DEC 1 0 1985

Ms. Carolyn F. Brinkley Agricultural Division Ciba-Geigy Corporation P.O. Box 18300 Greensboro, NC 27419 301 /1639/8

Dear Ms. Brinkley:

Subject: Amendment - Update Label
Diazinon AG-500
EPA Registration No. 100-461
Your Application Dated November 1, 1985

The amendment referred to above, submitted in connection with registration under FIFRA sec. 3(c)(7)(A), is acceptable, provided that you:

- 1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- 2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

Delete directions for use of this product in forests in compliance with the Ground Water Data Call-In Notice.

3. Submit five (5) copies of your final printed labeling before you release the product for shipment.

85864: LaRocca: RD-2: KENCO: 12/6/85: 12/18/85: dej:md

CONCURRENCES

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.

Sincerely yours,

George T. LaRocca Product Manager (15) Insecticide-Rodenticide Branch Registration Division (TS-767)

Enclosure

(Booklet for 2 1/2 Gallon Container)

D·z·n® diazinon AG500

Insecticide

For Agricultural or Commercial Use Only

For control of certain insects on fruits, nuts, vegetables, field crops, lawns and ornamentals

MCCBPTED
In EPA COMMENTS
Letter Dated:

DEC 1 0 1985

Under the Federal Insecticide, as amended, for the pesticide Act registered under EPA Reg. No.

Active Ingredient:

Diazinon: 0,0-diethyl 0-(2-isopropyl-6-

D·z·n diazinon AG500 contains 4 lbs. Diazinon per gal.

Keep Out of Reach of Children.

Warning

See additional precautionary statements at end of booklet.

Aviso

Precaucion Al Usuario: Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicado ampliamente.

EPA Req. No. 100-461

CIBA-GEIGY

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product.

Conditions of Sale and Warranty

The <u>Directions</u> for <u>Use</u> of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of CIBA-GEIGY or the Seller. All such risks shall be assumed by the Buyer.

CIBA-GEIGY warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the <u>Directions for Use</u> subject to the inherent risks referred to above. <u>CIBA-GEIGY makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall CIBA-GEIGY or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. CIBA-GEIGY and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of CIBA-GEIGY.</u>

General Information

D.z.n diazimon AG500 is an emulsifiable solution which, when diluted with water according to the directions, is intended for the control of insect pests of agricultural crops and other plant pests. Do not use in barns or dwellings. Do not use on livestock.

In the directions for use which follow, best control is obtained when application is made at first sign of insects. Application should be repeated as necessary to maintain control.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop or plant injury may result.

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 in such a manner as to directly or through drift expose workers or other persons except those knowingly involved in the application. The area being treated must be vacated by unprotected persons.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

Reentry Statement

Do not enter treated areas without protective clothing until sprays have dried.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. (See Note below.)

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. Oral warnings must inform workers of areas or fields that may not be entered without specific protective clothing until sprays have dried, and appropriate actions to take in case of accidental exposure, as described under Precautionary Statements on this label. When oral warnings are given, warnings shall be given in a language customacily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by Written warnings must include the following informaworkers. WARNING. Area treated with D.z.n diazinon AG500 on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, flush eyes or skin with plenty of water. physician if irritation persists. Remove and wash contaminated clothing before reuse.

Note: The California Department of Agriculture has set a 5-day reentry for Diazinon on citrus, grapes, peaches, and nectarines. Five days should elapse between the time of application and the time a worker may enter the field to engage in any activity requiring substantial contact with treated foliage. When a mixture of two or more organic phosphate pesticides is applied, the interval shall be prolonged by adding to the longest applicable interval an additional 50% of that interval.

Fruit and Nut Crops

Note: Unless otherwise stated, the following rates should be applied as a dilute full cover spray.

Almonds

Mites, Twig Borers: Apply 1-1 1/2 pts. per 100 gals. of water.

Parlatoria Scales, San Jose Scales: Mix 1-1 1/2 pts. D·z·n diazinon AG500 plus 2-3 gals. dormant oil per 100 gals. of water and apply as a dormant spray.

Almond hulls may be used for feed for livestock.

Apricots

Aphids, Brown Mites (Clover Mites), Twospotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers: Mix 1 pt. per 100 gals. of water. Apply when aphids, mites, and scale crawlers first appear.

Olive Scale Crawlers: Mix 1/2 pt. D.z.n diazinon AG500 plus 1 1/2 gals. of light medium horticultural oil per 100 gals. of water. Apply when scale crawlers are present.

Apricot Mealybugs: Mix 1 pt. per 100 gals. of water. Apply as a cover spray from petal fall to June.

Do not apply within 10 days of harvest or illegal residues may result.

Blueberries

Cranberry Fruitworms, Cherry Fruitworms, Blueberry Maggots, Aphids, Thrips, Twospotted Mites: Mix 1 pt. per 100 gals. of water. Apply up to 200 gals. of spray per acre. Do not apply within 7 days of harvest or illegal residues may result.

