 11/07//NONE TO ORDER//
- Voulvoulis, N.; Scrimshaw, M. D., and Lester, J. N. Partitioning of Selected Antifouling Biocides in the Aquatic Environment. 2002 Feb; 53, (1): 1-16.

Rec #: 50 Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: Following a ban on the use of tributyltin in antifouling products on small boats, a number of organic booster biocides have been utilised in conjunction with copper in antifouling paints as alternative treatments. The fate of organic compounds in the aquatic environment is closely linked to their partitioning between aqueous media and sediment. In this study, experiments were designed to investigate the partitioning and sorptive behaviour of Irgarol 1051, chlorothalonil, dichlofluanid and diuron in the aquatic environment. Factorial experiments were undertaken to determine the importance of pH, particulate matter concentration and salinity to their sorption. A Mackay fugacity model was also applied. Results demonstrated that dichlofluanid had the stronger adsorption characteristics and was predicted to bind more strongly to sediments than Irgarol or chlorothalonil. Diuron exhibited the least preference for sorptive behaviour. Sorption appeared to be enhanced by increased suspended matter, whilst salinity does not seem to play a significant role in the partitioning behaviour of these biocides. Biocides/ Antifouling paints/ Partitioning/ Sediments/ Fugacity http://www.sciencedirect.com/science/article/B6V7H-4471NWC-

1/2/ded2d42a00c853471714310559243673

990. ---. Partitioning of Selected Antifouling Biocides in the Aquatic Environment. 2002 Feb; 53, (1): 1-16. Rec #: 50

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: Following a ban on the use of tributyltin in antifouling products on small boats, a number of organic booster biocides have been utilised in conjunction with copper in antifouling paints as alternative treatments. The fate of organic compounds in the aquatic environment is

closely linked to their partitioning between aqueous media and sediment. In this study, experiments were designed to investigate the partitioning and sorptive behaviour of Irgarol 1051, chlorothalonil, dichlofluanid and diuron in the aquatic environment. Factorial experiments were undertaken to determine the importance of pH, particulate matter concentration and salinity to their sorption. A Mackay fugacity model was also applied. Results demonstrated that dichlofluanid had the stronger adsorption characteristics and was predicted to bind more strongly to sediments than Irgarol or chlorothalonil. Diuron exhibited the least preference for sorptive behaviour. Sorption appeared to be enhanced by increased suspended matter, whilst salinity does not seem to play a significant role in the partitioning behaviour of these biocides. Biocides/ Antifouling paints/ Partitioning/ Sediments/ Fugacity http://www.sciencedirect.com/science/article/B6V7H-4471NWC-1/2/ded2d42a00c853471714310559243673

991. Vulsteke, G.; Meeus, P.; Dejonckheere, W.; Callewaert, D., and Van Oost, N. Control of Powdery Mildew (Erysiphe heraclei DC.) and Leaf Blight (Alternaria dauci (Kuhn) Groves & Skolko) in Carrots. GRO,PHY,POPSOIL,ENV; 1996; 103, (5): 488-494. Rec #: 370
Call Number: LITE EVAL CODED (FNZ), NO EFED CHEM (BTN,CYD,DFC,DINO,ILL,ODL), NO MIXTURE (CBD,CTN,IPD,MZB), OK (FDX,MYC,VCZ)
Notes: EcoReference No.: 108061
Chemical of Concern: BTN,CBD,CTN,CYD,DFC,DINO,FDX,FNZ,ILL,IPD,MYC,MZB,ODL,VCZ

992. Vyas, S. C. ; Shroff, V. N., and Chaudhuri, S. Pr. Fungicides in Plant Disease Control Problem and Progress. 1990; 8, (1): 21-50. Rec #: 1780 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM SYMBIOTIC FUNGUS FUNGAL ANTAGONISTS ANTIBIOTICS MICROBIAL ACTION IATROGENIC DISEASE BIOCONTROL SOIL MICROBIOLOGY CHEMICAL TARGET TREATMENT DYNAMICS POLLUTION CROP PROTECTION EPIDEMIOLOGY MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: ANTIFUNGAL AGENTS/PHARMACOLOGY MESH HEADINGS: MYCOSES/DRUG THERAPY MESH HEADINGS: SOIL MICROBIOLOGY **MESH HEADINGS: BIOPHYSICS** MESH HEADINGS: PLANTS/CHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT **MESH HEADINGS: SOIL** MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MICROBIOLOGY

MESH HEADINGS: PLANTS **MESH HEADINGS: FUNGI** MESH HEADINGS: PLANTS **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Chemotherapy-Antifungal Agents **KEYWORDS: Soil Microbiology KEYWORDS:** Plant Physiology **KEYWORDS:** Agronomy-General KEYWORDS: Phytopathology-Diseases Caused by Fungi **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS: Pest Control KEYWORDS:** Microorganisms-Unspecified **KEYWORDS:** Plantae-Unspecified **KEYWORDS:** Fungi-Unspecified **KEYWORDS:** Spermatophyta LANGUAGE: eng

993. Wade, H. F. ; York, A. C.; Morey, A. E.; Padmore, J. M., and Rudo, K. M. The Impact of Pesticide Use on Groundwater in North Carolina. 1998; 27, (5): 1018-1026.

Rec #: 2629

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A North Carolina study revealed that certain pesticides have impacted groundwater above health-based standards in vulnerable areas. Ninety-seven shallow, surficial aquifer-monitoring wells were sampled at least twice. Sites for the monitoring wells were chosen based on an evaluation with the Pesticide DRASTIC model and a known record of pesticide use. Where possible, areas of greater risk were intentionally selected. Twenty-three pesticides or pesticide degradates were detected in 26 of the 97 wells. Nine of the pesticides or degradates are no longer registered for use; two of these chemicals, dibromochloropropane and methylene chloride, were found in excess of health-based guidance levels (HBGL) or state groundwater quality standards (GWQS). Of the registered pesticides or their degradates, the herbicides dichlorprop and simazine and the insecticide isomers BHC-alpha and BHC-delta were in excess of HBGL. The herbicide atrazine was detected at 83% of its GWQS. The U.S.

MESH HEADINGS: BIOPHYSICS MESH HEADINGS: CYBERNETICS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Biophysics-Biocybernetics (1972- ) KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-Physics and Chemistry (1970- ) KEYWORDS: Pest Control LANGUAGE: eng

 994. ---. The Impact of Pesticide Use on Groundwater in North Carolina. 1998; 27, (5): 1018-1026. Rec #: 2629 Keywords: FATE Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A North Carolina study revealed that certain pesticides have impacted groundwater above health-based standards in vulnerable areas. Ninety-seven shallow, surficial aquifer-monitoring wells were sampled at least twice. Sites for the monitoring wells were chosen based on an evaluation with the Pesticide DRASTIC model and a known record of pesticide use. Where possible, areas of greater risk were intentionally selected. Twenty-three pesticides or pesticide degradates were detected in 26 of the 97 wells. Nine of the pesticides or degradates are no longer registered for use; two of these chemicals, dibromochloropropane and methylene chloride, were found in excess of health-based guidance levels (HBGL) or state groundwater quality standards (GWQS). Of the registered pesticides or their degradates, the herbicides dichlorprop and simazine and the insecticide isomers BHC-alpha and BHC-delta were in excess of HBGL. The herbicide atrazine was detected at 83% of its GWQS. The U.S. MESH HEADINGS: BIOPHYSICS MESH HEADINGS: CYBERNETICS MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** KEYWORDS: Biophysics-Biocybernetics (1972-) KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS: Pest Control** LANGUAGE: eng 995. Wagenet, R. J. and Hutson, J. L. Quantifying Pesticide Behavior in Soil. 1990; 0, (0): 295-320. Rec #: 1727 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM REVIEW FUNGICIDES NEMATICIDES LEACHING SIMULATION MODELS PLANT UPTAKE MESH HEADINGS: MATHEMATICS **MESH HEADINGS: STATISTICS** MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air

KEYWORDS: Plant Physiology KEYWORDS: Plant Physiology KEYWORDS: Soil Science-Fertility and Applied Studies (1970- ) KEYWORDS: Pest Control LANGUAGE: eng

996. ---. Quantifying Pesticide Behavior in Soil. 1990; 0, (0): 295-320.

Rec #: 1727 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM REVIEW FUNGICIDES NEMATICIDES LEACHING SIMULATION MODELS PLANT UPTAKE MESH HEADINGS: MATHEMATICS MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Biochemical Studies-General** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Plant Physiology **KEYWORDS:** Plant Physiology KEYWORDS: Soil Science-Fertility and Applied Studies (1970-) **KEYWORDS:** Pest Control LANGUAGE: eng

997. Wagner, S. L. Pesticide Illness Surveillance Review of the National Pesticide Hazard Assessment Program. 1990; Des moines, iowa, usa, september 17-30, 1988. Am j ind med; 18, (3): 307-312. Rec #: 1228
Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM HUMAN NATIONAL PESTICIDE TELECOMMUNICATIONS NETWORK EPA TOXICITY MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOLOGY MESH HEADINGS: NECROSIS/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: PUBLIC HEALTH ADMINISTRATION **MESH HEADINGS: STATISTICS** MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS:** General Biology-Institutions **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health-Public Health Administration and Statistics KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS: Pest Control KEYWORDS:** Hominidae LANGUAGE: eng

998. ---. Pesticide Illness Surveillance Review of the National Pesticide Hazard Assessment Program. 1990; Des moines, iowa, usa, september 17-30, 1988. Am j ind med; 18, (3): 307-312. Rec #: 1228 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM HUMAN NATIONAL PESTICIDE TELECOMMUNICATIONS NETWORK EPA TOXICITY MESH HEADINGS: LEGISLATION MESH HEADINGS: ORGANIZATION AND ADMINISTRATION MESH HEADINGS: BIOLOGY **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: NECROSIS/PATHOLOGY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: PUBLIC HEALTH ADMINISTRATION **MESH HEADINGS: STATISTICS** MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: MORBIDITY MESH HEADINGS: NEOPLASMS MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: HOMINIDAE **KEYWORDS:** General Biology-Institutions KEYWORDS: General Biology-Symposia **KEYWORDS:** Pathology KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health-Public Health Administration and Statistics KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Epidemiology-Organic Diseases and Neoplasms **KEYWORDS: Pest Control** 

KEYWORDS: Hominidae LANGUAGE: eng

999. Walker, R. B.; Gessel, S. P., and Held, E. E. The Ecosystem Study on Rongelap Atoll. 1997; 73, (1): 223-233.

> Rec #: 2492 Keywords: SURVEY Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. During the 1950's and 1960's, the Laboratory of Radiation Biology at the University of Washington carried out an intensive study of this Atoll, which was contaminated with radioactive fallout from the "Bravo shot" in 1954. This study involved many aspects of the environment and the plant and animal life: soils, land plants, marine life, birds, geology and hydrology, and human diets as well. In much of the research, the fortuitously present radioactive isotopes, especially 137Cs and 90Sr, were tracers. Although the term "ecosystem study" was not in vogue at that time, it is clear that this was an early use of the ecosystem approach. Soil types and their development, the distribution of mineral elements in plants and soils, including predominant radionuclides, distribution and growth of native terrestrial plants in relation to topography and salinity, some aspects of the human diets, micronutrient nutrition of the coconut palm, island and islet development and stability, MH - RADIATION EFFECTS

MESH HEADINGS: RADIATION PROTECTION MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: RADIATION DOSAGE MESH HEADINGS: SOIL MESH HEADINGS: PLANTS **MESH HEADINGS: INVERTEBRATES MESH HEADINGS: VERTEBRATES KEYWORDS: Radiation-Radiation Effects and Protective Measures KEYWORDS: Ecology KEYWORDS: Ecology** KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Public Health: Environmental Health-Radiation Health KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Plantae-Unspecified **KEYWORDS:** Invertebrata-Unspecified KEYWORDS: Vertebrata-Unspecified LANGUAGE: eng

1000. ---. The Ecosystem Study on Rongelap Atoll. 1997; 73, (1): 223-233.

