

CIBA-GEIGY

Ridomil®

2E

One Gallon
U.S. Standard Measure
FUNGICIDE

For the control of certain diseases in various crops caused by the Oomycete class of fungi

Active Ingredient: Metalaxyl, N-(2,6-dimethylphenyl)-N-methylacetaldimine methylester 51.5%

Inert Ingredients 48.5%

Total 100.0%

Ridomil 2E contains 2.5% active ingredient per gallon

EPA Reg. No. 100-1017 EPA Est. 100-AL-1

**KEEP OUT OF REACH OF CHILDREN
WARNING/AVISO**

KEEP AWAY FROM ALCOHOL. Do not drink, smoke, or use in the presence of children or animals. Do not breathe vapors. See label for first aid, fire, spill, and disposal instructions and directions for use.

← PULL HERE TO OPEN

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. Terms are final. Do not use this product if you do not agree to these terms.

Conditions of Sale and Warranty

The Directions for Use and the Conditions of Sale and Warranty are printed on this label. The directions, the label, and the Directions for Use and the Conditions of Sale and Warranty are to be read in conjunction with the product label. The use of this product in conjunction with other chemical or biological products may result in a synergistic effect. It is the user's responsibility to determine the proper manner of use or application in which are being used. The use of this product is subject to the terms and conditions of sale and warranty 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 Directions for Use, subject to the limitations referred to above. **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 or 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.

DIRECTIONS FOR USE

This is a systemic fungicide for use on several crops to control certain diseases caused by members of the Oomycete class of fungi. Other fungicides must be used to control diseases not caused by other classes of fungi.

REENTRY STATEMENTS

For information on reentry restrictions, see the label for this product. For more information on reentry restrictions, see the label for this product. For more information on reentry restrictions, see the label for this product.

When this is used on several crops to control certain diseases caused by members of the Oomycete class of fungi. Other fungicides must be used to control diseases not caused by other classes of fungi. This product is not to be used in foliar applications unless specified on this label or in solutions used to dip plants. Do not use in nurseries, turf, or landscape plantings unless specified in this label.

General Information

Ridomil is a systemic fungicide for use on several crops to control certain diseases caused by members of the Oomycete class of fungi. Other fungicides must be used to control diseases not caused by other classes of fungi.

THIS PRODUCT IS NOT TO BE USED IN FOLIAR APPLICATIONS UNLESS SPECIFIED ON THIS LABEL OR IN SOLUTIONS USED TO DIP PLANTS. DO NOT USE IN NURSERIES, TURF, OR LANDSCAPE PLANTINGS UNLESS SPECIFIED IN THIS LABEL.

Note: Ridomil is a systemic fungicide having a specific mode of action and could be subject to development of resistant strains of fungi. Development of resistant strains is a possibility. Therefore, CIBA-GEIGY cannot assume liability for crop damage resulting from use of resistant strains of fungi. If resistant strains are present, the use of this product may be less effective. The use of this product should be limited to those crops and diseases for which it is specifically labeled. For more information on reentry restrictions, see the label for this product.

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NOT REVIEWED
In Accordance with IR Notice 82-2.
EPA Reg. No. 100-1017, Dated 11-9-91

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Mixing Instructions

Add one fourth to one half of the required amount of water to the spray tank. Add the proper amount of Ridomil 2E. Then add the rest of the water. When tank mixing other products with Ridomil 2E, follow the proper sequence of adding products to the spray tank. Wettable powders or water dispersible granules should be added to the water in the tank first, followed by flowable products with emulsifiable concentrates, such as Ridomil 2E, added last. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Ridomil 2E is usually compatible with Balan[®], Bravo[®], Dasanit[®], Di-Syston[®], Dithane[®] M 22, Dithane M 45, Dasanit[®], Nemacur[®], Dasanit[®], Dazox[®], Difolatan[®], Ende[®], Furadan[®], Manzate[®], Manzate 2G, Mocap[®], Mocap Plus 4 2EC, Paalan[®], Terracot[®] 2E, Terracot 75W, and Tillam[®].

To assure the compatibility of Ridomil 2E with these and other products, pour the products into a small container of water in the correct proportions. After thorough mixing, let stand for five minutes. If the combination remains mixed, or can be remixed readily, the mixture is compatible.

For banded applications, the area actually is the area covered by the band, not total cropland area planted. Some row-crop recommendations are based on treating in the row and these rates generally are specified as amounts (fluid ounces) of product per certain row length (often 1,000 feet). Others express rates as amount per treated acre which means the total area treated with the pesticide. If rates are expressed as amount per treated acre and banded applications are used, the amount of pesticide used per acre will be proportionately less. The following formula can be used to calculate the amount of Ridomil 2E needed per acre of crop when banded applications are made.

Calculate the amount of Ridomil 2E needed for band treatment by the formula

$$\frac{\text{band width in inches}}{\text{row spacing in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

Application Instructions

Apply Ridomil 2E by ground or air in sufficient water or liquid fertilizer to provide uniform coverage of the soil surface. Apply in a minimum of 20 gallons/A for ground applications and 5 gallons/A by air. Refer to the specific crop directions for use for application recommendations.

BEFORE TANK MIXING RIDOMIL 2E WITH OTHER REGISTERED PRODUCTS FOR ANY USE ON THIS LABEL, READ THE LABEL OF THE TANK MIX PARTNER TO BE CERTAIN IT IS LABELED FOR USE ON THE PARTICULAR CROP AND THAT USE PATTERNS ARE COMPATIBLE WITH THOSE OF RIDOMIL 2E.

Application Through Irrigation Systems

Ridomil 2E, alone or in combination with other pesticides, which are registered for application through irrigation systems, may be applied through irrigation systems. Apply this product only through center pivot, solid set, moving wheel, micro-sprinkler or drip irrigation systems. Do not apply this product through any other type of irrigation system. 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 (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed 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.

Operating Instructions

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 siphonage and contamination from backflow.
2. 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, check and operated valve, located on the intake side of the injection pump, and connected to the system in a manner 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. diaphragm 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.

Application Instructions

Ridomil 2E must be applied on the schedule specified in the specific crop use recommendations, not according to the irrigation schedule.

With the exception of avocados and citrus, Ridomil 2E has not been sufficiently tested when applied through irrigation systems to assure consistent product performance for all labeled uses. The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler or drip irrigation equipment. Users must check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler or drip irrigation equipment.

Note: Do not inject Ridomil 2E at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 10 parts water to 1 part Ridomil 2E. Ridomil 2E is corrosive to many natural materials. Leather seals are best. EPDM or nitrile rubber seals can be used, but should be replaced once a year. Do not use Viton, Buna-N, neoprene or PVC seals.

