

RIDOMIL® 2E SUPER LABEL
(Front Cover)

One Gallon and One Quart Labelmaster Booklet

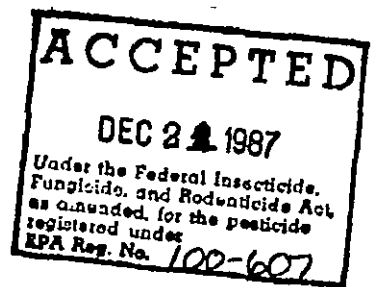
Ridomil® 2E

Fungicide

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

One Gallon
U. S. Standard Measure

One Quart
U. S. Standard Measure



Active Ingredient:

Metalaxyl: <u>N</u> -(2,6-dimethylphenyl)- <u>N</u> -(methoxyacetyl) alanine methyl ester	25.1%
<u>Inert Ingredients:</u>	74.9%
<u>Total:</u>	100.0%

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

EPA Reg. No. 100-607
EPA Est. 100-AL-1

Keep Out of Reach of Children.

WARNING

AVISO

"PRECAUCIÓN AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta haya sido explicado ampliamente."

See additional precautionary statements inside booklet.

See directions for use inside booklet.

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P. O. Box 18300
Greensboro, NC 27419

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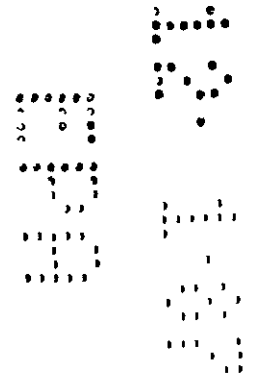
DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

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

Conditions of Sale and Warranty

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

CIBA-GEIGY warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks 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 and user accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of CIBA-GEIGY.



DIRECTIONS FOR USE

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

FAILURE TO FOLLOW DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY OR POOR DISEASE CONTROL.

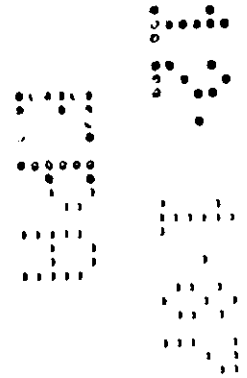
Do not apply this product in such a manner as to directly, or through drift, expose workers or other persons, except those knowingly involved in the application. The area being treated must be vacated by unprotected persons.

Reentry Statements

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

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

Written or oral warnings must be given to workers who are expected to be in the treated area or in an area about to be treated with this product. Oral warnings must be given which inform workers of areas or fields that may not be entered without specific protective clothing until sprays have dried and appropriate actions to take in case of accidental exposure, as described under Precautionary Statements at the back of this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: "WARNING. Area treated with Ridomil 2E on (date of application). Do not enter without appropriate protective clothing until sprays have dried. Flush eyes or skin with plenty of water. Call a physician if irritation persists. Remove contaminated clothing and wash before reuse."



General Information

Ridomil is a systemic fungicide for use on selected crops to control certain diseases caused by members of the Oomycete class of fungi. Other fungicides must be used to control diseases incited by other classes of fungi.

THIS PRODUCT IS NOT TO BE USED IN FOLIAR APPLICATIONS OR IN SOLUTIONS USED TO DIP PLANTS.

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 resistance cannot be predicted. Therefore, CIBA-GEIGY cannot assume liability for crop damage resulting from resistant strains of fungi. If treatment is not effective following the use of Ridomil as recommended, a resistant strain of fungi may be present. If the treatment is ineffective due to the presence of a Ridomil resistant strain of fungi, neither Ridomil nor any other fungicide with similar action will effectively control that disease. Consideration should then be given to the prompt use of other types of suitable fungicides. Consult with your State Agricultural Experiment Station or Extension Service Specialist for guidance on your particular crop and disease control situation.

Do not make foliar applications to field grown tobacco, or other crops since this practice may encourage more rapid development of resistance.

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

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 + Namacur®, Dasanit, D.z.n®, Difolatan®, Enide®, Furadan®, Manzate®, Manzate 200, Mocap®, Mocap Plus 4-2EC, Paarlan®, 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 re-mixed readily, the mixture is compatible.

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

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

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 fungicides 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 (Sprinkler and Drip 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.

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, 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., 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. (Applies to sprinkler systems.)