Caneberries

Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries

Leafhoppers, Thrips, Aphids, Twospotted Mites, Raspberry Saw-flies: Apply 2 pts. per acre in a minimum of 100 gals. of water.

Raspberry Fruitworms: Apply at the above rates when blossom buds separate and repeat application immediately before blossoms open.

Dryberry Mites: Apply 1-2 qts. per acre in a minimum of 100 gals. of water. Aroly as a dormant spray in early spring, when canes are still on the ground and buds are closed. Make a second application when the buds are well developed, but still closed.

Do not apply within 7 days of harvest or illegal residues may result.

Raspberry Crown Borers (Raspberry Root Borers): Apply 2 qts. per acre in a minimum of 100 gals. of water as a drench to the crown area and to the lower canes. Apply either in the spring before berries begin to form, or in the fall after harvest.

Cherries

Eyespotted Bud Moths, Fruittree Leafrollers: Mix 1 pt. per 100 gals. of water. Apply in cover sprays as necessary beginning with petal fall.

Cherry Fruit Flies: Mix 1/2-1 pt. per 100 gals. of water. Make 3 or 4 applications, beginning when adult cherry fruit flies begin to emerge and repeat at 10-day intervals.

Leafhoppers: Apply 1 pt. per 100 gals. of water in 3-5 applications beginning at petal fall and continuing through the growing season, or apply as infestations develop.

Black Cherry Aphids: Mix 1 pt. per 100 gals. of water. Apply as a cover spray when aphids appear and repeat af er 10 days.

San Jose Scale Crawlers: Mix 1 pt. per 100 gals. of water. Apply during the pre-pink stage or when crawlers first appear.

Do not apply within 10 days of harvest or illegal residues may result.

Cherry Rust Mites: Mix 1/2-1 pt. per 100 gals. of water. Apply as a supplemental spray after harvest.

Citrus Fruits

Grapefruit, Lemons, Limes, Oranges, Tangelos, Tangerines, Citrus Citron, Kumquats, and hybrids of these

Citrus Aphids, Fruittree Leafrollers, Cottonycushion Scale Crawlers, Soft Scale Crawlers: Apply 1/2-1 pt. per 100 gals. of water (maximum 1,000 gals. per acre) as a thorough cover spray when aphids and crawler stages of scale insects first appear.

Fruittree Leafrollers: Use 1/2-1 pt. per 100 gals. of spray (maximum 1,000 gals. per acre) when an average of 50 percent of eggs in egg masses have hatched in the spring.

Citrus Thrips: Apply 1 pt. in 100 gals. of water (maximum 1,000 gals. per acre) when thrips first appear.

Citrus Snow Scales: Apply 1-2 pts. per 100 gals. of water (maximum 1,000 gals. per acre) as a postbloom spray and again as a summer spray. For heavy snow scale infestations use the higher dosage rate. Thorough coverage of tree trunks, limbs, and twigs is essential.

<u>Precaution</u>: Do not apply during blocm. Do not apply to citrus within 21 days of harvest or illegal residues may result. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where these are important resources.

Cranberries

Blackheaded Fireworms (Rhopobota naevana): Apply 2 qts. in 400 gals. of water per acre.

Cranberry Fruitworms: Apply 3 qts. in 400 gals. of water per acre.

Do not apply within 7 days of harvest or illegal residues may result.

Figs

Vinegar Flies (Drosophila spp.), Dried Fruit Beetles: Apply 1 pt. per 100 gals. of water. Do not apply within 5 days of harvest or illegal residues may result.

Filberts

Filbert Leafrollers, Aphids: Apply 1-2 qts. in 250-400 gals. of water per acre as a thorough cover spray.

Grapes

Pacific Spider Mites, Leafhoppers, Grape Berry Moths, Grape Leaffolders: Apply 1-2 pts. per acre in a minimum of 100 gals. of ate as a thorough cover spray. Do not apply within 18 days of 1 ve tor illegal residues may result.

Drosophila spp.: Apply 12-18 fl. oz. per acre in a minimum of 100 gals. of water as a thorough cover spray, or apply when insects first appear. Make additional applications at weekly inte vals as necessary.

Do not apply within 7 days of harvest or illegal residues may result.

<u>Olives</u>

Olive Scales: Mix 3/4-1 pt. of D·z·n diazinon AG500 plus 1 1/2 gals. of light medium summer horticultural oil per 100 gals. of water. Apply as a cover spray in June or July.

<u>Precaution</u>: Do not apply during bloom to avoid injury to pollinating insects or within 75 days of harvest or illegal residues may result.

Peaches, Nectarines

Aphids, Brown Mites (Clover Mites), Twospotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers: Mix 1 pt. per 100 gals. of water. Apply when aphids, mites, and scale crawlers first appear.

Olive Scale Crawlers: Mix 1/2 pt. of D·z·n diazinon AG500 plus 1 1/2 gals. light medium horticultural oil per 100 gals. of water. Apply when scale crawlers are present.

Oriental Fruit Moths: Mix 1 pt. per 100 gals. of water and apply at 100% petal fall. Make 2 additional applications at 10-15 day intervals. Time the last application to peak adult oriental fruit moth flight, if possible.

