UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number: ~~100-929~~ 70252-10

Date of Issuance: OCT 26 1998

NOTICE OF PESTICIDE:
__x__ Registration
____ Reregistration

(under FIFRA, as amended)

Term of Issuance: Time-limited registration; Expires January 31, 1999

Name of Pesticide Product: Mefenoxam 2E

Name and Address of Registrant (include ZIP Code):

Novartis Crop Protection, Inc.
P.O. Box 18300
Greensboro, NC 27419-8300

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

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

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

This product is registered in accordance with sec. 3(c)(5) of FIFRA as amended, subject to the following terms:

1. Those terms of registration established for Mefenoxam Technical, EPA Reg. No. 100-791.

2. Registrant must submit the results of one year corrosion characteristics studies to the Agency.

3. Make the following label revisions before you release the product for shipment:

a. Revise the EPA Registration Number to 100-929.

b. Since the product is in acute toxicity category II for eye irritation, change all signal words to "Warning/Aviso".

c. The product label must have the following statement added just below the ingredient statement: "Contains Petroleum Distillate"

d. Precautionary language must be revised to read "Causes substantial, but temporary eye injury." Add "Wash thoroughly with soap and water after handling."

Signature of Approving Official: Mary F. Waller

Date: OCT 26 1998

EPA Form 8570-6

CONCURRENCES

SYMBOL	7505C						
SURNAME	FWarringer						
DATE	10/20/98						

e. PPE for AGRICULTURAL USE REQUIREMENTS and for Applicators and other handlers must include "Chemical resistant gloves such as barrier laminate or viton (≥ 14 mils)" and "Protective eye wear".

f. Statements of practical treatment must be revised to read "If in eyes: Hold eyelids open and flush with steady , gentle stream of water for 15 minutes. Get medical attention. If swallowed: Call a physician or poison control center. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol."

g. Under CONDITIONS OF SALE AND WARRANTY, revise opening sentence to read "The Directions for Use ...." Under NON-AGRICULTURAL USE REQUIREMENTS change the word "plans" to "plants". In the NOTE on page 5, there are words missing on line 4, after "Therefore, ...". On page 12, under Citrus, Established Plantings, the final sentence should read "...for one year (2-3 applications) to reduce the population."

h. Under Applicators and other handlers must wear: on page 33, place this statement before the existing statement addressing cleaning/maintaining PPE with: "Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions ..."

i. On page 14, at the top, the product named Mefenoxam 2E PC does not appear to be registered. Please clarify or delete.

j. On page 24 under DRENCH, the dosage rate should be revised to read "Mix 0.26-1.2 fl. oz....". On page 25 under DRENCH, the final sentence should be revised to read "Do not apply rates of 1.62 fl. oz./100gals. more often than every 10 weeks." On page 28 under Notes, the statement should be revised to read "...1,000sq. ft. (3.0 gals./A)of Mefenoxam..."

k. On page 32, the footnote for grasses is not clear. Revise to read "Any grass, Gramineae family (either green or cured), except do not rotate to any of the following for 12 months after application: sugarcane, any cereal grain that will be fed to or grazed by livestock, any enclosed pasture grass, grass grown for hay or silage such as bermudagrass, bluegrass, bromegrass or fescue."

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

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

If there are any questions, please contact Dr. Tom Ellwanger at (703) 308-9352.

Sincerely,

Mary L. Waller

Mary L. Waller
Product Manager (21)
Fungicide Branch
Registration Division (7505C)

4 & 4C

Mefenoxam 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 Pint
U. S. Standard Measure

Active Ingredients*:	
(R)-2-[(2,6-dimethylphenyl)-methoxyacetylamino]-propionic acid methyl ester	24.3%
Related Compounds	0.8%
Other Ingredients:	74.9%
Total:	100.0%

*Contains 2 lbs. active ingredient per gallon.

EPA Reg. No. 70252-

EPA Est.

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use inside booklet.

NCP

ACCEPTED
with COMMENTS
In EPA Letter Dated
OCT 26 1998
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. ~~100-929~~ transferred to 70252-10

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. If terms are not acceptable,* return the unopened product container at once.

CONDITIONS OF SALE AND WARRANTY

The **Directions of 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 Novartis Crop Protection, Inc. or the Seller. All such risks shall be assumed by the Buyer.

Novartis warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in **Directions for Use** subject to the inherent risks referred to above. **Novartis makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Novartis or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** Novartis 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 Novartis.

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. For application to ornamentals, do not enter treated areas without footwear until sprays have dried. There is no restricted-entry interval (REI) requirement following soil-incorporated application to ornamentals.

