Labelmaster Booklet
(Front Cover)

ACCEPTED

JAN 6 1986

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 100-619

Subdue® 2E

Fungicide

For the control of root and stem rot diseases of ornamentals, Pythium diseases of turf and vegetable plant beds, and Phytophthora diseases of nonbearing citrus, conifer, and nonbearing deciduous fruit and nut nurseries

Active Ingredient:	
Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl) alanine methyl ester	25.1%
Inert Ingredients:	74.9%
Total:	100.0%

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

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.

EPA Reg. No. 100-619

See directions for use inside booklet.

Agricultural Division
CIBA-GEIGY Corporation
P. O. Box 18300
Greensboro, NC 27419

CIBA-GEIGY

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

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

Conditions of Sale and Warranty

The 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 THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL OR CROP INJURY.

Reentry Statement

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.

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

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

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must inform workers of areas or fields that may not be entered without specific protective clothing until sprays have dried, and appropriate actions to take in case of accidental exposure, as described under Precautionary Statements on this label. When oral warnings are given, warnings shall be given in a language 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 Subdue 2E on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental eye contact, flush eyes with plenty of water. Get medical attention. In case of contact with skin, wash thoroughly with soap and water. Call physician if irritation occurs. Remove and wash contaminated clothing before reuse."

General Information

Subdue is a systemic fungicide for use on ornamentals, turf, nonbearing citrus, conifer and nonbearing deciduous fruit and nut nurseries, and vegetable plant beds.

Note: 1) Subdue is a systemic fungicide having a specific mode of action. Use of Subdue could result in 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. Consult with your State Agricultural Experiment Station or Extension Service Specialist for guidance and ways to control any possible Subdue resistant strains of fungi which may occur. 2) To help decrease the chance of downy mildew resistance, do not use Subdue for control of downy mildew diseases. Use Subdue only as a soil application for control of soil-borne diseases with the exception of azalea petal blight.

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

Mixing Instructions

Fill the spray tank one-half to three-fourths full with water, add the proper amount of Subdue, then add the rest of the water. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Subdue is usually compatible with D·z·n®, Tersan 1991®, Daconil 2787®, Tersan LSR®, Fore®, Dyrene®, and Acti-dione TGF®.

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

Ornamentals

Use Subdue 2E on container, bench, or bed-grown ornamentals in greenhouses or outdoor nurseries, and for professional 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. Use Subdue 2E either as a soil drench or soil mix on ornamentals at time of seeding and transplanting. Subdue 2E may be applied as a foliar spray on azaleas. 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 specified.

For use on ornamentals in less than 4 inches of soil, apply 100 gals. of Subdue 2E as a soil drench to 800 sq. ft. of surface area (1 pt./sq. ft.). For more than 4 inches of soil depth, apply 100 gals. of Subdue 2E as a soil drench to 400-600 sq. ft. of surface areas (1 1/2-2 pts./sq. ft.). Do not exceed recommended rates or apply more frequently than directed, or plant injury may occur.

NOTICE TO USER: Plant tolerances to Subdue have been found to be acceptable in the specific genera and species listed on this label. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for tolerance to Subdue. Neither the manufacturer nor the seller has determined whether or not Subdue can be used safely on ornamental and nursery plants not specified on this label. The professional user should determine if Subdue 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 Zygocactus	SOIL DRENCH: Mix 1/2-1 1/4 fl. ozs. with 100 gals. of water and apply to 400-800 sq. ft. (1-2 pts./sq. ft.) of bed or bench area. Repeat applications at two to three month intervals if necessary. *On Philodendron, use 1/2-2 fl. ozs./100 gals. Coverage: For soil depth of 4 inches or less, apply 100 gals. to 800 sq. ft.; soil depth of more than 4 inches, apply 100 gals. to 400-600 sq. ft. Precaution: To minimize the potential for injury to Pothos, do not use more than 3/4 fl. oz./100 gals. and do not apply more frequently than once every 3 months. SOIL MIX: Thoroughly mix 1/4-1/2 fl. oz. with each cu. yd. of soil mixture.