Center Pivot Irrigation Equipment (Use only wheel drive systems which provide uniform water distribution)

- Determine the size of the area to be treated.
- Determine the time required to apply 1/2 1-inch of water over the area to be treated when the system and injection equipment are operated at normal pressures recommended by the equipment manufacturer. Run the system at 80-95% of the manufacturer's rated capacity.
- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Ridomil 2E required to treat the area covered by the irrigation system.
- Add the required amount of Ridomil 2E and sufficient water to meet the injection time requirements to the solution tank.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the Ridomil 2E solution has cleared the sprinkler head.

Solid Set and Moving Wheel Irrigation Equipment

- Determine the acreage covered by the sprinklers.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20 to 30-minute interval.
- Determine the amount of Ridomil 2E required to treat the area covered by the irrigation system.
- Add the required amount of Ridomil 2E into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Inject Ridomil 2E at the end of the irrigation cycle at 1/2 1-inch of water or as a separate application to maximize the effectiveness of the fungicide.
- Stop injection equipment after treatment is completed. Continue to operate the system until the Ridomil 2E solution has cleared the last sprinkler head.

Micro-Sprinkler or Drip Irrigation Systems

General Instructions

- Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters in the system are putting out the same amount of water.
- Only pressure injection or venturi equipment is recommended.
- Determine the area to be treated in each irrigation run.
- Measure the output of each of the emitters or nozzles closest to and farthest from the injector.
- For calibration, substitute a concentrated detergent, such as W-Sol or a soluble fertilizer for the Ridomil 2E in the injector tank. The detergent will clog the emitters. The time period over which this occurs should be checked for both the closest and farthest emitters. If these times are not within two minutes of each other, adjust the dilution ratio and of the injection rate.
- If a soluble fertilizer is used, measure the time intervals with a salt bridge. If a drip system, size and calibrate, substitute soluble fertilizer for the Ridomil 2E in the injector and measure the time intervals with a salt bridge.

Step by Step Instructions

- Refer to the local state regulations for the system until all the emitters are putting out an equal flow rate or until the system is operating at full pressure.
- Make up an indicator solution in a detergent or fertilizer using the same ratio to be used when injecting Ridomil 2E.
- Set the injector to apply the indicator solution at the injection rate to be used on each Ridomil 2E application.
- Attach a 5-inch length of flexible tubing over the emitter closest to the injector and place the indicator solution in the emitter furthest away from the injector. Use the time interval to determine the time intervals that the indicator solutions are observed.
- Begin injecting the indicator solution. Direct the flow from the tubes at the emitters into a mail container. Begin timing when the indicator solution is first detected, stop timing when the indicator solution is no longer detected.
- If the period of detection of the indicator solution between the two emitters are within two minutes of each other, comparable coverage will be obtained. If they are not, make adjustments by increasing the dilution ratio using more water per part of Ridomil 2E, or adjust the injector to a slower flow rate.
- Once the system is calibrated, dilute the needed amount of Ridomil 2E with water using a minimum of 10 parts water to 1 part Ridomil 2E.
- Do not begin to inject Ridomil 2E into the system until all emitters are producing equal flow rates or until the system is at full pressure.
- Inject the Ridomil 2E into the system at the end of the irrigation set at 1/2 1-inch of irrigation water.

Alfalfa

Ridomil 2E applied to the soil at planting will provide control of damping-off caused by *Fusarium* spp. and root rot caused by *Phytophthora* spp.

Stand Establishment

Apply 1 to 2 1/2 lbs/A as a broadcast surface spray at planting in a minimum of 20 gals. of water or following micro-sprinkler or drip.

For alfalfa seed produced with a mechanical seed treatment, use 1 to 1 1/2 lbs/A at planting. For alfalfa seed produced with a chemical seed treatment, use 1 to 1 1/2 lbs/A at planting. Use the fungicide only if the seed is not treated with a fungicide.

Note: Do not apply to alfalfa seed produced with a mechanical seed treatment if the seed is not treated with a fungicide.

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Ridomil® 2E

Apples (Bearing and Non-bearing Trees)

Use of Ridomil 2E will aid in the control of crown collar and root rot caused by *Phytophthora* spp. when used in conjunction with good cultural practices and rootstocks that are most tolerant to the disease. Ridomil 2E applications should be made before symptoms appear, especially in areas of the orchard favorable for disease development. Ridomil 2E will not revitalize trees showing moderate to severe disease symptoms.

Broadcast Spray or Banded Applications: Apply 2 gals./treated acre as a broadcast spray (6 fl. oz./1,000 sq. ft.) in sufficient water to obtain thorough coverage. The treated area is based on the area under the tree canopy or the area of the sprayed row. Soil surface sprays of Ridomil 2E will not be effective until the fungicide is moved into the root zone by rainfall or irrigation. Applications should be made in early spring before growth starts and in the fall after harvest but before the ground freezes.

Drench: Mix 1 qt. of Ridomil 2E with 100 gals. of water. Apply the amount of diluted mixture indicated in the table below around the trunk of each tree. Applications should be made in early spring before growth starts and in the fall after harvest but before the ground freezes. On new plantings, delay the first application until two weeks after planting.

Note: To determine trunk diameter, measure the trunk 12 inches above the soil line.

| Trunk Diameter | Qts. of Diluted Mixture/Tree |
|----------------|------------------------------|
| < 1 inch | 1 qt. |
| 1-3 inches | 2 qts. |
| 3-5 inches | 3 qts. |
| > 5 inches | 4 qts. |

Notes: (1) Do not dip roots of trees in or spray bare roots with solutions containing Ridomil 2E. (2) Do not graze or feed cover crops in treated orchards, or illegal residues may occur.

Asparagus

Ridomil 2E will control crown rot and spear rot caused by *Phytophthora* spp.

Apply 2 qts./A as a broadcast spray in a minimum of 10 gals. of water over the beds.

Cutting Beds: Apply 30 to 60 days before the first cutting. For additional control, make another application just before the beginning of harvest.

New Plantings: Apply after planting seedlings or after covering one-year-old crowns.

Avocados

Root Rot - *Phytophthora cinnamomi*

Begin applications at the start of the growing season or at transplanting. Two additional applications should be made at three-month intervals. Applications are not needed during the winter months of November through February. Ridomil 2E may be applied as a sleeve drench at the time of transplanting, as a soil surface spray under sprinkler irrigation systems, as a directed spray under drip emitters or injected into the irrigation water.

Sleeve Drench: Mix 1 fl. oz. of Ridomil 2E with 18 gals. of water. At the time of transplanting, drench the roots inside the sleeve with 1 qt. of Ridomil solution per tree.

Note: The sleeve drench will not replace the soil surface applications for long-term control of root rot.

Sprinkler Irrigation: Apply as a soil surface spray under the canopy of the tree in sufficient water to obtain uniform coverage. See the following table for the amount of Ridomil 2E to use based on the diameter of the tree canopy. Start applications at the beginning of the growing season or at transplanting and continue at three-month intervals.