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

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plans on farms, forests, nurseries, or greenhouses. **Do not enter treated areas without footwear until sprays have dried.**

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

General Information

Mefenoxam 2E 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, 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: Mefenoxam 2E is a systemic fungicide having a specific mode of action and could be subject to development of insensitive strains of fungi. Development of insensitivity cannot be predicted. Therefore, cannot assume liability for crop damage resulting from insensitive strains of fungi. If treatment is not effective following the use of Mefenoxam 2E as recommended, an insensitive strain of fungi may be present. If the treatment is ineffective due to the presence of a Mefenoxam 2E insensitive strain of fungi, neither Mefenoxam 2E 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, unless specified since this practice may encourage more rapid development of insensitivity.

THIS LABEL IS FOR FIELD USE ONLY AND IS *NOT* INTENDED FOR USE ON TRANSPLANT TRAYS, GREENHOUSES, LATH HOUSES, FLOAT HOUSES, HYDROPONIC PRODUCTION, OR IN BEDDING PLANT STRUCTURES.

Where rate ranges are specified on this label, use the higher rate when heavy disease pressure is expected and the lower rate when disease pressure is expected to be light, unless otherwise noted.

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

Mixing Instructions

Add 1/4-1/2 of the required amount of water to the spray tank, add the proper amount of Mefenoxam 2E, then add the rest of the water. When tank mixing other products with Mefenoxam 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 Mefenoxam 2E, added last. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Mefenoxam 2E is usually compatible with Balan®, Bravo®, Dasanit® + Di-Syston®, Dithane® M-22, Dithane M-45, Dasanit + Nemacur®, Dasanit, D•z•n®, Enide®, Furadan®, Lorsban®, Manzate®, Manzate 200, Mocap®, Mocap Plus 4-2EC, Paarlan®, Terraclor® 2E, Terraclor 75WP and Tillam®.

To assure the compatibility of Mefenoxam 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 5 minutes. If the combination remains mixed, or can be remixed readily, the mixture is compatible.

BEFORE TANK MIXING MEFENOXAM 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 MEFENOXAM 2E.

Application Instructions

Apply Mefenoxam 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 gals./A for ground applications and 5 gals./A by air. Refer to the specific crop directions for use for application recommendations.

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 (fl. oz.) of product per certain row length (often 1,000 ft.). 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 Mefenoxam 2E needed per acre of crop when banded applications are made.

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

band width in inches	broadcast rate		amount needed
row spacing in inches X	per acre	=	per acre of field

Application Through Irrigation Systems

Mefenoxam 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, hand move, 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 non-uniform 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-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.

Application Instructions

Mefenoxam 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, Mefenoxam 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 Mefenoxam 2E at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 15 parts water to 1 part Mefenoxam 2E in the mix tank. Mefenoxam 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

Notes: (1) Use only with drive systems which provide uniform distribution. (2) Do not use end guns when chemigating Mefenoxam 2E through center pivot irrigation systems because of non-uniform application. (3) Plug the first nozzle closest to well head to protect water source.

1. Determine the size of the area to be treated.

2. Determine the time required to apply 1/4 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80-95% of the manufacturer's rated capacity.

3. Using water, determine the injection pump output when operated at normal line pressure.

4. Determine the amount of Mefenoxam 2E required to treat the area covered by the irrigation system.

5. Add the required amount of Mefenoxam 2E and sufficient water to meet the injection time requirements to the solution tank.

6. Make sure the system is fully charged with water before starting injection of the Mefenoxam 2E solution. Time the injection to last at least as long as it takes to bring the system to full pressure.

7. Maintain constant solution tank agitation during the injection period.

8. Continue to operate the system until the Mefenoxam 2E solution has cleared the sprinkler head.

Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

1. Determine the acreage covered by the sprinklers.

2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20 to 30-minute time interval.

3. Determine the amount of Mefenoxam 2E required to treat the area covered by the irrigation system.

4. Add the required amount of Mefenoxam 2E into the same quantity of water used to calibrate the injection period.

5. Operate the system at the same pressure and time interval established during the calibration.

6. Inject Mefenoxam 2E at the beginning of the irrigation cycle in ½-1 inch of water or as a separate application to maximize the effectiveness of the fungicide. Do not apply in excess of 1 inch of water.

7. Stop injection equipment after treatment is completed. Continue to operate the system until the Mefenoxam 2E solution has cleared the last sprinkler head.

Micro Sprinkler or Drip Irrigation Systems

General Instructions

1. 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.