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 seal materials. Leather seals are best. EPDM or silicone 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 with 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 in 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.
- Figure the area to be treated in each irrigation run.
- Measure the output of each of the emitters or drip tubes closest to and farthest from the injector site.
- For calibration, substitute a concentrated detergent (such as Wisk) or a soluble fertilizer for the Ridomil 2E in the injector tank. The detergent will bubble as it leaves the emitters. The time period over which bubbles occur 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/or the injection rate.
- If a soluble fertilizer is used, measure the time intervals with a salt bridge. If a drip system is being calibrated, substitute soluble fertilizer for the Ridomil 2E in the injector and measure the time intervals with a salt bridge.

Step-by-Step Instructions:

- Before starting to calibrate, operate the system until all the emitters are putting out at equal flow rates or until the system is operating at full pressure.

- Make up an indicator solution of detergent or fertilizer, using the same ratio to be used when mixing Ridomil 2E.
- Set the injector to apply the indicator solution at the injection rate to be used in the actual Ridomil 2E application.
- Attach a 5-inch length of flexible tubing over the emitter closest to the injection point, another length over the emitter farthest away. Both emitters should be monitored 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 small container. Begin timing when the indicator solution is first detected, stop timing when the indicator solutions are 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 in 1/2 - 1 inch of irrigation water.

Apples

Use of Ridomil 2E will aid in the control of crown rot caused by Phytophthora cactum 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 of the orchard favorable for disease development. Ridomil 2E will not revitalize trees showing moderate to severe crown rot symptoms.

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. Make one application at the time of planting or in the spring before growth starts. Make another application in the fall after harvest.

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

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

Note: Do not dip roots of trees in solutions containing Ridomil.

Asparagus

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

Apply 2 qts./A 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 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 soil surface spray under sprinkler irrigation systems, as a directed spray under drip emitters or injected into the irrigation water.

Sprinkler Irrigation: Apply as a soil surface spray under the canopy of the tree in sufficient water to obtain uniform coverage. See the 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 table) 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 - 7 1/2 ppm active ingredient) at each irrigation. If Ridomil 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. Refer to the Application Through Irrigation Systems section under General Information for specific instructions on this method of application.

<u>Diameter of Tree Canopy (Ft.)</u>	<u>Amount of Ridomil 2E Per Ten Trees/3 Months</u>
2	1/2 - 1 fl. oz.
5	3 - 6 fl. oz.
10	13 - 26 fl. oz.
15	29 - 58 fl. oz.
20	51 - 103 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 root stocks with Ridomil is recommended. Mature trees in moderate to advanced stages of decline cannot be cured with Ridomil. 3) Do not apply more than 24 gals./A of Ridomil 2E/year or make an application within 28 days of harvest, or illegal residues may result.

Citrus

Use Ridomil 2E on citrus for control of citrus foot rot, root rot, and trunk canker caused by Phytophthora spp. Apply to the soil as a drench or as a spray in a banded application.

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

Citrus in Nurseries

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.

Soil Drench: Apply 4-6 fl. oz./100 gals. of water as a drench over the row at the 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.

Soil Surface Spray: Apply 2 gals./A of soil treated in a broadcast or banded surface spray to seedbeds, liners, or bedded stock in sufficient water to obtain uniform coverage. If applications are banded, the treated area should be wide enough to cover the root systems of the plants. Follow with a 1/2 inch irrigation.

Citrus Resets or New Plantings

Make the first application of Ridomil 2E to citrus resets or new plantings at the time of transplanting. Make up to three repeat applications, at three-month intervals to coincide with root growth flushes during the growing season.

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: Apply 1-2 gals./A (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.

Citrus in Groves

Soil Application (Control of Phytophthora Foot and Root Rot): Apply 1-2 gals/A of soil treated (3-6 fl. oz./1,000 sq. ft.) in a banded surface spray under the canopy of the trees. Two additional applications may be made per year. Use the table as a guide for treating individual trees.

<u>Diameter of Tree Canopy (Ft.)</u>	<u>Fl. Oz. Ridomil 2E per Ten Trees</u>
5	1/2 - 1
10	2 1/2 - 5
15	5 - 10
20	10 - 20

Trunk Spray (Gummosis caused by Phytophthora spp.): Add one gallon of Ridomil 2E to 15 gallons of water and spray the surface of the trunks using enough spray to thoroughly wet the lesions. Up to three applications per year may be made.