Peach Twig Borers: Mix 1 pt. per 100 gals. of water and apply to peaches in May and June.

Leafhoppers (Peaches only): Apply 1 pt. per 100 gals. of water in 3-5 applications beginning at petal fall and continuing through the growing season, or apply as infestations develop.

White Peach Scale (Peaches only): As a post-harvest spray apply 1 1/2-2 pts. per 100 gals. of water timed to coincide with peak crawler and immature scale activity. Under conditions of heavy infestations, two applications may be necessary.

Do not apply to peaches within 20 days, or to nectarines within 10 days, of harvest or illegal residues may result.

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Pecans

Aphids, Mites, Pecan Nut Casebearers, Walnut Caterpillars: Apply 1-3 qts. per acre as a foliage spray in a minimum of 100 gals. of water. Do not apply after husks crack or illegal residues may result.

Pineapple

Scales: Apply 5 qts. of D·z·n diazinon AG500 plus 2 gals. of light or medium horticultural oil in 500 gals. of water per acre to the vegetative slips on the plants following harvest of pine-apple.

Mealybugs: Apply 2 qts. per acre in a minimum of 100 gals. of water. May be applied on day of harvest.

Pineapple forage and refuse may be fed to livestock 7 days following last application. Illegal residues may result if fed sooner than indicated.

Plums, Prunes

Brown Mites (Clover Mites), European Red Mites: Apply 1 pt. per 100 gals. of water.

Leafcurl Plum Aphids, Mealy Plum Aphids, Thistle Aphids: Apply 1/2-1 pt. per 100 gals. of water.

Do not apply within 10 days of harvest or illegal residues may result.

Strawberries

Aphids, Twospotted Spider Mites: Apply 1 pt. per 100 gals. of water per acre.

Cyclamen Mites: Apply 1 qt. per 100 gals. of water per acre, directing spray to plant crowns. Plants should be sufficiently agitated to assure thorough coverage of the foliage. Make additional applications, if necessary, after harvest.

Mole Crickets: Broadcast 1 qt. per acre when insects are present. Apply 1-2 days before transplanting and immediately mix into the top 1-2 inches of soil.

Strawberry Leafrollers: Mix 3/4-1 pt. per 100 gals. of water. Apply 200 gals. of spray per acre when blossoms show color.

Do not apply within 5 days of harvest or illegal residues may result.

Walnuts

Aphids, Mites: Apply 1 qt. per acre as a foliage spray minimum of 100 gals. of water.

Codling Moths, Scal. Crawlers, Walnut Caterpillars: Apquts. per acre as a foliage spray in a minimum of 100 gawater.

Do not apply after the husks open or illegal residues m result.

Vegetable Foliar Insects

Unless otherwise stated, foliar applications of D·z·n d AG500 should always be applied to vegetable crops as a a minimum of 2 gals. of water per acre for aerial appliand a minimum of 10 gals. of water per acre for ground tions.

Beans

Pole Beans, Snap Beans, Lima Beans

Black Bean Aphids, Mexican Bean Beetles, Leafminers: A 1-1 1/2 pts. per acre.

Cucumber Beetles: Apply 3/4 pt. in 100 gals. of water

Do not apply within 7 days of bean harvest or illegal r may result. Bean forage or bean hay may be fed to dair beef cattle and sheep. Wait 4 days following treatment forage is to be cut for hay or illegal residues may res

Lima Beans

Dipterous Leafminers, Leafhoppers, Mites: Apply 1 pt. Do not apply within 7 days of harvest or illegal residuresult. Bean forage or bean hay may be fed to dairy are cattle and sheep. Wait 4 days following treatment if to be cut for hay or illegal residues may result.

Broccoli, Cabbage, Cauliflower

Aphids, Diamondback Moths, Imported Cabbageworms: Apply 1/2-1 pt. per acre. Applications at 7-10 day intervals will usually be required. Do not apply to broccoli or cauliflower within 5 days, or to cabbage within 7 days, of harvest or illegal residues may result.

Brussels Sprouts

Aphids, Diamondback Moths, Imported Cabbageworms: Apply 1 pt. per acre. Generally, applications at 7-10 day intervals will be required. Do not apply to brussels sprouts within 7 days of harvest or illegal residues may result.

Carrots

Aphids: Apply 1 pt. per acre. Do not apply within 10 days of harvest or illegal residues may result.

Celery

Aphids, Flea Beetles: Apply 1 pt. in 100 gals. of water per acre. Do not apply within 10 days of harvest or illegal residues may result. Plants should be market trimmed (tops removed) before being shipped or used or illegal residues may result. Tops should not be used for feed or food or illegal residues may result.

Collards, Kale, Swiss Chard, Turnip Tops

Aphids, Imported Cabbageworms, Diamondback Moths, Harlequin Cabbage Bugs: Apply 1/2-1 pt. per acre. Do not apply to collards, kale, or turnip tops within 10 days, or to Swiss Chard within 12 days, of harvest or illegal residues may result.

