Reg # 352-354

PM-21

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JUL 4 1957

Dr. Richard A. Carver E.I. Du Font de Nemours & Co. P.O. Box 80038 Wilmington, DE 19880-0038

Dear Dr. Carver:

Subject: Benlate Fungicide EPA Reg. No. 352-354 Your Submissions of May 5, May 20, and June 15, 1994

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable provided you:

1. Revise the label by moving the statement concerning use of a dye in the seed treatment table to the column "Further Use Information" under slurry treatments since this applies to all uses except the planter box treatment.

2. Submit five copies of final printed label and supplemental label before release of these labels.

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

Copies of the stamped label and supplemental label are enclosed for your records.

Sincerely yours,

Steve Robbins Acting Product Manager (21) Fungicide-Herbicide Branch Registration Division (7505C)

enclosure

7505C:C.Grable:cg:7/14/94

ACCEPTED with COMMENTS In EPA Letter Dated

#### JUL 14 1994

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

## **UPOND BENLATE®**

## FUNGICIDE

#### WETTABLE POWDER

| ACTIVE INGREDIENT Y  | BY WEIGHT  |
|--|------------|
| Benomyl [Methyl 1-(butylcarbamoyl)-2-benz midazolecarbamate] | 50%        |
| INERT INGREDIENTS  |            |
|  | TOTAL 100% |

EPA Reg. No. 352-354

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## KEEP OUT OF REACH OF CHILDREN CAUTION

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION! MAY IRRITATE EYES, NOSE, THROAT AND SKIN.

Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing.

This product may cause a temporary allergic skin reaction in a few susceptible persons. This condition should be treated as an allergic dermatitis. There is no evidence of after effects or permanent injury.

First Aid: In case of contact, flush skin or eyes with plenty of water, for eyes, get medical attention.

For medical emergencies involving this product, call toll free 1-800-441-3637.

#### PERSONAL PROTECTIVE EQUIPMENT

#### Handlers who may be exposed to the dilute through application or other tasks must wear:

Long-sleeved shirt and long pants.

Waterproof gloves.

Chemical-resistant footwear plus socks.

Chemical-resistant apron when cleaning equipment.

Handler. who may be exposed to the concentrate through mixing, loading, application, or other tasks must wear:

Long-sleeved shirt and long pants.

Waterproof gloves.

Chemical-resistant footwear plus socks.

Chemical-resistant apron when mixing or loading.

For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

For exposures outdoors, a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### ENGINEERING CONTROL STATEMENTS

Human flaggers must be in enclosed cabs.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPr immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

PRECAUTIONARY STATEMENTS (continued on next page)

#### PRECAUTIONARY STATEMENTS (continued) ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. For terrestrial uses, do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark, except for the registered aquatic use on rice. Do not apply where runoff is likely to occur. Drift and runoff from treated areas may be hazardous to fish in adjacent areas. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from areas treated.

For registered aquade uses: Aquatic organisms may be killed at recommended application rates.

#### PHYS'CAL OR CHEMICAL HAZARDS

Keep away from fire or sparks.

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#### 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 a way that will contact workers or other persons, either directly or through drift. Only protected onders may be in the area during application. For any requirements specific to your State or Trobe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equiument (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls. Waterproof gloves. Chemical-resistant footwear plus socks.

BENLATE should be used only in accordance with the recommendations on this label, or the recommendations in separate DuPont publications available through local dealers.

DuPont will not be responsible for losses or damages resulting from use of this product in any manner not specifically recommended by DuPont. User assumes all risk associated with such nonrecommended use.

#### **GENERAL INFORMATION**

BENLATE is a systemic fungicide recommended for the control of many important plant diseases. Apply as a spray with ground equipment, except as otherwise directed in the "Crop/Rate Table", using sufficient water to obtain thorough coverage of plants. Application by air or chemigation is permitted for some crops. Under severe disease conditions, use the higher treatment rate and shorter interval for repeat applications as specified on "he label for each crop. Large mature trees will also require the higher labeled rate. Use only in commercial or farm plantings Not for use in home plantings nor once any commercial crop is turned into "U-Pick", "Pick Your Own" or similar operation.

#### Preparation of Spray Mixture

Add the required amount of BENL. TE to the necessary volume of water in the spray tank; continuously agitate the tank by hydraulic or mechanical means to keep the material in suspension. Po not tank mix BENLATE with lime or alkaline pesticides such as Bordeaux mixture or lime sulfur.

When the use of a spray oil is recommended (for crops such as apples, peanuts, pecans, and stone fruits), use a nonphytotoxic superior-type spray oil (60 to 70 second viscosity); add oil as last ingredient to spray tank. Consult product labels before applying other pesticides in conjunction with spray oil or immediately before or after an oil application. Follow label instructions for each product used in tank mixtures; observe all precautions and restrictions.

#### Resistance Management

If treatment with BENLATE is not effective, a benomylresistant strain of the fungus may be present. If this is the case, neither BENLATE nor any other benzimidazole- or thiophanate-type fungicide will effectively control that disease. Consider prompt use of other types of suitable fungicides.

Repeated, exclusive use of BENLATE may lead to buildup of resistant strains of fungi and loss of disease control. A spray program alternating BENLATE use with other fungicides may delay buildup of resistant strains. For guidance on your particular crop and disease control situation, consult your state extension specialist or official state recommendations.

Notes

Do not tank mix or alternate BENLATE with berzińudazole or thiophanate products such as Mertent' or Topsin<sup>2</sup>.

Do not use on greenhouse crops, including hydroponically grown crops.

Do not use on any container-grown crops.

Do not use on ornamentals.

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#### **CHEMIGATION**

Apply BENLATE only through sprinkler irrigation, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems only on beans, carrots, celery, cucurbits, peanuts, strawberries or tomatoes. Do not apply BENLATE to any other crops using chemigation.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide labelprescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### Specific Instructions for Public Water Systems

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tar', when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

#### Specific Instructions for Sprinkler Irrigation Systems

- 1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., disphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.
- 8. Good agitation is required in the injection tank.
- In moving systems, apply specified dosage of BENLATE as a continuous injection. In nonmoving systems inject BENLATE for 15 to 30 minutes at end of cycle. Use the least amount of water possible consistent with uniform coverage.
- 10. Mix the amount of BENLATE needed for acreage to b: treated into the quantity of water determined during prior calibration. For moving systems inject into the system continuously for one complete revolution of the field. For nonmoving systems inject into system for the time established during calibration.
- 11.Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all BENLATE is flushed from system.