Note: Trunk sprays for use only in Texas, California, and Arizona.

Cole Crops (Broccoli, Cabbage, Cauliflower)

Ridomil 2E applied as a soil application at seeding will control damping-off caused by Pythium spp. and basal stem rot caused by Phytophthora spp. Applications may be banded over the rows, broadcast or incorporated.

Broadcast and Banded Applications: Apply 4 pts./treated acre at planting in 20-50 gals. of water. For banded applications, 2 pts./13,000 linear ft. of row in a 7-inch band is recommended. For Pythium control, use 1/2-1 pt./13,000 linear ft. of row.

Incorporated application. Apply 4-8 pts./A as a broadcast soil application in 20-50 gals. of water and incorporate in the top 2 inches of soil. If plantings are made on beds, broadcast the Ridomil and incorporate before forming beds. For control of Pythium damping-off only use 1-2 pts./A.

Cotton

Seed Rots and Seedling Diseases of Cotton (Pythium spp.)

Apply 1/4-1/2 pt./13,000 linear feet of row as an in-furrow spray in 5-15 gals. of water at planting. Mount the spray nozzle so the spray is directed into the furrow over the seed just before the seeds are covered.

For broader spectrum disease control, Ridomil 2E can be applied with 2-4 qts. Terraclor® 2E/13,000 linear feet of row as an in-furrow spray.

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

Cucumbers, Melons, and Squash

Ridomil 2E applied at seeding will provide control of damping-off and cottony leak caused by Pythium spp. Applications may be made in a band over the row at the time of seeding or broadcast and lightly incorporated. If planting on beds, Ridomil 2E may be broadcast and incorporated before bedding.

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Broadcast and Banded Application: Apply 4-8 pts./treated acre at planting in 20-50 gals. of water. For banded applications, a 7-inch band is recommended. To calculate the amount of Ridomil 2E needed per acre for banded applications, use the formula in the General Information section of this label.

Incorporated application: Apply 4-8 pts./A as a broadcast soil application in 20-50 gals. water and incorporate into the top 2 inches of soil. If plantings are made on beds, Ridomil 2E may be broadcast before bedding provided it is not incorporated more than 4 inches deep.

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 2-4 gals./treated A (6-12 fl. oz./1,000 sq. ft.) in sufficient water to obtain thorough 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. Use the high rate in areas known to be infested with Phytophthora. 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 illegal residues may result. To avoid injury, 2) Do not dip the roots of trees in Ridomil 2E solutions, spray the roots, or 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; and 5) When applying Ridomil to apples, see the Apples section of this label for specific recommendations.

Hops

Downy Mildew (Pseudoperonospora humuli): Apply 1 qt./A in a minimum of 20 gals. of water 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 illegal residues may result.

Leafy Vegetables (Head Lettuce, Spinach)

Ridomil 2E applied as a soil application at seeding will control damping-off caused by Pythium spp. Applications may be banded over the rows, broadcast or incorporated.

Broadcast and Banded Applications: Apply 4-8 pts./treated acre at planting in 20-50 gals. of water. For banded applications, a 7-inch band is recommended. To calculate the amount of Ridomil 2E needed per acre, use the formula in the General Information section of this label.

Incorporated application: Apply 4-8 pts./A as a broadcast soil application in 20-50 gals. of water and incorporate in the top 2 inches of soil. If plantings are made on beds, broadcast the Ridomil and incorporate before forming beds.

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, garden peas, field peas, sugar peas, southern peas (blackeyed peas, crowder peas, cowpeas, catjang), and edible soybeans.

Pythium Damping-Off and Root Rot: Ridomil 2E applied at seeding will control damping-off and root rot caused by Pythium spp. Applications can be made in the seed furrow or banded at planting.

Application: Apply 1 pt./13,000 linear feet of row in-furrow or in a 7-inch band at the time of planting.

Onions - Dry Bulb, Green, and Onions Grown for Seed

Ridomil 2E applied at seeding will control damping-off caused by Pythium spp. Applications may be made in a band over the rows, broadcast or incorporated.

Broadcast or Banded application: Apply 4-8 pts./A as a broadcast application at planting in 20-50 gals. of water. For banded applications, a 7-inch band is recommended. To calculate the amount of Ridomil 2E needed per acre for banded applications, use the formula in the General Information section of this label.