/Continued ... 7

Bedding Plants Ageratum Aster Begonia Caladium Carnation Chrysanthemum Coleus Daisy, Shasta English ivy Geranium Impatiens Marigold Pansy Petunia Phlox Pinks Primrose Salvia Snapdragon Verbena Vinca Zinnia	SOIL DRENCH At Seeding (Soil 2-3 inches deep): Mix 1/4-1/2 fl. oz. with 100 gals. of water and apply to 800 sq. ft. (1 pt./sq. ft.) of bed area. At Transplanting (Soil 2-3 inches deep): Mix 1/2-2 fl. oz. with 100 gals. of water and apply to 800 sq. ft. of bed area. Repeat applications at one to two month intervals if necessary. Do not apply rates of 1 1/2-2 fl. ozs./100 gals. more often than once every six weeks. SOIL MIX At Seeding and At Transplanting: Thoroughly mix 1/4 fl. oz. with each cu. yd. of soil mixture. Precaution: Do not apply to English ivy more than once every 6 months or injury may occur.
Flowers African violet Baby's breath Carnation Chrysanthemum Delphinium Easter lily Geranium Gloxinia Poinsettia Rose	SOIL DRENCH: Mix 1/2-2 fl. ozs. with 100 gals. of water and apply to 400-800 sq. ft. (1-2 pts./sq. ft.). Repeat application at one to two month intervals if necessary. Do not apply rates of 1 1/2-2 fl. ozs./100 gals. more often than once every six weeks. Coverage: For soil depth of 4 inches or less, apply 100 gals. to 800 sq. ft.; soil depth of more than 4 inches, apply 100 gals. to 400-600 sq. ft. Precaution: Do not apply more than 1 fl. oz./100 gals. water to Easter lily and only make one at-planting application.

/Continued

Azalea	SOIL DRENCH: Phytophthora root and crown rot - Mix 1-2 1/2 fl. ozs. with 100 gals. of water and apply to 400-800 sq. ft. of bed area. Repeat applications at two to four month intervals if necessary. Coverage: For soil depth of 4 inches or less, apply 100 gals. to 800 sq. ft.; soil depth of more than 4 inches, apply 100 gals. to 400-600 sq. ft. FOLIAR SPRAY: Phytophthora shoot blight - Mix at 1 1/4-2 1/2 fl. ozs. with 100 gals. Spray to runoff. Repeat at two to three month intervals if necessary. Precaution: To minimize the potential for injury to azaleas, do not apply repeat soil applications of 2 1/2 fl. ozs./100 gals. closer than every 3 months, and do not exceed a total of 4 fl. ozs. in 6 months.

/Continued ... 9

Woody Ornamentals Other Than Azalea	SOIL DRENCH: Mix 1-4 fl. ozs. with 100 gals. of water and apply to 400-800 sq. ft. (1-2 pts./sq. ft.). Repeat applications at two to three month intervals if necessary. Do not apply rates greater than 3 1/4 fl. ozs./100 gals. more often than once every ten weeks. Coverage: For soil depth of 4 inches or less, apply 100 gals. to 800 sq. ft.; soil depth of more than 4 inches, apply 100 gals. to 400-600 sq. ft. Precaution: Do not apply to Euonymus or injury may occur.
Acuba japonica Arborvitae Boxwood Ceanothus Cotoneaster Dogwood Ilex *Juniperus* spp. Photinia *Pieris japonica* *Pinus* spp. Pittosporum Rhododendron White cedar White pine Yew	

Citrus in Nurseries (Nonbearing)

Use Subdue 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 Subdue at the time of planting. Make repeat applications at three-month intervals during the period when trees are actively growing.