#### SPRAY DRIFT MANAGEMENT

The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when r.al.i.g application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

#### **IMPORTANCE OF DROPLET SIZE**

The most effective way to reduce drift potential is to apply large dropl ts (>150 - 200 microns). The be, t drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. AFPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT

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WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVI-RONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

#### **Controlling Droplet Size - General Techniques**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

#### **Controlling Droplet Size - Aircraft**

- Number of Nozzles Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- Boom Length The boom length should not exceed 3/4 of the wing or rotor length - longer booms increase drift potential.
- Application Height Application more than 10 ft above the canopy increases the potential for spray drift.

#### **BOOM HEIGHT**

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

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Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID GUSTY AND WINDLESS CONDITIONS.

Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they effect spray drift.

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

#### TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

#### AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

#### AIR ASSISTED (AIR BLAST) TREE AND VINE SPRAYERS

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream.

In addition to the general drift management principles already described, the following specific practices will further reduce the potential for drift:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

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#### CROP/RATE TABLE

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| Сгор                         | Disease   | Limit<br>/Acre<br>/Crop  | Rate,<br>Minimum<br>Gallonage            | Application<br>Timing  | Last<br>Application<br>(days to<br>harvest) |  |
|------------------------------|---|--|--|--|---|--|
| limonds                      | Brown Rot Blossom Blight<br>(Monilinia)   | 48 oz<br>(3 lb)  | 16 to 24 oz/A<br>10 gal/A air            | Apply at pink bud. If needed, repeat during half<br>to full bloom or 10 days after initial application,<br>whichever comes first.                        | 80  |  |
|                              | 1   | -  |  | abeled nonbenzimidazole fungicide.<br>inieties, make a second application during half to   |   |  |
| Apples                       | See POME FRUITS.  |  | · • • • • • • • • • • • • • • • • • • •  |  |   |  |
| Apricots                     | See STONE FRUITS.   |  |  |  |   |  |
| Avocados<br>(FL and PR only) | Scab ( <i>Sphaceloma</i> )<br>Cercospora Spot<br>Anthracnose  | 96 oz<br>(6 lb)  | 16 to 32 oz/A<br>10 gal/A air            | Apply at bud swell. Repeat at 3 to 4 week intervals.   | 30  |  |
|                              | • Do not use BENLATE alone program with a labeled nonb  |  |  | combination or in an alternating application   |   |  |
| BEANS<br>Dry<br>Succulent    | White Mold ( <i>Sclerotinia</i> )<br>Gray Mold ( <i>Botrytis</i> )  | 64 oz<br>(4 lb)  | 24 to 32 oz/A<br>25 gal/A<br>3 gal/A air | Apply at initial bloom (25 to 50%). Repeat 7 to<br>10 days later.<br>Pacific NW: Apply prior to first petal fall/row fill.<br>Repeat 7 to 10 days later. | Dry/Snap<br>14<br>Other<br>Succulent        |  |
|                              | Anthracnose (except CA)   | 1  | 8 to 24 oz/A                             | ]  | 28  |  |
|                              | <ul> <li>May be used through irrigation systems.</li> <li>For narrow-row (20 to 40") plantings of irrigated dry beans in MT, NE, CO, WY, apply at initial bloom, and repeat 7 to 10 days later. BENLATE provides only partial control of white mold.</li> </ul> |  |  |  |   |  |
| Dry<br>(band spray)          | Vihite Mold (Sclerotinia)<br>Gray Mold (Botrytis)   | 64 oz<br>(4 lb)  | 32 oz/A<br>25 gal/A                      | Apply at 10 to 20% bloom.  |   |  |
|                              | For band sprays, a second application may be needed under heavy disease conditions. A 3-nozzle-per-row arrangement used at high pressure provides best results.   |  |  |  |   |  |
| Snap                         | Fusarium Root Rot   | 64 oz<br>(4 lb)  | 12 to 16 oz/A<br>15 gal/A                | Apply in-furrow at planting.   | NA*   |  |
|                              | BENLATE does not control Pythium sp.  |  |  |  |   |  |
| Blackberries                 | See CANEBERRIES.  |  |  |  | <u> </u>                                    |  |
| Blueberries                  | Botrytis Blossom Blight<br>Mummy Berry  | Before<br>harvest:<br>48 oz<br>(3 lb)<br>After harvest:<br>32 oz<br>(2 lb) | 16 oz/A<br>5 gal/A air                   | Apply at green tip. Repeat at 7 to 10 day intervals through petal fall.  | 21  |  |
|                              | Anthracnose Leaf Spot   | Totał:<br>80 oz<br>(5 lb)  |  | Apply when disease appears. Repeat 14 days later. After harvest, make ? applications at 14 day intervals as needed.                                      |   |  |
|                              | <ul> <li>Do not make more than 3 a</li> <li>Do not use BENLATE alone<br/>program with a labeled nonl</li> <li>Do not use on container-group</li> </ul>  | e in a spray progra<br>benzimidazole fut                                   | am. Use only in                          | est.<br>combination or in an alternating application   |   |  |
| Boysenberries                | See CANEBERRIES.  | · :  | RECI                                     |  | <u></u>                                     |  |
| Broccoli                     | See BRASSICA  |  |  |  | <b>F</b>                                    |  |