2. Only pressure injection or venturi equipment is recommended.

3. Determine the area to be treated in each irrigation run.

4. Measure the output of each of the emitters or drip tubes closest to and farthest from the injector site.

5. For calibration, substitute a concentrated detergent (such as Wisk) or a soluble fertilizer for the Mefenoxam 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 2 minutes of each other,

adjust the dilution ratio and/or the injection rate.

6. 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 Mefenoxam 2E in the injector and measure the time intervals with a salt bridge.

Step-by-Step Instructions

1. 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.

2. Make up an indicator solution of detergent or fertilizer, using the same ratio to be used when mixing Mefenoxam 2E.

3. Set the injector to apply the indicator solution at the injection rate to be used in the actual Mefenoxam 2E application.

4. 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.

5. 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.

6. If the period of detection of the indicator solution between the 2 emitters are within 2 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 Mefenoxam 2E, or adjust the injector to a slower flow rate.

7. Once the system is calibrated, dilute the needed amount of Mefenoxam 2E with water in the mix tank using a minimum of 15 parts water to 1 part Mefenoxam 2E in the solution tank.

8. Do not begin to inject Mefenoxam 2E into the system until all emitters are producing equal flow rates, or until the system is at full pressure.

9. Inject the Mefenoxam 2E into the system at the beginning of the irrigation set in ½-1 inch of irrigation water. Do not apply in excess of 1 inch of water.

Trunk Diameter	Qts. of Diluted Mixture Per 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 Mefenoxam 2E. (2) Do not graze or feed cover crops in treated orchards, or illegal residues may occur.

Citrus

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

Use Mefenoxam 2E on citrus for control of citrus foot rot, root rot, trunk cankers, and brown rot caused by *Phytophthora* spp. Mefenoxam 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 Mefenoxam 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 Mefenoxam 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 Mefenoxam 2E applications.

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

Citrus in Nurseries (AZ, CA, FL, and PR Only)

Make the first application of Mefenoxam 2E at the time of planting. Make repeat applications at 3-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 Mefenoxam 2E solutions to bare roots.

Soil Drench: Apply 2-3 fl. oz./100 gals. of water as a drench over the row at a rate of 100-250 gals./1,000 ft. 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 2-4 qts. per treated acre in a broadcast or banded surface spray to seedbeds, liners, or bedded stock in sufficient water to obtain thorough coverage. If applications are 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.

Note: Do not use Mefenoxam 2E for disease control in greenhouse nurseries.

Citrus Resets or New Plantings (AZ, CA, FL, and PR Only)

Make the first application of Mefenoxam 2E to citrus resets or new plantings at the time of transplanting. Make up to 3 additional applications per year at 3-month intervals or when root growth flushes occur.

Water Ring Drench: Mix 2-3 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 (AZ and CA Only): Apply 2-4 qts. per treated acre (1 1/2-3 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 3 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 (FL and PR Only): Apply 2 qts. per treated acre (1 1/2 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 pt. per grove acre for trees less than 5 years old. Two to 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 (FL and PR Only): Apply 2 pts. per treated acre to groves that have a Phytophthora propagule count of 10-20 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 pt. per grove acre. Two to 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 2 qts. per treated acre for one year (2-3 applications) reduce the population.**

Soil Surface Spray (AZ and CA Only): For best results, begin Mefenoxam 2E applications during the spring root-flush period. One or two additional applications per year can be made at 3-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 Mefenoxam 2E at 2-4 qts./A (1½-3 fl. oz./1,000 sq. ft.) when 3 applications are planned and at 6 qts./A (4.5 fl. oz./1,000 sq. ft.) when 2 applications are planned. Apply in sufficient water to provide uniform coverage or apply through irrigation water. See the following instructions for application through irrigation water.

Diameter of Tree Canopy (Ft.)	Fl. Oz. of Mefenoxam 2E Per Ten Trees	
	2 applications per yr.	3 applications per yr.
5	0.76	0.50
10	3.76	2.50
15	7.50	5.00
20	15.00	10.00

Trunk Spray for Control of Gummosis Caused by *Phytophthora* spp. (AZ, CA, and TX Only): Add 2 qts. of Mefenoxam 2E to 3 gals. of water and spray the surface of the trunks using enough spray to thoroughly wet the cankers. Mefenoxam 2E may be applied up to 3 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. (2) Do not apply more than 3 gals. of Mefenoxam 2E per treated acre per year.

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

Cotton

Seed Rots and Seedling Diseases of Cotton Caused by *Pythium* spp.