Rec #: 2492

Keywords: SURVEY

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. During the 1950's and 1960's, the Laboratory of Radiation Biology at the University of Washington carried out an intensive study of this Atoll, which was contaminated with radioactive fallout from the "Bravo shot" in 1954. This study involved many aspects of the environment and the plant and animal life: soils, land plants, marine life, birds, geology and hydrology, and human diets as well. In much of the research, the fortuitously present radioactive isotopes, especially 137Cs and 90Sr, were tracers. Although the term "ecosystem study" was not in vogue at that time, it is clear that this was an early use of the ecosystem approach. Soil types and their development, the distribution of mineral elements in

plants and soils, including predominant radionuclides, distribution and growth of native terrestrial plants in relation to topography and salinity, some aspects of the human diets, micronutrient nutrition of the coconut palm, island and islet development and stability, MH - RADIATION EFFECTS

MESH HEADINGS: RADIATION PROTECTION MESH HEADINGS: ECOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: RADIATION DOSAGE MESH HEADINGS: SOIL MESH HEADINGS: PLANTS **MESH HEADINGS: INVERTEBRATES MESH HEADINGS: VERTEBRATES KEYWORDS: Radiation-Radiation Effects and Protective Measures KEYWORDS: Ecology KEYWORDS: Ecology** KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Public Health: Environmental Health-Radiation Health KEYWORDS: Soil Science-Physics and Chemistry (1970-) **KEYWORDS:** Plantae-Unspecified **KEYWORDS:** Invertebrata-Unspecified **KEYWORDS:** Vertebrata-Unspecified LANGUAGE: eng

## 1001. Wallace, D. F.; Hand, L. H., and Oliver, R. G. THE ROLE OF INDIRECT PHOTOLYSIS IN LIMITING THE PERSISTENCE OF CROP PROTECTION PRODUCTS IN SURFACE WATERS. 2010; 29, (3): 575-581.

Rec #: 16012

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: Abstract: The photodegradation of six crop protection products (CPPs) was studied in 16 natural waters collected from across the midwest of the United States under simulated sunlight to determine the significance of indirect photolysis. The rate of degradation of five of the CPPs was faster in irradiated natural waters than in buffer systems, with the effect particularly significant with the relatively photostable compounds propiconazole and prometryn. Degradation rates were correlated with the concentration of one or more photosensitizers, or ratios thereof, by means of a Pearson's correlation and linear regression analysis. It was found that the photodegradation of chlorotoluron, pinoxaden, propiconazole and prometryn were linked to the concentration of nitrate, pointing to a significant role of hydroxyl radical ((center dot)OH) as a reactive intermediate. Increased concentrations of dissolved organic carbon (DOC) and bicarbonate relative to nitrate were found to decrease the rate of degradation of these compounds, consistent with a quenching role. Chlorothalonil appeared to be rapidly degraded by means of the carbonate radical ((center dot)CO(3)(-)), whereas the photodegradation of emamectin was particularly complex. Overall, indirect photolysis significantly enhanced the rate of CPP degradation and fate models based on these experiments appear to offer more realism than those that only take into account direct photolysis. Environ. Toxicol. Chem. 2010;29:575-581. (C) 2009 SETAC Keywords: Photolysis, Crop protection product, Photosensitizer, Hydroxyl radical ISI Document Delivery No.: 566KH

 1002. Walters, S. M. Clean-up Techniques for Pesticides in Fatty Foods. 1990; 236, (1): 77-82. Rec #: 1735 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The separation of pesticides and other chemical contaminants from high-fat food samples prior to subsequent steps in the analytical process (usually gas chromatography) is a problem to which much effort in method development has been applied. Early methods involved liquid-liquid partitioning, adsorption chromatography and chemical destruction of lipids with strong base and acid. These techniques had limited applicability, especially with the advent of more polar and labile pesticides. Later developments involving sweep codistillation, gel-permeation chromatography and reversed-phase liquid chromatography on alkyl-bonded microparticulate silica are applicable to a wider range of analytes and are generally faster and more efficient and consume less reagents. Supercritical fluid extraction should prove useful in this regard. A brief overview of methods developed for isolating trace levels of environmental contaminants from lipids is presented. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS:** Food Technology-General KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS: Pest Control** LANGUAGE: eng

1003. ---. Clean-up Techniques for Pesticides in Fatty Foods. 1990; 236, (1): 77-82.

Rec #: 1735

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The separation of pesticides and other chemical contaminants from high-fat food samples prior to subsequent steps in the analytical process (usually gas chromatography) is a problem to which much effort in method development has been applied. Early methods involved liquid-liquid partitioning, adsorption chromatography and chemical destruction of lipids with strong base and acid. These techniques had limited applicability, especially with the advent of more polar and labile pesticides. Later developments involving sweep codistillation, gel-permeation chromatography and reversed-phase liquid chromatography on alkyl-bonded microparticulate silica are applicable to a wider range of analytes and are generally faster and more efficient and consume less reagents. Supercritical fluid extraction should prove useful in this regard. A brief overview of methods developed for isolating trace levels of environmental contaminants from lipids is presented.

MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS:** Food Technology-General KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-Foods KEYWORDS: Toxicology-Environmental and Industrial Toxicology **KEYWORDS:** Pest Control LANGUAGE: eng

 1004. Wan, M. T. and Rahe, J. E. Impact of Azadirachtin on Glomus intraradices and Vesicular-Arbuscular Mycorrhiza in Root Inducing Transferred DNA Transformed Roots of Daucus carota. POP,GRO. 6714: SOIL,ENV; 1998; 17, (10): 2041-2050. Rec #: 790 Call Number: LITE EVAL CODED(AZD,CuS),OK(BMY,GYP,DMT),NO CROP(CTN) Notes: EcoReference No.: 55368 Chemical of Concern: BMY,CTN,CuS,DMT,GYP,AZD

1005. Wan, M. T.; Rahe, J. E., and Watts, R. G. A New Technique for Determining the Sublethal Toxicity of Pesticides to the Vesicular-Arbuscular Mycorrhizal Fungus Glomus intraradices. GRO. 14080: SOIL,ENV; 1998; 17, (7): 1421-1428. Rec #: 800 Call Number: TARGET(CTN) Notes: EcoReference No.: 55367 Chemical of Concern: CuS,BMY,CTN,DMT,GYP

1006. Washington, J. R. Relationship Between the Spray Droplet Density of Two Protectant Fungicides and the Germination of Mycosphaerella fijiensis Ascospores on Banana Leaf Surfaces. REP. J.R. Washington, ISK Biosciences Corporation, 2100 Ponce De Leon Blvd., 1000, Coral Gables, FL 33134, United States//: SOIL,ENV; 1997; 50, (3): 233-239. Rec #: 1510
Call Number: TARGET (CTN,MZB)
Notes: EcoReference No.: 92171
Chemical of Concern: CTN,MZB

1007. Washington, J. R.; Cruz, J., and Fajardo, M. Detection of Chlorothalonil in Dew Water Following Aerial Spray Application and Its Role in the Control of Black Sigatoka in Banana. POP,REP,GRO. J.R. Washington, 6964 NW 55th St., Miami, FL 33166-5632, United States.: SOIL,ENV; 1998; 82, (11): 1191-1198. Rec #: 820 Call Number: OK TARGET(MZB,CTN) Notes: EcoReference No.: 72792 Chemical of Concern: MZB,CTN

 1008. Washington, J. R.; Cruz, J.; Lopez, F., and Fajardo, M. Infection Studies of Mycosphaerella fijiensis on Banana and the Control of Black Sigatoka with Chlorothalonil. POP,REP. J.R. Washington, 6964 NW 55th St., Miami, FL 33166-5632//: ENV; 1998; 82, (11): 1185-1190. Rec #: 1370 Call Number: TARGET (AZX,CTN,PCZ,PPCP,PPCP2011) Notes: EcoReference No.: 72791 Chemical of Concern: AZX,CTN,PCZ,PPCP

 1009. ---. Infection Studies of Mycosphaerella fijiensis on Banana and the Control of Black Sigatoka with Chlorothalonil. POP,PHY. J.R. Washington, 6964 NW 55th St., Miami, FL 33166-5632: SOIL,ENV; 1998; 82, (11): 1185-1190. Rec #: 810 Call Number: NO CROP(CTN) Notes: EcoReference No.: 72791 Chemical of Concern: CTN

1010. Watanabe, T. Determination of the Concentration of Pesticides in Atmosphere at High Altitudes After Aerial Application. 1998; 60, (5): 669-676. Rec #: 2598 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE HIGH ALTITUDES PESTICIDES DDT PESTICIDE AERIAL PESTICIDE APPLICATION POLLUTION ATMOSPHERIC CONCENTRATIONS MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General** KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Pest Control LANGUAGE: eng

 1011. ---. Determination of the Concentration of Pesticides in Atmosphere at High Altitudes After Aerial Application. 1998; 60, (5): 669-676. Rec #: 2598 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM RESEARCH ARTICLE HIGH ALTITUDES PESTICIDES DDT PESTICIDE AERIAL PESTICIDE APPLICATION POLLUTION ATMOSPHERIC CONCENTRATIONS MESH HEADINGS: CLIMATE MESH HEADINGS: ECOLOGY MESH HEADINGS: METEOROLOGICAL FACTORS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Pest Control LANGUAGE: eng

1012. Wegulo, S. N.; Rivera-Canales, J. M.; Martinson, C. A., and Nutter, F. W. Jr. Efficacy of Fungicide Treatments for Control of Common Rust and Northern Leaf Spot in Hybrid Corn Seed Production. POP. C.A. Martinson, Department of Plant Pathology, Iowa State University, Ames, IA 50011, United States//: SOIL,ENV,MIXTURE; 1998; 82, (5): 547-554. Rec #: 1060 Call Number: EFFICACY (CTN,MZB,PCZ,PPCP,PPCP2011), TARGET (CTN,MZB,PCZ,PPCP,PPCP2011) Notes: EcoReference No.: 69007 Chemical of Concern: CTN,MZB,PCZ,PPCP

 1013. ---. Efficacy of Fungicide Treatments for Control of Common Rust and Northern Leaf Spot in Hybrid Corn Seed Production. PHY, REP, POP. C.A. Martinson, Department of Plant Pathology, Iowa State University, Ames, IA 50011, United States: SOIL, ENV; 1998; 82, (5): 547-554. Rec #: 840 Call Number: OK(PCZ), NO CROP(CTN, MZB) Notes: EcoReference No.: 69007 Chemical of Concern: PCZ, CTN, MZB

 1014. Weisburger, E. K. Carcinogenicity Tests on Pesticides. PHY1982: 165-176. Rec #: 1570 Call Number: NO CONTROL(ALL CHEMS)// Notes: EcoReference No.: 69996 Chemical of Concern: PNB,DDT,EN,HCCH,ES,DZ,CTN

1015. Wenner, N. G. and Merrill, W. Cyclaneusma-Minus Infection Controlled Using Bravo 720 Spray Schedules. 1988; 78, (11): 1512. Rec #: 1608 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT PINUS-SYLVESTRIS CHRISTMAS TREES EFFICACY PENNSYLVANIA USA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia

KEYWORDS: Biochemical Studies-General KEYWORDS: Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Ascomycetes KEYWORDS: Coniferopsida LANGUAGE: eng

1016. ---. Cyclaneusma-Minus Infection Controlled Using Bravo 720 Spray Schedules. 1988; 78, (11): 1512. Rec #: 1608 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM ABSTRACT PINUS-SYLVESTRIS CHRISTMAS TREES EFFICACY PENNSYLVANIA USA MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ASCOMYCOTA MESH HEADINGS: PLANTS **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biochemical Studies-General KEYWORDS:** Horticulture-Flowers and Ornamentals KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Ascomycetes **KEYWORDS:** Coniferopsida LANGUAGE: eng

1017. White, R. E. and Kookana, R. S. Measuring Nutrient and Pesticide Movement in Soils: Benefits for Catchment Management. 1998; 38, (7): 725-743. Rec #: 2361

Keywords: FATE

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The movement of nutrients, especially NO3- and H2PO4-, and pesticides from soils into receiving waters can pose problems for the management of water quality in catchments. This paper briefly reviews the reactions of these materials in soil, and the processes involved in their transport by water over and through soils in the field. The natural heterogeneity of soils, and fluctuations in the source strength of pesticides and nutrients due to biophysical factors and environmental conditions, have a profound effect on measurements. Preferred techniques are discussed for measuring losses from drained systems (sampled as point sources, which provide an integration of spatial and temporal variability in the areas drained) and undrained systems (sampled as diffuse sources, where the reliability of areal averaging depends on the efficiency of the sampling strategy). Pathways of nitrogen, phosphorus and pesticide movement from soil solution and solid phases under various land use MESH HEADINGS: MINERALS

MESH HEADINGS: NUTRITIONAL REQUIREMENTS

MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL MESH HEADINGS: SOIL MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES KEYWORDS: Nutrition-Minerals KEYWORDS: Soil Science-General KEYWORDS: Soil Science-Physics and Chemistry (1970- ) KEYWORDS: Soil Science-Fertility and Applied Studies (1970- ) KEYWORDS: Pest Control LANGUAGE: eng

1018. ---. Measuring Nutrient and Pesticide Movement in Soils: Benefits for Catchment Management . 1998; 38, (7): 725-743.