Cucumbers

Aphids, Serpentine Leafminers, Thrips: Apply 1 pt. per acre. Do not apply within 7 days of harvest or illegal residues may result.

Lettuce, Endive

Aphids, Dipterous Leafminers: Apply 1/2-1 pt. per acre. Do not apply within 10 days of harvest or illegal residues may result.

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Melons, Squash

Cantaloupes, Casabas, Cre:shaws, Honeydew Melons, Muskmelons, Persian Melons, and hybrids of these; Watermelons and their hybrids; Summer and Winter Squash

Aphids, Leafhoppers, Mites: Apply 1-1 1/2 pts. per acre.

Serpentine Leafminers, Thrips: Apply 1/2-1 pt. per acre.

Do not apply to melons and winter squash within 3 days, or to summer squash within 7 days, of harvest or illegal residues may result.

Mushroom Houses

Mushroom Flies (Phorids and Sciarids): Mix 1/2-1 gal. in 50 gals. of water (0.5% to 1.0% actual diazinon) and spray on outside and inside walls and ventilators of mushroom houses, after compost in beds has been pasteurized by heating. Do not spray compost in beds or after spawning or illegal residues may result.

To treat wooden sides of beds, posts, doors, and door frames after pasteurizing, mix 1/2 pt. in 6 gals. of water and apply with a brush.

Do not treat compost or illegal residues may result.

Onions

Onion Thrips: Apply 1 pt. per acre. Do not apply within 10 days of harvest or illegal residues may result.

Peas

Aphids, Leafminers: Apply 3/4-1 pt. per acre. Peas may be picked immediately. Pea vines and pea vine hay may be fed to dairy and beef cattle and sheep. Wait 4 days following treatment if forage is to be cut for hay or illegal residues may result.

Peppers

Aphids, Serpentine Leafminers: Apply 1/2 pt. per acre. Do not apply within 5 days of harvest or illegal residues may result.

Potatoes

Aphids, Flea Beetles, Colorado Potato Beetles, Dipterous Leafminers: Apply at the rate of 1/2-3/4 pt. per acre.

Banded Cucumber Beetles, Leafhoppers, Southern Armyworms: Apply 3/4-1 pt. per acre.

Do not apply within 35 days of harvest or illegal residues may result.

Radishes, Parsnips, Turnips

Aphids, Flea Beetles, Dipterous Leafminers: Apply 1/2-1 pt. per acre. Do not apply within 10 days of harvest or illegal residues may result.

Spinach, Beets

Aphids, Dipterous Leafminers: Apply 1/2-1 pt. per acre. Do not apply to spinach within 10 days, or to beets within 14 days, of harvest or illegal residues may result.

Squash (Summer and Winter)

See Melons and Squash section.

Sweet Corn

Corn Earworms: Apply 1-1 1/4 qts. per acre when silks first appear. Two or three repeat applications at 2-3 day intervals will usually be necessary. Corn may be picked immediately following last application. Corn forage may be fed to dairy and beef cattle and sheep.

Refer also to Corn under Field and Forage Foliar Insects and Field and Forage Soil Insects.

Tomatoes

Aphids, Dipterous Leafminers: Apply 1/2 pt. per acre. To control leafminers, weekly applications are usually required.

Banded Cucumber Beetles, Fall Armyworms, Southern Armyworms: Apply 3/4-1 pt. per acre.

Vinegar Flies (Drosophila spp.): Apply 1/2-1 1/2 pts. per acre Weekly applications are usually required.

Do not apply within 1 day of harvest or illegal residues may result.

Watercress (Hawaii only)

Cyclamen Mites: Mix 1 pt. per 100 gals. of water and apply to one acre as a thorough cover spray. Spray should be directed into the crowns and growing tips of plants. If infestation is heavy, make a second application no later than 10 days after the first application. Repeat applications as necessary. Do not apply within 5 days of harvest or illegal residues may result.

Vegetable Soil Insects

Unless otherwise stated, soil applications of D·z·n diazinon AG500 should always be applied to vegetable crops as a spray in a minimum of 5 gals. of water per acre for ground applications.

Cutworms (Surface and Subterranean)

Broccoli **Snap Beans** Kale Brussels Sprouts Lettuce Spinach Summer Squash Cabbage Lima Beans Sweet Corn Cantaloupes Muskmelons Swiss Chard Cauliflower Parsley Celery Peas " >matoes Collards Peppers Watermelons Cucumbers Potatoes Winter Squash Endive (Escarole)

Broadcast 2-4 qts. per acre just prior to planting. Work into the soil immediately, 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

Garden Symphylans (Centipedes)

CabbagePeasSnap BeansCarrotsPole BeansTomatoesCornRadishesTurnipsLettuceRed Beets

Broadcast 10 qts. per acre just prior to planting. Immediately work into soil 4-8 inches. This preplant treatment will also control other soil insects: cutworms (surface and subterranean), mole crickets, root maggots, and wireworms.