Apply 2-4 fl. oz./13,000 linear ft. of row (0.15-0.30 fl. oz./1,000 linear ft.) 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. of Terraclor 2E or 1⅓-2¾ lbs. of Terraclor 75WP per 13,000 linear ft. of row in tank mixture

with Mefenoxam 2E or use labeled rates of Mefenoxam 2E PC.

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

Mefenoxam 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 2-4 pts. per treated acre as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 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 Mefenoxam 2E needed per acre.

Surface Application: Apply 2-4 pts. per 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 Mefenoxam 2E needed per acre. If natural rainfall is not expected before the seeds start germinating, Mefenoxam 2E should be incorporated mechanically before planting or be moved into the seed zone after planting with ½-1 inch sprinkler irrigation.

Notes: (1) Do not use Mefenoxam 2E for disease control in greenhouse or field-grown vegetable bedding plants. (2) Do not dip plants in solutions containing Mefenoxam 2E, or crop injury may occur.

Leafy Vegetables*

*Includes celery, gardencress, upland cress, endive, fennel, lettuce (head and leaf), parsley, rhubarb, spinach, and Swiss chard.

Mefenoxam 2E applied as a soil application will control damping-off caused by *Pythium* spp. in leafy vegetables and white rust (*Albugo occidentalis*) and downy mildew in spinach. Applications may be made banded over the row, preplant incorporated, or injected with liquid fertilizer.

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

Surface Application: Apply 2-4 pts. per treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a minimum of a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam 2E needed per acre. If natural rainfall is not expected before the seeds start germinating, Mefenoxam 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 1/2 pt. of Mefenoxam 2E per acre shanked in 21 days after planting or after the first cutting. One other application may be shanked in after the next cutting. A total of 2 supplemental applications may be used on a 21-day interval. Use sufficient mechanical or bypass agitation to keep the Mefenoxam 2E mixed with the water or fertilizer.

Notes: (1) The additional applications of Mefenoxam 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 Mefenoxam 2E to the soil at planting. **If Mefenoxam 2E is not used at planting, do not use Mefenoxam 2E at any other time throughout the season.** Do not apply Mefenoxam 2E in foliar applications or make curative applications in situations where white rust infections are already established. The use of Mefenoxam 2E in curative applications greatly increases the risk of the fungus developing insensitivity to this active ingredient. The development of insensitivity will destroy the effectiveness of Mefenoxam 2E in controlling white rust. (2) Do not harvest spinach within 21 days of a Mefenoxam 2E application. (3) Do not use Mefenoxam 2E for disease control in

greenhouse or field-grown vegetable bedding plants. (4) Do not apply more than 5.5 pts. of Mefenoxam EC per acre per growing season in spinach. (5) Do not exceed a total of 1.4 lbs. active ingredient per acre per growing season, when using a combination of Mefenoxam EC, Mefenoxam GR, or Mefenoxam/Copper in spinach.

Peppers and Eggplant

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

Apply 2 pts. per treated acre at the time of planting in sufficient water (20-50 gals.) or liquid fertilizer to provide uniform coverage. If rainfall is not expected before the plants begin growth, Mefenoxam 2E should be incorporated mechanically before planting or be moved into the root zone after planting with ½-1 inch of sprinkler irrigation water. For banded applications, a 12 to 16-inch band is recommended. After the initial application, 2 supplemental post-directed applications at 2 pts. per treated acre 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 Mefenoxam 2E into the root zone. Mefenoxam 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 Mefenoxam 2E needed per acre.

Precautions: (1) Mefenoxam 2E may cause some yellowing of the pepper leaves. (2) Plants already infected with Phytophthora cannot be cured with Mefenoxam 2E applications. (3) The foliar blight phase of Phytophthora cannot be controlled with foliar applications of Mefenoxam 2E. (4) Do not use Mefenoxam 2E for disease control in greenhouse or field-grown vegetable bedding plants. (5) In areas where there is a history of late Phytophthora infections, an application of another EPA-registered fungicide labeled for Phytophthora control is recommended 17-21 days following the last Mefenoxam 2E application.

Notes: To avoid possible illegal residues, (1) Do not apply within 7 days of harvest, and (2) Do not apply more than 6 pts. of Mefenoxam 2E per acre of crop per season.

Tobacco

Mefenoxam 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. For control of anthracnose and other tobacco diseases, use fungicides that control those diseases.

Notes: (1) Do not use Mefenoxam 2E for disease control in greenhouse crops or tobacco plant beds. (2) Do not dip plants in solutions containing Mefenoxam 2E, or crop injury may occur. (3) Do not use Mefenoxam 2E for disease control in floathouse, floatbed production facilities, hydroponic production, or greenhouse facility.