Rec #: 2361 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The movement of nutrients,

especially NO3- and H2PO4-, and pesticides from soils into receiving waters can pose problems for the management of water quality in catchments. This paper briefly reviews the reactions of these materials in soil, and the processes involved in their transport by water over and through soils in the field. The natural heterogeneity of soils, and fluctuations in the source strength of pesticides and nutrients due to biophysical factors and environmental conditions, have a profound effect on measurements. Preferred techniques are discussed for measuring losses from drained systems (sampled as point sources, which provide an integration of spatial and temporal variability in the areas drained) and undrained systems (sampled as diffuse sources, where the reliability of areal averaging depends on the efficiency of the sampling strategy). Pathways of nitrogen, phosphorus and pesticide movement from soil solution and solid phases under various land use MESH HEADINGS: MINERALS MESH HEADINGS: NUTRITIONAL REQUIREMENTS MESH HEADINGS: METHODS MESH HEADINGS: PLANTS MESH HEADINGS: SOIL **MESH HEADINGS: SOIL** MESH HEADINGS: FERTILIZERS MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES **KEYWORDS:** Nutrition-Minerals

KEYWORDS: Nutrition-Minerals KEYWORDS: Soil Science-General KEYWORDS: Soil Science-Physics and Chemistry (1970-) KEYWORDS: Soil Science-Fertility and Applied Studies (1970-) KEYWORDS: Pest Control LANGUAGE: eng

1019. Wicks, T.; Emmett, R. W.; Magarey, P. A., and Fletcher, G. C. Control of Grapevine Powdery Mildew in Southern Australia: I. Evaluation of Protectant Spray Programmes. POPSOIL,ENV,MIXTURE; 1985; 11, (16): 12-15. Rec #: 350 Call Number: OK (DCF), TARGET (CTN,FRM,MZB,PCZ,PPCP,PPCP2011) Notes: EcoReference No.: 151082 Chemical of Concern: CTN, DCF, FRM, MZB, PCZ, PPCP

1020. Wicks, T.; Lomman, G., and Rogers, I. S. Fungicide Control of Ringspot (Mycosphaerella brassicicola) in Brussels Sprouts. POPSOIL,ENV,MIXTURE; 1987; 27, (4): 597-600. Rec #: 1280
Call Number: EFFICACY (BMY,CBD,CTN,FRM,MZB,Maneb,TDF), NO EFED CHEM (TBA), TARGET (BMY,CBD,CTN,FRM,MZB,Maneb,TDF)
Notes: EcoReference No.: 91966
Chemical of Concern: BMY,CBD,CTN,FRM,MZB,Maneb,TBA,TDF

1021. Wicks, T. J. Fungicidal Control of Leaf Spot (Septoria apiicola) of Celery. POPSOIL,ENV,MIXTURE; 1989; 29, (2): 261-266. Rec #: 1270
Call Number: EFFICACY (CTN,FUZ,MYC,PCZ,PPCP,PPCP2011), NO EFED CHEM (ANZ,TDM), TARGET (CTN,FRM,FUZ,MYC,PCZ,PPCP,PPCP2011,TEZ) Notes: EcoReference No.: 96266
Chemical of Concern: ANZ,CTN,FRM,FUZ,MYC,PCZ,PPCP,TDM,TEZ

 1022. Wicks, T. J. Glasshouse and Field Evaluation of Fungicides for the Control of Septoria Apiicola on Celery. 1990 Dec; 9, (6): 433-438. Rec #: 103 Call Number: TARGET (CTN)

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Propiconazole was more effective than either triadimenol or hexaconazole when applied after infection, for the control of Septoria apiicola on celery seedlings. In three out of four glasshouse experiments, 25 mg propiconazole I-1 controlled S. apiicola completely when applied within 3 days after inoculation. Propiconazole and triadimenol at 5-15 mg l-1 were also effective when applied 2 days after inoculation. Soil applications of a granular formulation of triadimenol (up to 20 mg per plant) controlled S. apiicola for 5 weeks on celery seedlings grown in pots and, in the field, granules at 100 mg per plant applied at planting were effective for 6 weeks. In two other field experiments the most effective treatments were foliar sprays of 25 mg propiconazole l-1 applied every 7-10 days with or without the addition of anilazine or chlorothalonil. Septoria/ celery/ fungicidal control http://www.sciencedirect.com/science/article/B6T5T-4B4RN63-P/2/ef2d025eaf3687420dd41e12e8d88115

1023. Wicks, T. J.; Hall, B., and Pezzaniti, P. Fungicidal Control of Anthracnose (Microdochium panattonianum) on Lettuce. GRO,PHY,POP,REPSOIL,ENV,MIXTURE; 1994; 34, (2): 277-283. Rec #: 1260
Call Number: EFFICACY (CTN,CuOH,FRM,FUZ,MYC,MZB,PCZ,PPCP,PPCP2011,TEZ), NO EFED CHEM (ANZ,DFC,HCZ,TDM), TARGET
(CTN,CuOH,FRM,FUZ,MYC,MZB,PCZ,PPCP,PPCP2011,TEZ) Notes: EcoReference No.: 91965
Chemical of Concern: ANZ,CTN,CuOH,DFC,FRM,FUZ,HCZ,MYC,MZB,PCZ,PPCP,TDM,TEZ

 1024. ---. Fungicidal Control of Downy Mildew (Bremia lactucae) on Lettuce. POP. South Aust. Dep. Agric., GPO Box 1671, Adelaide, SA 5001, Aust.//: SOIL,ENV,MIXTURE; 1993; 33, (3): 381-384. Rec #: 360
 Call Number: EFFICACY (MLX,MZB), TARGET (CTN,MMM) Notes: EcoReference No.: 151133
 Chemical of Concern: CTN,MLX,MMM,MZB

 1025. Wiese, A. F.; Schoenhals, M. G.; Bean, B. W., and Salisbury, C. D. Effect of Tillage Timing on Herbicide Toxicity to Field Bindweed. POPSOIL,ENV; 1997; 10, (3): 459-461. Rec #: 1580 Call Number: OK(GYPI),OK TARGET(24DXYBEE,DMB),NO MIXTURE(PCLK),NO COC(CTN) Notes: EcoReference No.: 89848 Chemical of Concern: 24DXYBEE,GYPI,DMB,PCLK

1026. Wilson, N. H.; Killeen, J. C. Jr.; Ford, W. H.; Siou, G.; Busey, W. M., and Eilrich, G. L. A 90-Day Study in Rats with the Monoglutathione Conjugate of Chlorothalonil. GRO,CEL,BCMORAL; 1990; 53, (1/2): 155-156. Rec #: 1590 Call Number: NO ENDPOINT(CTN) Notes: EcoReference No.: 89830 Chemical of Concern: CTN

1027. Winnett, G.; Marucci, P.; Reduker, S., and Uchrin, C. G. The Fate of Chlorothalonil in Ground Water in Commercial Cranberry Culture in the New Jersey Pine Barrens. 1990; 25, (6): 587-595. Rec #: 1110 Keywords: FATE Call Number: NO ENDPOINT(CTN) Notes: Chemical of Concern: CTN

 1028. ---. The Fate of Chlorothalonil in Ground Water in Commercial Cranberry Culture in the New Jersey Pine Barrens. 1990; 25, (6): 587-595. 166269. Rec #: 5472 Keywords: FATE Notes: Chemical of Concern: CTN Abstract: NO FATE Author Affiliation: Dep. Environ. Sci., New Jersey Agric. Exp. Station, Rutgers Univ., New Brunswick, N.J. 08903//

1029. Wise, I. L. and Lamb, R. J. Spatial Distribution and Sequential Sampling Methods for the Potato Aphid, Macrosiphum Euphorbiae (Thomas) (Homoptera: Aphididae), in Oilseed Flax. 1995; 127, (6): 967-976.

Rec #: 2601 Keywords: NO TOX DATA

Notes: Chemical of Concern: CTN

MESH HEADINGS: HERBICIDES

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Sequential decision plans based on aphid counts and binomial counts of infested plants (presence or absence of aphids) were developed to guide chemical control decisions for the potato aphid, Macrosiphum euphorbiae, on two growth stages of oilseed flax in western Canada. The plans were derived from studies of aphid dispersion among plants in field plots at two locations over 4 years, and verified in samples from 51 commercial fields, in Manitoba. The relationship between variance (s2) and mean aphid density (x) per plant was loge  $s^2 = 0.790 | 0.050 + (1.649 | 0.031) | \log x(n = 69 r^2 = 0.98)$ , for both crop growth stages. Neither sweep samples nor pan samples produced reliable estimates of the number of aphids per plant and, therefore, these sampling tools could not replace aphid counts on individual plants. Aphid counts and the binomial method gave similar control decisions with similar amounts of effort, but the aphid counting method required fewer plants to reach a d MESH HEADINGS: BIOLOGY/METHODS **MESH HEADINGS: MATHEMATICS** MESH HEADINGS: STATISTICS MESH HEADINGS: BIOLOGY MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: OILS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL

MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS **MESH HEADINGS: INSECTICIDES** MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: PLANTS MESH HEADINGS: INSECTS **KEYWORDS:** Methods **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-General **KEYWORDS:** Agronomy-Oil Crops **KEYWORDS: Pest Control** KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Invertebrata **KEYWORDS:** Linaceae **KEYWORDS:** Homoptera LANGUAGE: eng

 1030. ---. Spatial Distribution and Sequential Sampling Methods for the Potato Aphid, Macrosiphum Euphorbiae (Thomas) (Homoptera: Aphididae), in Oilseed Flax. 1995; 127, (6): 967-976. Rec #: 2601

> Keywords: NO TOX DATA Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Sequential decision plans based on aphid counts and binomial counts of infested plants (presence or absence of aphids) were developed to guide chemical control decisions for the potato aphid, Macrosiphum euphorbiae, on two growth stages of oilseed flax in western Canada. The plans were derived from studies of aphid dispersion among plants in field plots at two locations over 4 years, and verified in samples from 51 commercial fields, in Manitoba. The relationship between variance (s2) and mean aphid density (x) per plant was loge  $s_2 = 0.790 | 0.050 + (1.649 | 0.031) | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.031) | 0.050 + (1.649 | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050) | 0.050 + (1.649 | 0.050)$ both crop growth stages. Neither sweep samples nor pan samples produced reliable estimates of the number of aphids per plant and, therefore, these sampling tools could not replace aphid counts on individual plants. Aphid counts and the binomial method gave similar control decisions with similar amounts of effort, but the aphid counting method required fewer plants to reach a d MESH HEADINGS: BIOLOGY/METHODS MESH HEADINGS: MATHEMATICS **MESH HEADINGS: STATISTICS** MESH HEADINGS: BIOLOGY MESH HEADINGS: ANIMALS MESH HEADINGS: ECOLOGY MESH HEADINGS: BIOCHEMISTRY **MESH HEADINGS: POISONING** MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: OILS MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** 

MESH HEADINGS: ARACHNIDA MESH HEADINGS: ENTOMOLOGY/ECONOMICS MESH HEADINGS: INSECTICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: ANIMAL MESH HEADINGS: DISEASE MESH HEADINGS: INSECTS/PARASITOLOGY MESH HEADINGS: PLANTS **MESH HEADINGS: INSECTS KEYWORDS:** Methods **KEYWORDS:** Mathematical Biology and Statistical Methods **KEYWORDS: Ecology KEYWORDS: Biochemical Studies-General KEYWORDS:** Toxicology-General **KEYWORDS:** Agronomy-Oil Crops **KEYWORDS: Pest Control** KEYWORDS: Economic Entomology-Chemical and Physical Control **KEYWORDS:** Invertebrata **KEYWORDS:** Linaceae **KEYWORDS:** Homoptera LANGUAGE: eng

1031. Wojdy&#322 and A, A. T. Activity of Some Chemicals in the Control of Botrytis Cinerea on Roses . Rec #: 655

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: In the control of grey mould (Botrytis cinerea) on rose petals all 15 tested fungicides used as a spray, suppressed very effectively development of necrosis. But the best results in suppression of necrosis development, more than 90% effectiveness gave: Amistar 250 SC (azoxystrobin), Bravo 500 SC (chlorothalonil), Discus 500 WG (kresoxim methyl), Euparen 50 WP (dichlofluanid) Euparen Multi 50 WG (tolyfluanid), Folpan 80 WG (folpet), Kaptan zaw. 50 WP (captan), Penncozeb 80 WP (mancozeb), Ronilan 50 WP (vinclozolin), Rovral Flo 255 SC (iprudione), Sumilex 500 SC (procymidone) and Teldor 500 SC (fenhexamid). When Dithane M-45 80 WP (mancozeb), Sarbrawit 530 SC (chlorothalonil + carbendazim) or Topsin M 70 WP (thiophanate methyl) were used, the diameter of spots was about 6-times smaller than on control flowers (about 84% effectiveness). All tested fungicides used for spraying of flower petals with abundant visible sporulation of B. cinerea were ineffective in the inhibition of spore germination. But when Petri dishes with potato-dextrose-agar were sprayed with tested fungicides and inoculated with spore suspension, Euparen 50 WP, Euparen Multi 50 WG, Folpan 80 WG, Kaptan zaw. 50 WP and Penncozeb 80 WP completely suppressed conidia germination. MESH HEADINGS: Botrytis/\*drug effects/growth & amp MESH HEADINGS: development/physiology MESH HEADINGS: Dose-Response Relationship, Drug MESH HEADINGS: Fungicides, Industrial/\*pharmacology **MESH HEADINGS: Germination MESH HEADINGS:** Pesticide Synergists MESH HEADINGS: Rosa/\*microbiology MESH HEADINGS: Spores, Fungal/drug effects/physiology