Mole Crickets

Broccoli Endive (Escarole) Radishes
Brussels Sprouts Kale Tomatoes
Cabbage Lettuce Turnips
Cauliflower Mustard
Collards Peppers

Broadcast 1 qt. per acre when insects are present. Make application to plant beds or field 1-2 days prior to sowing of seed or transplanting and immediately work into soil 1-2 inches.

Onion Maggots

Onions:

Furrow Application: Apply 1 qt. per acre in sufficient water to drench the seed furrow at planting time.

Broadcast Application: Broadcast 2-4 qts. per acre just prior to planting. Immediately work into soil 3-4 inches.

Root Maggots

Broccoli, Brussels Sprouts, Cabbage, Cauliflower: Broadcast Application: Broadcast 2-3 qts. per acre and immediately work into the soil 3-4 inches, before seeding, either in the seedbed or in the field, or before transplanting.

Transplant water (drench) application: Mix 1/4-1/2 pt. in 50 gals. of transplant water, when 200-300 gals. of water are used per acre. May be applied at the rate of 1/2-1 cupful per plant, either by hand or by tractor-mounted sprayer equipped with drop nozzles to direct spray to the base of the plant.

Precaution: Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.

Radishes: Mix 1 qt. in 50 gals. of water. Apply 80-100 gals. per acre (1-1 1/3 gals. per 1,000 linear feet of row) in the seld furrow at planting time.

Wireworms

Broccoli Endive (Escarole) Potatoes Brussels Sprouts Kale Snap Beans Cabbage Lettuce Spinach Cantaloupes Lima Beans Summer Squash Muskmelons Sweet Corn Carrots Cauliflower Onions Sweet Potatoes Parsley Swiss Chard Celery Collards Tomatoes Peas Cucumbers Peppers Watermelons Winter Squash

Broadcast 3-4 qts. per acre prior to planting, and immediately work into soil 4-8 inches.

Potatoes: Broadcast 3-6 qts. per acre prior to planting. Immediately disk or harrow into soil 4-8 inches.

Southern Potato Wireworms (Southeastern U.S.)

Potatoes:

For use to control southern potato wireworms in potatoes grown on mineral soils in the Southeast, apply 2-4 qts. per acre as a soil treatment prior to planting, and immediately mix thoroughly by disking, or other suitable means into the top 3-6 inches of soil, depending on location of wireworms.

Field and Forage Foliar Insects

Unless otherwise stated, foliar applications of D·z·n diazinon AG500 should always be applied to field and forage crops as a spray in a minimum of 2 gals. of water per acre for aerial applications and a minimum of 10 gals. of water per acre for ground applications.

Alfalfa, Clover

Spotted Alfalfa Aphids, Yellow Clover Aphids, Pea Aphids, Leaf-hoppers, Plant Bug Nymphs, Mites: Apply 3/4-1 pt. per acre.

Grasshoppers: Apply 1 pt. per acre.

Following the above applications, dairy and beef cattle and sheep (1) may be grazed immediately following application, (2) may be fed green alfalfa or clover immediately following cutting, and (3) may be fed hay provided alfalfa or clover is not cut for hay for 7 days following treatment or illegal residues may result.

Alfalfa Weevil Larvae: For control in the spring, apply 2-3 pts. per acre when feeding damage to growing tips becomes evident. Repeat application, if necessary. If damage is already extensive, cut the hay and make application to the stubble. Do not graze dairy and beef animals or sheep for 2 days. Do not cut for hay for 10 days following treatment or illegal residues may result.

<u>Precaution</u>: Do not spray livestock directly with either air or ground equipment or illegal residues may result. Do not treat during bloom to avoid injury to pollinating insects.

Clover

Striped Ground Crickets: Broadcast 1-2 pts. per acre following seeding in the fall but prior to clover emergence.

Corn

Use a minimum of 1 gal. of water for aerial applications and 5 gals. of water for ground applications.

Corn Rootworm Adults: Apply 1/2-1 pt. per acre.

Corn Leaf Aphids: Apply 1-2 pts. per acre. Complete coverage of the upper portions of the plants is essential. Repeat applications as necessary.

Mites: Apply 1 pt. per acre when infestations first appear. Repeat applications as necessary.

Flea Beetles: Apply 1 pt. per acre when insects first appear. Repeat applications as necessary.

Grasshoppers: Apply 1 pt. per acre.

Sap Beetles: Apply 2-2 1/2 pts. per acre. Add 1-2 gals. of soluble mineral oil per acre to the spray mixture. Consult State Agricultural Experiment Stations or State Extension Service Specialists for proper timing of sprays.

Corn may be picked immediately following last application. Corn forage may be fed to dairy and beef cattle and sheep.

Cotton

Spider Mites, Aphids, Leafhoppers, Lygus Bug, Cotton Leafworms, Cotton Leafperforators: Apply 1-2 pts. in 5-25 gals. of water per acre. Repeat as infestation warrants.

Do not apply within 14 days of harvest or illegal residues may result. Do not graze treated cotton plants, or feed gin waste to livestock or illegal residues may result.

Guar (Texas and Oklahoma only)

Midge: Apply 1/2-1 pt. per acre in a minimum of 10 gals. of water for ground application or 2 gals. of water for aerial application when 15% of the blooms are infested. Should the infestation warrant, repeat applications should be made in 5-6 days.

