



PM 21 100-619 JF 24 File  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

DEC 7 1993

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Theresa Kamicker  
CIBA-GEIGY CORP.  
P.O. Box 18300  
Greensboro, NC 27419

Subject: Label Amendment Submission of 07/16/93 in Response to PR Notice 93-7  
EPA Reg. No. 100-619  
SUBDUE 2E FUNGICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

**WHAT THIS ACCEPTANCE MEANS:**

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

**WHAT YOU NEED TO DO NEXT:**

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.

**BEST AVAILABLE COPY**

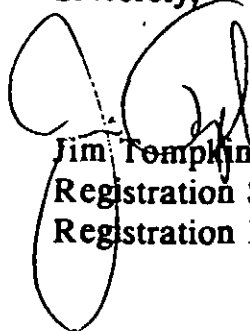
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs (7505C)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs  
Room 266A, Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (7505W)

Attachment

(WPS)  
Labelmaster Booklet  
(Front Cover)

Subdue® 2E  
Fungicide

For the control of certain diseases  
in conifers, nonbearing citrus,  
nonbearing deciduous fruits and  
nuts, ornamentals and turf

Active Ingredient:

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

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

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.

EPA Reg. No. 100-619

EPA Est. 100-AL-1

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

DEC - 7 1993  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
100-619

One Gallon  
U.S. Standard Measure

One Quart  
U.S. Standard Measure

Fifteen Gallons  
U.S. Standard Measure

Ciba-Geigy

CGA 64L7G 042 - 1 Gallon  
CGA 64L8F 042 - 1 Quart  
CGA 64L18 013 - 15 Gallons

[GANNONC.LABELS] - SUBD2WPS - 7/8/93

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.

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Conditions of Sale and Warranty

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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.

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**DIRECTIONS FOR USE**

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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 12 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.

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
- Chemical-resistant gloves, such as barrier laminate or viton
- Shoes plus socks
- Protective eyewear

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**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 plants on farms, forests, nurseries, or greenhouses.

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

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

General Information

Subdue 2E is a systemic fungicide for use on ornamentals, turf, nonbearing citrus grown in nurseries and as landscape plantings, conifers grown in nurseries and plantations, including Christmas trees and nonbearing deciduous fruit and nut trees grown in nurseries.

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Notes: 1) Subdue 2E is a systemic fungicide having a specific mode of action. Use of Subdue 2E 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 2E resistant strains of fungi which may occur. 2) To help decrease the chance of downy mildew resistance, do not use Subdue 2E for control of downy mildew diseases, except for use in turf. Use Subdue 2E 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 2E, then add the rest of the water. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Subdue 2E is usually compatible with D·z·n®, Triumph®, Banner®, Sprint®, Pennant®, Tersan® 1991, Daconil 2787®, Tersan® LSR, Fore®, Dyrene®, and Acti-dione TGF®.

To determine the compatibility of Subdue 2E with these and other

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

Tank mixtures are permitted only in those states where the tank mix partner is registered.

#### Application Through Irrigation Systems

Subdue 2E alone or in tank mixture with other pesticides registered for application through irrigation systems may be applied in irrigation water at rates recommended on this label. This product may be applied through drip (trickle) irrigation system(s) or by overhead irrigation. Application through overhead irrigation is recommended for use on turf only. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place. A person knowledgeable of the chemigation system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise.

Subdue 2E can be injected into the irrigation line in concentrated form, or diluted with water or liquid fertilizer solutions with pH levels less than 7.5. If diluted, a pesticide supply tank should be used. Agitation is not needed unless the diluted solution will remain in the supply tank more than 24 hours. Subdue 2E is normally diluted at a ratio of 10:1 to 50:1, depending on injection setups. Injecting a larger volume of a more dilute mixture will usually allow a more accurate calibration of the metering equipment. Meter the fungicide into the irrigation water during the first part of the irrigation cycle.

**Note:** Subdue 2E is highly corrosive to seals and other pump components. Recommended components are Teflon, polyethelene, polypropylene and nylon. When Subdue 2E is diluted at least 50:1, silicone rubber and viton can be used. Do not use PVC or EPDM based components.

#### Safety Devices for Irrigation Systems Connected to Public Water Supplies

If the source of water for your irrigation system is a public water supply, follow the instructions below.

