OTICE OF PESTICIDE: PARENETALT

. (Under the Federal Insecticide, Fungicide,

and Rodenticide Act, as amended)

Endosulfan 50W

NAME, AND ADDRESS OF REGISTRANT (Include ZIP code)

Micro Flc (c. P.O. Fox 5948 Takeland, FL 33607

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NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

by others. This product is conditionally con

- 3. Subsit add/or cite all rata required for registration/reregistration of your product under DTIRA sec. 3(c)(5) when the Amency requires all registrants of similar products to subsit such data.
- Make the lab ling charge(s) listed below before you release the productor shipment:
  - (a) And the phrase "PPA pr . No. 71636-91".
  - (b) In the "Berong to Humer's arm terratio Ambrela" text, review to mitter at Not reader that the letter and active alother reculting to the follows:

Applicators must was a long stored shirt, trousers, unlined waterproof gloves was all nutural subter or neopreme, tuli focu covering (such as shoes or roots), head covering (such as a hat, and a postunide mask or respirator jointly approved by the Mine Safety and Fealth Administration (MSHA) and the National Institute for Occur tional Safety and Health (NIOSH) under the provisional of 30 GFF Part II for protection against endosulfan. Mixers and/or lose to must what a chemical-resistant apron and googles or face since of in a little to all of the protective equipment.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

13/2 Jan

July 1976

EPA Form \$578-6 (Rev. 5-76)

PREVIOUS EDITION MAY BE USED UNTIL SUPPLY IS SUMALISTED

- (c) When printing the finished label, ensure that the signal word POISON appears in red on a background of distinctly contrasting color and is accompanied by the skull and crossbones symbol.
- (d) Delete the crop use "Alfalfa (Seed Crop Only)" and the associated directions. None of the generic data producers elected to support this use pattern and it has been deleted from the list of acceptable end uses that appear on their technical endouslfan manufacturing-use products.
- (e) In the Environmental Hazards text, add "Do not contaminate water by cleaning of equipment or disposal of equipment washwaters." after "Do not apply where fish, shrimp, crab, and other aquatic life are important resources.".
- (e) In the directions for "Ornamentals (Greenhouse and Out-of Doors)" correct the spelling of "Bonnafon Deluxe" chrysanthemums and delete "In greenhouse applications, wear a mask or respirator approved by MSA and OSHA for protections against endosulfan", since this contradicts the more inclusive correct applicator and mixer/loader protective equipment requirements which will appear (item 2 (b) above) in the Hazards to Humans and Domestic Animals section of the label and which pertain to all uses, both in greenhouses and outdoors.
- (e) In the sub-heading for the directions for use on dogwood and lilac, correct the spelling of the word "DOGWOOD".
- 3. Subsit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 Enclosure for a further description of final printed labeling.
- 4. The Agency is accepting only the "Basic Formula" as presented on the Confidential Statement of Formula dated July 21, 1987 as the only approved formula of record for this product.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.



George T. LaRocca Product Hanager (15) Insecticide-Rodenticide Branch Registration Division (H7505C)

The Shill

### ENDOSULFAN 50WP

FOR AGRICULTURAL OR COMMERCIAL USE ONLY

**ACTIVE INGREDIENT:** 

Endosulfan: (Hexachlorohexahydromethano-2,4,3-

benzodioxathiepin-3-oxide) \_\_\_\_\_\_50.0%

INERT INGREDIENTS: 50.0%

TOTAL \_\_\_\_\_ 100.0%

# KEEP OUT OF REACH OF CHILDREN POISON

#### **DANGER PELIGRO**

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicado ampliamente.

#### STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center immediately. If possible, vomiting should be induced under medical supervision. Drink one or two glasses of water and induce vomiting by giving one (1) ounce of syrup of ipecac, if available, or by touching the back of the throat with a finger. Do not induce vomiting, or give anything by mouth to a person who is unconscious or convulsing.

IF INHALED: Remove victim to fresh air. Apply artificial respiration if indicated.

IF ON SKIN: Remove contaminated clothing and wash skin with soap and water.