Drip Irrigation: Apply the recommended amount of Ridomil 2E (see tables) to the soil directly under the drip emitter at each tree. If there is more than one emitter per tree, distribute the total amount of Ridomil 2E needed among the emitters.

Injection into Irrigation Water (Sprinkler or Drip Irrigation Only): Inject Ridomil 2E into the irrigation water at a rate of 2.4 fl. oz./1,000 gals. (3 3/4 ppm active ingredient) at each irrigation. If Ridomil 2E is not applied at each irrigation, use the table below to determine how much Ridomil 2E should be injected into the irrigation water. If Ridomil is to be used more frequently than every three months, adjust the rates so that no more than the specified amount is applied during each three-month period. See the General Information section of this label for further instructions and precautions when making applications through irrigation systems.

| Diameter of Tree Canopy (Ft.) | Amount of Ridomil 2E Per Ten Trees/3 Months |
|-------------------------------|---|
| 2 | 1/2-1 fl. oz. |
| 5 | 3.6 fl. oz. |
| 10 | 13.26 fl. oz. |
| 15 or wider | 29.58 fl. oz. |

Notes: (1) For best results, use Ridomil 2E as soon as soil tests indicate the presence of *Phytophthora*. (2) For new plantings, the use of *Phytophthora* resistant rootstocks with Ridomil 2E is recommended. Mature trees in moderate to advanced stages of decline cannot be cured with Ridomil 2E. (3) Do not apply more than 6 gals./A of Ridomil 2E/year. (4) Do not make an application within 28 days of harvest, or possible illegal residues may result.

Blueberries

Ridomil 2E will aid in the control of root rot caused by *Phytophthora* spp. when used in conjunction with good cultural practices and rootstocks that are most tolerant to the disease. Ridomil 2E will not revitalize trees showing moderate to severe disease symptoms.

Established Plantings: Apply 1 qt./1,000 sq. ft. (6 fl. oz./1,000 sq. ft.) in sufficient water to obtain thorough coverage. The treated area is based on the area under the tree canopy or the area of the sprayed row. Soil surface sprays of Ridomil 2E will not be effective until the fungicide is moved into the root zone by rainfall or irrigation. Applications should be made in early spring before growth starts and in the fall after harvest but before the ground freezes.

New Plantings: Apply 2 gals./A as a broadcast spray in a minimum of 10 gals. of water over the beds. Applications should be made in early spring before growth starts and in the fall after harvest but before the ground freezes. On new plantings, delay the first application until two weeks after planting.

Note: To determine trunk diameter, measure the trunk 12 inches above the soil line.

Citrus

Includes grapefruits, lemons, limes, oranges, tangelos, tangerines, citrus citron, kumquats and hybrids of these.

Use Ridomil 2E on citrus for control of citrus foot rot, root rot, and trunk cankers caused by *Phytophthora* spp. Ridomil 2E can be applied as a topical canker application and as a soil application, as a spray or through sprinkler or drip irrigation systems. If trees are on a drip irrigation system, distribute the amount of Ridomil 2E needed per tree (see tables) to the soil directly under the drip emitters at each tree. If there is more than one emitter per tree, distribute the total amount of Ridomil 2E needed among the emitters.

Note: Where nematodes are a problem, best results can be achieved if effective EPA registered nematicides are used. Nematicides can be used in combination or in sequence with Ridomil applications.

Precaution: For best *Phytophthora* control, a combination of cultural practices and resistant varieties is recommended. The use of Ridomil 2E is not recommended in Florida for use on the highly susceptible sweet orange rootstock.

Citrus in Nurseries (Arizona, California, Florida and Puerto Rico Only)

Make the first application of Ridomil 2E at the time of planting. Make repeat applications at three-month intervals during the period when trees are actively growing. For banded applications, use a band wide enough to cover the root systems of the plants. Do not apply Ridomil 2E solutions to bare roots.

Soil Drench: Apply 4-6 fl. oz./100 gals. of water as a drench over the row at a rate of 100-250 gals./1,000 feet of row. The width of the drench treatment should be wide enough to cover the root systems of the plants. Follow with a 1/2-1 inch irrigation over the treated area.

Soil Surface Spray: Apply 1-2 gals./treated acre in a broadcast or banded surface spray to end-beds, kners, or bedded stock in sufficient water to obtain thorough coverage. If application is banded, the treated area should be wide enough to cover the root systems of the plants. Follow the applications with a 1/2-1 inch irrigation over the treated area.

Citrus Resets or New Plantings (Arizona, California, Florida and Puerto Rico Only)

Make the first application of Ridomil 2E to citrus resets or new plantings at the time of transplanting. Make up to three additional applications per year at three-month intervals or when root growth flushes occur.

Water Ring Drench: Mix 4-6 fl. oz./100 gals. of water. Apply 5 gals. of the mix around the base of each tree within the watering ring.

Soil Surface Spray (Arizona and California Only): Apply 1-2 gals./treated acre (3-6 fl. oz./1,000 sq. ft.) in sufficient water to obtain uniform coverage of the soil surface. Apply spray to the soil surface beneath the tree canopy or apply through irrigation water if natural rainfall is not expected within three days of a soil surface application. Irrigate with 1/2-1 inch water over the treated area. See instructions below for application through irrigation water.

Soil Surface Spray (Florida and Puerto Rico Only): Apply 1 gal./treated acre (3 fl. oz./1,000 sq. ft.) under the canopy of the tree. Applications may be made through low volume irrigation systems at the rate of 1 qt./grove acre for trees less than 5 years old. Two-three applications per year are recommended. Applications may be made on a spring + summer, summer + fall or spring + summer + fall schedule.

Established Plantings

Soil Application (Florida and Puerto Rico Only): Apply 1/2 gal./treated acre to groves that have a *Phytophthora* propagule count of 10 to 20 per cubic centimeter (cc) of soil as a feeder root rot disease maintenance treatment. Applications may be made through low volume irrigation for trees 5 years or older at the rate of 1 qt./grove acre. Two-three applications per year are recommended. Applications may be made on a spring + summer, summer + fall or spring + summer + fall schedule. For groves with extremely high propagule counts (above 20 per cc of soil), apply 1 gal./treated acre for one year (2-3 applications) to reduce the population.

Soil Surface Spray (Arizona and California Only): For best results, begin Ridomil applications during the spring root flush period. One or two additional applications per year can be made at three-month intervals or to coincide with flushes of root growth. Use the following table to determine the proper rate based on tree size and the number of applications per year. For applications based on broadcast rates, use Ridomil 2E at 1-2 gals./A (3-6 fl. oz./1,000 sq. ft.) when three applications are planned and at 3 gals./A (9 fl. oz./1,000 sq. ft.) when two applications are planned. Apply in sufficient water to provide uniform coverage or apply through irrigation water. See instructions below for application through irrigation water.

| Diameter of Tree Canopy (Ft.) | Fl. Oz. of Ridomil 2E Per Ten Trees | |
|-------------------------------|-------------------------------------|--------------------|
| | 2 Applications/yr. | 3 Applications/yr. |
| 5 | 15 | 1 |
| 10 | 75 | 5 |
| 15 | 15 | 10 |
| 20 | 30 | 20 |

Trunk Spray for Control of Gummosis Caused by *Phytophthora* spp. (Arizona, California and Texas Only): Add 1 gallon of Ridomil 2E to 3 gallons of water and spray the surface of the trunks using enough spray to thoroughly wet the cankers. F.C.R. may be applied up to three times per year.