| Сгор   | Disease  | Limit<br>/Acre<br>/Crop  | Rate,<br>Minimum<br>Gallonage       | Application<br>Timing  | Last<br>Application<br>(days to<br>harvest) |  |  |
|--|--|--------------------------|-------------------------------------|--|---|--|--|
| Crop<br>BRASSICA<br>(seed crops)<br>Broccoli<br>Brussels Sprouts<br>Cabbaye<br>Chinese Cabbage<br>Cauliflower<br>Collard<br>Kale<br>Kohlrabi<br>Mustard Greens<br>Rutabagas<br>Turnips | Disease<br>White Mold (Sclerotinia)  | /Сгор<br>96 оz<br>(6 lb) | Gallonage<br>32 oz/A<br>5 gal/A air | Apply at first petal fall. Repeat at 14 day intervals.                             | harvest)<br>NA*                             |  |  |
|  | <ul> <li>Add a spreader sticker to aid</li> <li>Do not graze livestock in treat</li> <li>Do not use treated seed or p</li> </ul> | ated areas.              |                                     |  |   |  |  |
| BRASSICA<br>Brussels Sprouts   | White Mold ( <i>Sclerotinia</i> )<br>Gray Mold ( <i>Botrytis</i> )<br>Anthracnose<br>Ring Spot<br>• Do not make more than 3 ap   | 96 oz<br>(6 b)           | 32 oz/A<br>3 gal/A air              | Apply when disease appears. Repeat at 7 day intervals.                             | 7   |  |  |
| Chinese Cabbage  | White Mold (Sclerotinia)     Do not make more than 6 ap  | 48 oz<br>(3 lb)          | 8 oz/A                              | Apply when disease appears. Repeat at 7 to 10 day intervals.                       |   |  |  |
| Turnip Greens<br>(AL, AR, FL, GA,<br>KY, LA, MS, NC,<br>OK, SC, TN, TX,<br>VA only)  | Cercospora /<br>Cercosporella Leaf Spots<br>Anthracnose<br>Powdery Mildew ( <i>Erysiphe</i> )     Do not make more than 3 ap     | 24 oz<br>(1.5 lb)        | 8 oz/A<br>3 gal/A air               | Apply when disease appears. Repeat at 14-day intervals.                            | 14  |  |  |
| Brussels Sprouts   | See BRASSICA.  |                          |                                     |  |   |  |  |
| Cabbage  | See BRASSICA.  |                          |                                     |  |   |  |  |
| CANEBERRIES<br>Blackberries<br>Boysenberries<br>Dewberries<br>Loganberries<br>Raspberries  | Botrytis<br>Powdery Miłdew<br>Penicillium Rots   | 60 oz<br>(3.75 ib)       | 12 oz/A                             | Apply at 5 to 10% bloom.<br>Repeat at full bloom, followed by<br>14 day intervals. | 3   |  |  |
|  | Do not make more than 5 applications per crop per season.  |                          |                                     |  |   |  |  |
| Caprifigs<br>(mammae crop;<br>CA only)   | Endosepsis   | 4 oz<br>(0.25 llo)       | 4 oz/25 gal                         | Immerse figs into solution.  | NA .  |  |  |
| Carrots  | White Mold (Scierotinia)   | 48 oz<br>(3 lb)          | 4 to 16 oz/A<br>5 gal/A air         | Apply when disease appears. Repcat at 7 to 10-<br>day intervals.                   | • 4   |  |  |
|  | May be used through irrigati   | un systems.              |                                     |  |   |  |  |
| Cauliflower  | See BRASSICA.  |                          | B                                   | EST AVAILABLE C  | DPT   |  |  |

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| Сгор            | Disease   | Limit<br>/Acre<br>/Crop | Rate,<br>Minimum<br>Gallonage | Application<br>Timing   | Last<br>Application<br>(days to<br>harvest) |  |  |  |
|-----------------|---|-------------------------|-------------------------------|---|---|--|--|--|
| Celery          | Early Blight (Cercospora)   | 48 oz                   | 4 to 8 oz/A                   | Apply when disease appears. Repeat at 7 to 10   |   |  |  |  |
| UCICI Y         | Late Blight (Septoria)  | (3 lb)                  | 5 gaVA air                    | day intervals.  | ,   |  |  |  |
|                 | May be used through imigation   |                         | U Yain ai                     |   |   |  |  |  |
|                 |   | n systems.              |                               |   |   |  |  |  |
| Cherries        | See STONE FRUITS.   |                         |                               | · · · · · · · · · · · · · · · · · · ·   | L   |  |  |  |
| CITRUS          | Scab (Elsinoe)  | 96 oz                   | 24 to 48 oz/A                 | For light disease, apply once at 2/3 petal fall.  | 2   |  |  |  |
|                 |   | (6 lb)                  |                               | For heavy disease, apply at pinhead stage.<br>Repeat at 2/3 petal fall.                       |   |  |  |  |
|                 | Greasy Spot (Mycosphaerella)  |                         |                               | Apply once from mid-June to mid-July.   |   |  |  |  |
|                 | Fruit Decay (Green or<br>Blue Mold, Stern-end Rot)  |                         | 16 to 32 oz/A                 | Apply once from 3 weeks to 2 days before harvest.   |   |  |  |  |
|                 | with copper sprays.   | -                       | nbination with a la           | beled nonbenzimidazole fungicide or alternate   |   |  |  |  |
|                 | Do not graze livestock in trea  | ited groves.            |                               |   |   |  |  |  |
| Collard         | • S <del>ee</del> BRASSICA.   |                         |                               |   |   |  |  |  |
| CONIFERS        | Tip Blight (Diplodia)   | 48 oz                   | 16 oz/A                       | Apply at bud break. Repeat 10 to 14 days later,   | NA*   |  |  |  |
| (PINE)          |   | (3 lb)                  | 100 gaVA                      | just before needles emerge from sheath; repeat<br>again 10 to 14 days after needle emergence. |   |  |  |  |
| Austrian<br>Red |   |                         |                               | ayan tu tu 14 days and needle analyaide.  |   |  |  |  |
| Scots           |   |                         |                               |   |   |  |  |  |
| (FIR)           | Swiss Needle Cast   | 80 oz                   | 16 oz/A                       | Apply initially in early May. Repeat at 4 week  |   |  |  |  |
| Douglas         | (Phaecryptopus)   | (5 lb)                  | 50 gal/A                      | intervals.  |   |  |  |  |
|                 | Rhabdocline Needle Cast   |                         | <b>3</b>                      |   |   |  |  |  |
|                 | Add a spreader sticker to improve coverage.   |                         |                               |   |   |  |  |  |
|                 | Use minimum gallonage with mist-blower types of sprayers and higher gallonage with conventional sprayers.                             |                         |                               |   |   |  |  |  |
|                 | Do not graze livestock in treated areas.  |                         |                               |   |   |  |  |  |
| CONIFERS        | Brown Needle Blight (Scirrhia)  | NA"                     | 1 oz/9.5 oz                   | Wet seedling roots in clean water, then apply   | NA*   |  |  |  |
| (seedling       |   |                         | dry Kaolinite                 | BENLATE/Kaolinite mixture to wet roots.   |   |  |  |  |
| treatment)      |   |                         | clay for seedling roots       |   |   |  |  |  |
| Longleaf        |   |                         |                               |   |   |  |  |  |
| Lobioliy        | Fusarium and Rhizoctonia<br>Root Rot  |                         | 2 oz/50 oz<br>Kaolinite clay, | Thoroughly cover seedling roots with<br>BENLATE/Kaolinite slurry.                             |   |  |  |  |
| Longleaf        |   |                         | plus enough                   | DENLATE/RAURINE SIUTY.  |   |  |  |  |
| Slash           |   |                         | water to make                 |   |   |  |  |  |
|                 | a slurry  |                         |                               |   |   |  |  |  |
|                 | Do not apply mixture to seedling foliage.   |                         |                               |   |   |  |  |  |
|                 | <ul> <li>During the ment, avoid excessive drying of roots or exposure to temperatures greater than 90 % or less than 02 %.</li> </ul> |                         |                               |   |   |  |  |  |
|                 | BENLATE does not control /  | Pythium or Phyt         | ophthora.                     |   |   |  |  |  |
| Cucumbers       | See CUCURBITS.  | See CUCURBITS.          |                               |   |   |  |  |  |
| CUCURBITS       | Anthracnose (Colletotrichum)  | 32 oz                   | ground:                       | Apply when disease appears or when runners  | 1.1   |  |  |  |
| Cucumber        | Gummy Stern Blight  | (2 lb)                  | 4 to 8 oz/A                   | form. Repeat at 7 to 14 day intervals.  |   |  |  |  |
| Melon           | (Didymella)   | ]                       | 50 gal/A                      |   | · ·   |  |  |  |
| Pumpkin         | Powdery Mildew  | •                       | air:<br>8 oz/A                |   | ļ   |  |  |  |
| Squash          | Target Spot (Corynespora)   | ł                       | 5 gaVA                        |   | Ì   |  |  |  |
| (continued on   | To control Target Spot, the 7   | day intension in        |                               |   | 4   |  |  |  |
| next page)      |   |                         | COUNTEROPORU IOF              | тарсат ардикани « >   |   |  |  |  |
|                 | <ul> <li>May be used through imgation</li> </ul>  | лі зузіеть.             |                               |   | 1   |  |  |  |