IF IN EYES: Flush eyes with plenty of water. Call a physician immediately. NOTE TO PHYSICIAN: Endosulfan is a central nervous system stimulant absorbable by mouth, inhalation or through contact with skin. It may cause convulsions. There is no specific antidote. Diazepam I.V. is the drug of choice. Barbituric acid derivatives such as Phenobarbital may be used additionally. A neuromuscular blocking agent may be used if convulcions persist. This type of drug may be used only if complete control of respiration can be maintained. Epinephrine derivatives are absolutely contraindicated.

See Side Panels For Additional Precautionary Statements

EPA Reg. No. 51036-

ACCEPTED
with CONCENTS
in EPA Letter Deled:

JUL 10 1990

Under the Pederal Inspeticide, Practicide, and Redacticide Aut or amended, for the Resticide registered under Edd Ray, No. Manufactured By
MICRO FLO COMPANY

P.O. BOX 5948 LAKELAND, FLORIDA 33807

EPA Est. No. 51036-GA-1

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# PRECAUTIONARY STATEMENTS Hazards To Humans And Domestic Animals DANGER

Fatal if swallowed or inhaled. Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Do not breathe vapor. Wear a long sleeve shirt, trousers, an apron, unlined waterproof gloves made of rubber or neoprene, and a pesticide mask or respirator jointly approved by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NICSH) under the provisions of 30 CFR Part 11 for protection against end-sulfan during mixing and loading. All of the above, except an apron, should also be worn during application. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals. Wash thoroughly with soap and water after handling and before smoking or eating. Remove contaminated clothing and wash with soap and hot water before reuse.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish, birds, and other wildlife. Birds feeding on treated areas may be killed. Do not apply directly to water or wetlands. Due to the risk of runoff and drift, do not apply within a distance of 300 feet of lakes, ponds, streams, and estuaries. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab and other aquatic life are important resources. This product must not be used in areas where impact on threatened endangered species is likely. Contact your State Fish and Game Agency before applying this product. Apply this product only as specified on this label.

This pesticide is toxic to bees exposed to direct application. Applications should be timed to coincide with periods of minimum bee activity, usually between late evening and early morning.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product through any type of irrigation system.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. When mixing, loading, and applying this product wear unlined waterproof gloves and a MSHA/OSHA approved pesticide mask or respirator.

#### RE-ENTRY

Do not enter treated areas without appropriate protective clothing for 24 hours.



Protective clothing means, at least, a hat or other suitable head covering, a long sleeved shirt and long legged trousers or a coverall type garment (all of closely woven fabric covering the body, including the arms and legs), shoes and socks.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, such as the 48 hour reentry interval established by California, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to take in case of accidental exposure. An example of such information is given under written warnings. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information:

#### DANGER

Area treated with endosulfan on (insert date). Do not enter without appropriate protective clothing for 24 hours (insert State Department of Agriculture's reentry interval, if more restrictive).

In case of accidental exposure to pesticide spray or dust, wash the skin thoroughly with soap and water. Remove contaminated clothing and wash before reuse. If in eyes, flush with plenty of water. If inhaled, go to an area where the pesticide has not been applied. Get medical attention if needed

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE

Do not store in or around the home.

Keep out of reach of children and animals. Store in original containers only Store in a cool, dry place and avoid excess heat. Carefully open containers After partial use, fold and roll back bags, clamp and close tightly. Do not put concentrate or dilute mulerial into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

To confine spill. If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents. PESTICIDE DISPOSAL.

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Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. CONTAINER DISPOSAL

Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### **GENERAL INSTRUCTIONS**

Not For Use Or Storage In Or Around The Home

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Apply the listed amount per acre when insects first appear and repeat as required, unless otherwise noted, to maintain effective control. Use in sufficient water for thorough coverage of listed crops, unless otherwise noted. Coverage of upper and lower leaf surfaces is essential for good control. For ground application, apply recommended amount of pesticide in a minimum of 10 gallons of water per acre on vegetable or row crops. Observe use limitations. If insect control is required beyond the following use patterns, supplement the control program with other suitable pesticides.

When applying this material by aircraft, mix the recommended amount with sufficient water to provide a minimum of 1 gallon of finished spray per acre on vegetable and field crops, unless otherwise noted, and a minimum of 20 gallons of finished spray per acre on fruit and nut trees and on vines. When applying 4 pounds or more of Endosulfan 50WP, mix in a minimum of 10 gallons of water.

Do not plant root crops other than carrots, potatoes, swet potatoes, and sugar beets as followup crops. Observe days interval between last application and harvest indicated by number in ( ) following the crop name.