Notes: (1) To avoid possible illegal residues, do not make trunk and soil applications to the same tree in the same cropping season and (2) Do not apply more than 6 gals. of Ridomil 2E/treated acre/year.

Application Through Irrigation Water (Sprinkler or Drip Irrigation Only): See comments and precautions in the General Information section of this label. Inject Ridomil 2E into the irrigation water at rates specified in the tables above.

Cole Crops, (Broccoli, Cabbage and Cauliflower)

Includes broccoli, Chinese broccoli (gai lan), choy flowering broccoli, cabbage, Chinese cabbage (pepino), flowering varieties only, and cauliflower only.

Ridomil 2E applied as a soil application at planting will control damping-off caused by *Pythium* spp. and basal stem rot caused by *Phytophthora* spp. Applications may be made pre-planting or post-planting as a soil surface spray after planting.

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Preplant Incorporated Application: Apply 4.8 pts./treated acre as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top two inches of soil. For control of *Pythium* damping off only use 1.2 pts./A. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre.

Surface Application: Apply 4.8 pts./treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. If natural rainfall is not expected before the seeds start germinating, Ridomil 2E should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

Notes: (1) Do not use Ridomil 2E for disease control in greenhouse crops. (2) Do not dip plants in solutions containing Ridomil 2E, or crop injury may occur. (3) Ridomil 2E may be tank mixed with Terraclor 75WP to control club root (*Plasmodiophora brassicae*) or whistlem/black root (*Corticium solani*). Before applying observe all precautions, limitations, rates, and directions for use including the need for incorporation on the Terraclor 75WP label.

Cotton

Seed Rots and Seeding Diseases of Cotton Caused by *Pythium* spp.
Apply 1/4-1/2 pt./13,000 linear feet of row (0.3-0.6 fl. oz./1,000 linear feet) as an in-furrow spray in 5-15 gals. of water or liquid fertilizer at planting. Mount the spray nozzle so the spray is directed into the furrow over the seed just before the seeds are covered.

For control of *Pythium* and *Rhizoctonia* apply 2.4 qts. Terraclor® 2E or 1 1/2-2 3/4 lbs. Terraclor 75W/13,000 linear feet of row in tank mixture with Ridomil 2E or use labeled rates of Ridomil PC® 11G.

Note: When Ridomil 2E is applied with Terraclor 2E or Terraclor 75W, observe all precautions and restrictions that appear on the Terraclor 2E or Terraclor 75W labels.

Cucurbit Vegetables

Includes balsam pear (bitter melon), Chinese waxgourd (Chinese preserving melon), citron melon, cucumber, gherkin, edible gourds, cantaloupe, casaba, crenshaw, honeydew melon, honey balls, mango melon, muskmelon, Persian melon, pumpkin, summer squash, winter squash, watermelon, and cucurbit hybrids only.

Ridomil 2E applied at planting will provide control of damping off and cottony leak caused by *Pythium* spp. Applications may be made preplant incorporated or as a soil surface spray after planting.

Preplant Incorporated Application: Apply 4.8 pts./treated acre as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top two inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre.

Surface Application: Apply 4.8 pts./treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. If natural rainfall is not expected before the seeds start germinating, Ridomil 2E should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

Notes: (1) Do not use Ridomil 2E for disease control in greenhouse crops. (2) Do not dip plants in solutions containing Ridomil 2E, or crop injury may occur.

Deciduous Fruits and Nuts in Orchards (Nonbearing)

Phytophthora Diseases

Use of Ridomil 2E will aid in the control of crown, collar, and root rot of deciduous fruit and nut trees caused by *Phytophthora* spp. when used in conjunction with good cultural practices and rootstocks that are most tolerant to the disease. Applications should be made before symptoms appear, especially in areas favorable for disease development. Ridomil 2E will not revitalize trees showing moderate to severe disease symptoms.

Make the first application at the time of planting (See Notes below). Additional applications should be made at three-month intervals during the time when conditions are favorable for disease development. For established plantings, make the first application in the spring before growth starts.

Apply 2 gals./treated acre (6 fl. oz./1,000 sq. ft.) in sufficient water to obtain uniform coverage of the soil under the canopy of the trees. For banded applications, use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. Soil surface sprays of Ridomil 2E will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

Notes: (1) Do not apply to plantings that will bear harvestable fruit within 12 months of the last application, or possible illegal residues may result. (2) To avoid injury, do not use Ridomil 2E to dip or spray tree roots. Do not concentrate it around the tree trunks. (3) Do not apply to trees under stress. (4) In California, do not apply Ridomil 2E to newly planted trees within 90 days of planting. (5) Do not apply more than 6 gals. of Ridomil 2E/treated acre/year.

Hops

Downy mildew (*Pseudoperonospora humuli*): Apply 1 qt./A of hops in a minimum of 20 gals. of water or liquid fertilizer to the soil surface over the crowns after pruning, but before training. Early application before shoots are six inches long is preferable.

Notes: (1) Do not apply after training or make more than one application per year, and (2) Do not feed hop refuse to livestock, or possible illegal residues may result.

Leafy Vegetables (Head Lettuce and Spinach Only)

Ridomil 2E applied as a soil application will control damping off caused by *Pythium* spp. in head lettuce and spinach and white rust (*Abugoea candidus*) and downy mildew in spinach. Applications may be made banded over the row, preplant incorporated, or as a soil surface spray with liquid fertilizer.

Preplant Incorporated Application: Apply 4.8 pts./treated acre as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top two inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre.

Surface Application: Apply 4.8 pts./treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. If natural rainfall is not expected before the seeds start germinating, Ridomil 2E should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

White Rust and Downy Mildew Control (Spinach Only): In addition to the preplant incorporated or surface application described above, apply 1 pt. of Ridomil/A of crop, shanked in 40-50 days after planting or after the first cutting. One other application may be shanked in after the next cutting. Use sufficient mechanical or bypass agitation to keep the Ridomil 2E mixed with the water or fertilizer.

Notes: (1) The additional applications of Ridomil 2E noted above and made after each cutting by shanking the fungicide into the beds along with liquid fertilizer provide continuing control of white rust. However, white rust can only be controlled in a preventative disease control program that begins with an application of Ridomil to the soil at planting. If Ridomil is not used at planting, do not use Ridomil at any other time throughout the season. Do not apply Ridomil in foliar applications or in situations where white rust infections are already established. The use of Ridomil 2E in curative applications greatly increases the risk of the fungus developing resistance to metalaxyl. The development of resistance will destroy the effectiveness of Ridomil in controlling white rust. (2) To avoid possible illegal residues, do not harvest spinach within 21 days of a Ridomil 2E application. (3) Do not use Ridomil 2E for disease control in greenhouse crops.