LANGUAGE: eng

1032. Wojdyla, A. T. Chemical Control of Rose Diseases. V. Effectiveness of Fungicides in the Control of Powdery Mildew on Rose cv Mercedes in Greenhouse. PHY,GRO,ACC,POP. Research Institute of Pomology and Floriculture,Skierniewice,Pol: SOIL,ENV,MIXTURE; 1999; 7, (1): 47-54. Rec #: 850 Call Number: LITE EVAL CODED(TCZ,TDF,TFR),OK(BTN,TDM,CBD,FUZ,FRM,DFC,MYC,TFZ),NO MIXTURE(TEZ),NO CROP(CTN,Folpet,MZB) Notes: EcoReference No.: 75966 Chemical of Concern: TFR,FRM,FUZ,MZB,CBD,Folpet,TEZ,TCZ,CTN,TDF,TDM,BTN,TFZ,MYC,DFC

1033. Wong, J. W.; Zhang, K.; Tech, K.; Hayward, D. G.; Krynitsky, A. J.; Cassias, I.; Schenck, F. J.; Banerjee, K.; Dasgupta, S., and Brown, D. Multiresidue Pesticide Analysis of Ginseng Powders Using Acetonitrile- or Acetone-Based Extraction, Solid-Phase Extraction Cleanup, and Gas Chromatography-Mass Spectrometry/Selective Ion Monitoring (GC-MS/SIM) or -Tandem Mass Spectrometry (GC-MS/MS). 2010; 58, (10): 5884-5896. Rec #: 16162

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: Abstract: A multiresidue method for the analysis of 168 pesticides in dried powdered ginseng has been developed using acetonitrile or acetone mixture (acetone/cyclohexane/ethyl acetate, 2:1:1 v/v/v) extraction, solid-phase extraction (SPE) cleanup with octyl-bonded silica (C(8)), graphitized carbon black/primary secondary amine (GCB/PSA) sorbents and toluene, and capillary gas chromatography mass spectrometry/selective ion monitoring (GC-MS/SIM) or tandem mass spectrometry (GC-MS/MS). The geometric mean limits of quantitation (LOQs) were 53 and 6 mu g/kg for the acetonitrile extraction and 48 and 7 mu g/kg for the acetone-based extraction for GC-MS/SIM and GC-MS/MS, respectively. Mean percent recoveries and standard deviations from the ginseng fortified at 25, 100, and 500 mu g/kg using GC-MS/SIM were 87 +/-10, 88 +/- 8, and 86 +/- 10% from acetonitrile extracts and 88 +/- 13, 88 +/- 12, and 88 +/- 14% from acetone mixture extracts, respectively. The Mean percent recoveries from the ginseng at the 25, 100, and 500 mu g/kg levels using GC-MS/MS were 83 +/- 19, 90 +/- 13, and 89 +/- 11% from acetonitrile extracts and  $98 \pm 20, 91 \pm 13$ , and  $88 \pm 14\%$  from acetone extracts, respectively. Twelve dried ginseng products were found to contain one or more of the following pesticides and their metabolites: BHCs (benzene hexachlorides, alpha-, beta-, gamma-, and delta-), chlorothalonil, chlorpyrifos, DDT (dichlorodiphenyl trichloroethane), dacthal, diazinon, iprodione, quintozene, and procymidone ranging from <1 to >4000 mu g/kg. No significant differences were found between the two extraction solvents, and GC-MS/MS was found to be more specific and sensitive than GC-MS/SIM. The procedures described were shown to be effective in screening, identifying, confirming, and quantitating pesticides in commercial ginseng products. Keywords: Multiresidue methods, organohalogen pesticides, GC-MS/SIM, GC-MS/MS, ISI Document Delivery No.: 596YN

1034. Wong, Jon W.; Zhang, Kai; Tech, Katherine; Hayward, Douglas G.; Krynitsky, Alexander J.; Cassias, Irene; Schenck, Frank J.; Banerjee, Kaushik; Dasgupta, Soma, and Brown, Don. Multiresidue Pesticide Analysis of Ginseng Powders Using Acetonitrile- or Acetone-Based Extraction, Solid-Phase Extraction Cleanup, and Gas Chromatographyâ 'Mass Spectrometry/Selective Ion Monitoring (GC-MS/SIM) or â 'Tandem Mass Spectrometry (GC-MS/MS). 2010; 58, (10): 5884â€'5896.

Rec #: 13542

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: A multiresidue method for the analysis of 168 pesticides in dried powdered ginseng has been developed using acetonitrile or acetone mixture (acetone/cyclohexane/ethyl acetate, 2:1:1 v/v/v) extraction, solid-phase extraction (SPE) cleanup with octyl-bonded silica (C8), graphitized carbon black/primaryâ 'secondary amine (GCB/PSA) sorbents and toluene, and capillary gas chromatographyâ 'mass spectrometry/selective ion monitoring (GC-MS/SIM) or â 'tandem mass spectrometry (GC-MS/MS). The geometric mean limits of quantitation (LOQs) were 53 and 6 ÎL'g/kg for the acetonitrile extraction and 48 and 7 ÎL'g/kg for the acetone-based extraction for GC-MS/SIM and GC-MS/MS, respectively. Mean percent recoveries and standard deviations from the ginseng fortified at 25, 100, and 500 ÎL'g/kg using GC-MS/SIM were 87 Å $\pm$  10, 88 Å $\pm$  8, and 86 Å $\pm$  10% from acetonitrile extracts and 88 Å $\pm$  13, 88 Å $\pm$  12, and 88 Å $\pm$  14%

from acetone mixture extracts, respectively. The mean percent recoveries from the ginseng at the 25, 100, and 500 ÎL'g/kg levels using GC-MS/MS were 83 ű 19, 90 ű 13, and 89 ű 11% from acetonitrile extracts and 98 ű 20, 91 ű 13, and 88 ű 14% from acetone extracts, respectively. Twelve dried ginseng products were found to contain one or more of the following pesticides and their metabolites: BHCs (benzene hexachlorides, α-, Î, -, Ît-, and delta-), chlorothalonil, chlorpyrifos, DDT (dichlorodiphenyl trichloroethane), dacthal, diazinon, iprodione, quintozene, and procymidone ranging from <1 to >4000 ÎL'g/kg. No significant differences were found between the two extraction solvents, and GC-MS/MS was found to be more specific and sensitive than GC-MS/SIM. The procedures described were shown to be effective in screening, identifying, confirming, and quantitating pesticides in commercial ginseng products. Keywords: QuEChERS method Includes references 1022991213

1035. Woodhead, S. H.; O'leary, A. L.; Rabatin, S. C., and Crosby, K. E. Microscreen Testing for Agrichemical Activity. 1990; 0, (0): 873-878. Rec #: 1779 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM BACTERIA FUNGI NEMATODE PLANT PATHOGENS HERBICIDAL POTENTIAL MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: GRASSES/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: BACTERIA MESH HEADINGS: FUNGI MESH HEADINGS: NEMATODA **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Biochemical Methods-General **KEYWORDS:** Biochemical Studies-General **KEYWORDS:** Agronomy-Weed Control **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control KEYWORDS: Bacteria-Unspecified (1979-) **KEYWORDS:** Fungi-Unspecified **KEYWORDS:** Nematoda LANGUAGE: eng

 1036. ---. Microscreen Testing for Agrichemical Activity. 1990; 0, (0): 873-878. Rec #: 1779
 Keywords: REVIEW
 Notes: Chemical of Concern: CTN
 Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM BACTERIA FUNGI
 NEMATODE PLANT PATHOGENS HERBICIDAL POTENTIAL
 MESH HEADINGS: CONGRESSES
 MESH HEADINGS: BIOCHEMISTRY/METHODS
 MESH HEADINGS: GRASSES/GROWTH & DEVELOPMENT MESH HEADINGS: SOIL MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: BACTERIA MESH HEADINGS: FUNGI MESH HEADINGS: NEMATODA **KEYWORDS:** General Biology-Symposia **KEYWORDS:** Biochemical Methods-General **KEYWORDS: Biochemical Studies-General KEYWORDS:** Agronomy-Weed Control **KEYWORDS:** Phytopathology-Disease Control **KEYWORDS:** Pest Control KEYWORDS: Bacteria-Unspecified (1979-) **KEYWORDS:** Fungi-Unspecified **KEYWORDS:** Nematoda LANGUAGE: eng

1037. Wu, L.; Liu, G.; Yates, M. V.; Green, R. L.; Pacheco, P.; Gan, J., and Yates, S. R. Environmental Fate of Metalaxyl and Chlorothalonil Applied to a Bentgrass Putting Green Under Southern California Climatic Conditions. ACCSOIL,ENV; 2002; 58, (4): 335-342. Rec #: 1600 Keywords: FATE Call Number: NO CONTROL(CTN,MLX) Notes: EcoReference No.: 89853 Chemical of Concern: CTN,MLX

1038. Yamano, T. and Morita, S. Effects of Pesticides on Isolated Rat Hepatocytes, Mitochondria, and Microsomes Ii. 1995; 28, (1): 1-7.

> Rec #: 520 Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Twenty-two pesticides were examined in vitro for their effects on hepatocytes, mitochondria, and microsomes isolated from male rats. Twelve pesticides reduced non-protein sulfhydryl (NPSH) content in hepatocytes to less than 80% of control at a concentration of 10(-3) M. Chlorothalonil and ziram were especially effective, reducing NPSH content at 10(-4) M after 90 min incubation. Among those pesticides, only copper terephthalate and chlorothalonil were reactive with glutathione non-enzymatically and enzymatically, respectively. Lipid peroxidation in hepatocytes was stimulated by four pesticides, namely, chlorothalonil, pretilachlor, ethoprofos, and metribuzin at 10(-3)-10(-4) M. Cell viability was considerably decreased following incubation with chlorothalonil, trichlamide, and ziram. Hepatotoxicity of trichlamide was considered to be associated with its direct adverse effects on mitochondrial energy production, since it uncoupled isolated mitochondrial respiration at 10(-6) M and depleted cellular ATP content prior to cell death. Conversely, chlorothalonil- and ziraminduced hepatotoxicity seemed to be related to their depleting effects on cellular sulfhydryls, since addition of the thiol compound dithiothreitol to the hepatocytes incubation mixture protected cells. With respect to isolated mitochondrial respiration, four pesticides inhibited state 3 and/or state 4 respiration rates at 10(-3)-10(-4) M, whereas seven pesticides uncoupled state 4 respiration at 10(-3)-10(-6) M. With respect to isolated microsomal lipid peroxidation, three pesticides were peroxidative at 10(-3)-10(-4) M, whereas three pesticides were antioxidative at 10(-3)-10(-7) M. Only two pesticides, beta-endosulfan and metalaxyl, had essentially no effects on any parameters tested at 10(-3) M.