ALFALFA (Seed Crop Only): Aphids, meadow spittlebug - Use 1 to 4 kbs. per acre. Lygus bug, stink bug - Use 3 to 4 ibs. per acre. Apply in stifficient water for thorough coverage. By ground, apply a minimum of 20 gais, by air, apply a minimum of 7 1/2 gals. of spray per acre. Do not feed treated forage to meat or dairy animals. Do not use on forage sold commercially or shipped interstate. Crop to be used for seed production only.

ALFALFA (Grown for Forage) (21): Meadow spittlebug - 1/2 lb. per acre. Apply 1 week after eggs begin to hatch or when first small masses of froth are produced in the crowns of the plant which is usually about the time the

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alfalfa is 4 to 6 inches tall. Apply in a minimum of 10 gallons of water per acre by ground or 2 gallons of water per acre by air. Do not apply more than once per cutting. Do not graze or cut forage within 21 days of treatment.

APPLES (21): Apple aphid, rosy apple aphid, woolly apple aphid, apple rust mite, green fruitworm, tarnished plant bug, first generation white apple leafhopper - Use 1 lb. per 100 gals of water or a maximum of 5 lbs. per acre. Applications made at pink and/or petal fall provide best control of tarnished plant bug and green fruitworm. For best control of first generation white apple leafhopper, apply when nymphs first appear on leaves. If necessary, prior to petal fall, use 1 1/2 lbs. per 100 gals to control apple aphids and rosy apple aphids. Do not exceed 3 applications per year or a maximum of 6 lbs. total per acre per year. Do not feed pomace from treated apples to livestock. Do not feed cull fruits to animals nor allow livestock to graze in treated orchards.

APPLES (30): Apple aphid, rosy apple aphid, woolly apple aphid, apple rust mite, green fruitworm, tarnished plant bug, first generation white apple leafhopper - Use 1 lb. per 100 gals. or a maximum of 6 lbs. per acre. Do not exceed 2 applications per year or a maximum of 6 lbs. per acre per year. Do not feed pomace from treated apples to livestock. Do not feed cull fruits to animals nor allow livestock to graze in treated orchards.

APRICOTS (21), NECTARINES (21), PEACHES (21): Peach tree borer, lesser peach tree borer - Use 1 1/2 lbs. per 100 gals., West C. ast use 1 to 1 1/2 lbs. per 100 gals. Do not exceed 2 applications per year. Southeastern States - Use 3 to 5 lbs. per 100 gals. post-harvest, not to exceed 6 lbs. per acre. Best control is obtained with a single application during the first week of September. Spray all bark areas from ground level to lower scaffold limbs. All uses: Do not feed cull fruits to animals nor allow livestock to graze in treated orchards.

APRICOTS (30), NECTARINES (30), PEACHES (30): Catfacing insects (stinkbug type), green peach aphid, black cherry aphid, black peach aphid, rusty plum aphid, peach twig borer, green fruitworm, peach silver mite - Use 1 lb; per 100 gals, or a maximum of 4 to 5 lbs, per acre. West Coast use up to a maximum of 6 lbs, per acre. Do not exceed 2 applications per year or a maximum of 6 lbs, per acre per year. Do not feed cull fruits to animals nor allow livestock to graze in treated orchards.

ARTICHOKES (7): Artichoke aphid, green peach aphid - Use 1 1/2 to 2 lbs. per acre. Artichoke plume moth - Use 2 lbs. per acre. Apply in a minimum

of 20 gals of water per acre by ground and in a minimum of 10 gals. of water per acre by air. Do not exceed 2 applications per year.

BARLEY, OATS, RYE, WHEAT: Army cutworm - Use 1 lb. per acre. For aerial application, apply in 2 gals of diesel fuel oil per acre. Cereal leaf beetle (Illinois, Indiana, Michigan and Ohio only) - Use 1/2 to 1 lb. per acre. Apply when small larvae are readily found in the field. For aerial application, use a minimum of 1 to 2 gals. of water per acre. Do not apply after heads begin to form. Do not exceed 2 applications per year. Do not feed treated forage to livestock.