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| Сгор                               | Disease   | Limit<br>/Acre<br>/Crop                  | Rate,<br>Minimum<br>Gallonage                            | Application<br>Timing  | Last<br>Applicatio<br>(days to<br>harvest) |  |  |
|------------------------------------|---|--|--|--|--|--|--|
| CUCURBITS<br>(continued)<br>Melons | Cephalosporium Wilt   | 8 oz<br>(0.5 lb)                         | 8 oz/A   | Apply in-furrow at planting.   | NA   |  |  |
|                                    | Do not use less than 10 gallo   | ins of solution pe                       | r acre.  |  |  |  |  |
| Currants                           | Powdery Mildew<br>(Sphaerotheca)  | 60 oz<br>(3.75 lb)                       | 12 oz/A  | Apply at early bloom. Repeat at full bloom, followed by 7 to 14 day intervals.   | 21   |  |  |
| Dandelions<br>(FL only)            | White Mold (Sclerotinia)  | 32 oz<br>(2 lb)                          | 8 oz/A   | Apply when disease appears. Repeat at 7 day intervals.   | 7  |  |  |
| Dewberries                         | See CANEBERRIES.  |  |  |  |  |  |  |
| Ar                                 | See CONIFERS.   |  |  |  |  |  |  |
| Garlic<br>(CA only)                | Penicillium Clove Rot   | 16 oz<br>(1 lb)                          | 16 oz/100 gal  | Completely immerse garlic cloves in<br>suspension for at least 5 minutes.  | NA*  |  |  |
|                                    | <ul> <li>Continuously agitate the solution</li> <li>After treatment, remove clow</li> <li>Dry cloves after treatment and</li> </ul>   | es from solution                         | and drain over sa  |  |  |  |  |
| Grapes                             | Eutypa Dieback  | NA"                                      | 3.2 oz/gal   | Paint or spray on immediately after pruning.   | NA*  |  |  |
|                                    | Apply immediately after prun  | ing—belore rain,                         | , dew, and spores  | come in contact with fresh wood.   |  |  |  |
|                                    | Botrytis Bunch Rot  | 96 oz<br>(6 lb)                          | 16 to 24 oz/A<br>15 gal/A air                            | Apply at first bloom (1 to 5%). Repeat 14 days<br>after first bloom. If conditions favor disease,<br>repeat again 14 days later. | 70   |  |  |
|                                    | Anthracnose (Elsinoe)   | 4  | 24 oz/A  | Apply at 4 to 10" shoot growth. Repeat at 10 to  | 1  |  |  |
|                                    | Isariopsis Leaf Spot  |  | 15 gal/A air   | 14 day intervals. After harvest, apply to vines at 4 week intervals.   |  |  |  |
| Grapes                             | Powdery Mildew (Uncinula)   | 1  | 12 to 24 oz/A  | Apply at foliar emergence. Repeat at   |  |  |  |
| (East of Rockies)                  | Black Rot ( <i>Guignardia</i> )<br>Bitter Rot ( <i>Melanconium</i> )  |  | 15 gal/A air   | 14 to 21 day intervals.  |  |  |  |
|                                    | <ul> <li>BENLATE does not control Rhizopus, Atternaria, or Diplodia Bunch Rots. These rots occur most frequently in high temperature areas such as the San Joaquin and Sacramento Valleys of California.</li> <li>Do not use BENLATE alone in a spray program. Use only in combination or in an alternating application program with a labeled nonbenzimidazole fungicide.</li> </ul> |  |  |  |  |  |  |
| Kale                               | See BRASSICA.   |  |  |  | <u> </u>                                   |  |  |
| Kohirabi                           | See BRASSICA.   |  |  |  |  |  |  |
| Loganberries                       | See CANEBERRIES.  |  |  |  | ╞╴═  |  |  |
| Macadamia Nuts<br>(HI only)        | Botrytis Blossom Blight   | 84 oz<br>(5.25 lb)                       | 28 oz/A  | Apply 7 to 14 days before bloom. Repeat at 7 to 14 day intervals through bloom.  | NA   |  |  |
|                                    | Do not make more 3 applica  | tions per season                         |  |  |  |  |  |
| Mangoes                            | Anthracnose   | 96 oz<br>(6 lb)                          | 16 to 32 oz/A  | Apply at panicle emergence (2"). Repeat at 7<br>day intervals through fruit set, followed by<br>3 to 4 week intervals.           | 14   |  |  |
|                                    | Do not use BENLATE alone in a spray program. Use only in combination or in an alternating application program with a labeled nonbenzimidazole fungicide.  |  |  |  |  |  |  |
| Melon                              | See CUCURBITS.  |  |  |  |  |  |  |
| Mushrooms<br>(Agaricus)            | Verticillium Spot (Dry Bubble)  | 4 uz<br>(0.25 lb)/<br>1000 sq<br>ft/crop | 16 oz/100 gal<br>(use 12.5 gal<br>per 1000 sq ft<br>bed) | New bed: Apply after casing. Repeat at<br>pinning.<br>Production bed: Apply after picking. Repeat 10<br>days later.              | <br> 2                                     |  |  |
| Mustard Greens                     | See BRASSICA.   |  |  |  |  |  |  |
| Nectarines                         | See STONE FRUITS.   |  |  |  | <u> </u>                                   |  |  |