Do not make more than 3 applications to the same crop. Do not apply within 12 weeks of harvest or illegal residues may result.

Do not graze or feed treated forage to livestock within 12 weeks of harvest or illegal residues may result.

Hops

Aphids, Mites: Apply 1 qt. per acre. Do not apply within 14 days of harvest or illegal residues may result.

Sorghum

Use a minimum of 1 gal. of water for aerial applications and 5 gals. of water for ground applications.

Sorghum Midge: Apply 1/2-1 pt. per acre when 90% of heads have emerged from the boot. Repeat application within 4 days.

Mites: Apply 1 pt. per acre when infestation first appears and repeat applications as necessary.

Greenbug: Apply at the rates indicated below when infestation first appears and repeat as necessary.

Texas and Oklahoma - Apply 1/2-1 pt. per acre. All Other Areas - Apply 1 pt. per acre.

Crop may be fed to livestock immediately following treatment. Do not apply within 7 days of harvesting for grain or illegal residues may result.

Sugar Beets

Beet Leafhoppers, Dipterous Leafminers, Aphids: Apply 3/4-1 pt. per acre.

Grasshoppers: Apply 1 pt. per acre.

Tops may be fed to beef and dairy animals.

Sugarcane

Aphids: Apply 1/2-1 pt. per acre. Allow 1 day between last application and harvest or illegal residues may result. Bagasse and forage may be fed to livestock.

Tobacco

Aphids, Flea Beetles: Apply 1/2-3/4 pt. per acre. Do not apply within 3 days of harvest or illegal residues may result.

Grasshoppers: Apply 1 pt. per acre. Do not apply within 14 days of harvest or illegal residues may result.

Field and Forage Soil Insects

Unless otherwise stated, soil applications of D·z·n diazinon AG500 should always be applied to field and forage crops as a spray in a minimum of 5 gals. of water per acre for ground applications.

Alfalfa, Clover

Cutworms (Surface and Subterranean): Broadcast 2-4 qts. per acre just prior to planting. Work into the soil immediately, 2-3 inches for surrace cutworms, 3-6 inches for subterranean cutworms.

Corn

Corn Rootworm Larvae:

Postemergence Basal Treatment: Apply 1 1/4-2 1/2 oz. per 1,000 linear feet of corn row in sufficient water to thoroughly wet base of corn plant and a narrow band of soil next to the plant. Refer to the row spacing chart for amounts recommended per acre. Cover treated band with 2-3 inches of soil using a disk hiller or cultivator immediately after spraying. Application should be made at the first sign of corn rootworm larvae, but not later than June 24 in the Middle Corn Belt, or July 1 in the Northern Corn Belt.

Suggested Rates According to Row Spacing for Corn Rootworm Larvae Control

Row Spacing	Linear Feet of Corn Row/Acre	Postemergence Basal Treatment (Fl. oz.)	
48"	10,890		
42"	12,455	15.5-31	
40"	13,068	16-32 (1/2-1 qt.)	
38 "	13,939	17.5-35	
36"	14,250	18-36	
30"	17,424	22-44	
24"	21,780	27.5-55	
20"	26,136	32-64 (1-2 qts.)	
15"	34,848	44-88	

Note: For row spacings not listed, calculate the appropriate dosage based on the 40-inch row figure.

Seedcorn Maggots: Broadcast 2-4 qts. per acre just prior to planting. Work immediately into soil 2 inches.

Cutworms (Surface and Subterranean): Broadcast 2-4 qts. per acre. For surface cutworms apply just prior to planting or when larvae first appear and work into soil 1-2 inches immediately. Do not apply later than lay by.

For subterranean cutworms apply just prior to planting and immediately work into soil 3-6 inches.

Wireworms: Apply 3-4 qts. per acre prior to planting and immediately work into the soil 4-8 inches.

Corn may be picked immediately following last application. Corn forage may be fed to dairy and beef cattle and sheep.

Cowpeas

Cutworms (Surface and Subterranean): Broadcast 2-4 qts. per acre, just prior to planting. Work into the soil immediately, 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

Lespedeza

Cutwo ms (Surface and Subterranean): Broadcast 2-4 qts. per ac ^ just prior to planting. Work into the soil immediately, 2-7 inches for surface cutworms, 3-6 inches for subterranean co.coms.

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Cutworms: Apply 2 qts. per acre in a 12-inch band over the row. Thorough coverage of the foliage is essential. Begin application when small larvae appear. Two or three additional applications at three-week intervals may be necessary. Do not apply within 21 days of peanut harvest or illegal residues may result.

Livestock (1) may be fed peanut hulls, (2) may be fed peanut forage 7 days following treatment, and (3) may be fed peanut hay 21 days following treatment. Illegal residues may result if fed sooner than indicated.