MESH HEADINGS: Animals

MESH HEADINGS: Lipid Peroxidation/drug effects

MESH HEADINGS: Liver/cytology/\*drug effects/metabolism MESH HEADINGS: Male MESH HEADINGS: Microsomes, Liver/\*drug effects/metabolism MESH HEADINGS: Mitochondria, Liver/\*drug effects/metabolism MESH HEADINGS: Pesticides/\*pharmacology MESH HEADINGS: Rats MESH HEADINGS: Rats, Sprague-Dawley LANGUAGE: eng

1039. ---. Effects of Pesticides on Isolated Rat Hepatocytes, Mitochondria, and Microsomes Ii. 1995; 28, (1): 1-7. Rec #: 520

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Twenty-two pesticides were examined in vitro for their effects on hepatocytes, mitochondria, and microsomes isolated from male rats. Twelve pesticides reduced non-protein sulfhydryl (NPSH) content in hepatocytes to less than 80% of control at a concentration of 10(-3) M. Chlorothalonil and ziram were especially effective, reducing NPSH content at 10(-4) M after 90 min incubation. Among those pesticides, only copper terephthalate and chlorothalonil were reactive with glutathione non-enzymatically and enzymatically, respectively. Lipid peroxidation in hepatocytes was stimulated by four pesticides, namely, chlorothalonil, pretilachlor, ethoprofos, and metribuzin at 10(-3)-10(-4) M. Cell viability was considerably decreased following incubation with chlorothalonil, trichlamide, and ziram. Hepatotoxicity of trichlamide was considered to be associated with its direct adverse effects on mitochondrial energy production, since it uncoupled isolated mitochondrial respiration at 10(-6) M and depleted cellular ATP content prior to cell death. Conversely, chlorothalonil- and ziraminduced hepatotoxicity seemed to be related to their depleting effects on cellular sulfhydryls, since addition of the thiol compound dithiothreitol to the hepatocytes incubation mixture protected cells. With respect to isolated mitochondrial respiration, four pesticides inhibited state 3 and/or state 4 respiration rates at 10(-3)-10(-4) M, whereas seven pesticides uncoupled state 4 respiration at 10(-3)-10(-6) M. With respect to isolated microsomal lipid peroxidation, three pesticides were peroxidative at 10(-3)-10(-4) M, whereas three pesticides were antioxidative at 10(-3)-10(-7) M. Only two pesticides, beta-endosulfan and metalaxyl, had essentially no effects on any parameters tested at 10(-3) M. **MESH HEADINGS: Animals** 

MESH HEADINGS: Lipid Peroxidation/drug effects MESH HEADINGS: Liver/cytology/\*drug effects/metabolism MESH HEADINGS: Male MESH HEADINGS: Microsomes, Liver/\*drug effects/metabolism MESH HEADINGS: Mitochondria, Liver/\*drug effects/metabolism MESH HEADINGS: Pesticides/\*pharmacology MESH HEADINGS: Rats MESH HEADINGS: Rats, Sprague-Dawley LANGUAGE: eng

1040. Yanez, Maribel and France, Andres. Effects of Fungicides on the Development of the Entomopathogenic Fungus Metarhizium anisopliae var. anisopliae. 2010; 70, (3): 390-398. Rec #: 13592

Call Number: TARGET (CTN)

Notes: Chemical of Concern: CTN

Abstract: Abstract: Metarhizium anisopliae (Metschnikoff) Sorokin is an entomopathogenic fungus used for controlling different insect pests. It is most frequently applied to berry fruit crops, where fungicides are also used for disease control. Fungicides: azoxystrobin, benomyl, captan, chlorothalonil, fenhexamid, fludioxonil, iprodione, and metalaxyl in concentrations of 0.01, 0.1, 1.0, 10, and 100 mg L-1 were evaluated in this research study. Vegetative growth, conidia germination, and conidia germination tube length were measured on the Qu-M82, Qu-M151b, Qu-M253, Qu-M430, and Qu-M984 Metarhizium anisopliae var. anisopliae fungus strains. Those

strains were selected because of their present use against different insect pest in bramble fruits. Vegetative growth was measured through the colony rate growth in agar media, and those reaching up to 50% of the check growth were considered compatible. Results indicate that the benomyl and fenhexamid fungicides were compatible with the five isolates whereas, azoxystrobin and fludioxonil were incompatible. Furthermore, benomyl and fludioxonil reduced conidia germination by 53 and 91%, and germination tube length by 18 and 37%, respectively. Keywords: Internet resource Includes references Summary in Spanish. 1023115748

- 1041. Yardim, E. N. and Edwards, C. A. An Economic Comparison of Pesticide Application Regimes for Processing Tomatoes. 2003; 31, (1): 51-60. Rec #: 1140 Keywords: MIXTURE Call Number: NO MIXTURE Notes: Chemical of Concern: PAQT,TFN,CBL,ES,EFV,CTN
- 1042. ---. An Economic Comparison of Pesticide Application Regimes for Processing Tomatoes. SOIL; 2003; 31, (1): 51-60.
   Rec #: 1150
   Keywords: MIXTURE
   Call Number: NO MIXTURE (CBL,CTN,EFV,ES,PAQT,TFN)
   Notes: Chemical of Concern: CBL,CTN,EFV,ES,PAQT,TFN
- 1043. ---. An Economic Comparison of Pesticide Application Regimes for Processing Tomatoes. 2003; 31, (1): 51-60. 166814. Rec #: 9502 Keywords: MIXTURE Notes: Chemical of Concern: CBL,CTN,EFV,ES,PAQT,TFN Abstract: NO MIXTURE ROUTE TO SARAH FOR DATA CHECK//
- 1044. ---. The Effects of Chemical Pest, Disease and Weed Management Practices on the Trophic Structure of Nematode Populations in Tomato Agroecosystems. 1998; 7, (2): 137-147. Rec #: 1130 Keywords: MIXTURE Call Number: NO MIXTURE Notes: Chemical of Concern: EFV,PAQT,TFN,CTN,CBL,ES
- 1045. ---. The Effects of Chemical Pest, Disease and Weed Management Practices on the Trophic Structure of Nematode Populations in Tomato Agroecosystems. 1998; 7, (2): 137-147. Rec #: 1140 Keywords: MIXTURE Call Number: NO MIXTURE (CBL,CTN,EFV,ES,PAQT,TFN) Notes: Chemical of Concern: CBL,CTN,EFV,ES,PAQT,TFN
- 1046. ---. The Effects of Chemical Pest, Disease and Weed Management Practices on the Trophic Structure of Nematode Populations in Tomato Agroecosystems. 1998; 7, (2): 137-147. 166811. Rec #: 8452 Keywords: MIXTURE Notes: Chemical of Concern: CBL,CTN,EFV,ES,PAQT,TFN Abstract: NO MIXTURE Applied Soil Ecology//ROUTE TO SARAH FOR DATA CHECK//
- 1047. Yardim, E. N. and Edwards, C. A. The Influence of Chemical Management of Pests, Diseases and Weeds on Pest and Predatory Arthropods Associated with Tomatoes. 1998; 70, (1): 31-48. Rec #: 1120 Keywords: MIXTURE Call Number: NO MIXTURE(ALL CHEMS, TARGET-CBL, EFV)

Notes: Chemical of Concern: CBL,ES,EFV,CTN,TFN,PAQT

 1048. Yardim, E. N. and Edwards, C. A. The Influence of Chemical Management of Pests, Diseases and Weeds on Pest and Predatory Arthropods Associated With Tomatoes. 1998; 70, (1): 31-48. 166812. Rec #: 8462 Keywords: MIXTURE Notes: Chemical of Concern: CBL,CTN,EFV,ES,PAQT,TFN Abstract: NO MIXTURE ROUTE TO SARAH FOR DATA CHECK//Agriculture, Ecosystems & Environment//ISSN: 0167-8809//

1049. Yates, M. V.; Green, R. L.; Gan, J.; Yates, S. R., and Wang, D. Measurement and Model Prediction of Pesticide Partitioning in Field-Scale Turfgrass Plots. 1998; 216, (1-3): Agro 134. Rec #: 2624 Keywords: FATE, MODELING Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT TURFGRASS TURFGRASS MODELS AND SIMULATIONS PESTICIDES POLLUTION TOXICOLOGY CHLOROTHALONIL PARTITIONING PESTICIDE POLLUTANT TURFGRASS LEACHING METALAXYL CHLORPYRIFOS TRICHLORFON SIMULATION MODELING **MESH HEADINGS: CONGRESSES** MESH HEADINGS: BIOLOGY MESH HEADINGS: BIOPHYSICS MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: GRASSES **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biophysics-General Biophysical Studies** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Horticulture-General **KEYWORDS: Pest Control KEYWORDS:** Gramineae LANGUAGE: eng

 1050. ---. Measurement and Model Prediction of Pesticide Partitioning in Field-Scale Turfgrass Plots. 1998; 216, (1-3): Agro 134. Rec #: 2624
 Keywords: FATE, MODELING
 Notes: Chemical of Concern: CTN
 Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT
 TURFGRASS TURFGRASS MODELS AND SIMULATIONS PESTICIDES POLLUTION
 TOXICOLOGY CHLOROTHALONIL PARTITIONING PESTICIDE POLLUTANT
 TURFGRASS LEACHING METALAXYL CHLORPYRIFOS TRICHLORFON SIMULATION
 MODELING
 MESH HEADINGS: CONGRESSES
 MESH HEADINGS: BIOLOGY
 MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: GRASSES **KEYWORDS:** General Biology-Symposia **KEYWORDS: Biophysics-General Biophysical Studies KEYWORDS:** Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Horticulture-General **KEYWORDS:** Pest Control **KEYWORDS:** Gramineae LANGUAGE: eng

1051. Yoshida, M.; Kawasaki, A.; Yukimoto, M., and Nose, K. Detection of the Effects of Fungicides on the Cell Membrane by Proton Nmr Spectroscopy. 1990; 38, (2): 172-177. Rec #: 1755 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The observed spin-spin relaxation time (T2) of intracellular water protons reflects the membrane water permeability. Effects of various types of fungicides on the membrane were investigated by using the T2 of the water protons in the mycelial cells of Botrytis cinerea. The treatments of the cells with nystatin and dehydroabietylamine, ion channel attackers, remarkably increase the membrane water permeability within 1 hr, which suggest that the functions of the ion channels relate closely to the water exchange through the membrane. Edifenphos and iprobenfos, phosphatidylcholine biosynthesis inhibitors, slightly increase the membrane water permeability. Triadimefon and triflumizole, ergosterol biosynthesis inhibitors, also slightly increase the membrane water permeability only after a 15-hr treatment. These results indicate that the phospholipid biosynthesis inhibitors and the ergosterol biosynthesis inhibitors do not attack the water channels in the membrane directly but MESH HEADINGS: PLANTS/CYTOLOGY MESH HEADINGS: ISOTOPES MESH HEADINGS: RADIATION MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: LIPIDS

**MESH HEADINGS: STEROIDS** MESH HEADINGS: STEROLS MESH HEADINGS: BIOPHYSICS MESH HEADINGS: MEMBRANES/PHYSIOLOGY MESH HEADINGS: METABOLISM MESH HEADINGS: LIPIDS/METABOLISM MESH HEADINGS: STEROIDS/METABOLISM MESH HEADINGS: STEROLS/METABOLISM MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANT GROWTH REGULATORS/PHARMACOLOGY MESH HEADINGS: PLANTS/PHYSIOLOGY MESH HEADINGS: PLANTS/METABOLISM
MESH HEADINGS: PLANTS/GROWTH & DEVELOPMENT MESH HEADINGS: PLANTS/DRUG EFFECTS MESH HEADINGS: BIOPHYSICS MESH HEADINGS: PLANTS/METABOLISM **MESH HEADINGS: FUNGI** MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: MITOSPORIC FUNGI **KEYWORDS:** Cytology and Cytochemistry-Plant **KEYWORDS:** Radiation-Radiation and Isotope Techniques **KEYWORDS: Biochemical Studies-General KEYWORDS: Biochemical Studies-Lipids KEYWORDS: Biochemical Studies-Sterols and Steroids KEYWORDS:** Biophysics-Membrane Phenomena **KEYWORDS:** Metabolism-General Metabolism **KEYWORDS:** Metabolism-Lipids **KEYWORDS:** Metabolism-Sterols and Steroids **KEYWORDS:** Plant Physiology **KEYWORDS:** Plant Physiology **KEYWORDS:** Plant Physiology KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Fungi Imperfecti or Deuteromycetes LANGUAGE: eng

1052. Yoshida, M.; Kawasaki, A.; Yukimoto, M., and Nose, K. Detection of the Effects of Fungicides on the Cell Membrane by Proton Nuclear Magnetic Resonance Spectroscopy. GRO,PHYSOIL,ENV; 1990; 38, (2): 172-177. Rec #: 800 Call Number: NO EFED CHEM (HgCl2,TPM), OK (CAP), TARGET (BMY,CTN,Captan,IPD,MZB,Maneb,TDF,TFZ,THM,Ziram) Notes: EcoReference No.: 109557 Chemical of Concern: BMY,CAP,CTN,Captan,HgCl2,IPD,MZB,Maneb,TDF,TFZ,THM,TPM,Ziram

1053. Yoshida, Mitsuru; Kawasaki, Akira; Yukimoto, Mineko, and Nose, Kazuo. Detection of the Effects of Fungicides on the Cell Membrane by Proton Nuclear Magnetic Resonance Spectroscopy. 1990 Oct; 38, (2): 172-177. Rec #: 105 Call Number: TARGET (CTN) Notes: Chemical of Concern: CTN Abstract: The observed spin-spin relaxation time (T2) of intracellular water protons reflects the