Incorporated application: Apply 4-8 pts./A as a broadcast soil application in 20-50 gals. of water and incorporate in the top 2 inches of soil. If plantings are made on beds, Ridomil 2E may be broadcast before planting provided it is not incorporated more than 4 inches deep.

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 in-furrow in a 7-inch band at the time of planting.

Pod Rot: Apply 2 qts./A at early pod set through the irrigation water. Apply early in set to insure adequate flushing into soil.

Note: Where Rhizoctonia and Fusarium are a problem, fungicides that control these pathogens should be used with Ridomil.

Peppers and Eggplant

Soil applications of Ridomil 2E will provide control of Pythium damping-off 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 A (broadcast rate) at the time of planting in sufficient water 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 (broadcast rate) should be made at 30-day intervals. The spray should be directed at the base of the plants and cover 6-10 inches of soil on either side of the plants. 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.

Notes: 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, or illegal residues may result.

Pineapples

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

Apply as a preplant crown dip at the rate of 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

Phytophthora Root Rot (Phytophthora spp.): Apply 1 pt./1,000 ft. of row to the soil surface in a three foot band over the row (5.5 pts./A on broadcast basis). One application may be made in the fall after harvest, and a second application in the spring.

Note: Do not apply less than 45 days prior to harvest, or illegal residues may result.

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 high rate of Ridomil 2E should be used in areas with a history of heavy Phytophthora damage. Under heavy late season Phytophthora pressure, Ridomil 2E may not provide complete control.

Surface Applications: For full season control, apply 5 pts./treated acre in sufficient carrier 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 1/10 fl. oz./1,000 linear feet of row as an in-furrow spray in 5-10 gals. of carrier 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 carrier to provide uniform coverage. Use the table 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	6/10	1 1/10
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.

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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 (Peronospora 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. Ridomil 2E will not control Anthracnose; continue using a preventive foliar fungicide control program.

For best results against black shank, use Ridomil 2E on tobacco varieties with some resistance to black shank. 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. (Note: Burley L8 hybrids are only resistant to Phytophthora Race 0.) Ridomil 2E is not recommended for use in high black shank areas on very susceptible flue-cured varieties such as Hicks, Virginia Gold, and White Gold.

Notes: (1) The preferred method of blue mold control is to use Ridomil 2E in the plant bed and follow with an application in the field prior to transplanting. (2) Failure to adequately control nematodes in fields treated with Ridomil 2E may result in poor control of black shank.

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./A in 50 gals. of water (1 fl. oz. or 2 tablespoons/150 sq. yds. of bed in 2 gals. of water). Apply before or at the time of seeding to the surface of the plant bed and lightly incorporate or follow with one-half inch sprinkler irrigation water. In Pennsylvania, use 2 qts./A (2 fl. oz. or 4 tablespoons/150 sq. yds. of bed in 2 gals. of water).

Note: These treatments are only adequate to control blue mold in the plant bed and will not control blue mold in the field following transplanting. Follow the directions below for field planted tobacco.

Field Planted Tobacco

Blue Mold: Use Ridomil 2E as a broadcast soil application and incorporate in the top 2-4 inches of soil and form beds. For flue-cured tobacco, use 1-2 qts./A, depending on disease

pressure and length of control desired. Under low disease pressure or for early season control, use 1 qt./A; for burley and other tobacco types, use 2 qts./A of Ridomil 2E.

Black Shank: Apply a broadcast application of Ridomil 2E using the appropriate rate in the table below. Apply with a conventional ground sprayer in a minimum of 15 gals. of water per acre. Incorporate Ridomil 2E in the top 2-4 inches of soil and form beds.

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.

*See General Information for recommendations on the use of resistant varieties.

**Florida and Georgia - Use 6 qts./A of Ridomil 2E in fields with very high black shank levels (greater than 60% disease).

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

For prolonged control of blue mold or black shank in field planted tobacco, make a supplemental application of 1 qt./A as a broadcast soil application at the last cultivation. Do not make this layby application if more than 2 qts./A of Ridomil 2E were applied at transplanting.

Note: Do not use Ridomil 2E in transplant water or in foliar application on field-grown tobacco, or crop injury may occur.