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| Сгор                              | Disease   | Limit<br>/Acre<br>/Crop | Rate,<br>Minimum<br>Gallonage        | Application<br>Timing  | Last<br>Application<br>(days to<br>harvest) |  |  |
|-----------------------------------|---|-------------------------|--------------------------------------|--|---|--|--|
| Onions<br>(seed crop;<br>CA only) | Botrytis  | NA.                     | 16 oz/A                              | Apply when disease appears. Repeat at 7 day intervals.                               | NA"   |  |  |
|                                   | Do not use treated onions for   | food or feed.           |                                      |  |   |  |  |
| Oranges                           | See CITRUS.   | <u></u>                 |                                      |  |   |  |  |
| Papaya                            | Anthracnose<br>Powdery Mildew   | 96 oz<br>(6 lb)         | 16 to 32 oz/A                        | Apply at bud expansion. Repeat at 3 to 4 week intervals.                             | 14  |  |  |
| Peaches                           | See STONE FRUITS.   |                         | 1                                    | L  |   |  |  |
| Peanuts                           | Rust (Puccinia)   | 48 oz                   | 4 oz/A                               | Apply 35 to 40 days after planting or when   | 14  |  |  |
|                                   | Ascochyta Web Blotch  | (3 lb)                  | lb) 5 gal/A air                      | disease appears.<br>Rust: Repeat at 7 to   |   |  |  |
|                                   |   |                         |                                      | 10 day intervals.<br>Web Blotch: Repeat at<br>7 to 14 day intervals.                 |   |  |  |
|                                   | Blackhull (Thielaviopsis)   |                         | 4 oz/A                               | Apply in-furrow at p'anting.   | 1   |  |  |
|                                   | <ul> <li>Do not use BENLATE alone. Use only in combination with a labeled nonbenzin 'dazole fungicide such as DuPont MANZATE<sup>®</sup> 200 Fungicide at 1.5 ib per acre.</li> <li>May be used through irrigation systems.</li> <li>Do not graze livestock in treated areas or feed livestock treated vines, hay, or hulls.</li> </ul> |                         |                                      |  |   |  |  |
| Pears                             | See POME FRUITS.  |                         | CO NVCORUM DEDIC                     |  |   |  |  |
| Pecans                            | Scab (Fusicladium)  | 48 oz                   | 8 to 16 oz/A                         | Apply at bud break or leaf unfolding. Repeat at                                      | 15  |  |  |
|                                   | Brown Leaf Spot ( <i>Cercospora</i> )<br>Downy Spot ( <i>Mycosphaerella</i> )<br>Powdery Mildew<br>( <i>Microsphaera</i> )<br>Liverspot<br>Zonate Leaf Spot<br>Fungal Leaf Scorch   | (3 lb)                  | 10 gal/A air                         | nut formation and 3 to 4 week intervals thereafter.                                  |   |  |  |
|                                   | <ul> <li>Do not use BENLATE alone in a spray program. Use only in combination or in an alternating application<br/>program with a labeled nonbenzimidazole lungicide.</li> </ul>  |                         |                                      |  |   |  |  |
|                                   | Use the higher treatment rate   |                         | 30 ft tall.                          |  |   |  |  |
|                                   | Spray oils may be added to the tank mix.  |                         |                                      |  |   |  |  |
|                                   | Do not apply after shuck split.   |                         |                                      |  |   |  |  |
| Pine                              | See CONIFERS.   |                         |                                      | <u></u>  | <u> </u>                                    |  |  |
| Pineapple<br>(seed piece)         | Pineapple Butt Rot<br>( <i>Thielaviopsis paradoxa</i> )   | NA*                     | 20 oz/100 gal                        | Immerse seed pieces in solution and wet thoroughly; remove and allow to drain.       | NA*   |  |  |
| Pistachio<br>(CA only)            | Shoot Blight (Botrytis,<br>Botrycsphaeria)  | 32 oz<br>(2 lb)         | 24 to 32 oz/A<br>100 gal/A           | Apply at first bloom.  | NA*   |  |  |
| Plums                             | See STONE FRUITS.   |                         |                                      |  | T   |  |  |
| POME FRUITS                       | Scab (Venturia)   | 80 oz                   | 6 to 12 oz/A                         | Apply at 1/2" green tip. Repeat at 7 to 14 day                                       | 14  |  |  |
| Apples                            | Powdery Mildew<br>( <i>Podosphaera</i> )  | (5 lb)                  | 2 to 3 oz/100<br>gal dilute<br>spray | intervals.   |   |  |  |
|                                   | Fly Speck ( Schizothyrium)<br>Sooty Blotch ( Gloeodes)  | 1                       |                                      | Apply at petal fall, or when disease threatens.<br>Repeat at 14 to 21 day intervals. | -1 ·<br>                                    |  |  |
|                                   | Black Rot ( <i>Botryosphaeria</i> )<br>Fruit Rots   |                         | 6 oz/100 gal                         | Apply once 2 to 3 weeks before harvest.  |   |  |  |
| (continued on                     | (Botrylis spp.,<br>Penicillium spp.,<br>Gloeosporium spp.)  |                         |                                      |  |   |  |  |