Abstract: The observed spin-spin relaxation time (T2) of intracellular water protons reflects the membrane water permeability. Effects of various types of fungicides on the membrane were investigated by using the T2 of the water protons in the mycelial cells of Botrytis cinerea. The treatments of the cells with nystatin and dehydroabietylamine, ion channel attackers, remarkably increase the membrane water permeability within 1 hr, which suggests that the functions of the ion channels relate closely to the water exchange through the membrane. Edifenphos and iprobenfos, phosphatidylcholine biosynthesis inhibitors, slightly increase the membrane water permeability. Triadimefon and triflumizole, ergosterol biosynthesis inhibitors, also slightly increase the membrane water permeability only after a 15-hr treatment. These results indicate that the phospholipid biosynthesis inhibitors and the ergosterol biosynthesis inhibitors do not attack the

water channels in the membrane directly but have some secondary effects on them through the change in the membrane structure. Among the ---SH and ---NH2 inhibitors, captan, captafol, chlorothalonil, and HgCl2 increase the membrane water permeability probably by binding to the proteins at the ion channels. On the other hand, maneb, mancozeb, thiram, and ziram have no effect on the permeability, suggesting that the ---SH and ---NH2 inhibition is not the primary action of them. Benomyl, thiophanate methyl, procymidone, iprodione, blasticidin S, and polyoxin B were also tested, but these fungicides do not change the membrane water permeability, which confirms that the action sites of these fungicides are not on the membrane. In addition, the relation between the change in the T2 and growth inhibitions. Therefore, this NMR technique is useful in fungicide pharmacology. http://www.sciencedirect.com/science/article/B6WP8-4F0PT94-3N/2/f6d7a64a8e8d62115341c2324b3c9b0c

1054. Zahm, S. H. and Ward, M. H. Pesticides and Childhood Cancer. 1998; 106, (Suppl. 3): 893-908.

Rec #: 2604

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Children are exposed to potentially carcinogenic pesticides from use in homes, schools, other buildings, lawns and gardens, through food and contaminated drinking water, from agricultural application drift, overspray, or offgassing, and from carry-home exposures of parents occupationally exposed to pesticides. Parental exposure during the child's gestation or even preconception may also be important. Malignancies linked to pesticides in case reports or case-control studies include leukemia, neuroblastoma, Wilms' tumor, soft-tissue sarcoma, Ewing's sarcoma, non-Hodgkin's lymphoma, and cancers of the brain, colorectum, and testes. Although these studies have been limited by nonspecific pesticide exposure information, small numbers of exposed subjects, and the potential for caseresponse bias, it is noteworthy that many of the reported increased risks are of greater magnitude than those observed in studies of pesticide-exposed adults, suggesting that children may be parti MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: DIAGNOSIS MESH HEADINGS: GENITALIA **MESH HEADINGS: REPRODUCTION** MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: NEOPLASMS MESH HEADINGS: CHILD DEVELOPMENT MESH HEADINGS: PEDIATRICS MESH HEADINGS: EMBRYOLOGY MESH HEADINGS: FETAL DEVELOPMENT MESH HEADINGS: LARVA MESH HEADINGS: EPIDEMIOLOGIC METHODS MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: HOMINIDAE **KEYWORDS:** Biochemical Studies-General **KEYWORDS:** Reproductive System-General **KEYWORDS:** Toxicology-General **KEYWORDS:** Neoplasms and Neoplastic Agents-General **KEYWORDS:** Pediatrics KEYWORDS: Developmental Biology-Embryology-General and Descriptive **KEYWORDS:** Public Health: Epidemiology-Miscellaneous **KEYWORDS: Pest Control KEYWORDS:** Hominidae LANGUAGE: eng

1055. ---. Pesticides and Childhood Cancer. 1998; 106, (Suppl. 3): 893-908.

Rec #: 2604

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Children are exposed to potentially carcinogenic pesticides from use in homes, schools, other buildings, lawns and gardens, through food and contaminated drinking water, from agricultural application drift, overspray, or off-gassing, and from carry-home exposures of parents occupationally exposed to pesticides. Parental exposure during the child's gestation or even preconception may also be important. Malignancies linked to pesticides in case reports or case-control studies include leukemia, neuroblastoma, Wilms' tumor, soft-tissue sarcoma, Ewing's sarcoma, non-Hodgkin's lymphoma, and cancers of the brain, colorectum, and testes. Although these studies have been limited by nonspecific pesticide exposure information, small numbers of exposed subjects, and the potential for case-response bias, it is noteworthy that many of the reported increased risks are of greater magnitude than those observed in studies of pesticide-exposed adults, suggesting that children may be parti MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: DIAGNOSIS

MESH HEADINGS: GENITALIA

MESH HEADINGS: REPRODUCTION

MESH HEADINGS: POISONING

MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: NEOPLASMS

MESH HEADINGS: CHILD DEVELOPMENT

MESH HEADINGS: PEDIATRICS

MESH HEADINGS: EMBRYOLOGY

MESH HEADINGS: FETAL DEVELOPMENT

MESH HEADINGS: LARVA

MESH HEADINGS: EPIDEMIOLOGIC METHODS

MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL

MESH HEADINGS: PESTICIDES

MESH HEADINGS: HOMINIDAE

KEYWORDS: Biochemical Studies-General

KEYWORDS: Reproductive System-General

**KEYWORDS:** Toxicology-General

KEYWORDS: Neoplasms and Neoplastic Agents-General

KEYWORDS: Pediatrics

KEYWORDS: Developmental Biology-Embryology-General and Descriptive

KEYWORDS: Public Health: Epidemiology-Miscellaneous

KEYWORDS: Pest Control KEYWORDS: Hominidae

LANGUAGE: eng

1056. Zahm, S. H.; Ward, M. H., and Blair, A. Pesticides and Cancer. 1997; 12, (2): 269-289. Rec #: 2502
Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM LITERATURE REVIEW HUMAN AGRICULTURAL WORKER OCCUPATIONAL HEALTH PESTICIDES TOXICOLOGY CANCER PESTICIDE CARCINOGEN OCCUPATIONAL EXPOSURE TOXIN TUMOR BIOLOGY CARCINOGENICITY HERBICIDE FUNGICIDE INSECTICIDE NEOPLASTIC DISEASE MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HOMINIDAE KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Public Health: Environmental Health-Air KEYWORDS: Hominidae LANGUAGE: eng

1057. ---. Pesticides and Cancer. 1997; 12, (2): 269-289.

Rec #: 2502 Keywords: HUMAN HEALTH Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM LITERATURE REVIEW HUMAN AGRICULTURAL WORKER OCCUPATIONAL HEALTH PESTICIDES TOXICOLOGY CANCER PESTICIDE CARCINOGEN OCCUPATIONAL EXPOSURE TOXIN TUMOR BIOLOGY CARCINOGENICITY HERBICIDE FUNGICIDE INSECTICIDE NEOPLASTIC DISEASE MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: CARCINOGENS MESH HEADINGS: OCCUPATIONAL HEALTH SERVICES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: HOMINIDAE KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis KEYWORDS: Public Health: Environmental Health-Occupational Health KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Hominidae LANGUAGE: eng

1058. Zahm, S. Hoar. Mortality Study of Pesticide Applicators and Other Employees of a Lawn Care Service Company. 1997; 39, (11): 1055-1073. Rec #: 2448

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In response to reports linking non-Hodgkin's lymphoma (NHL) and the herbicide 2,4-dichlorophenoxyacetic acid, a retrospective cohort mortality study of 32,600 employees of a lawn care company was conducted. The cohort was generally young with short-duration employment and follow-up. In comparison to the US population, the cohort had significantly decreased mortality from all causes of death combined (307 deaths), arteriosclerotic heart disease, and accidents. There were 45 cancer deaths (59.6 ex yed for three or more years (SMR = 7.11, CI = 1.78, 28.42). No other cause of death was significantly elevated among lawn applicators as a group or among those employed for three or more years. Although based on very small numbers and perhaps due to chance, the NHL excess is consistent with several earlier studies. MESH HEADINGS: POISONING MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: NEOPLASMS

MESH HEADINGS: ENVIRONMENTAL HEALTH

MESH HEADINGS: EPIDEMIOLOGIC METHODS MESH HEADINGS: HOMINIDAE KEYWORDS: Toxicology-General KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Neoplasms and Neoplastic Agents-General KEYWORDS: Public Health: Environmental Health-Miscellaneous KEYWORDS: Public Health: Epidemiology-Miscellaneous KEYWORDS: Hominidae LANGUAGE: eng

1059. ---. Mortality Study of Pesticide Applicators and Other Employees of a Lawn Care Service Company. 1997; 39, (11): 1055-1073.

Rec #: 2448

Keywords: HUMAN HEALTH

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. In response to reports linking non-Hodgkin's lymphoma (NHL) and the herbicide 2,4-dichlorophenoxyacetic acid, a retrospective cohort mortality study of 32,600 employees of a lawn care company was conducted. The cohort was generally young with short-duration employment and follow-up. In comparison to the US population, the cohort had significantly decreased mortality from all causes of death combined (307 deaths), arteriosclerotic heart disease, and accidents. There were 45 cancer deaths (59.6 ex yed for three or more years (SMR = 7.11, CI = 1.78, 28.42). No other cause of death was significantly elevated among lawn applicators as a group or among those employed for three or more years. Although based on very small numbers and perhaps due to chance, the NHL excess is consistent with several earlier studies.

MESH HEADINGS: POISONING

MESH HEADINGS: ANIMALS, LABORATORY

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES

MESH HEADINGS: NEOPLASMS

MESH HEADINGS: ENVIRONMENTAL HEALTH

MESH HEADINGS: EPIDEMIOLOGIC METHODS

MESH HEADINGS: HOMINIDAE

KEYWORDS: Toxicology-General

KEYWORDS: Toxicology-Environmental and Industrial Toxicology

KEYWORDS: Neoplasms and Neoplastic Agents-General

KEYWORDS: Public Health: Environmental Health-Miscellaneous

KEYWORDS: Public Health: Epidemiology-Miscellaneous

KEYWORDS: Hominidae

LANGUAGE: eng

1060. Zhadin, M. N.; Novikov, V. V.; Barnes, F. S., and Pergola, N. F. Combined Action of Static and Alternating Magnetic Fields on Ionic Current in Aqueous Glutamic Acid Solution. 1998; 19, (1): 41-45.

Rec #: 2573

Keywords: CHEM METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Combined parallel static and alternating magnetic fields cause a rapid change in the ionic current flowing through an aqueous glutamic acid solution when the alternating field frequency is equal to the cyclotron frequency. The current peak is 20-30% of the background direct current. The peak is observed with slow sweep in the alternating magnetic field frequency from 1 Hz-10 Hz. Only one resonance peak in the current is observed in this frequency range. The frequency corresponding to the peak is directly proportional to the static magnetic field. The above effect only arises at very small alternating field amplitude in the range from 0.02 muT-0.08 muT. MESH HEADINGS: RADIATION

MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS KEYWORDS: Radiation-General KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Studies LANGUAGE: eng

1061. ---. Combined Action of Static and Alternating Magnetic Fields on Ionic Current in Aqueous Glutamic Acid Solution. 1998; 19, (1): 41-45. Rec #: 2573 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Combined parallel static and alternating magnetic fields cause a rapid change in the ionic current flowing through an aqueous glutamic acid solution when the alternating field frequency is equal to the cyclotron frequency. The current peak is 20-30% of the background direct current. The peak is observed with slow sweep in the alternating magnetic field frequency from 1 Hz-10 Hz. Only one resonance peak in the current is observed in this frequency range. The frequency corresponding to the peak is directly proportional to the static magnetic field. The above effect only arises at very small alternating field amplitude in the range from 0.02 muT-0.08 muT. MESH HEADINGS: RADIATION MESH HEADINGS: BIOCHEMISTRY **MESH HEADINGS: BIOPHYSICS KEYWORDS:** Radiation-General **KEYWORDS: Biochemical Studies-General KEYWORDS:** Biophysics-General Biophysical Studies

LANGUAGE: eng

1062. Zhang, Z. Y.; Liu, X. J.; Yu, X. Y.; Zhang, C. Z., and Hong, X. Y. Pesticide Residues in the Spring Cabbage (Brassica oleracea L. var. capitata) Grown in Open Field. SOIL; 2007; 18, (6): 723-730. Rec #: 1170 Keywords: MIXTURE Call Number: NO MIXTURE (CPY,CTN,CYH,CYP,DM,DMT,FNV) Notes: Chemical of Concern: CPY,CTN,CYH,CYP,DM,DMT,FNV

1063. Zhang, Z. Y.; Liu, X. J.; Yu, X. Y.; Zhang, C. Z., and Hong, X. Y. Pesticide Residues in the Spring Cabbage (Brassica Oleracea L. Var. Capitata) Grown in Open Field. 2007; 18, (6): 723-730. 167223.