Legume Vegetables (Succulent or Dried)

Includes field beans, French beans, kidney beans, lima beans, mung beans, navy beans, pinto beans, runner beans, snap beans, wax beans, broad beans (fava beans), chickpeas (garbanzo beans), lentils, lupines (sweet, white sweet, white and grain), garden peas, field peas, sugar peas, southern peas (blackeye peas, cowpeas, caljang) and edible soybeans, etc.

Pythium Damping-Off and Root Rot: Ridomil 2E applied at planting will control damping-off and root rot caused by *Pythium* spp. Applications may be made preplant incorporated, or as a soil surface spray after planting.

Preplant Incorporated Application: Apply 2.4 pts./treated acre as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top two inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre.

Surface Application: Apply 2.4 pts./treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. If natural rainfall is not expected before the seeds start germinating, Ridomil 2E should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

Notes: (1) Do not use Ridomil 2E for disease control in greenhouse crops. (2) Ridomil 2E may be tank mixed with Terraclor 2E or 75WP to control *Rhizoctonia* root and stem rot or white mold (*Sclerotinia sclerotiorum*) in snap and dry beans. Observe all precautions, limitations, rates, and directions for use on the respective Terraclor label before applying.

Onions — Dry Bulb, Green*, and Onions Grown for Seed

* Includes green onions, leeks, spring onions or scallions, Japanese bunching onions, green shallots, or green eschalots.

Ridomil 2E applied at planting will control damping-off caused by *Pythium* spp. Applications may be made preplant incorporated or as a soil surface spray after planting.

Preplant Incorporated Application: Apply 2.4 pts./treated acre as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top two inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre.

Surface Application: Apply 2.4 pts./treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. If natural rainfall is not expected before the seeds start germinating, Ridomil 2E should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

Note: Do not use Ridomil 2E for disease control in greenhouse crops.

Papaya (Hawaii Only)

Ridomil 2E aids in the control of *Phytophthora* root rot of papaya in nurseries and in new plantings in the field.

Papaya in Nurseries: Apply Ridomil 2E as a soil drench by mixing 2.4 fl. oz. with 40 gals. of water and applying to 800 sq. ft. Apply to seedlings 3 to 4 weeks after planting seed. Repeat application one month later if necessary. Do not apply more than twice per year in the nursery.

Papaya in the Field — New Plantings: Make the first application of Ridomil 2E at the time of transplanting to the field or within one week of transplanting. Apply 3 1/2 to 7 qts./A of soil treated (2 1/2 to 5 fl. oz./1,000 sq. ft.) as a soil surface spray in sufficient water to obtain thorough coverage of the soil under the canopy of the trees. After application, immediately irrigate with 1/2 to 1 inch of water. Repeat in 2-4 weeks if conditions are favorable for disease. Use the table below as a guide for treating individual trees.

Notes: To avoid possible illegal residues, (1) Do not apply more than two applications per year in the field to newly transplanted stock, and (2) Do not apply within 3 months of harvest.

| Diameter of Tree Canopy (ft.) | F. Oz. of Ridomil 2E Per Ten Trees |
|-------------------------------|------------------------------------|
| 3 | 1/4 - 1/2 |
| 4 | 1/2 - 3/4 |
| 6 | 1 - 1 1/2 |
| 8 | 1 1/2 - 2 1/2 |

* 1 quart = 32 fl. oz.

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Ridomil® 2E

Peanuts

Ridomil 2E is a soil applied systemic fungicide for use in control of seedling and pod diseases of peanuts incited by *Pythium* spp.

Seedling Diseases: Apply 1 pt /A of crop as an application to the seed in furrow or in a 7 inch band at the time of planting. For in furrow applications, position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly with the spray solution or crop injury may occur.

Pod Rot: Apply 1-2 qts /A at early pod set or pegging through overhead irrigation systems. See the General Information section of this label for further instructions and precautions when making applications through irrigation systems.

Notes: (1) Where pathogens other than *Pythium* spp. are present, use fungicides that control those diseases in combination with Ridomil 2E. (2) Where the predominant pod rot pathogens are *Pythium* spp. and *Rhizoctonia* spp., use Ridomil PC 11G at labeled rates.

Peppers and Eggplant

Soil applications of Ridomil 2E will control damping-off caused by *Pythium* spp. and crown rot caused by *Phytophthora capsici*. Ridomil 2E must be applied to the soil before the plants are infected with *Phytophthora* to obtain satisfactory disease control.

Apply 4-8 pts /treated acre at the time of planting in sufficient water (20-50 gallons) or liquid fertilizer to provide uniform coverage. If rainfall is not expected before the plants begin growth, Ridomil 2E should be incorporated mechanically before planting or be moved into the root zone after planting with 1/2-1 inch of sprinkler irrigation water. For banded applications, a 12-16 inch band is recommended. After the initial application, two supplemental post-directed applications at 4 pts /treated A should be made at 30-day intervals. The spray should be directed at the base of the plants and cover 6-8 inches of soil on either side of the plants. Such applications must be incorporated mechanically or by sprinkler irrigation to move the Ridomil into the root zone. Ridomil 2E may be applied with liquid fertilizer shanked in as a band treatment to either side of the plant. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre.

Precautions: (1) Ridomil may cause some yellowing of the pepper leaves. (2) Plants already infected with *Phytophthora* cannot be cured with Ridomil 2E applications. (3) The foliar blight phase of *Phytophthora* cannot be controlled with foliar applications of Ridomil 2E. (4) Do not use Ridomil 2E for disease control in greenhouses.

Notes: To avoid possible illegal residues: (1) Do not apply within 7 days of harvest, and (2) Do not apply more than 12 pts. of Ridomil 2E per acre of crop per season.

Pineapple

Ridomil 2E, applied as a seed piece dip, provides effective control of heart rot disease of pineapple caused by *Phytophthora* spp.

Apply Ridomil 2E as a crown dip before planting at the rate of 1-2 qts /100 gals. of water. Use 75 to 100 gals. of dip solution per planted acre, depending on crown size, plant density and dipping techniques.

Note: If there is a crop failure within one year of planting treated crowns, do not harvest plant material for animal feed.

Raspberries

Ridomil 2E is a soil applied systemic fungicide for use in the control of *Phytophthora* root rot.

Apply 1 pt /1 000 linear ft. of row to the soil surface in a three-foot band over the row. Make one application in the spring and another in the fall after harvest. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre.

Note: Do not apply Ridomil 2E within 45 days before harvest or possible illegal residues may result.