Sorghum

Cutworms (Surface and Subterranean): Broadcast 2-4 qts. per acre just prior to planting. Work into the soil immediately, 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

Soybeans

Cutworms (Surface and Subterranean): Broadcast 2-4 qts. per acre just prior to planting. Work into the soil immediately, 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

Sugar Beets

Wireworms: Broadcast 3-4 qts. per acre just prior to planting, and immediately work into soil 4-8 inches.

Tops may be fed to beef and dairy animals.

Sugarcane

Wireworms: Apply 1 gal. per acre in a 12-inch band centered over the furrow. Make application directly to seed pieces in open furrow at covering time.

Tobacco

Cutworms: Broadcast 2-3 qts. per acre before transplanting and immediately work into the soil 2-4 inches.

Green June Beetle Larvae: Mix 1/4 pt. in 50 gals. of water and apply as a drench (100 gals. per 100 sq. yds.) to uprooted areas of plant beds with sprinkling can.

Mole Crickets: Broadcast 1 qt. per acre, when insects are present. Make application to beds or fields 1-2 days prior to sowing of seed or transplanting, and immediately work into soil 1-2 inches.

Seedcorn Maggots: Broadcast 3 pts. per acre, 3-4 weeks before transplanting. Immediately work into soil 2 inches.

Wireworms: Broadcast 2-3 qts. per acre, 3-4 weeks before transplanting. Immediately work into soil 6-9 inches.

Range, Pasture, and Grassland Insects

Unless otherwise stated, D·z·n diazinon AG500 should always be applied as a spray in a minimum of 1 gal. of water per acre for aerial applications and a minimum of 5 gals. of water per acre for ground applications.

Bermudagrass and Forage Grasses (other than Range and Pasture Grasses)

Thrips, Whiteflies, Grasshoppers: Apply 1 pt. per acre.

Dairy and beef cattle and sheep (1) may be grazed immediately following application, (2) may be fed green forage immediately following cutting. Forage grasses may be cut for hay 7 days following treatment. Do not repeat application for 30 days or illegal residues may result.

Rangeland, Pasture, Ditch Banks, Roadsides, Wasteland, Noncrop Areas, Barrier Strips

Grasshoppers: Apply 3/4-1 pt. per acre in water or oil (minimum of 1 gal. of oil per acre) when insects first appear, preferably in the nymphal stage. Thorough coverage of the foliage is essential.

Dairy and beef cattle and sheep (1) may be grazed immediately following application, (2) may be fed green forage immediately following cutting, and (3) may be fed hay provided grass is not cut for hay for 21 days if the spray is a water solution, or for 30 days if the spray is an oil solution or illegal residues may result. Do not spray livestock directly with either air or ground equipment or illegal residues may result. Do not repeat application for 30 days or illegal residues may result.

Ornamental Insect Control

To control certain insects on Arborvitae, Azalea, Birch, Box-wood, Camellia, Carnation, Chrysanthemum, Douglas Fir, Elm, Gladioli, Hawthorn, Holly, Juniper, Lilac, Locust, Maple, Oak, Pine, Plum, Poplar, Rhododendron, Rose, Spruce, and Willow, apply the recommended rates indicated below:

Insects	Rate per 3 gals. water	Rate per 100 gals. water
Aphids, Bagworms, Carnation Bud Mites, Carnation Shoot Mites, Clover Mit , Cyclamen Mites, Dipterous Leafminers, European Pine Shoot Moths, European Red Mites, Flea Beetles, Holly Bud Moths, Leafhoppers, Obscure Root Weevils, Omnivorous Leaftiers, Privet Mites, Scale Crawlers (Cottonycushion, Lecanium, Pine Needle, San Jose, Soft Scale), Thrips, Twospotted Mites, Webworms, Whiteflies	1/2 fl. oz.*	1 pt.**
Apple-and-Thorn Skeletonizers, Cotoneaster Webworms, Fall Webworms, Hemlock Chermes, Oak Loopers, Obliquebanded Leaf- rollers, Pear Slugs, Tent Caterpillars	1 1/2 fl. oz.*	3 pts.**

^{* 1} fl. oz. = 2 tablespoons

**16 fl. oz. = 1 pint

Precaution: Do not use on Ferns, Poinsettia, Hibiscus, Papaya, Pilea, and Gardenia, since injury to the plants may occur.

Mimosa Webworms: Mix 1/2 fl. oz. in 3 gals. of water (or 1 pt. in 100 gals. of water) and apply as a thorough foliar spray when adults first appear. Make a second and third application at 4-5 week intervals.

Lawn Insect Control

To control insects listed below, apply recommended rates. For control of Ants, Brown Dog Ticks, Clover Mites, Crickets, Earwigs, Fleas, Millipedes, Sowbugs, and Springtails (Collembola), which are commonly found near the house and may enter the house, spray a 5-ft. band of soil around the house, as well as the house foundation wall to a height of 2-3 ft. Repeat application if necessary.