Rec #: 10322

Keywords: MIXTURE

Notes: Chemical of Concern: CPY,CTN,CYH,CYP,DM,DMT,FNV

Abstract: NO MIXTURE//A method was established to evaluate multi-residual dynamics of the pesticides (chlorpyrifos, dimethoate, cyhalothrin, cypermethrin, fenvalerate, deltamethrin and chlorothalonil) in the spring cabbage, Brassica oleracea L. var. capitata. The results showed that the pesticide residues were closely related with the times and dosage of application, and the weather after spraying. The half-lives of the seven pesticides in the vegetable were 2.0, 1.6, 1.6, 2.3, 2.2, 1.5 and 1.8 days, respectively. If the cabbages were treated one time at normal dosage of pesticides, and all pesticides maximum residue limits (MRLs) were not exceeded according to the recommended pre-harvest interval. However, if the vegetables were treated four times at the maximal dosage with a five-day $\Gamma$ ÇÖs interval, the half-lifes of chlorpyrifos, cypermethrin and chlorothalonil exceeded its MRL on cabbage, but the final residual amounts of cypermethrin and chlorpyrifos were below its MRLs on the cabbage. Furthermore, in both one-time and four-time spraying treatments, the final degradation rates of pesticides residues were above 80%. Pesticides residue/ Spring cabbage/ Open field

 1064. Zhang, Z. Y.; Zhang, C. Z.; Liu, X. J., and Hong, X. Y. Dynamics of Pesticide Residues in the Autumn Chinese Cabbage (Brassica chinensis L.) Grown in Open Fields. SOIL; 2006; 62, (4): 350-355. Rec #: 1160 Keywords: MIXTURE Call Number: NO MIXTURE (CPY,CTN,CYH,CYP,DM,DMT,FNV) Notes: Chemical of Concern: CPY,CTN,CYH,CYP,DM,DMT,FNV

1065. Zhang, Z. Y.; Zhang, C. Z.; Liu, X. J., and Hong, X. Y. Dynamics of Pesticide Residues in the Autumn Chinese Cabbage (Brassica Chinensis L.) Grown in Open Fields. 2006; 62, (4): 350-355. 167222. Rec #: 10112

Keywords: MIXTURE

Notes: Chemical of Concern: CPY,CTN,CYH,CYP,DM,DMT,FNV

Abstract: NO MIXTURE//ABSTRACT: Residues of the pesticides chlorpyrifos, dimethoate, cyhalothrin, cypermethrin, fenvalerate, deltamethrin and chlorothalonil in the autumn Chinese cabbage (Brassica chinensis L.) were studied using gas chromatography. The results indicated that the residues were dependent on the frequency and rate of pesticide application and on the weather conditions immediately following spraying. When the Chinese cabbages were treated once at normal rates, the half-lives of the seven pesticides in the vegetable were 4.7, 5.3, 2.9, 3.5, 5.4, 4.3 and 4.0 days respectively. Thus, based on the recommended preharvest intervals, the residual levels of all pesticides were within the national standards. When the Chinese cabbages were treated four times at maximal rates at 5 day intervals, the half-lives of chlorpyrifos, cypermethrin and chlorothalonil in the vegetable were 3.6, 2.9 and 5.9 days respectively, so that, based on the recommended preharvest intervals, the residual levels of chlorpyrifos and chlorothalonil exceeded the national standards for pollution-free vegetables, but the residual level of cypermethrin was within the national standard. Effects of rain on pesticide final residues in plants treated four times were more significant than in those treated once.

MESH HEADINGS: Agriculture

MESH HEADINGS: \*Brassica/parasitology

MESH HEADINGS: China

MESH HEADINGS: Nitriles/\*analysis

MESH HEADINGS: Organothiophosphorus Compounds/\*analysis

MESH HEADINGS: Pesticide Residues/\*analysis

MESH HEADINGS: Pyrethrins/\*analysis

MESH HEADINGS: Reference Standards

LANGUAGE: eng Pest Management Science//

1066. Zhao, S.; Arthur, E. L.; Moorman, T. B., and Coats, J. R. Evaluation of Microbial Inoculation and Vegetation to Enhance the Dissipation of Atrazine and Metolachlor in Soil.

Rec #: 597

Keywords: FATE, BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Four greenhouse studies were conducted to evaluate the effects of native prairie grasses and two pesticide-degrading bacteria to remediate atrazine and metolachlor in soils from agricultural dealerships (Alpha site soil, northwest Iowa, USA; Bravo site soil, central Iowa, USA). The Alpha soil contained a low population of atrazine-degrading microorganisms relative to the Bravo soil. Each soil freshly treated with atrazine or metolachlor was aged for a short or long period of time, respectively. An atrazine-degrading bacterium, Agrobacterium radiobacter strain J14a; a metolachlor-degrading bacterium, Pseudomonas fluorescens strain UA5-40; and a mixture of three native prairie grasses-big bluestem (Andropogon gerardii Vitman), yellow Indian grass (Sorghastrum nutans [L.] Nash), and switchgrass (Panicum virgatum L.)-were added to the soils after the soils were aged for long periods of time. The soils aged for short periods of time were treated with J14a, the prairie grasses, or both after aging. The J14a and the grasses significantly reduced the concentration of atrazine in Alpha soil when the soil was aged for a short period of time. However, these treatments had no statistically significant effect when the soil was aged for a long period of time or on atrazine in Bravo soil. Inoculation with UA5-40 did not enhance metolachlor dissipation in either soil, but vegetation did increase metolachlor dissipation.

Our results indicate that the dissipation of atrazine by J14a is affected by the presence of indigenous atrazine-mineralizing microorganisms and probably by the bioavailability of atrazine in the soil.

MESH HEADINGS: Acetamides/\*metabolism MESH HEADINGS: Andropogon/physiology MESH HEADINGS: Atrazine/\*metabolism MESH HEADINGS: Biological Availability MESH HEADINGS: Biological Availability MESH HEADINGS: Herbicides/\*metabolism MESH HEADINGS: Panicum/physiology MESH HEADINGS: Pseudomonas aeruginosa/physiology MESH HEADINGS: Rhizobium/physiology MESH HEADINGS: Soil Pollutants/\*metabolism LANGUAGE: eng

1067. ---. Evaluation of Microbial Inoculation and Vegetation to Enhance the Dissipation of Atrazine and Metolachlor in Soil.

Rec #: 597

Keywords: FATE, BACTERIA

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: Four greenhouse studies were conducted to evaluate the effects of native prairie grasses and two pesticide-degrading bacteria to remediate atrazine and metolachlor in soils from agricultural dealerships (Alpha site soil, northwest Iowa, USA; Bravo site soil, central Iowa, USA). The Alpha soil contained a low population of atrazine-degrading microorganisms relative to the Bravo soil. Each soil freshly treated with atrazine or metolachlor was aged for a short or long period of time, respectively. An atrazine-degrading bacterium, Agrobacterium radiobacter strain J14a; a metolachlor-degrading bacterium, Pseudomonas fluorescens strain UA5-40; and a mixture of three native prairie grasses-big bluestem (Andropogon gerardii Vitman), yellow Indian grass (Sorghastrum nutans [L.] Nash), and switchgrass (Panicum virgatum L.)-were added to the soils after the soils were aged for long periods of time. The soils aged for short periods of time were treated with J14a, the prairie grasses, or both after aging. The J14a and the grasses significantly reduced the concentration of atrazine in Alpha soil when the soil was aged for a short period of time. However, these treatments had no statistically significant effect when the soil was aged for a long period of time or on atrazine in Bravo soil. Inoculation with UA5-40 did not enhance metolachlor dissipation in either soil, but vegetation did increase metolachlor dissipation. Our results indicate that the dissipation of atrazine by J14a is affected by the presence of indigenous atrazine-mineralizing microorganisms and probably by the bioavailability of atrazine in the soil.

MESH HEADINGS: Acetamides/\*metabolism MESH HEADINGS: Andropogon/physiology MESH HEADINGS: Atrazine/\*metabolism MESH HEADINGS: Biological Availability MESH HEADINGS: Biological Availability MESH HEADINGS: Herbicides/\*metabolism MESH HEADINGS: Panicum/physiology MESH HEADINGS: Pseudomonas aeruginosa/physiology MESH HEADINGS: Rhizobium/physiology MESH HEADINGS: Soil Pollutants/\*metabolism LANGUAGE: eng

 1068. Zhao, Z. and Mo, J. Single-Sweep Polarographic Determination of Ammonia by Its Reaction With 1-Naphthol and Hypochlorite. 1990; 2, (2): 139-146. Rec #: 1668 Keywords: METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A polarographic procedure is described for the determination of ammonia at concentration levels below 10-4 M that is based on its reaction with 1-naphthol and hypochlorite in a strongly alkaline medium whose (1,4indonapthol) product is polarographically active. The polarographic behavior of the compound and the electrode process has been studied by several electrochemical methods. The experimental results showed that it is an EC process involving the formation of a radical as the electrode product that is followed by a disproportionation reaction of the radical. The rate constant (kf) of the coupled following chemical reaction was found to be 0.228 s-1. The wave height at - 0.47 V (versus the standard calomel electrode (SCE)) on the dropping mercury electrode (DME) is directly proportional to the concentration of ammonia from 1 electrode can also be used for the determination of ammonia. The method hs been applied to the analysis of water and serum samples.

MESH HEADINGS: ECOLOGY MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: CHEMISTRY, CLINICAL MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: BLOOD CHEMICAL ANALYSIS MESH HEADINGS: BODY FLUIDS/CHEMISTRY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: VERTEBRATES **KEYWORDS: Ecology KEYWORDS: Clinical Biochemistry KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS:** Blood KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Vertebrata-Unspecified LANGUAGE: eng

1069. ---. Single-Sweep Polarographic Determination of Ammonia by Its Reaction With 1-Naphthol and Hypochlorite. 1990; 2, (2): 139-146.

Rec #: 1668

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. A polarographic procedure is described for the determination of ammonia at concentration levels below 10-4 M that is based on its reaction with 1-naphthol and hypochlorite in a strongly alkaline medium whose (1,4-indonapthol) product is polarographically active. The polarographic behavior of the compound and the electrode process has been studied by several electrochemical methods. The experimental results showed that it is an EC process involving the formation of a radical as the electrode product that is followed by a disproportionation reaction of the radical. The rate constant (kf) of the coupled following chemical reaction was found to be 0.228 s-1. The wave height at - 0.47 V (versus the standard calomel electrode (SCE)) on the dropping mercury electrode (DME) is directly proportional to the concentration of ammonia from 1 electrode can also be used for the determination of ammonia. The method hs been applied to the analysis of water and serum samples.

MESH HEADINGS: ECOLOGY

MESH HEADINGS: OCEANOGRAPHY MESH HEADINGS: FRESH WATER MESH HEADINGS: CHEMISTRY, CLINICAL MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: BLOOD CHEMICAL ANALYSIS MESH HEADINGS: BODY FLUIDS/CHEMISTRY MESH HEADINGS: LYMPH/CHEMISTRY MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING MESH HEADINGS: OCCUPATIONAL DISEASES MESH HEADINGS: AIR POLLUTION MESH HEADINGS: SOIL POLLUTANTS MESH HEADINGS: WATER POLLUTION MESH HEADINGS: VERTEBRATES **KEYWORDS: Ecology KEYWORDS: Clinical Biochemistry KEYWORDS: Biochemical Methods-General KEYWORDS: Biochemical Studies-General** KEYWORDS: Biophysics-General Biophysical Techniques **KEYWORDS: Blood** KEYWORDS: Toxicology-Environmental and Industrial Toxicology KEYWORDS: Public Health: Environmental Health-Air **KEYWORDS:** Vertebrata-Unspecified LANGUAGE: eng

- 1070. Zhou, T. and Boland, G. J. Suppression of Dollar Spot by Hypovirulent Isolates of Sclerotinia homoeocarpa. POPSOIL,ENV; 1998; 88, (8): 788-794.
  Rec #: 900
  Call Number: OK TARGET(CTN)
  Notes: EcoReference No.: 90473
  Chemical of Concern: CTN
- 1071. Zhou, X. and Carter, N. The Effects of Nitrogen and Fungicide on Cereal Aphid Population Development and the Consequences for the Aphid-Yield Relationship in Winter Wheat. POPSOIL,ENV; 1991; 119, (3): 433-441. Rec #: 930 Call Number: NO MIXTURE (CBD,CTN,Maneb,PCZ,PPCP,PPCP2011), OK (PIM) Notes: EcoReference No.: 91768 Chemical of Concern: CBD,CTN,Maneb,PCZ,PIM,PPCP

1072. Zhou, X. G. and Duthie, J. A. Distinguishing Effects on Foliar Disease of Total Fungicide Dose Applied During a Cropping Season and Number of Applications. 1998; 88, (9 suppl.): S104. Rec #: 1039 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT COLLETOTRICHUM-ORBICULARE WATERMELON PLANT PATHOGEN FUNGUS HOST PLANT PEST MANAGEMENT ANTHRACNOSE CHLOROTHALONIL FUNGICIDE FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS KEYWORDS: General Biology-Symposia KEYWORDS: Horticulture-Vegetables KEYWORDS: Horticulture-Vegetables KEYWORDS: Phytopathology-Diseases Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Pest Control KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Cucurbitaceae LANGUAGE: eng