Field Planted Tobacco

Blue Mold: Apply Mefenoxam 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 pts. per treated acre, depending on disease pressure and length of control desired. Under low disease pressure or for early season control, use 1 pt. per treated acre. For burley and other tobacco types, use 2 pts. per treated acre.

For ***prolonged control*** *of blue mold in field planted tobacco, make a* supplemental application of 1 pt./A 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 pts./A of Mefenoxam 2E was applied prior to transplanting or if no Mefenoxam 2E was applied prior to transplanting.

Note: Do not use Mefenoxam 2E in transplant water on field tobacco because of the potential for crop injury. Do not use Mefenoxam 2E as a foliar spray to field planted tobacco.

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

Type of Tobacco	Disease Level in Field	Rate of Nation's Ag Mefenoxam 2E Per Acre
Flue-Cured	Low to Moderate (Less than 6% Disease)	2 pts.
	High (More than 6% Disease)	2 qts.*
Burley and Other**	Low to Moderate (Less than 6% Disease)	2 qts.
	High (More than 6% Disease)	3 qts.

*FL and GA - Use 3 qts. per treated acre of Mefenoxam 2E in fields with heavy black shank levels (greater than 6%).

**PA - Do not use Mefenoxam 2E for black shank control.

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

Precautions: (1) For best results against black shank, use Mefenoxam 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 L8 hybrids are only resistant to Phytophthora Race 0.) (2) Mefenoxam 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 Mefenoxam 2E may result in poor control of black shank.

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

Tomatoes

Soil applications of Mefenoxam 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 2-4 pts. per 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, Mefenoxam 2E should be incorporated mechanically before planting, during the planting operation, or be moved into the seed zone after planting with ½-1 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 Mefenoxam 2E needed per acre.

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

To aid in the control of root and fruit rot, 1 or 2 additional applications may be made during the growing season, depending on the severity of the conditions for disease infection.

Apply 2 pts. per 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. Mefenoxam 2E 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 Mefenoxam 2E needed per acre. If Mefenoxam 2E is injected into the beds with liquid fertilizer, base calculations on a 7-inch band.

If soil surface sprays are used, the Mefenoxam 2E must be incorporated into the soil with ½-1 inch of rainfall or sprinkler irrigation.

Mefenoxam 2E may be applied with water or liquid fertilizer. Use the test in the **General Information** section to check for compatibility with various fertilizers.

Notes: (1) To avoid possible illegal residues, do not apply more than 6 pts. per treated acre per season. (2) Keep Mefenoxam 2E suspended in the fertilizer solution with bypass or mechanical agitation. Refer to the **General Information** section for drip irrigation instructions. (3) Do not use Mefenoxam 2E for disease control in greenhouse or field-grown vegetable bedding plants.

Ornamentals

Use Mefenoxam 2E on container, bench, or bed-grown ornamentals in greenhouses or outdoor nurseries, and for use on ornamentals grown for indoor and outdoor landscaping, for control of damping-off, and root and stem rot diseases caused by Pythium and Phytophthora. Mefenoxam 2E may be applied through irrigation systems, as a soil drench or as a soil surface spray, or incorporated into a soil mix for subsequent seeding or transplanting of ornamentals. **Within a rate range given for a specific group of ornamentals, use the lower rate for the shortest interval listed and the higher rate for the longest interval. Under severe disease conditions, use the highest rate and the shortest interval.**

For drench applications, use enough of the specified Mefenoxam 2E: water solution to wet the root zone of plants. In general, 1 pt./sq. ft. of this solution is sufficient for ornamentals growing in containers with 4 inches of growth media. Containers with growth media depth greater than 4 inches generally require 1½-2 pts./sq. ft. of the solution. If soil surface applications are made, irrigate with at least ½ inch of water if rainfall does not occur within 7 days.

NOTICE TO USER: Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for tolerance to Mefenoxam 2E. Neither the manufacturer nor the seller has determined whether or not Mefenoxam 2E can be used safely on ornamental and nursery plants not specified on this label. The professional user should determine if Mefenoxam 2E can be used safely prior to commercial use. In a small area, test the recommended rates for a particular group of unlabeled plants, i.e., bedding plants, foliage, etc., for phytotoxicity prior to widespread use.