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|   | Сгор                  | Disease  | Limit<br>/Acre<br>/Crop              | Rate,<br>Minimum<br>Gallonage        | Application<br>Timing  | Applicatio<br>n<br>(days to<br>harvest) |  |  |
|---|-----------------------|--|--------------------------------------|--------------------------------------|--|---|--|--|
|   | POME FRUITS           | Scab (Venturia)  | 80 cz                                | 12 to 24 oz/A                        | Apply at 1/2" green tip. Repeat at 7 to 14   | 14                                      |  |  |
|   | (continued)<br>Pears  | Powdery Mildew<br>(Phyllactinia)   | (5 lb)                               |                                      | day intervals.   |   |  |  |
|   |                       | Fly Speck<br>Sooty Blotch  |                                      | 4 to 6 oz/100<br>gal dilute<br>spray | Apply at petal fall or when disease threatens.<br>Repeat at 14 to 21 day intervals.  |   |  |  |
|   |                       | . ruit Rots<br>(Botrytis spp.,<br>Penicillium spp.,<br>Gloeosporium spp.)  |                                      | 6 oz/100 gal                         | Apply once 2 to 3 weeks before harvest.  |   |  |  |
|   |                       | program with a labeled non   | benzimidazole i<br>ditions or on dis | ungicide.                            | n combination or in an alternating application<br>varieties, use higher treatment rates and                                  |   |  |  |
| ) |                       | oil spray. (Apples)  |                                      |                                      | rtner immediately before or closely following an   |   |  |  |
|   |                       | <ul> <li>Do not graze livestock in t</li> </ul>  | reated orchards                      |                                      |  |   |  |  |
|   | Prunes                | See STONE FRUITS.  |                                      |                                      |  |   |  |  |
|   | Pumpkin               | See CUCURBITS.   |                                      |                                      |  |   |  |  |
|   | Raspberries           | See CANEBERRIES.   |                                      |                                      |  | <u></u>                                 |  |  |
|   | Rice<br>(excludes CA) | Steath Blight (Rhizoctonia)  | 64 oz<br>(4 lb)                      | 16 to 32 oz/A<br>3 gal/A air         | Scout at 1/2" internodes, spray at 5 to 15% infection. Repeat 10 to 14 days later.   | 21                                      |  |  |
|   |                       | Plast (Pyricularia)  |                                      |                                      | Apply at late boot stage (just prior to head<br>emergence). Repeat 7 to 10 days later or at<br>90% head emergence from boot. |   |  |  |
|   |                       | Stem Rot (Sclerotium)  |                                      |                                      | Apply between 1/2 to 3/4" internodes and   |   |  |  |
|   |                       | Narrow Brown Leaf Spot<br>(Cercospora)   |                                      |                                      | late booting. Repeat 14 days later.  |   |  |  |
|   | ł                     | Leaf Smut (Entyloma)   |                                      |                                      |  |   |  |  |
|   | Ì                     | Sheath Rot (Acrocylindrium)  |                                      |                                      |  |   |  |  |
|   |                       | <ul> <li>To ensure adequate coverage when disease is severe, use higher treatment rates, higher gallonage, and<br/>make additional BENLATE applications.</li> </ul>  |                                      |                                      |  |   |  |  |
|   |                       | <ul> <li>The most effective way to control Blast is to use BENLATE in a preventive treatment program. Visual symptoms of Blast may not appear on rice until 4 to 7 days after infection occurs. Field scouting is highly recommended.</li> </ul> |                                      |                                      |  |   |  |  |
|   |                       | <ul> <li>Do not apply to fields where crayfish or catfish are farmed.</li> </ul>   |                                      |                                      |  |   |  |  |
|   |                       | Do not drain treated water   | into fields whe                      | re craylish or ca                    | tfish are farmed.  |   |  |  |
|   |                       | Do not use treated water   | to irrigate other                    | crops.                               |  | · : ·                                   |  |  |
|   |                       | Do not apply to stubble rice.  |                                      |                                      |  |   |  |  |
|   |                       | <ul> <li>BENLATE is toxic to fish. Keep out of lakes, streams, or ponds. Do not apply when weather conditions favor drift from treated areas.</li> </ul>   |                                      |                                      |  |   |  |  |
|   |                       | BENLATE is toxic to fish. I  |                                      | s, streams, or po                    | onds. Do not apply when weather conditions   |   |  |  |

| Сгор  | Disease                                 | Limit<br>/Acre<br>/Crop   | Rate,<br>Minimum<br>Gallonage     | Application<br>Timing   | Last<br>Application<br>(days to<br>harvest) |  |  |  |
|---|---|---|-----------------------------------|---|---|--|--|--|
| SEED CROPS<br>(grown for seed;<br>CA only)<br>Anise | Powdery Mildew                          | NA*   | 16 oz/A<br>5 gal/A air            | Apply when disease appears. Repeat at 7 to 14 day intervals.  | NA*   |  |  |  |
| Brussels Sprouts                                    |   |   |                                   |   |   |  |  |  |
| Cabbage   |   |   |                                   |   |   |  |  |  |
| Cardoon   |   |   |                                   |   |   |  |  |  |
| Cauliflower   |   |   |                                   |   |   |  |  |  |
| Chickory  |   |   |                                   |   |   |  |  |  |
| Com   |   |   |                                   |   |   |  |  |  |
| Cucumbers   |   |   |                                   |   |   |  |  |  |
| DW  |   |   |                                   |   |   |  |  |  |
| Melons  |   |   |                                   |   |   |  |  |  |
| Peas  |   |   | 1                                 | 1   |   |  |  |  |
| Peppers, Bell<br>Squash                             |   |   |                                   |   |   |  |  |  |
|   | Do not use treated seed or pl           | Do not use treated seed or plant parts for food or feed.                        |                                   |   |   |  |  |  |
| Soybeans  | Diaporthe Pod and Stern Blight          | 16 oz   | 8 to 16 oz/A                      | Apply at early pod set (pods 1/8 to 1/4" long at  | 35  |  |  |  |
| (seed or fond                                       | Anthracnose (Glomerella)                | (1 lb)  | 5 gal/A air                       | 1 of 4 main stem upper nodes). Repeat 14 to 21 days later (as needed).  |   |  |  |  |
| сгор)   | Septoria Brown Spot                     |   |                                   |   |   |  |  |  |
|   | Frogeye Leaf Spot                       |   |                                   |   |   |  |  |  |
|   | (Cercospora)                            |   |                                   |   |   |  |  |  |
|   | Purple Seed Stain                       |   |                                   |   |   |  |  |  |
|   | Aerial Blight (Rhizoctonia)             |   | 16 oz/A                           | Apply when disease threatens.   |   |  |  |  |
|   |   | [   | 5 gaVA air                        | <u> </u>  |   |  |  |  |
|   |   | Do not graze livestock in treated areas or feed livestock treated vines or hay. |                                   |   |   |  |  |  |
| Squash  | See CUCURBITS.                          |   |                                   |   |   |  |  |  |
| STONE FRUIT   | Brown Rot Blossom Blight<br>(Monilinia) | 64 oz<br>(41b)  | East of<br>Rockies:               | Apply at early bloom before infection occurs.   | 3   |  |  |  |
| Apricots  | Powdery Mildew                          |   | 16 to 32 oz/A                     | Apricots: early red bud   |   |  |  |  |
| Nectarines  | Peach Scab (Venturia)                   |   | West of                           | Peaches/Nectarines: pink bud  |   |  |  |  |
| Peaches   | (                                       |   | Rockies:<br>24 to 32 oz/A         | Plums/Prunes: green tip<br>Planser Plicht:  |   |  |  |  |
| Plums   |   |   | 10 gal/A air                      | Blossom Blight:<br>Repeat at full bloom or 10 days later.   |   |  |  |  |
| Prunes  |   |   | i gain an                         | Powdery Mildew or Peach Scab:<br>Repeat at full bloom or 10 days later. At shuck<br>fall and 14 days later use a nonbenzimidazc'e<br>fungicide. |   |  |  |  |
|   | Fruit Brown Rot (Monilinia)             |   |                                   | Apply 3 to 21 days before harvest. Use additional nonbenzimidazole sprays as needer:  | 1· · · · · · · · · · · · · · · · · · ·      |  |  |  |
| Plums<br>Prunes                                     | Black Knot ( Dibotryon)                 |   | 12 to 24 oz/A<br>10 gal/A air     | Apply at early bloom (green tip). Repeat at 7 to 10 day intervals through mid-June.   | 1. <i>•</i> ,<br>, , ,                      |  |  |  |
| Peaches   | Cytospora Canker                        | NA  | 2 Tbsp/16 oz<br>wound<br>dressing | As a wound dressing, apply to pruned or cut surface.  | NA*   |  |  |  |
| (continued on                                       |   | L   |                                   | l   | 1   |  |  |  |
| next page)  |   | SEE   | NOTES ON NEX                      | TPAGE   | 1   |  |  |  |