1073. ---. Distinguishing Effects on Foliar Disease of Total Fungicide Dose Applied During a Cropping Season and Number of Applications. 1998; 88, (9 suppl.): S104. Rec #: 1039 Keywords: ABSTRACT Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. RRM MEETING ABSTRACT COLLETOTRICHUM-ORBICULARE WATERMELON PLANT PATHOGEN FUNGUS HOST PLANT PEST MANAGEMENT ANTHRACNOSE CHLOROTHALONIL FUNGICIDE FUNGAL DISEASE MESH HEADINGS: CONGRESSES MESH HEADINGS: BIOLOGY MESH HEADINGS: VEGETABLES MESH HEADINGS: FUNGI MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: MITOSPORIC FUNGI MESH HEADINGS: PLANTS

KEYWORDS: Phytopathology-Disease Caused by Fungi KEYWORDS: Phytopathology-Disease Caused by Fungi KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Fungi Imperfecti or Deuteromycetes KEYWORDS: Cucurbitaceae

LANGUAGE: eng

1074. Zhou Xiangchun; Lu Guanghan; Wang Fang, and Lan Yanhua. A New Polarographic Adsorptive Catalytic Wave for the Determination of Trace Tellurium in Smog Dust and Wheat Flour. 1997; 57, (3): 274-282.
Rec #: 686
Keywords: METHODS
Notes: Chemical of Concern: CTN
Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Linear-sweep polarography of tellurium in sulfuric acid solution containing methylene blue produces a wave at -0.82 V (vs SCE). In a cathodic sweep, the derivative peak current is directly proportional to the concentration of

tellurium over the range 4 detection limit is 2 adsorptive catalytic hydrogen wave. This method has been applied to the determination of trace amount of tellurium in smog dust and wheat flour,

with satisfactory results.
MESH HEADINGS: MINERALS/ANALYSIS
MESH HEADINGS: MINERALS
MESH HEADINGS: BIOPHYSICS/METHODS
MESH HEADINGS: FOOD ANALYSIS
MESH HEADINGS: FOOD TECHNOLOGY
MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING
MESH HEADINGS: OCCUPATIONAL DISEASES
KEYWORDS: Biochemical Methods-Minerals
KEYWORDS: Biochemical Studies-Minerals
KEYWORDS: Biophysics-General Biophysical Techniques
KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-)
KEYWORDS: Toxicology-Environmental and Industrial Toxicology
LANGUAGE: eng

1075. ---. A New Polarographic Adsorptive Catalytic Wave for the Determination of Trace Tellurium in Smog Dust and Wheat Flour. 1997; 57, (3): 274-282.

Rec #: 686

Keywords: METHODS

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. Linear-sweep polarography of tellurium in sulfuric acid solution containing methylene blue produces a wave at -0.82 V (vs SCE). In a cathodic sweep, the derivative peak current is directly proportional to the concentration of tellurium over the range 4 detection limit is 2 adsorptive catalytic hydrogen wave. This method has been applied to the determination of trace amount of tellurium in smog dust and wheat flour, with satisfactory results.

MESH HEADINGS: MINERALS/ANALYSIS

MESH HEADINGS: MINERALS

MESH HEADINGS: BIOPHYSICS/METHODS

MESH HEADINGS: FOOD ANALYSIS

MESH HEADINGS: FOOD TECHNOLOGY

MESH HEADINGS: ENVIRONMENTAL POLLUTANTS/POISONING

MESH HEADINGS: OCCUPATIONAL DISEASES

KEYWORDS: Biochemical Methods-Minerals

**KEYWORDS: Biochemical Studies-Minerals** 

KEYWORDS: Biophysics-General Biophysical Techniques

KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-)

KEYWORDS: Toxicology-Environmental and Industrial Toxicology

LANGUAGE: eng

1076. Zongmao, C. and Xuefen, C. Chemical Control of Pests and Diseases in Tea Production in China: Progress and Strategy. 1990; 67, (4): 363-367.

Rec #: 1729

Keywords: REVIEW

Notes: Chemical of Concern: CTN

Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The special agro-biological character and beverage purpose of the tea plant, Camellia sinesis, determine a strict selection of the pesticides used in tea production. Some guidelines including the efficiency, activity spectrum, toxicity, degradative rate on/in tea shoots, taint and extractive rate in the infusion are discussed. The major pests and diseases of the tea plant and the evolutional change of pesticides used in tea production in China are listed. MESH HEADINGS: BIOCHEMISTRY

MESH HEADINGS: FOOD ANALYSIS

MESH HEADINGS: FOOD TECHNOLOGY

MESH HEADINGS: FOOD-PROCESSING INDUSTRY

MESH HEADINGS: FOOD TECHNOLOGY

MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: TROPICAL CLIMATE MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE **MESH HEADINGS: HERBICIDES** MESH HEADINGS: PEST CONTROL MESH HEADINGS: PESTICIDES MESH HEADINGS: PLANTS **KEYWORDS: Biochemical Studies-General** KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Food Technology-Preparation **KEYWORDS:** Toxicology-Foods KEYWORDS: Horticulture-Tropical and Subtropical Fruits and Nuts KEYWORDS: Phytopathology-Disease Control **KEYWORDS:** Pest Control **KEYWORDS:** Theaceae LANGUAGE: eng

1077. ---. Chemical Control of Pests and Diseases in Tea Production in China: Progress and Strategy. 1990; 67, (4): 363-367.

Rec #: 1729 Keywords: REVIEW Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The special agro-biological character and beverage purpose of the tea plant, Camellia sinesis, determine a strict selection of the pesticides used in tea production. Some guidelines including the efficiency, activity spectrum, toxicity, degradative rate on/in tea shoots, taint and extractive rate in the infusion are discussed. The major pests and diseases of the tea plant and the evolutional change of pesticides used in tea production in China are listed. MESH HEADINGS: BIOCHEMISTRY MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD-PROCESSING INDUSTRY MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY MESH HEADINGS: FRUIT MESH HEADINGS: NUTS MESH HEADINGS: TROPICAL CLIMATE MESH HEADINGS: PLANT DISEASES MESH HEADINGS: PREVENTIVE MEDICINE MESH HEADINGS: HERBICIDES MESH HEADINGS: PEST CONTROL **MESH HEADINGS: PESTICIDES** MESH HEADINGS: PLANTS

KEYWORDS: Biochemical Studies-General KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) KEYWORDS: Food Technology-Preparation KEYWORDS: Toxicology-Foods KEYWORDS: Horticulture-Tropical and Subtropical Fruits and Nuts KEYWORDS: Phytopathology-Disease Control KEYWORDS: Pest Control KEYWORDS: Theaceae LANGUAGE: eng

1078. Zou, Enmin ; Hatakeyama, Mariko, and Matsumura, Fumio. Foci Formation of Mcf7 Cells as an in Vitro Screening Method for Estrogenic Chemicals. 2002 Mar; 11, (2): 71-77. Rec #: 48

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: Previously we reported a novel phenomenon that some organochlorine compounds mainly act through activation of c-Neu tyrosine kinase without being strong agonists for the estrogen receptor. In this study we tested the possibility of developing an assay system to identify estrogenic compounds acting through this c-Neu-mediated mechanism. We describe herein an assay that utilizes foci formation of MCF7 cells as an endpoint, antibody 9G6 to neutralize the c-Neu-mediated pathway and 4-hydroxytamoxifen to block the ER. Aroclors 1242 and 1248, 2,2',3,5',6-pentachlorobiphenyl (PCB 95), 2,2'-dichlorobiphenyl (PCB), cis- and transpermethrins, and chlorothalonil were found to render estrogenic effects through this c-Neumediated mechanism, while [alpha] and [beta]- endosulfans appeared to act through a pathway independent of the c-Neu-mediated one. Pentachloronitrobenzene was found to be capable of antagonizing the 17[beta]-estradiol effect, which has never been reported previously. Environmental estrogens/ Screening assay/ Antiestrogens/ Foci formation/ MCF7 cells/ c-Neu/ERbB2 http://www.sciencedirect.com/science/article/B6T6D-452RD9T-1/2/2497172c1e54721293db600f130af6f5

1079. ---. Foci Formation of Mcf7 Cells as an in Vitro Screening Method for Estrogenic Chemicals . 2002 Mar; 11, (2): 71-77.

Rec #: 48

Keywords: IN VITRO

Notes: Chemical of Concern: CTN

Abstract: Previously we reported a novel phenomenon that some organochlorine compounds mainly act through activation of c-Neu tyrosine kinase without being strong agonists for the estrogen receptor. In this study we tested the possibility of developing an assay system to identify estrogenic compounds acting through this c-Neu-mediated mechanism. We describe herein an assay that utilizes foci formation of MCF7 cells as an endpoint, antibody 9G6 to neutralize the c-Neu-mediated pathway and 4-hydroxytamoxifen to block the ER. Aroclors 1242 and 1248, 2,2',3,5',6-pentachlorobiphenyl (PCB 95), 2,2'-dichlorobiphenyl (PCB), cis- and transpermethrins, and chlorothalonil were found to render estrogenic effects through this c-Neu-mediated mechanism, while [alpha] and [beta]- endosulfans appeared to act through a pathway independent of the c-Neu-mediated one. Pentachloronitrobenzene was found to be capable of antagonizing the 17[beta]-estradiol effect, which has never been reported previously. Environmental estrogens/ Screening assay/ Antiestrogens/ Foci formation/ MCF7 cells/ c-Neu/ERbB2 http://www.sciencedirect.com/science/article/B6T6D-452RD9T-1/2/2497172c1e54721293db600f130af6f5

 1080. Zou, Y. and Mo, J. The 2.5th Order Differential Voltammetric Determination of Phenol With a Composite Carbon Paste/Polyamide Electrode. 1997; 353, (1): 71-78. Rec #: 2563 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The 2.5th order differential

voltammetric behavior of phenol at a composite carbon paste/polyamide electrode in aqueous solution is reported. Adsorption of the phenol onto the electrode under open-circuit conditions is followed by application of the 2.5th order differential staircase sweep voltammetry. The results obtained under optimum conditions allowed the development of a method to determine phenol in the ranges of 10l l-1, 1Mol l-1. The relative standard deviation is 2.2% for a concentration level of 5.610-9 mol l-1 (RSD=4.5%) was achieved. The effect of experimental conditions and the electrode mechanism were investigated. Good results were obtained by applying the proposed method to the determination of phenol in cola drinks. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY **KEYWORDS:** Methods **KEYWORDS: Biochemical Methods-General KEYWORDS:** Biophysics-General Biophysical Techniques **KEYWORDS:** Food Technology-General KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970-) **KEYWORDS:** Toxicology-General **KEYWORDS:** Toxicology-Foods LANGUAGE: eng

1081. ---. The 2.5th Order Differential Voltammetric Determination of Phenol With a Composite Carbon Paste/Polyamide Electrode. 1997; 353, (1): 71-78. Rec #: 2563 Keywords: CHEM METHODS Notes: Chemical of Concern: CTN Abstract: ABSTRACT: BIOSIS COPYRIGHT: BIOL ABS. The 2.5th order differential voltammetric behavior of phenol at a composite carbon paste/polyamide electrode in aqueous solution is reported. Adsorption of the phenol onto the electrode under open-circuit conditions is followed by application of the 2.5th order differential staircase sweep voltammetry. The results obtained under optimum conditions allowed the development of a method to determine phenol in the ranges of 10l l-1, 1Mol l-1. The relative standard deviation is 2.2% for a concentration level of 5.610-9 mol 1-1 (RSD=4.5%) was achieved. The effect of experimental conditions and the electrode mechanism were investigated. Good results were obtained by applying the proposed method to the determination of phenol in cola drinks. MESH HEADINGS: BIOCHEMISTRY/METHODS MESH HEADINGS: BIOPHYSICS/METHODS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: FOOD ANALYSIS MESH HEADINGS: FOOD TECHNOLOGY MESH HEADINGS: POISONING MESH HEADINGS: ANIMALS, LABORATORY MESH HEADINGS: FOOD ADDITIVES/POISONING MESH HEADINGS: FOOD ADDITIVES/TOXICITY MESH HEADINGS: FOOD CONTAMINATION MESH HEADINGS: FOOD POISONING MESH HEADINGS: FOOD PRESERVATIVES/POISONING

MESH HEADINGS: FOOD PRESERVATIVES/TOXICITY KEYWORDS: Methods KEYWORDS: Biochemical Methods-General KEYWORDS: Biophysics-General Biophysical Techniques KEYWORDS: Food Technology-General KEYWORDS: Food Technology-Evaluations of Physical and Chemical Properties (1970- ) KEYWORDS: Toxicology-General KEYWORDS: Toxicology-General KEYWORDS: Toxicology-Foods LANGUAGE: eng