BEANS (Succulent and Dry), SOUTHERN FIELD PEAS (13): Black bean aphid, bean leafskeletonizer, cucumber beetle, green stink bug, Mexican bean beetle, cowpea curculio - Use 1 to 2 lbs. per acre. For control of cowpea curculio, make 3 applications at 5-day intervals starting when the pods are 1/2" long. Do not exceed 3 applications per year. Do not feed treated threashings to livestock or allow livestock to graze in treated fields. Do not use on Lima Beans that are to be removed from the field for processing.

BLUEBERRIES: Blueberry bud mite - Use 3 lbs. per acre in 300 gals. of water. Apply immediately after harvest and repeat 6 to 8 weeks later. Do not apply after buds are well formed. Do not exceed 2 applications per year.

BROCCOLI (7), BRUSSELS SPROUTS (14), CABBAGE (7), CAULIFLOWER (14). Cabbage aphid, cabbage looper, cross-striped cabbageworm, diamond-back moth larvae, flea beetle, harlequin bug, imported cabbage worm, stink bugs - Use 1 1/2 to 2 lbs. per acre. Armyworms, cutworm - use 2 lbs. per acre. Do not exceed 2 applications per year.

CARROTS (7): Green peach aphid - Use 1 to 2 lbs. per acre. Do not use tops of food or feed. Do not exceed 1 application per season.

CELERY (4): Green peach aphid, cabbage looper - Use 1 to 2 lbs. per acre. Do not exceed one application per season -OR - Celery (7)\_ Green peach aphid - Use 1 lb. per acre. Do not exceed 2 applications per season.

CHERRIES (21): Peach tree borer, lesser peach tree borer - Use 1 1/2 lbs. per 100 gals. West Coast use 1 to 1 1/2 lbs. per 100 gals. Thoroughly wet all bark from ground to scaffold limbs. Black cherry aphid, plum nursery mite, green fruitworm - Use 1 lb. per 100 gals. or a maximum of 4 to 5 lbs. per acre. Pacific Northwest Only: Eyespotted bud moth, fruit tree leafroller - Use 1 lb. per 100 gals. at "popcorn" stage for bud moth control and during pre-pink stage of growth for leafroller control. Michigan Only: For the

control of mineola moth use 2 lbs. per 100 gais, in the delayed dormant period. All uses: Do not exceed 2 applications per year or a maximum of 6 lbs. per acre per year. Do not feed cull fruits to animals nor allow livestock to graze in treated orchards.

CHERRY, PEACH, PLUM NURSERY STOCK DIP: Peachtree borer - Use 4 lbs. per 40 gals. of water. Mix thoroughly. Wear rubber gloves during dipping operation. Immerse trees so that roots and crowds are covered well above grafting bud scar. Plant immediately or dry before returning stock to storage.

CITRUS NURSERY AND NON-BEARING STOCK: Citrus aphid - Use 1/2 lb. per 100 gals.: a maximum of 5 lbs. per acre. Do not apply to bearing trees or trees that will bear fruit within twelve months. Do not exceed 2 applications per year or a maximum of 6 lbs. per acre per year.

COLLARDS (21): Cabbage looper, diamondback moth larvae, harlequin bug, Imported cabbageworm - Use 1 1/2 lbs. per acre. Do not exceed 1 application per season.

COTTON: Thrips - use 3 lbs. per acre. Po not apply after bolls open. Do not graze meat or dairy animals in treated fields. Do not exceed 6 lbs. per year.

COTTON (Eastern Use Only): Boll weevil - Use 1 to 2 1/2 lbs. per acre. Bollworm. cabbage looper, cotton leafperforator, lygus bugs, stink bugs - Use 2 lbs. per acre. Do not apply after bolls open. Do not graze dairy or meat animals in treated fields. Do not exceed 6 lbs. per year.

COTTON (Western Use Only): Boll weevil - Use 1 to 3 lbs. per acre. Bollworm, cabbage looper, cotton leafperforator, lygus bugs, stink bugs - Use 2 to 3 lbs. per acre. Do not apply after bolls open. Do not graze dairy or meat animals in treated fields. Do not exceed 6 lbs. per year.

CUCUMBERS (2), MELONS (2), SUMMER AND WINTER SQUASH (2): Aphids, Cucumber beetles, striped flea beetle, melonworm, pickleworm, rindworm (on watermelons), squash beetle, squash bug, squash vine borer - Use 1 to 2 lbs. per acre. For vine borer control, apply to flower buds, stems and vines beginning when moths first appear. For cabbage looper and omniverous leafroller on melons use 2 lbs. per acre. Do not exceed 3 applications per year

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EGGPLANT (1): Colorado potato beetle, flea beetle, green peach aphid, whitefly, blister beetle, green stink bug - Use 1 lb. per acre. Do not exceed two applications per year.