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

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2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must 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.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, 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 for treatment.

Safety Devices for Irrigation Systems Not Connected to a Public Water Supply

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 the 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 for treatment.

For banded applications, calculate the amount of Subdue 2E needed as follows:

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

Ornamentals

Use Subdue 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. Subdue 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. 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 drench applications, use enough of the specified Subdue 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 1 1/2 - 2 pts./sq. ft. of the solution. If soil surface applications are made, irrigate with at least 1/2 inch of water if rainfall does not occur within 7 days.

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**NOTICE TO USER:** Plant tolerances to Subdue 2E have been found to be acceptable for 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 2E. Neither the manufacturer nor the seller has determined whether or not Subdue 2E can be used safely on ornamental and nursery plants not specified on this label. The professional user should determine if Subdue 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.

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Foliage Plants

- Aglaonema
- Aphelandra
- Dieffenbachia
- Peperomia
- Philodendron\*
- Pothos
- Schefflera
- Sedum
- Sempervivum
- Zygocactus

DRENCH: Mix 1/2-1 1/4 fl. oz. with 100 gals. of water. Apply 1 pt. solution/sq. ft. For growth media depth greater than 4 inches, apply 1 1/2-2 pts. solution/sq. ft. Repeat applications at two to three month intervals if necessary.

\*On Philodendron, use 1-2 fl. oz./100 gals.

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.

SOIL SURFACE SPRAY TO FOLIAGE PLANTS IN THE LANDSCAPE: Apply 2 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 1/2 inch of water if rainfall does not occur within seven days.

Bedding Plants

- Ageratum
- Algerian ivy
- Artemisia
- Aster
- Begonia
- Caladium
- Carnation
- Chrysanthemum
- Coleus
- Daisy (Shasta)
- English ivy
- Foxglove
- Gaillardia
- Geranium
- Impatiens
- Marigold
- Pansy
- Petunia
- Phlox
- Pinks
- Primrose
- Prostrate Rosemary
- Salvia
- Snapdragon
- Verbena
- Vinca
- Zinnia

DRENCH At Seeding (Soil 2-3 inches deep): Mix 1/4-1/2 fl. oz. with 100 gals. of water and apply 1 pt. solution/sq. ft.

DRENCH At Transplanting (Soil 2-3 inches deep): Mix 1/2-2 fl. oz. with 100 gals. of water and apply 1 pt. solution/sq. ft. For growth media depth greater than 4 inches, apply 1 1/2-2 pts. solution/sq. ft. Repeat applications at one to two month intervals if necessary. Do not apply rates of 1 1/2-2 fl. oz./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.

SOIL SURFACE SPRAY TO BEDDING PLANTS IN THE LANDSCAPE: Apply 2 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 1/2 inch of water if rainfall does not occur within seven days.

Flowers

- African violet
- Anthurium
- Baby's breath
- Carnation
- Chrysanthemum
- Columbine
- Delphinium
- Easter lily
- Geranium
- Gloxinia
- Poinsettia
- Rose

DRENCH: Mix 1/2-2 fl. oz. with 100 gals. of water and apply 1 pt. solution/sq. ft. For growth media depth greater than 4 inches, apply 1 1/2-2 pts. solution/sq. ft. Repeat applications at one to two month intervals if necessary. Do not apply rates of 1 1/2-2 fl. oz./100 gals. more often than every six weeks.

Precaution: Do not apply more than 1 fl. oz./100 gals. water to Easter lily and only make one at-planting application.

SOIL SURFACE SPRAY TO FLOWERS IN THE LAND-SCAPE: Apply 2 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 1/2 inch of water if rainfall does not occur within seven days.

Rhododendrons and Azaleas

DRENCH: Phytophthora root and crown rot - Mix 1-2 1/2 fl. oz. with 100 gals. of water and apply 1 pt. solution/sq. ft. For growth media depth greater than 4 inches, apply 1 1/2-2 pts. solution/sq. ft. Repeat applications at two to four month intervals if necessary.

FOLIAR SPRAY: Phytophthora shoot blight - Mix at 1 1/4-2 1/2 fl. oz. with 100 gals. of water. Spray to runoff. Repeat at two to three month intervals if necessary.