Root and Tuber Vegetables

Includes artichoke (Jerusalem), beet (sugar and table), carrot, cassava, chicory, ginger, ginseng, horseradish, parsnip, potato, radish, rutabaga, salsify, sweet potato, turnip and yams.

Ridomil 2E applied to the soil at planting will provide control of diseases caused by *Pythium* and *Phytophthora* spp. Applications may be made preplant, incorporated or as a soil surface spray after planting.

Preplant Incorporated Application: Apply 4-8 pts /treated acre as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top two inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per dose.

Surface Application: Apply 4-8 pts /treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. If natural rainfall is not expected before the seeds start germinating, Ridomil 2E should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2 inch sprinkler irrigation.

Note: Do not use Ridomil 2E for disease control in greenhouse crops.

Soybeans

Ridomil 2E is a soil applied systemic fungicide for use in the control of *Phytophthora* root and stem rot and *Pythium* damping off. Ridomil 2E may be applied broadcast, banded or in the seed furrow before the seeds are covered. The seed furrow applications will provide more consistent results if rain is not expected before the seeds germinate.

For best results against *Phytophthora* root and stem rot, use Ridomil 2E with soybean varieties that have some tolerance to the races of *Phytophthora* present in the field. The higher the Ridomil 2E should be used in areas with a history of heavy *Phytophthora* damage. Do not make late season *Phytophthora* pressure. Ridomil 2E may not provide complete control.

Surface Applications: For full season control, apply 5 pts /treated acre in sufficient water or liquid fertilizer to provide uniform coverage at the time of planting. For banded applications, a 7 inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. For early to mid season control, apply 1 1/2-3 pts /treated acre.

In-Furrow Applications: For full season control, apply 1 1/2 fl. oz. /1 000 linear feet of row as an in furrow spray in 5-10 gals. of water or liquid fertilizer at planting. Position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly with the spray solution or crop injury may occur. Use sufficient water or liquid fertilizer to provide uniform coverage. Use the formula below to determine the amount of Ridomil 2E needed per acre based on row spacing. For early to mid season control, apply 3/10-6/10 fl. oz. /1 000 linear feet of row.

Suggested Rates Per Acre According to Row Spacing

| Row Spacing | Linear Feet of Soybean Row Per Acre | Fluid Ounces of Ridomil 2E Needed Per Acre | | |
|-------------|-------------------------------------|--|--------------|----------------|
| | | Rate Desired | | |
| | | 3/10 fl. oz. | 6/10 fl. oz. | 1 1/10 fl. oz. |
| 38 in | 13,756 | 4 | 8 | 15 |
| 36 in | 14,520 | 4 1/2 | 9 | 16 |
| 30 in | 17,424 | 5 1/2 | 11 | 19 |
| 24 in | 21,780 | 6 1/2 | 13 | 24 |
| 20 in | 26,136 | 8 | 16 | 28 |

Note: Ridomil 2E is specific for *Pythium* and *Phytophthora* and will not control other diseases that may attack soybeans.

Stone Fruits*, Walnuts and Almonds

*Including apricots, cherries (sweet, sour), nectarines, peaches, plums (Chickasaw, Damson, Japanese), prunes.

Use of Ridomil 2E will aid in the control of crown, collar and root rot caused by *Phytophthora* spp. when used in conjunction with good cultural practices and rootstocks that are most tolerant to the disease. Ridomil 2E applications should be made before symptoms appear, especially in areas favorable for disease development. Ridomil 2E will not revitalize trees showing moderate to severe disease symptoms.

On new plantings, make the first application of Ridomil 2E two weeks after planting. Additional applications should be made at 2-3 month intervals or during periods most favorable for root, crown or collar rot development.

For established plantings, the application should be made in the spring before the plants start growth. Additional applications should be made at 2-3 month intervals or to coincide with periods most favorable for root, crown or collar rot development.

Apply 2 gals /treated acre (6 fl. oz. /1 000 sq. ft.) in sufficient carrier to obtain thorough coverage of the soil under the canopy of the trees. Sufficient surface area should be treated in nurseries to cover the root zone of the plants. Up to three applications can be made per year. For banded applications, use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. Soil surface sprays of Ridomil 2E will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

Precautions: (1) Do not dip the roots of trees in Ridomil 2E solutions. Spray the roots or concentrate it around the tree trunks or injury may occur. (2) Do not apply to trees under stress. (3) For intense plantings (2-3 times the normal planting rate) make applications on a per area basis, i.e. per acre or 1 000 sq. ft. Do not calculate the amount of Ridomil 2E on a per tree basis. (4) In California, do not apply Ridomil 2E to newly planted trees within 90 days of planting.

Notes: To avoid possible illegal residues: (1) Do not graze livestock in treated areas, and (2) Do not graze or feed cover crops grown in treated orchards.

Strawberries

Ridomil provides control of red stele (*Phytophthora fragariae*), vascular collar rot (*P. cactorum*) and leather rot (*P. cactorum*) when used as directed. Applications may be made using ground application equipment or through drip irrigation systems.

New Plantings: Apply Ridomil 2E at 2 qts /treated acre in sufficient water to move the fungicide into the root zone of the plants. Make one application after transplanting followed by an additional application 30 days before the beginning of harvest. A third application may be made during the harvest season, depending on environmental conditions and disease pressure. For banded applications, use the formula in the General Information section of this label to determine the amount of Ridomil 2E needed per acre. When applying Ridomil 2E through drip irrigation systems, use the same amount as would be applied in a banded application to cover the root zone of the plants. Observe the precautions concerning application of Ridomil through irrigation systems in the General Information section of this label.

Established Plantings: Apply Ridomil 2E at 2 qts /treated acre in sufficient water to move the fungicide into the root zone of the plants. Make one application in the spring after the ground thaws and before first bloom. A second application may be applied after harvest in the fall. For supplemental control of leather rot, an application may be made during the harvest season. For banded applications, use the formula in the General Information section of this label to determine the amount of Ridomil 2E needed per acre. When applying Ridomil 2E through drip irrigation systems, use the same amount as would be applied in a banded application to cover the root zone of the plants. Observe the precautions concerning application of Ridomil through drip irrigation systems in the General Information section of this label.

Notes: (1) To avoid possible illegal residues, do not use more than a total of 6 qts. of Ridomil 2E /treated acre/year. (2) For low annual rainfall areas, a surface application of Ridomil 2E needs to be moved into the root zone by rainfall over the growing season or greenhouse irrigation.

Sugar Beets

Ridomil 2E will provide control of diseases caused by *Pythium* spp. Applications may be made preplant, incorporated or as a surface spray after planting.

Preplant Incorporated Application: Apply 4-8 pts /treated acre as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top two inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre.

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Surface Application: Apply 4-8 pts./treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. If natural rainfall is not expected before the seeds begin germinating, Ridomil 2E should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-inch sprinkler irrigation.

Note: Do not use Ridomil 2E for disease control in greenhouse crops.