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| Сгор                                   | Disease   | Limit<br>/Acre<br>/Crop                               | Rate,<br>Minimum<br>Gallonage  | Application<br>Timing  | Last<br>Application<br>(days to<br>harvest) |  |  |
|--|---|---|--|--|---|--|--|
| STONE FRUIT<br>(continued)<br>Cherries | Brown Hot Blossom Blight<br>( <i>Monilinia</i> )<br>Powdery Mildew<br>Cherry Leaf Spot<br>( <i>Mycosphaerella</i> )   | 96 oz<br>(6 lb)                                       | East of<br>Rockies:<br>16 to 32 oz/A<br>West of<br>Rockies:<br>24 to 32 oz/A<br>10 gal/A air | Apply at early popcorn stage.<br><u>Biossom Blight:</u><br>Repeat at full bloom or 10 days later.<br><u>Powdery Mildew:</u><br>Repeat at full bloom or 10 days later. At shuck<br>fall and 14 days later use a nonbenzimidazole<br>fungicide.<br><u>Cherry Leaf Suot:</u><br>Repeat at 10 to 14 day intervals; make one<br>application 2 to 3 weeks after harvest. | 3   |  |  |
|  | Fruit Brown Rot  Do not use BENI ATE along i  | n a sorav nimor                                       | am. Use only in c  | Apply 3 to 21 days before harvest.<br>combination or in an alternating application   |   |  |  |
|  | <ul> <li>program with a tabeled nonbole</li> <li>For aerial application, fly over</li> <li>BENLATE does not control P and Alternaria spp.</li> <li>Do not graze livestock in treat</li> <li>BENLATE is not labeled for I</li> </ul> | r every row or o<br>leach Leaf Curl<br>ited orchards. | enter.<br>, Shot Hole, bacte   | rial Blast, or fruit rots caused by <i>Rhizopus</i> spp.<br>puntains.  |   |  |  |
| Strawberries                           | Powdery Mildew<br>Leaf Scorch<br>Leaf Blight<br>Mycosphaerella Leaf Spot  | 80 oz<br>(5 lb)                                       | 8 to 16 oz/A<br>10 gal/A air   | Apply at 16 oz/A at 10% bloom and at full<br>bloom. Repeat at 8 oz/A at 10 to 14 day<br>intervals  | 1   |  |  |
|  | Anthracnose   |   | 16 oz/A<br>10 gal/A air  | Apply when plants are established. Repeat at 7 day intervals.  |   |  |  |
|  | <ul> <li>Do not use BENLATE alone in a spray program. Use only in combination or in an alternating application program with a labeled nonbenzimidazole fungicide.</li> <li>May be used through irrigation systems.</li> </ul>       |   |  |  |   |  |  |
| Tomatoes                               | Gray Mold (Botrytis)<br>Leaf Mold (Cladosporium)<br>White Mold (Sclerotinia)<br>Cercospora Leaf Spot<br>Phoma Leaf Spot<br>Target Spot (Corynespora)  | 80 oz<br>(5 lb)                                       | 8 to 16 oz/A<br>50 gal/A<br>5 gal/A air  | Apply when disease appears. Repeat at 7 to 14 day intervals.   | 1   |  |  |
|  | <ul> <li>Do not use BENLATE alone in a spray program. Use only in combination or in an alternating application<br/>program with a labeled nonbenzimidazole fungicide.</li> </ul>  |   |  |  |   |  |  |
| Turnips and Turnip<br>Greens           | May be used through irrigation     See BRASSICA.  | n systems.  | <u></u>  |  |   |  |  |
| Wheat                                  | Strawbreaker Foot Rot<br>( <i>Pseudocercosporella</i> )   | 48 oz<br>(3 lb)                                       | 12 to 32 oz/A<br>15 gal/A<br>5 gal/A air   | Apply once at full tillering but before elongation.  | 21  |  |  |
|  | Where resistance is suspected or known to exist, do not use BENLATE alone. Use only in combination with a nonbenzimidazole fungicide.   |   |  |  |   |  |  |
|  | Do not allow livestock to gra.     Powdery Mildew (Erysiphe)     Leaf Rust (Puccinia)     Helminthosporium Leat Blight  | ze in treate.<br>48 oz<br>(3 lb)                      | ds<br>4 to 8 oz/A<br>15 gal/A<br>5 gal/A air   | Apply at boot stage to early heading. Repeat<br>14 days later  |   |  |  |
| (continued on next page)               | For effective control of these keep the flag leaf free of disc  |   | mix with 16 to 32  | oz/A of MANZATE 200 Time the applications to   | 1   |  |  |