FILBERTS (1): Filbert aphid, filbert leafroller - Use 1 lb. per 100 gals. or 3 to 4 lbs. per acre. Do not exceed 2 applications per year or a maximum of 6 lbs. per acre per year. Do not graze livestock on orchard crops or grasses in treated areas.

GRAPES (7): Grape leafhopper, rose chafer, grape phylloxera (leaf form) - Use 1 lb. per 100 gals.; 2 to 3 lbs. per acre. Do not exceed 3 applications per year or a maximum of 6 lbs. per acre per year. Do not use on Baco No. 1, Baco Noir, Concord, Seibel 7053 (Chancellor), Seibel 8357 (Colobel), Seibel 13053 (Cascade) varieties of grapes as severe injury is likely to occur.

KALE (21): Cabbage flea beetle, imported cabbageworm, harlequin bug - Use 1 1/2 lbs. per acre. Do not exceed one application per season.

LETTUCE (14): Cabbage looper, green peach aphid, diamondback moth larvae, imported cabbageworm - Use 1 1/2 to 2 lbs. per acre. On head lettuce, do not exceed 3 applications after thinning. Remove wrapper leaves at harvest. On leaf lettuce, do not exceed 2 applications per season. All uses: Do not feed crop refuse to livestock. Do not exceed 6 lbs. per acre per year.

MUSTARD GREENS (21): Aphids, cabbage looper, imported cabbageworm - Use 1 1/2 lbs. per acre. Do not exceed one application per season.

PEARS (7): Green fruitworm, tarnished plant bug - Use 1 lb. per 100 gals, 4 to 5 lbs. per acre. Apply at white bud or petal fall. Pear leaf blister mite - apply 1/2 to 1 lb. per 100 gals, as a post harvest or dormant treatment. Pear psylla - Use 5 lbs. per acre in a minimum of 10 gals, of water by aerial application, in 40 gals, of water for semi-concentrate, or in 300 gals, of water for dilute application. Apply when adults are first observed or nympns are small and repeat to maintain control. Consperse stink bug, pear rust mite (foliar treatment) - Use 1 lb. per 100 gals, 4 to 5 lbs. per acre. Stink bugs must be wet by spray to obtain control. Consperse stink bug (soil treatment) - Use 1 lb. per 100 gals, 200 to 400 gals, per acre applied to orchard floor around trees prior to bloom. All Uses: Do not exceed 2 applications per year of a maximum of 6 lbs. per acre per year. Do not feed cull fruits to animals or allow livestock to graze in treated orchards.

NOTE: Aerial application does not result in satisfactory control and should only be employed if impossible to apply by ground.

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PEAS, SEED CROP ONLY (1): Pea sphid, pea weevil - use 1 to 1 1/2 lbs. per acre. Do not exceed 2 applications per year. Use only on peas to be harvested by combine. Do not feed treated vines or threshings to livestock or allow livestock to graze in treated fields.

PECANS: Black pecan aphid, pecan nut casebearer, spittlebug - use 1 1/2 lbs. per 100 gals. For casebearer, apply when eggs of first generation appear on tips of the young nuts. Another application may be required after the second generation of eggs is deposited. For spittlebug, apply when first leaves are half grown and repeat as required. Pecan leaf phylloxera - use 1 to 1 1/2 lbs. per 100 gals. when nymphs appear and before they are enclosed in plant tissue. For high populations, use the higher rate. Do not apply after shuck split. Do not exceed 2 applications per year or a maximum of 6 lbs. per acre per year. Do not graze livestock on orchard crops or grasses in treated areas.

PEPPERS (1): Green peach aphid, flea beetles, hornworms, pepper maggot - use 1 lb. per acre. Peppers (4): Green peach aphid, flea beetles, hornworms, pepper maggot - use 2 lbs. per acre. Do not exceed 2 applications per season.

PINEAPPLE (for fresh market only) (7): Pineapple fruit mite - use 3 to 4 lbs. per acre. Apply at intervals of 7 to 10 days if necessary, particularly during the 40 day period of blooming. Do not exceed 2 applications per year or a maximum of 6 lbs. per acre per year. Do not feed treated forage or pineapple by-products to livestock.