Tomatoes

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

Seedling Damping-Off (Pythium spp.): Apply 4-8 pts./A as a broadcast surface spray immediately before or after planting in 20-50 gals. of water. Lightly incorporate with mechanical equipment if application is made prior to planting or with sprinkler irrigation if applied after planting. For banded applications, use the formula shown in the General Information section to calculate the amount of Ridomil 2E needed per acre.

Fruit and Root Rot (Pythium spp. and Phytophthora spp.): Apply 4 pts./A as a soil surface application under the vines 4-12 weeks before harvest in sufficient water to obtain thorough coverage. Follow as soon as possible with an irrigation. For banded applications, use the formula shown in the General Information section to determine the amount of Ridomil 2E needed per acre.

Notes: (1) Do not apply more than 12 pts./A/season and (2) Do not apply within 7 days of harvest or illegal residues may result.

Vegetable Bedding Plants

Pythium Damping-Off of Broccoli, Cabbage, Cauliflower, Cucumbers, Lettuce, Melons, Spinach and Squash

Apply 2-4 pts./A as a preplant broadcast spray in 50 gals. of water (1-2 fl. oz. or 2-4 tablespoons/150 sq. yds. of bed in 2 gals. water) before or at the time of seeding to the surface of the beds and lightly incorporate or follow with one-half inch sprinkler irrigation water.

Rotational Crops

If replanting is necessary following a soil application, tobacco or cotton may be replanted immediately. Tomatoes, broccóli, cabbage, cauliflower, cucumbers, eggplant, melons, peppers, squash, onions, lettuce, or spinach may be replanted immediately provided that no more than 4 qts. per acre of Ridomil were applied to the soil. Do not make a second application of Ridomil. Wheat, or any crop on this label may be planted during the fall following application of Ridomil. Other small grain cover crops may also be planted during the fall following application provided they are plowed down and not used for food or feed. Corn, soybeans, root crops, or any crop on this label may be planted the year following treatment. Other crops may be planted 18 months following application.

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°F 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. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate 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 Hazardous Waste representative at the nearest EPA Regional Office.

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.

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.

Practical Treatment: In case of contact with eyes, immediately flush with plenty of water. Get medical attention. In case of contact with 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 to fresh air. If not breathing, give artificial respiration (preferably mouth to mouth) and get medical attention. Notes 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. Apply only as specified on this label. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

Physical or Chemical Hazards

Do not use or store near heat or open flame.

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

D·z·n® trademark of CIBA-GEIGY for diazinon

Balan® trademark of Elanco Products for benefin

Bravo® trademark of SDS Biotech for chlorothalonil

Dasanit® trademark of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen, for fensulfotion

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

Enide® trademark of Tuco Division of the Upjohn Company for diphenamid

Furadan® trademark of FMC Corporation of carbofuran

Manzate® trademark of E. I. DuPont de Nemours & Company for maneb/mancozeb

Mocap® trademark of Rhone Poulenc, Inc., for ethoprop

Nemacur® trademark of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen, for fenamiphos

Paarlan® trademark of Elanco Products for isopropalin

Terraclor® trademark of UniRoyal, Inc., for PCNB

Tillam® trademark of Stauffer Chemical Co. for pebulate

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Agricultural Division
CIBA-GEIGY Corporation
Greensboro, North Carolina 27419

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(Back Cover)

Ridomil® 2E

Fungicide

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

One Gallon
U. S. Standard Measure

One Quart
U.S. Standard Measure

Active Ingredient:

Metalaxyl: <u>N</u> -(2,6-dimethylphenyl)- <u>N</u> - (methoxyacetyl) alanine methyl ester	25.1%
<u>Inert Ingredients:</u>	<u>74.9%</u>
<u>Total:</u>	<u>100.0%</u>

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

Keep Out of Reach of Children.

WARNING

AVISO

"PRECAUCIÓN AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta haya sido explicado ampliamente."

Precautionary Statements

Hazards to Humans and Domestic Animals

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.

Practical Treatment: In case of contact with eyes, immediately flush with plenty of water. Get medical attention. In case of contact with 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 to fresh air. If not breathing, give artificial respiration (preferably mouth to mouth) and get medical attention. Notes 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. Apply only as specified on this label. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

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 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.

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

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(LABELS-R.1 - RDML2E/MSTF4)

CGA
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Oct. 9, 1987 -
Chemigation
Dec. 1, 1987 -
Adm. Amendments