Tobacco

Ridomil 2E is a soil-applied systemic fungicide for use in the field before transplanting for control of black shank (*Phytophthora parasitica* var. *Nicotianae*) and blue mold (*Ferrospora tabacina*) on all types of tobacco. Ridomil 2E may also be applied in tobacco plant beds for control of blue mold and damping-off caused by *Pythium* spp. For control of anthracnose and other tobacco diseases, use fungicides that control those diseases.

Tobacco Plant Bed

For control of blue mold and damping-off caused by *Pythium* spp., apply Ridomil 2E only as a preplant broadcast soil application at the rate of 1 qt./treated acre in 50 gals. of water or liquid fertilizer (1 fl. oz. or 2 tablespoons/150 sq. yds. of bed in 2 gals. of water or liquid fertilizer). Apply before or at the time of seeding to the surface of the plant bed and lightly incorporate or follow with 1/2-inch sprinkler irrigation water. In Pennsylvania, use 2 qts./treated acre (2 fl. oz. or 4 tablespoons/150 sq. yds. of bed in 2 gals. of water or liquid fertilizer).

Notes: (1) Do not use Ridomil 2E for disease control in greenhouse crops. (2) Do not dip plants in solutions containing Ridomil 2E, or crop injury may occur.

Field Planted Tobacco

Blue Mold: Apply Ridomil 2E as a broadcast soil application and incorporate in the top 2-4 inches of soil before forming beds. For flue-cured tobacco, use 1-2 qts./treated acre, depending on disease pressure and length of control desired. Under low disease pressure or for early season control, use 1 qt./treated acre. For burley and other tobacco types, use 2 qts./treated acre.

For prolonged control of blue mold in field planted tobacco, make a supplemental application of 1 qt./acre of crop as a soil application at lay by or the last cultivation. Position the nozzles so that the spray is deposited under the plants and is covered by soil by the cultivator. Do not make this application if more than 2 qts./A of Ridomil 2E were applied at transplanting or if no Ridomil 2E was applied at transplanting.

Note: For best control of blue mold, use Ridomil 2E in the plant bed and follow with an application in the field prior to transplanting. Do not use Ridomil 2E in transplant water or in foliar applications on field tobacco because of the potential for the development of resistance in the blue mold fungus, crop injury or potential excessive residues in the crop.

Black Shank: Use Ridomil 2E as a broadcast soil application and incorporate in the top 2-4 inches of soil before forming beds. Apply Ridomil 2E using conventional ground application equipment in sufficient water or liquid dry fertilizer to provide uniform coverage. Use the table below to determine the amount of Ridomil 2E needed per acre depending on the black shank severity.

| Type of Tobacco | Disease Level in Field | Rate of Ridomil 2E Per Acre |
|--------------------|--|-----------------------------|
| Flue Cured | Low to Moderate (Less than 6% Disease) | 2 qts. |
| | High (More than 6% Disease) | 4 qts.* |
| Burley and Other** | Low to Moderate (Less than 6% Disease) | 4 qts. |
| | High (More than 6% Disease) | 6 qts. |

* Florida and Georgia -- Use 6 qts./treated acre of Ridomil 2E in fields with heavy black shank levels (greater than 6%).

** Pennsylvania -- Do not use Ridomil 2E for black shank control.

For prolonged control of black shank in field planted tobacco, one of the following is recommended: (1) Make a supplemental application at 1 qt./A of crop as a soil application at the last cultivation. Position the nozzles so that the spray is deposited under the plants and is covered by soil by the cultivator. Do not make this application if more than 2 qts./A of Ridomil 2E was applied at transplanting, or (2) Apply Ridomil 2E at 2 qts./A just prior to transplanting followed by a second application of 2 qts./A at the first cultivation followed by a third application of 2 qts./A at lay by or the last cultivation.

Precautions: (1) For best results against black shank, use Ridomil 2E with tobacco varieties that have some resistance to black shank and use crop rotation. In fields where there is a history of severe black shank, use the highest rate and plant a variety that is resistant to the race of *Phytophthora* present in the field. (Burley LB hybrids are only resistant to *Phytophthora* Race C.) (2) Ridomil 2E is not recommended for use in high black shank areas on highly susceptible flue-cured varieties such as Hicks, Virginia Gold or White Gold. (3) Failure to adequately control nematodes in fields treated with Ridomil 2E may result in poor control of black shank.

No-ill Tobacco: Apply Ridomil 2E to the field before transplanting for control of black shank and blue mold on all types of tobacco. Apply 1-2 qts./treated acre as a pre-plant broadcast or banded soil application. For banded applications, use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre. A supplemental lay by application may be made 30-35 days after planting at 1.0 qt./A. Do not make the lay by application if more than 2 qts./A of Ridomil 2E were applied at transplanting or if no Ridomil 2E was applied at transplanting.

Tomatoes

Soil applications of Ridomil 2E at planting will provide control of damping-off caused by *Pythium* spp. Soil applications applied 4-12 weeks before harvest under the vines will control fruit and root rot caused by *Pythium* spp. and *Phytophthora* spp.

Damping Off (*Pythium* spp.) Apply 4-8 pts./treated acre in sufficient water or liquid fertilizer to provide uniform coverage at the time of planting. If rainfall is not expected before the seeds start to germinate, Ridomil 2E should be incorporated mechanically before planting, starting the application period, or be moved into the seed zone after planting with 1/2-inch sprinkler irrigation. For banded applications, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Ridomil 2E needed per acre.

Root and Fruit Rot (*Phytophthora* spp. and *Pythium* spp.)

To aid in the control of root and fruit rot, one or two additional applications may be made during the growing season, depending on the severity of the conditions for disease infection.

Apply 4 pts./treated acre beginning 4-6 weeks after planting. A second application may be made as needed up to 4 weeks before harvest, but before the last irrigation. Ridomil may be applied as a directed soil surface spray under the vines or it may be injected into the beds with liquid fertilizer. If less than the full bed is treated, use the formula in the General Information section to determine the amount of Ridomil 2E needed per acre. If Ridomil is injected into the beds with liquid fertilizer, base calculations on a 7-inch band.

If soil surface sprays are used, the Ridomil must be incorporated into the soil with 1/2-inch of rainfall or sprinkler irrigation.

Ridomil may be applied with water or liquid fertilizer. Use the test in the General Information section to check for compatibility with various fertilizers.

Notes: To avoid possible illegal residues, (1) Do not apply more than 12 pts./treated acre/season and (2) Do not apply within 7 days of harvest. (3) Keep Ridomil 2E suspended in the fertilizer solution with bypass or mechanical agitation. Refer to the General Instructions section for drip irrigation instructions. (4) Do not use Ridomil 2E for disease control in greenhouse crops.

Vegetable Bedding Plants

Includes broccoli, Chinese broccoli (gai lan), white flowering broccoli, cabbage, Chinese cabbage (bok choy and napa), cauliflower, cucurbit vegetables, head lettuce, spinach, legume vegetables, onions and tomatoes.