Foliage Plants Aglaonema, Aphelandra, Dieffenbachia, Peperomia, Philodendron*, Pothos, Schefflera, Sedum, Sempervivum, Zygocactus	**DRENCH:** Mix 0.12-0.6 fl. oz. with 100 gals. of water. Apply 1 pt. solution per sq. ft. For growth media depth greater than 4 inches, apply 1½-2 pts. solution per sq. ft. Repeat applications at 2 to 3-month intervals, if necessary. *On Philodendron, use 0.2-1.0 fl. oz./100 gals. *Precaution: To minimize the potential for injury to Pothos, do not use more than 0.38 fl. oz./100 gals. and do not apply more frequently than once every 3 months.* **SOIL MIX:** Thoroughly mix 0.06-0.26 fl. oz. with each cu. yd. of soil mixture. **SOIL SURFACE SPRAY:** Apply 0.2-1.0 fl. oz./1,000 sq. ft. to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of ½ inch of water if rainfall does not occur within 7 days.

Bedding Plants	**DRENCH At Seeding** (Soil 2-3 inches deep): Mix 0.06-0.26 fl. oz. with 100 gals. of water and apply 1 pt. solution per sq. ft. **DRENCH At Transplanting** (Soil 2-3 inches deep): Mix 0.2-1.0 fl. oz. with 100 gals. of water and apply 1 pt. solution per sq. ft. For growth media depth greater than 4 inches, apply 1½-2 pts. solution per sq. ft. Repeat applications at 1 to 2-month intervals, if necessary. Do not apply rates of 0.75-1.0 fl. oz./100 gals. more often than once every 6 weeks. **SOIL MIX At Seeding and At Transplanting:** Thoroughly mix 0.02-0.12 fl. oz. with each cu. yd. of soil mixture. **SOIL SURFACE SPRAY:** Apply 0.2-1.0 fl. oz./1,000 sq. ft. to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of ½ inch of water if rainfall does not occur within 7 days.
Ageratum, Algerian ivy, Artemisia, Aster, Begonia, Caladium, Carnation, Chrysanthemum, Coleus, Daisy, English ivy, Foxglove, Gaillardia, Geranium, Impatiens, Marigold, Pansy, Petunia, Phlox, Pinks, Primrose, Prostrate Rosemary, Salvia, Snapdragon, Verbena, Vinca, Zinnia	

Flowers African violet, Anthurium, Baby's breath, Carnation, Chrysanthemum, Columbine, Delphinium, Easter lily, Geranium, Gloxinia, Poinsettia, Rose	**DRENCH:** Mix 0.2-1.0 fl. oz. with 100 gals. of water and apply 1 pt. solution per sq. ft. For growth media depth greater than 4 inches, apply 1½-2 pts. solution per sq. ft. Repeat applications at 1 to 2-month intervals, if necessary. Do not apply rates of 0.76-1.0 fl. oz./100 gals. more often than every 6 weeks. *Precaution: Do not apply more than 0.5 fl. oz./100 gals. water to Easter lily and only make one at-planting application.* **SOIL SURFACE SPRAY:** Apply 0.2-1.0 fl. oz./1,000 sq. ft. to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of ½ inch of water if rainfall does not occur within 7 days.

Azaleas	**DRENCH:** Phytophthora root and crown rot - Mix 0.26-0.12 fl. oz. with 100 gals. of water and apply 1 pt. with 100 gals. of water and apply 1 pt. solution per sq. ft. For growth media depth greater than 4 inches, apply 1½-2 pts. solution per sq. ft. Repeat applications at 2 to 4-month intervals, if necessary. **SOIL SURFACE SPRAY:** Apply 0.5-2.5 fl. oz./1,000 sq. ft. to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of ½ inch of water if rainfall does not occur within 7 days. *Precautions: (1) To minimize the potential for injury to azaleas, do not apply repeat soil applications of 1.2 fl. oz./100 gals. closer than every 3 months, and do not exceed a total of 2 fl. oz. in 6 months. (2) Use the lower rate for "Coral Bell" variety.*

Woody Ornamentals Other Than Azaleas *Aucuba japonica,* Arborvitae, Boxwood, Ceanothus, Cotoneaster, Dogwood, Ficus, "Halls" Honeysuckle, Ilex, *Juniperus* spp., Photinia, *Pieris japonica,* *Pinus* spp., Pittosporum, Rhododendron, White cedar, White pine, Yew	**DRENCH:** Mix 0.4-2 fl. oz. with 100 gals. of water and apply 1 pt. solution per sq. ft. For growth media depth greater than 4 inches, apply 1½-2 pts. solution per sq. ft. Repeat applications at 2 to 3-month intervals, if necessary. Do not apply rates of 1.0 fl. oz./100 gals. more often than every 10 weeks. **SOIL SURFACE SPRAY:** Apply 0.5-2.5 fl. oz./1,000 sq. ft. to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of ½ inch of water if rainfall does not occur within 7 days.