Soil Drench: Mix 4-6 fl. oz./100 gals. of water and apply 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 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 Subdue 2E needed for band treatment by the formula:

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

Note: Do not apply to trees that will bear harvestable fruit within 12 months of application, or illegal residues may result.

Conifers in Nurseries

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

Seedbeds and Plug-Plantings	Apply 2 1/2 pts. Subdue 2E in at least 50 gals. water per acre in the spring and again in the fall.
2-0 Transplants	Apply 5 pts. Subdue 2E in at least 50 gals. water per acre in the spring and again in the fall.

Deciduous Fruits and Nuts in Nurseries (Nonbearing)

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

Apply 6-12 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. Use the high rate in areas known to be infested with Phytophthora. Additional applications may be made as necessary at three-month intervals during the growing season.

Note: Do not apply to trees that will bear harvestable fruit within 12 months of application, or illegal residues may result.

Turf

Subdue 2E controls Pythium blight and Pythium damping-off in turf, yellow tuft (downy mildew) in bluegrass, and downy mildew in St. Augustine grass. 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 specified.

Established Turf: Pythium Blight Yellow Tuft Downy Mildew	Apply as a preventative treatment at 1-2 fl. ozs. in 3-5 gals of water per 1,000 sq. ft. Re-treat at 10-21 day intervals during periods favorable for disease development.
Newly Seeded Areas: Pythium Damping-Off Pythium Blight Yellow Tuft Downy Mildew	Apply 1-2 fl. ozs. in 5-10 gals. of water per 1,000 sq. ft. immediately after seeding. Irrigate with 1/4-1/2 inch water. Re-treat at 7-14 day intervals if conditions remain favorable for disease.

Vegetable Bedding Plants (Tomatoes, Cucumbers, Melons and Squash)

Pythium Damping-Off of Tomatoes, Cucumbers, Melons, and Squash

Apply 2-4 pts./acre as a preplant broadcast spray in 50 gals. of water (1-2 fl. oz. or 2-4 tablespoons/150 square yards 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.

Storage and Disposal

Storage

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), puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. Keep out of smoke from burning container.

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 procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call (919) 292-7100 day or night.

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 Subdue 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

Keep out of lakes, streams, or ponds. 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 and Chemical Hazards

Do not use or store near heat or open flame.

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

D·z·n® trademark of CIBA-GEIGY

Acti-dione TGF® trademark of Upjohn Company

Daconil 2787® trademark of Diamond Shamrock Corp. for chlorothalonil

Dyrene® trademark of Mobay Chemical Corporation for anilazine

Fore® trademark of Rohm and Haas Co. for mancozeb

Tersan 1991® trademark of E. I. duPont de Nemours & Co., Inc. for benomyl

Tersan LSR® trademark of E. I. duPont de Nemours & Co., Inc. for maneb

Agricultural Division
CIBA-GEIGY Corporation
Greensboro, North Carolina 27419

October 24, 1983
Revised February 10, 1984
Revised June 18, 1985
Revised September 13, 1985

(Back Cover)

Subdue® 2E

Fungicide

For the control of root and stem rot diseases of ornamentals, Pythium diseases of turf and vegetable plant beds, and Phytophthora diseases of nonbearing citrus, conifer, and nonbearing deciduous fruit and nut nurseries

Active Ingredient:	
Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl) alanine methyl ester	25.1%
Inert Ingredients:	74.9%
Total:	100.0%

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

See directions for use in attached booklet.

EPA Reg. No. 100-619

Keep Out of Reach of Children.

WARNING

AVISO

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

Precautionary Statements

Haza ds 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 Subdue 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

Keep out of lakes, streams, or ponds. 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 and Chemical Hazards

Do not use or store near heat or open flame.

Store at temperatures above 40°F.

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

Agricultural Division
CIBA-GEIGY Corporation
Greensboro, North Carolina 27419

CIBA-GEIGY

	October 24, 1983
Revised	February 10, 1984
Revised	June 18, 1985
Revised	September 13, 1985