PLUMS (7), PRUNES (7): Fruittree leafroller (Pacific Northwest Only) - Use 1 lb. per 100 gals.; 4 to 5 lbs. per acre. Apply during pre-pink stage of grewth. Hop aphid, leafcurl plum aphid, plum rust (nursery) mite, thistle aphid. - use 1 lb. per 100 gals.; 4 to 5 lbs. per acre. For aphids, apply when eggs hatch during pre-bloom or petal fall. Summer applications should be made before leaves curl. Lesser peachtree borer - use 1 1/2 lbs. per 100 gals.; 4 to 5 lbs. per acre. Apply spray to thoroughly wet trunk and main branches. Peachtree borer - use 1 1/2 lbs. per 100 gals.; 4 to 5 lbs. per acre except West Coast use 1 to 1 1/2 lbs. per 100 gals. Spray thoroughly to cover all bark areas from ground to scaffold limbs. Peach twig borer - use 4 to 5 lbs. per acre. All uses - Do not exceed 2 applications per year or a maximum of 6 lbs. per acre per year. Do not graze livestock on orchard crops or grasses in treated areas.

POTATOES (1): Threelined potato beetle - use 1 lb. per acre. Aphids, Colorado potato beetle, green stink bug, leassooted bug, potato slea beetles,

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potato leashopper, potato tuberworm, southern armyworm, whitesly - use 1 to 2 lbs. per acre. European corn borer, potato psyllid - use 1 1/2 to 2 lbs. per acre. False chinch bug - use 2 lbs. per acre. Do not exceed 6 applications per year or a maximum of 6 lbs. per acre per year.

PUMPKINS (1): Aphids, cucumber beetle, squash vine borer - use 1 to 2 lbs. per acre. For vine borer, apply to flower buds, stems and vines beginning when moths first appear. Do not exceed 6 applications per year or a maximum of 6 lbs. per acre per year.

SAFFLOWER: Green peach aphid - use 2 lbs. per acre. Do not apply after flower heads open. Do not exceed 2 applications per year.

SPINACH (21): Green peach aphid, crown mite - Use 1 1/2 lbs. per acre. Do not exceed one application per season.

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STRAWBERRIES (4): Tarnished plant bug, meadow spittlebug, strawberry aphid - use 2 lbs. per acre. Do not reapply within 15 days or more than twice during a 35 day period when fruit is present. Cyclamen mite - use 4 lbs. per acre in 400 gals. of water. Thoroughly wet the foliage, stem and crown of the plant. For multiple applications, do not apply at intervals less than 35 days during the fruiting period. Do not exceed 3 applications per year or a maximum of 6 lbs. per acre per year.

STRAWBERRIES (4) NORTHWEST USE ONLY - Garden symphylan (aids in reducing damage) - Use 2 lbs. per 100 gals. (plant dip). Mix thoroughly. Dip entire plant. When immensing bundles of plants, make certain any trapped air is forced out to assure thorough wetting of entire plant. Drain and allow plants to dry before setting them out in the field. Wear rubber gloves during the dipping operation.

SUGAR BEETS (30): Meadow spittlebug - use 1 lb. per acre Green peach aphid - use 1 to 2 lbs. per acre. Sugar beet webworm - use 1 1/2 to 2 lbs. per acre. Make 1 to 2 applications per year as needed for control. Western Use Only - Meadow spittlebug - Use 1 to 2 lbs. per acre. All Uses: Do not feed treated tops to livestock. Do not exceed 6 lbs. per acre per year.

SUNFLOWERS (1): Sunflower moth - Use 2 lbs. per acre. Do not exceed 3 applications per year. Make first application at the onset of bloom. Allow 7 days between repeat applications. Do not feed treated forage to livestock.

SWEET CORN (Fresh Vegetable Use Only) (1): Corn leaf aphid - use 2 lbs. per acre. Corn earworm - use 3 lbs. per acre beginning when silks first appear

and continuing until they begin to dry. Allow 5 days between endosulfan applications. Do not exceed 3 applications per year or a maximum of 6 lbs. per acre per year. Do not apply to sweet corn to be processed. Do not feed treated forage or ensilage to livestock or allow livestock to graze in treated fields.