Interiorscape and Individual Plant Use

In situations where water volumes used are much less than 100 gals. and the area treated is small, the following table provides the Mefenoxam 2E rates to make small quantities of solution. Refer to the plant type for the correct fl. oz. of product to use when utilizing this table.

Rate of Novartis Mefenoxam 2E (fl. oz.)	Amount of Mefenoxam 2E to add to water to make the following quantities			
	1 gal.	5 gals.	10 gals.	25 gals.
0.5	2 drops	10 drops	20 drops	50 drops/ 1.0 ml
1.0	4 drops	20 drops	40 drops	100 drops/ 2 ml
2.0	8 drops	40 drops	80 drops/ 1.5 ml	200 drops/ 4 ml/ 2/3 tsp.
4.0	16 drops	80 drops/ 1.5 ml	3 ml/ 0.5 tsp.	8 ml/ 1 1/3 tsp.

Apply enough solution to wet the root area of the plants.

Citrus in Nurseries and Landscape Plantings (Nonbearing)

Use Mefenoxam 2E on nonbearing 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.

Make the first application of Mefenoxam 2E at the time of planting. Make repeat applications at 3-month intervals during the period when trees are actively growing.

Soil Drench: Mix 0.6-3.0 fl. oz./100 gals. of water and apply as a drench over the row at the rate of 100-250 gals./1,000 ft. of row. The width of the drench treatment should be wide enough to cover the root systems of the plants.

Soil Surface Spray: Apply 0.2-1.0 gal./A of treated soil 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.

Calculate the amount of Mefenoxam 2E needed for a banded treatment by using the formula at the end of the **General Information** section of this label.

Note: Do not use in greenhouse citrus nursery stock intended for commercial fruit production.

Conifers in Nurseries and Plantations (Including Christmas Trees)

Mefenoxam 2E provides control of Phytophthora root rot of conifers.

Conifers in Nurseries

Seedbeds and Plug-Plantings	Apply 0.25-1.25 pt. Mefenoxam 2E in at least 50 gals. of water *per acre in the spring and again* in the fall.
2-0 Transplants	Apply 0.5-2.5 pts. Mefenoxam 2E in at least 50 gals. of water per acre in the spring and again in the fall.

Conifers in Plantations

Use of Mefenoxam 2E will aid in the control of Phytophthora root rot when used in conjunction with good cultural practices. The use of Mefenoxam 2E will not overcome poor management practices such as planting on sites that are prone to flooding or are poorly drained. Mefenoxam 2E fungicide will not revitalize trees showing moderate to severe disease symptoms.

Apply 0.25-1.25 gal. of Mefenoxam 2E per acre in a minimum of 50 gals. of water as a directed soil spray. Do not apply as a foliar spray. Applications should be made in early spring before growth starts and in the fall before the ground freezes. Calculate the amount of Mefenoxam 2E needed for a banded treatment by using the formula at the end of the **General Information** section of the label.

For best results, apply ½-1 inch of water after application if rain is not expected within 3 days.

Deciduous Fruits and Nuts in Nurseries (Nonbearing)

Mefenoxam 2E provides control of Pythium root rot and Phytophthora root, crown, and collar rot of nonbearing deciduous fruits and nuts.

Apply 0.6-3.0 fl. oz./1,000 sq. ft. in sufficient water to obtain thorough coverage of the soil under the canopy of the trees. Treat sufficient surface area in nurseries to cover the root zone of the plants. Additional applications may be made as necessary at 3-month intervals during the growing season.

Notes: (1) Do not apply to trees that will bear harvestable fruit within 12 months of the last application, or possible illegal residues may result. (2) Do not apply more than 8.8 oz./1,000 sq. ft. (1.5 gals./A) of Mefenoxam 2E per year.

Turf

Mefenoxam 2E controls Pythium blight and Pythium damping-off in turf, yellow tuft (downy mildew) in bluegrass, and downy mildew in St. Augustinegrass. **Within the rate range given for turf, use the lower rate for the shortest interval listed and the higher rate for the longest interval. Under severe disease conditions, use the highest rate and shortest interval.**

Established Turf Pythium Blight, Yellow Tuft, Downy mildew	Apply as a preventative treatment at 0.2-1.0 fl. oz. in 1-5 gals. of water per 1,000 sq. ft. Re-treat at 10 to 21-day intervals. During periods of prolonged conditions favorable for disease development, use 0.5-1.0 fl. oz. on a 14-day schedule.
Newly Seeded Areas Pythium Damping-off, Pythium Blight, Yellow Tuft, Downy Mildew	Apply 0.2-1.0 fl. oz. in 1-5 gals. of water per 1,000 sq. ft. immediately after seeding. Irrigate with 1/4-1/2 inch water. Re-treat at 7 to 14-day intervals if conditions remain favorable for disease. **Note:** For long-term control of Pythium in areas when using seed treated with the active ingredient contained in Mefenoxam 2E, make an application of Mefenoxam 2E 7-10 days after seeding.

