# Subdue® 2E

## Fungicide

For the control of root and stem rot diseases of ornamentals, *Pythium* diseases of turf, and *Phytophthora* root rot in conifer nurseries

Metalaxyl: N-(2,6-dimethylphenyl)-N (methoxyacetyl) alanine methyl ester

25.11% 74 89% Inert Ingredients

100.00%

Subdue 2E contains 2 lbs. active ingredient per gallon EPA Reg. No. 100-619

Keep Out of Reach of Children.

See additional precautionary statements on this sheet. CGA 64L4 111

### 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 prod-uct. Crop injury, ineffectiveness, or other unintended consequences may result be-cause 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

CIBA-GEIGY makes no other express or implied warranty of Fitness or Merchantability or any other express of 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.

## **General Information**

Subdue is a systemic fungicide for use on ornamentals, turf, and conifer nurseries.

Note: 1) Subdue is a systemic fungicide having a specific mode of action. Sub-due 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 resis-tant strains of fungi. Consult with your State Agricultural Experiment Station or Extension Service Specialist for gui-dance and ways to control any possible Subdue resistant strains of fungi which may occur.

## **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® Diazinon®, Tersan 1991®, Daconil 2787®, Tersan LSR®, Fore®, Dyrene®, and Actidione 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 is compatible.

### Directions for Use

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

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

## Ornamentals

Use Subdue on container, bench, or bed-grown ornamentals in greenhouses or outdoor nurseries for control of damping-off, and root and stem rot diseases caused by Pythium and Phytophthora. Use Subdue either as a soil drench or soil mix on ornamentals at time of seeding and trans-planting. Subdue 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 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 soil drench to 400-600 sq. ft. of surface areas (1½-2 pts./sq. ft.). Do not exceed recommended steep of supplemental to the surface areas (1½-2 pts./sq. ft.). mended rates or apply more frequently than directed, or plant injury may occur.

Precaution: Do not apply to Euonymus or injury may occur.

## **Foliage Plants**

Aglaonema Aphelandra Dieffenbachia Peperomia Philodendron\* SOIL DRENCH: Mix 0.4-2 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

## Schefflera

if necessary.
On Philodendron, use
0.4-2 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 0.8 if oz.7100 gals, and do not apply more frequently than once every 3 months.

SOIL MIX: Thoroughly mix 0.1-0.4 fl. oz. with each cu. yd. of soil mixture.

## **Bedding Plants**

Ageratum Aster Carnation Chrysanthemum Coleus Geranium **Impatiens** Marigold Pansy Salvia Snapdragon Verbena Zinnia

SOIL DRENCH At Seeding (Soil 2-3 inches deep): Mix 0.25-0.5 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 0.5-2 fl. ozs. 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 1.6-2 fl. ozs./100 gals. more often than once every

SOIL MIX At Seeding and At Transplanting: Thoroughly mix 0.1-0.2 fl. oz. with each cu. yd. of soil mixture.

Flowers African violet Carnation Chrysan-themum Geranium Poinsettia

SOIL DRENCH: Mix 0.5-2 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 1.6-2 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.

Azalea

SOIL DRENCH: Phytophthora root and crown rot — Mix 1-2.4 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 1.2-2-4 fl. ozs. with 100 gais. Spray to runoff, Repeat at two to three month intervals if necessary.

Precaution: To minimize the potential for injury to azaleas, do injury to azaleas, do not apply repeat applications of 1.8-2.4 fl. ozs./100 gals. closer than every 3 months, and do not exceed a total of 4 fl. ozs. in 6 months.

## Woody Orna-mentals Other Than Azalea

Acuba japonica. Andromeda Arborvitae Ceanothus llex Pinus thumbergii Savin juniper Tam juniper Shore juniper Pittosporum

Rhododendron

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 of 3.2-4 fl. ozs./100 gals. more often than once everyten weeks. SOIL DRENCH: Mix 1-4

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 400-500 sq. ft.

## Conifers in Nurseries

Subdue provides control of *Phytophthora* root rot of conifers.

## Seedbeds and Plug-Plantings

Apply 2½ pts. of Subdue 2E as a broadcast 2E as a broadcast spray over the beds in at least 50 gals. of water per acre at the time of seeding or transplanting Additional applications should be made at approximately six-month intervals.

## 2-0 Transplants\*

Apply 5 pts. of Subdue 2E as a broadcast spray over the beds in at least 50 gals. of water per acre at the time of transplanting. Additional applications should be made at approximately six-month intervals.

\*Newly transplanted two-year old seedlings

Subdue controls Pythium blight and Pythium damping-off in turf. Apply as a spray to established turf to control Pythium blight, or apply as a spray at time of seeding to control *Pythium* damping-off. 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

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 dur-ing periods favorable for disease development.

**Newly Seeded** Areas: Pythium Damping-Off and Pythium Blight

Apply 1-2 fl. ozs. in 5-10 gals. of water per 1,000 sq. ft.•immediately after seeding. Irrigate with seeding. Irrigate with 1/4-1/2 inch water. Re-treat at 7-14 day intervals if conditions remain favorable for disease.

## Storage and Disposal

Do not contaminate water, food, or feed by Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse container. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures under the Resource Conservation and Recovery Act. Triple rinse (or equivalent) and offer for recycling or reconditioning, or dispose of in a sanitary landfill, or by incineration if permitted by state and local authorities. Consult federal, state, or local disposal authorities for approved alternative disposal authorities for approved alternative procedures such as limited open burning.

Store at temperatures above 32°F.

## **Precautionary Statements** Hazards to Humans and

**Domestic Animals** DANGER

Corrosive, causes eye damage and skin irritation. Harmful if swallowed, inhaled, or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Avoid breathing vapors or spray mist. Remove and wash contaminated clothing before reuse. Do not store near food or feed.

First Aid: In case of eye contact, flush with plenty of water for 15 minutes and get medical attention. In case of skin contact, wash thoroughly with soap and water. If swallowed, give water or milk if conscious and get medical attention; do not induce vomiting. If inhaled, move to fresh air; if not breathing, give artificial respiration and get medical attention.

Environmental Hazards
Do not apply directly to 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.

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

Acti-dione TGF® trademark of Upjoh 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

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