	 		
Insects	Rate/1,000 sq. ft.		Remarks
	D·z·n diazinon AG500	Water	
Lawn Chinch Bugs	2-3 fl. oz. or 3-6 fl. oz.	25 gals.*	Use higher rate for longer residual control and in lawns of dense growth, such as St. Augustine lawns.
Ants, Armyworms, Clover Mites, Springtails (Collembola), Crickets, Cutworms, Digger Wasps, Earwigs, Frit Flies, Lawn Billbugs, Sod Webworms (Lawn Moths), Sowbugs	2-4 fl. oz.	3 gals.	Spot spray ant hills and wasp ground nest open-ings. For lawn billbugs, irrigate the lawn thoroughly immediately after treatment. (See Precaution below.) For frit flies, mow grass and water well before treatment but delay application until grass is dry. Do not water again until necessary.

Brown Dog Ticks, Bermudagrass Mites, Chiggers, Fleas, Leafhoppers	1 1/4 fl. oz.	3 gals.	Note: Do not apply to animals. For brown dog ticks, spray grass and under shrubbery, particularly near house.
Millipedes	8 fl. oz.	3 gals.	
Rhodesgrass Scales	5 fl. oz.	25 gals.*	Apply when crawlers first emerge.

^{*}Or make application in 3 gals. of water per 1,000 sq. ft. and thoroughly water immediately following application. (See Precaution below.)

Boxelder bugs: Spray bugs outside the home with 1 1/4-2 1/2 $\overline{\text{fl. oz.}}$ (2 1/2-5 tablespoons) in 1 gal. water. At the same time, thoroughly spray around foundation, windows, doors, tree trunks, and into cracks and other places where the insects hide.

Billbugs, White Grubs (such as Japanese Beetle Larvae, European Chafer, Southern Chafer): Apply 4 fl. oz. per 1,000 sq. ft. of lawn. Water grass thoroughly after application. (See Precaution below.) For grub control make application any time between late July and early October. For billbug control apply when activity is first observed or when chewed or brown grass is present, indicating damage from this insect.

Hyperodes Weevil (New York only): Apply 3 fl. oz. per 1,000 sq. ft. of grass. Water grass thoroughly after application. (See Precaution below.) Treat problem areas in mid-April and again in mid-May.

Precaution: Birds and waterfowl feeding or drinking on treated areas may be killed. Apply this product only as specified on this label. Do not exceed maximum permitted label rates, as rates above those recommended significantly increase potential hazards to birds and waterfowl. Avoid overlapping of sprays. Where irrigation (watering) is recommended, apply a minimum of 0.25" of water immediately after application. Stop irrigation before puddling occurs.

Forest Insects

Pine (Seed Orchards, Plantations, Forests)
Arkansas Sawfly (Loblolly Sawfly): Apply 1/2 pt. per acre over the tree canopy. Application should be made at or near the completion of egg hatch. Aerial applications should be made with a minimum of 2 gals. of spray per acre, in swaths not more than 90 ft. wide. Repeat application as needed.

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide:

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If pesticide, spray mixture or rinsate 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 quidance.

Container:

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Precautionary Statements

Hazards to Humans and Domestic Animals

WARNING

May be fatal if swallowed. May be absorbed through skin. Do not breathe spray mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Avoid contamination of food. Do not use on humans or permit children to go onto sprayed grass until spray has completely dried.

Keep out of reach of domestic animals. Do not contaminate feed or use on household pets or livestock. Do not permit pets to go onto sprayed grass until spray has completely dried.

Statement of Practical Treatment

If swallowed, call a physician immediately. DO NOT INDUCE VOMITING UNLESS NO OTHER TREATMENT IS AVAILABLE. Vomiting may cause aspiration pneumonia. If it is necessary to induce vomiting, give victim one or two glasses of water and /Continued ... 29

insert finger in back of throat. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

If inhaled, remove victim to fresh air and apply artificial respiration if indicated.

If on skin, wash promptly with soap and water. Rinse thoroughly.

If in eyes, rinse eyes with plenty of water and call a physician immediately.

Note to Physician: Gastric lavage is indicated. Contains a petroleum-based solvent which presents aspiration hazard. Atropine sulfate and 2-PAM are specific antidotes.

Environmental Hazards

This product is toxic to birds, fish, and wildlife including waterfowl. Birds and waterfowl feeding or drinking on treated areas may be killed. Apply this product only as specified on this label. Do not exceed maximum permitted label rates, as rates above those recommended significantly increase potential hazards to birds and waterfowl. overlapping of sprays. Where irrigation (watering) is recommended apply a minimum of 0.25" of water immediately after application. Stop irrigation before puddling occurs. Keep out of lakes, streams, ponds, tidal marshes and estuaries (except for effluence from treated watercress Do not apply to water that will be used for recreational purposes and human and livestock consumption. 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. product must not be used in areas where impact on threatened endangered species is likely. Contact your State Fish and Game Agency for information pertaining to areas having threatened endangered species. Apply this product only as specified on this label.

This pesticide is highly toxic to bees exposed to direct treatment or to residues remaining on the treated area. Do not apply when bees are actively visiting the crop, cover crop, or weeds blooming in the treatment area. Applications should be timed to provide the maximum possible interval between treatment and the next period of bee activity.

Physical or Chemical Hazards

Do not use, pour, spill, or store near heat or open flame.

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