Note: For control of other diseases of turf, use Banner alone or in a tank mix combination with Mefenoxam 2E. Refer to the Banner label for rates, precautions, restrictions, etc.

Precautions: To minimize the potential for insensitivity, (1) Make no more than 3 applications per season of any product in which the Mefenoxam 2E active ingredient is applied alone, and (2) Apply an alternate EPA-registered fungicide for Pythium control at least once during the season.

Replanting

If replanting is necessary, additional applications of Mefenoxam 2E may be made, provided that the total amount of active ingredient in Mefenoxam 2E applied does not exceed the maximum allowed for the specific crop.

Rotation (Plantback) Restriction

Do not plant any crop which is not registered for use with the Mefenoxam 2E active ingredient in soil treated with this active ingredient for a period of 12 months, unless a shorter interval is specified on the following list.

Rotation Crop	Planting Time From Last Mefenoxam 2E Application
Alfalfa (including birdsfoot trefoil), Almonds, Apples, Asparagus, Avocados	
Blueberries,	
Citrus, Clover, Cole Crops, Cotton, Cranberries, Cucurbit Vegetables	
Deciduous Fruits and Nuts*	
Eggplant	
Garlic, Ginseng, Grapes Grasses**	0 days
Hops	
Leafy Vegetables (Excluding Brassica), Legume Vegetables (beans and peas - succulent and dried)	
Onions (dry bulb, green, and seed)	
Papaya, Peanuts, Peppers, Pineapples, Potatoes	
Raspberries, Root and Tuber Vegetables	
Soybeans, Spinach, Stone Fruits, Strawberries, Sugar Beets	
Tobacco, Tomatoes	
Walnuts	
Cereal Grains (other than Corn)	14 days
Corn	9 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 Mefenoxam 2E, provided they will not bear harvestable fruit within 12 months.

**Any grass, Gramineae family (either green or cured), except sugarcane and those included in the group cereal grains, that will be fed to or grazed by livestock, all enclosed pasture grasses and grasses grown for hay or silage, such as bermudagrass, bluegrass, bromegrass, or fescue.

Storage and Disposal

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

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 (For one gallon and one pint)

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.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes. In the event of a major spill, fire, or other emergency, call _____, day or night.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Causes moderate eye irritation. Do not get in eyes or on clothing. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing.

Statement of Practical Treatment

If in eyes: Flush eyes with plenty of water. Get medical attention if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention.

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomitting by touching the back of your throat with finger. Do not induce vomitting or give anything by mouth to an unconscious person.

Note to Physician: If ingested, induce emesis or lavage stomach. Treat symptomatically.

Personal Protection Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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

Engineering Control Statements

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

For terrestrial uses, do not apply directly to water, or 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 waters or rinsate.

Physical or Chemical Hazards

Do not use or store near heat or open flame.

Novartis Crop Protection, Inc.
Greensboro, North Carolina 27419

[QUARK/NOVARTIS AG MEF 2E/AG MEF 2E] - *ccg* - 8/19/98

(Back Cover)

Mefenoxam 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 Pint
U.S. Standard Measure

Active Ingredients*:	
(R)-2-[(2,6-dimethylphenyl)-methoxyacetylamino]-propionic acid methyl ester	24.3%
Related Compounds	0.8%
Other Ingredients:	75.5%
Total:	100.0%

See directions for use in attached booklet.

*Contains 2 lbs. active ingredient per gallon.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No.

EPA Est.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes moderate eye irritation. Do not get in eyes or on clothing. Harmful if swallowed or absorbed through skin. Avoid contact with skin.

Statement of Practical Treatment

If in eyes: Flush eyes with plenty of water. Call a physician if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention.

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

Note to Physician: If Mefenoxam 2E is ingested, induce emesis or lavage stomach. Treat symptomatically.

Environmental Hazards

For terrestrial uses, do not apply directly to water, or 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 waters or rinsate.

Physical or Chemical Hazards

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

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.

[QUARK/NOVARTIS AG MEF 2E/zAG MEF 2E] - ccg - 8/19/98