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| Сгор  | Disease   | Limit<br>/Acre<br>/Crop  | Rate,<br>Minimum<br>Gallonage     | Application<br>Timing  | Last<br>Application<br>(days to<br>harvest) |
|---|---|--|-----------------------------------|--|---|
| (continued)<br>Powdery Mil<br>Leaf Rust<br>• For effect | Septoria Leaf<br>Glume akotch<br>Powdery Mildew (Erysiphe)<br>Leaf Rust | 48 oz<br>(3 lb)  | 4 oz/A<br>15 gal/A<br>5 gal/A air | Apply at boot stage. Repeat 14 days later.                   | 21  |
|   | For effective control of these the flag leaf free of disease.           | For effective control of these diseases, tank mix with 2 to 4 oz/A of Bayleton <sup>4</sup> . Time the applications to keep the flag leaf free of disease. |                                   |  |   |
| Yams<br>(PR only)                                       | Antoracnose (Colletotrichum)  | 96 oz<br>(6 lb)  | 16 to 32 oz/A                     | Apply when disease appears. Repeat at 3 to 4 week intervals. | 90  |

#### SEED TREATMENT TABLE

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| Сгор  | Disease   | Rate   | Application<br>Timing               | Further Use Information   |
|---|---|--|-------------------------------------|---|
| Beans, Snap   | Fusarium Root Rot   | 6 oz/50 lb seed                                    | Apply dry in planter<br>box.        | All Crops:<br>• Label treated seed as follows: "Do not use treated<br>seed for food, feed, or oil purposes. This seed<br>treated with BENLATE Fungicide."   |
|   | BENLATE does not contr  | ol Pythium sp.                                     |                                     | Dry Treatment:  |
| BRASSICA<br>Broccoli<br>Brussels Sprouts<br>Cabbage<br>Chinese Cabbage<br>Cauliflower<br>Collard<br>Kale<br>Kohlrabi<br>Mustard Greens<br>Rape (Canola)<br>Rutabagas<br>Turnips | Seed-borne Blackleg<br>( <i>Phorna</i> )                            | 8 oz/100 lb seed in<br>1/2 to 3 pt water           | Use slurry<br>treatment.            | <ul> <li>Sprinkle BENLATE over the seed surface, and stir<br/>until seed is thoroughly covered.</li> <li>Slurry Treatment:</li> <li>Make a slurry of EENLATE in sufficient water to<br/>uniformly treat seed.</li> <li>Use a slurry-type treater specifically designed and<br/>approved for this purpose.</li> <li>Allow seeds to dry before planting; seeds may be<br/>planted any time after being well cured.</li> </ul> |
|   | An EPA-approved dye that i<br>must be used with the treatr          |  | for to the treated seed             |   |
| Chickpeas<br>(ID and WA only)   | Seed-borne<br>Ascochyta rabiei                                      | 10 oz/100 lb seed<br>in 1/3 to 1/2 pt<br>water     | Use slurry<br>treatment.            |   |
|   | BENLATE does not control  | soil-borne Ascochyta.                              |                                     |   |
| Spinach   | Fusarium Wilt   | 16 to 32 oz/100 lb<br>seed in 1/2 to 2 pt<br>water | Use slurry<br>treatment.            |   |
| Wheat, Barley,<br>Oats, Fiye  | Bunt and Common Bunt<br>Flag Smut, Loose Smut,<br>and Covered Smut. | 1 to 2 oz/bushel<br>seed                           | Use either dry or slurry treatment. |   |
|   | Do not allow livestock to gra                                       | ize on plants grown froi                           | n treated seed.                     | 1   |

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#### STORAGE AND DISPOSAL

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

**STORAGE:** Never allow "Benlate" to become wet during storage. This may lead to certain chemical changes which will reduce the effectiveness of "Benlate" as a fungicide. Keep container tightly closed when not in use. Store product in original container only.

**PRODUCT DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**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.

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#### NOTICE OF WARRANTY

DuPont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with the 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 DuPont. In no case shall DuPont be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. DUPONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

- 1 Registered trademark of Merck & Company.
- 2 Registered trademark of Nippon Soda Company, Japan.
- 3 Rregistered trademark of Drexel Chemical Co.
- 4 Registered trademark of Bayer AG, Germany.

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#### AGRICULTURAL PRODUCTS

"...... A Growing Partnership With Nature"



SUPPLEMENTAL LABELING

BENLATE<sup>•</sup> FUNGICIDE FOR THE SUPPRESSION OF ANTHRACNOSE (PFD) ON CITRUS

### **BENLATE® FUNGICIDE**

(EPA REG. NO. 352-354)

#### FOR THE SUPPRESSION OF ANTHRACNOSE (POSTBLOOM FRUIT DROP - PFD) ON CITRUS

#### **DIRECTIONS FOR USE**

Apply DuPont "Benlate" Fungicide at  $1 \frac{1}{2} - 2$  lbs per acre. Complete coverage of the entire tree is necessary for maximum suppression of PFD. Application can be made by ground using sufficient water to obtain thorough coverage or by air (using fixed wing aircraft or helicopter).

For air applications apply between 15 and 30 gallons of final spray per acre. Agitation is required during mixing and spraying. Fly every tree row middle in alternate directions. Do not fly a race track pattern. Do not fly an across tree row pattern.

At least 2 applications should be made for optimum results.

Make the first application at early bloom when significant PFD infestations exist and weather conditions are favorable for further disease development. The second application should be made 7 - 14 days after depending on disease and weather conditions. Under severe disease pressure and/or warm, wet weather conditions, the interval between the first and second application should be shorter (7 days). If disease and weather conditions continue to promote further spread of PFD, additional application may be necessary.

Do not exceed 6 lbs of "Benlate" per acre per season. Do not apply within 2 days of harvest.

"Benlate" provides suppression of PFD, complete suppression is not obtainable due to the nature of the disease. The level of suppression obtained will be influenced by disease severity, weather conditions, and spray coverage.

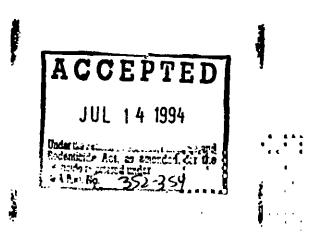
#### IMPORTANT

BEFORE USING "BENLATE", READ AND FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAU-TIONS ON THE EPA REGISTERED LABEL.

This bulletin contains new or supplemental instructions for use of this product which do not appear on the EPA registered package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

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