SWEET POTATOES (1): Sweet potato flea beetle - use 1 lb. per acre. Begin applications shortly after transplanting or as soon as flea beetles appear. Do not exceed 3 applications per year.

TOBACCO (5): Budworm, cabbage looper, flea beetle, green peach aphid, hornworm - SEED BED - use 1 lb. per 100 gals. of water. Apply about 6 gals. of tinished spray per 100 square yards. PLANT BED - Green June bug larvae - Use 1/2 lb. per 100 gals. of water drenching at a rate of 1 gal. per square yard. FIELD - use 1 to 2 lbs. per acre to control above insects. Stink bugs - use 2 to 3 lbs. per acre. Do not exceed 6 applications per year or a maximum of 6 lbs. per acre per year.

TOMATOES (Field and Greenhouse) (2): Blister beetle, Colorado potato beetle, flea beetle, green peach aphid, hornworm; California only webworm - use 1 to 2 lbs. per acre. Cabbage looper, stink bug - use 1 1/2 to 2 lbs. per acre. Tomato fruitworm, yellowstriped armyworm - use 2 lbs. per acre. Whitefly - use 1 lb. per 100 gals.; 100 to 200 gals. per acre. Do not exceed 6 applications per year or a maximum of 6 lbs. per acre per year.

WALNUTS: Walnut aphid - use 3 to 4 lbs. per acre. Do not apply after husk split. Do not exceed 2 applications or 6 lbs. per acre per year. Do not graze livestock on orchard crops or grasses in treated areas.

## COMMERCIALLY GROWN ORNAMENTALS ORNAMENTAL PLANTS

LEATHERLEAF FERN: Leatherleaf fern borer - use 1 lb. per 100 gals of water. Begin treatment when first larvae feeding is observed in the mid-vein area at the base of the leaflets. Repeat at intervals of 2 to 3 weeks as necessary. Do not exceed 3 applications per year.

ORNAMENTALS (GREENHOUSE AND OUT-OF-DOORS): Aphids, cyclamen mite, whitefly, rose chafer - use 1 lb. per 100 gals. of water. On chrysanthemums, best results will be obtained if applied before plants flower. Do not exceed a maximum of 6 lbs. per acre per year. Do not apply to birch trees or to "Bonnaton Deluxe", "Fred Shoesmith", and "White Knight" chrysanthemums as

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injury may result. In greenhouse applications, wear a mask or respirator approved by MSA and OSHA for protections against endoculfan.

# COMMERCIALLY GROWN ORNAMENTALS ORNAMENTAL TREES AND SHRUBS

DOOGWOOD, LILAC: Dogwood borer, tilac borer - use 1 to 2 lbs. per 100 gals. of water. Apply in early June and repeat in 10 to 14 days. Drench all bark areas down to the ground level. Do not exceed 6 lbs. per acre per year.

DOUGLAS FIR (Grown for Ornamentals, Nursery Stock or Christmas trees) Pacific Northwest Only, Cooley spruce gall adelgid, Douglas fir needle midge, aphids - Use 1 lb. per 100 gals. of water (1 tablespoon per gallon). For gall adelgid control apply when white cotton tufts appear. For needle midge control apply in late April or early May just before buds open. Do not exceed 6 lbs. per acre per year.

PINES (Austrian, Jack, Red, Scotch, White): Zimmerman pine moth - use 1 1/2 lbs. per 100 gals. of water. Apply in mid-April and again, if necessary, in late fall. Thoroughly wet bark and main stem, especially where branches join main stem. Do not exceed 6 lbs. per acre per year.

SHADE TREES (except Birch), SHRUBS: Aphids - use 1 lb. per 100 gals. of water. Do not exceed 6 lbs. per acre per year.

SPRUCE (New England area only): Spruce gall aphid - use 1 lb. per 100 gals. of water. Apply in late April or early May when aphids are present, but before galls are formed. Do not exceed 6 lbs. per acre per year.

TAXUS: Taxus bud mite - use 1 lb. per 100 gals. of water. Apply 3 to 5 applications beginning in mid-May. Thoroughly spray foliage, twigs and bark. Black vine weevil - use 2 lbs. per 100 gals. of water. Spray thoroughly and drench soil under plants. Apply when weevils first appear. Repeat in 14 days. All uses: Do not exceed 6 lbs. per acre per year.