Pythium Damping-Off: Apply 2-4 pts./treated acre as a preplant broadcast spray in 50 gals. of water or liquid fertilizer (1-2 fl. oz. or 2-4 tablespoons/150 sq. yds. of bed in 2 gals. water or liquid fertilizer) before or at the time of seeding to the surface of the beds. If natural rainfall is not expected before the seeds start germinating, Ridomil 2E should be incorporated mechanically before planting or be moved in the seed zone after planting with 1/2-inch sprinkler irrigation.

Note: Do not use Ridomil 2E for disease control in vegetable plants grown in an enclosed environment, i.e., greenhouse, glasshouse, etc.

Replanting

If replanting is necessary, additional applications of Ridomil may be made, provided that the total amount of metalaxyl applied does not exceed the maximum allowed for the specific crop.

Rotation (Plantback) Restrictions

Do not plant any crop which is not registered for use with metalaxyl in metalaxyl treated soil for a period of 12 months, with the exception of wheat. See list below.

| Rotation Crop | Planting Time From Last Ridomil 2E Application |
|---|--|
| Alliata, Almonds, Apples, Asparagus, Avocados | |
| Blueberries, Broccoli | |
| Cabbage, Cauliflower, Chinese Broccoli (gai lan), white flowering broccoli, Chinese Cabbage (light heading varieties only), Citrus, Cucurbit Vegetables | |
| Deciduous Fruits and Nuts* | |
| Eggplant | |
| Head Lettuce, Hops | 14 days |
| Legume Vegetables | |
| Onions | |
| Papaya, Peanuts, Peppers, Pineapples, Potatoes | |
| Raspberries, Root and Tuber Vegetables | |
| Soybeans, Spinach, Stone Fruits, Strawberries, Sugar Beets | |
| Tobacco, Tomatoes | |
| Walnuts | |
| Wheat, Barley | 14 days |
| Corn | 12 months |
| Crops Not Intended for Food or Feed | 0 days |
| All Other Crops Intended for Food or Feed | 12 months |

* These crops and other perennial crops may be planted immediately following last application of Ridomil 2E provided they will not bear harvestable fruit within 12 months.

Storage and Disposal

Store at temperatures above 40° F. Crystals may form at lower storage temperatures. If this occurs, place the product in a warm room (68° or above) and roll or shake the container at frequent intervals until all crystals are dissolved.

Pesticide Disposal

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Wastes resulting from the use of this product are acutely toxic. In proper disposal of unused pesticide spray mixture or residue is a violation of Federal Law. Pesticide Storage, Transport, and Disposal that cannot be used according to label instructions, must be disposed of according to Federal, State or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the nearest U.S. Waste Representative at the nearest EPA Regional Office.

Container Disposal

Do not reuse empty container. Do not reuse equipment and other materials used in the handling, application and disposal of agricultural chemicals by other than the original manufacturer. Do not burn. Follow State and local authorities if burned. Keep out of smoke.

For minor spills, leaks, etc., wash thoroughly with soap and water and clean up promptly. Take special care to avoid contact with eyes, nose, mouth, and skin. Turn on fans to help dry surfaces and to prevent vapors from accumulating. Do not inhale vapors. Do not eat, drink, or smoke while using.

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Precautionary Statements**Hazards to Humans and Domestic Animals****WARNING**

Causes eye injury. Do not get in eyes. Avoid contact with skin or clothing. Harmful if swallowed. Inhaled or absorbed through the skin. Avoid breathing vapors or spray mist.

Statement of Practical Treatment

If in eyes: Immediately flush with plenty of water. Get medical attention.

If on skin: Wash thoroughly with soap and water. Get medical attention if irritation occurs.

If swallowed: Immediately contact a physician, hospital, or local Poison Control Center. Do not induce vomiting.

If inhaled: Move victim to fresh air. If not breathing, give artificial respiration (preferably mouth-to-mouth) and get medical attention.

Note to Physician: If Ridomil 2E is ingested, lavage stomach. A slurry of activated charcoal in water can be left in the stomach. Give a saline laxative and supportive therapy.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Apply only as specified on this label. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment wash water or rinsate.

Physical or Chemical Hazards

Do not use or store near heat or open flame.

Balan[®] trademark of Elanco Products for benfen.

Bravo[®] trademark of Fermenta Plant Protection Company for chlorothalonil.

Dasanit[®] trademark of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen for fen硫lithion.

Difolatan[®] trademark of Chevron Chemical Company for captafol.

Di-Syston[®] trademark of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen for disulfoton.

Dithane[®] trademark of Rohm and Haas Company for maneb/mancozeb.

D*-n[®] trademark of CIBA-GEIGY for diazinon.

Endin[®] trademark of Tucco Division of the Upjohn Company for diphenamid.

Furadan[®] trademark of FMC Corporation for carbofuran.

Manzate[®] trademark of E. I. duPont de Nemours and Company for maneb/mancozeb.

Mocap[®] trademark of Rhone-Poulenc, Inc. for ethoprop.

Nemacur[®] trademark of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen for fenamphos.

Paartan[®] trademark of Elanco Products for isopropalin.

Ridomil[®] trademark of CIBA-GEIGY for metaxyl.
U. S. Patent No. 4,151,299.

Terractor[®] trademark of UniRoyal, Inc. for PCF:B.

Tillam[®] trademark of ICI Americas for pebulate.

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Agricultural Division
CIBA-GEIGY Corporation
Greensboro, North Carolina 27419
CGA 65L14U 031

Ridomil[®] 2E

One Gallon

U. S. Standard Measure

Fungicide

For the control of certain diseases in various crops caused by the Oomycete class of fungi

Active Ingredient:
Metalaxyl: *N*-(2, 6-dimethylphenyl)-*N*-(methoxyacetyl)alanine methyl ester . . . 25.1%

Inert Ingredients: . . . 74.9%

Total: . . . 100.0%

Ridomil 2E contains 2 lbs. active ingredient per gallon.

See directions for use in attached booklet.

EPA Reg. No. 100-607

EPA Est. 100-AL-1

Ridomil[®] trademark of CIBA-GEIGY for metalaxyl
U. S. Patent No. 4,151,299

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Agricultural Division
CIBA-GEIGY Corporation
Greensboro, NC 27419
CGA 65L14U 081

KEEP OUT OF REACH OF CHILDREN. WARNING / AVISO

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

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Physical or Chemical Hazards

Do not use or store near heat or open flame.

Store at temperatures above 40° F.

Storage and Disposal

Container Disposal

Do not reuse empty container. Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

See label booklet for proper disposal of pesticide wastes.

Chemigation

Refer to supplemental labeling in attached booklet for use directions on chemigation. Do not apply this product through any type of irrigation system unless the supplemental labeling on chemigation is followed.

CIBA-GEIGY

BEST AVAILABLE COPY