Precautions: (1) To minimize the potential for injury to azaleas, do not apply repeat soil applications of 2 1/2 fl. oz./100 gals. closer than every 3 months, and do not exceed a total of 4 fl. oz. in 6 months. (2) Use the lower rate for "Coral Bell" variety.

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Woody Ornamentals  
Other Than Azalea

- Aucuba japonica
- Arborvitae
- Boxwood
- Ceanothus
- Cotoneaster
- Dogwood
- Ficus
- "Halls" Honey-suckle
- Ilex
- Juniperus spp.
- Photinia
- Pieris japonica
- Pinus spp.
- Pittosporum
- White cedar
- White pine
- Yew

DRENCH: Mix 1-4 fl. oz. with 100 gals. of water and apply 1 pt. solution/sq. ft. For growth media depth greater than 4 inches, apply 1 1/2-2 pts. solution/sq. ft. Repeat applications at two to three month intervals if necessary. Do not apply rates greater than 3 1/4 fl. oz./100 gals. more often than once every ten weeks.

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

SOIL SURFACE SPRAY TO WOODY ORNAMENTALS IN THE LANDSCAPE: Apply 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 1/2 inch of water if rainfall does not occur within seven 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 Subdue 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.

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Rate of Subdue 2E (fl. oz.)	Amount of Subdue 2E to add to water to make the following quantities			
	1 gal.	5 gals.	10 gals.	25 gals.
0.5	7 drops	37 drops/ 0.75 ml	75 drops/ 1.5 ml	3.75 ml/ 3/4 tsp.
1.0	15 drops	75 drops/ 1.5 ml	3.0 ml/ 1/2 tsp.	7.5 ml/ 1.5 tsp./ 1/2 Tbsp.
2.0	30 drops	3.0 ml/ 1/2 tsp.	6.0 ml/ 1.25 tsp.	15.0 ml/ 3.0 tsp./ 1 Tbsp.
3.0	45 drops	4.5 ml/ 1 tsp.	9.0 ml/ 2 tsp.	22.5 ml/ 4.5 tsp. 1.5 Tbsp.
4.0	60 drops/ 1.25 ml	6.0 ml/ 1.25 tsp.	12.0 ml/ 2.5 tsp.	30.0 ml/ 2 Tbsp./ 1 oz.

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Apply enough solution to wet the root area of the plants; apply at least one pint of solution per square foot.

Citrus in Nurseries and Landscape Plantings (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 2E 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 a banded treatment by using the formula at the end of the General Information section of this label.

Conifers in Nurseries and Plantations  
(Including Christmas Trees)

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

Conifers in Nurseries

<u>Seedbeds and Plug-Plantings</u>	Apply 2 1/2 pts. Subdue 2E in at least 50 gals. of water/A in the spring and again in the fall.
<u>2-0 Transplants</u>	Apply 5 pts. Subdue 2E in at least 50 gals. of water/A in the spring and again in the fall.

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Conifers in Plantations

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

Apply 1 1/4-2 1/2 gals. of Subdue 2E/A 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 Subdue 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 1/2 to 1 inch of water after application if rain is not expected within three days.

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 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 three-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 17.6 oz./1,000 sq. ft. (6 gals./A) of Subdue 2E/year.

Turf

Subdue 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 specified.

<u>Established Turf</u> Pythium Blight Yellow Tuft Downy Mildew	Apply as a preventative treatment at 1-2 fl. oz. in 3-5 gals. of water/1,000 sq. ft. Retreat at 10-21 day intervals. During periods of prolonged conditions favorable for disease development, use 2 fl. oz. on a 14-day schedule.
<u>Newly Seeded Areas</u> Pythium Damping-Off Pythium Blight Yellow Tuft Downy Mildew	Apply 1-2 fl. oz. in 5-10 gals. of water/1,000 sq. ft. immediately after seeding. Irrigate with 1/4-1/2 inch water. Retreat at 7-14 day intervals if conditions remain favorable for disease.  <u>Note:</u> For long term control of Pythium in areas when using Apron® treated seed, make an application of Subdue 2E 7-10 days after germination.

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

Precautions: To minimize the potential for resistance, (1) Make no more than three applications of Subdue 2E per season and (2) Apply an alternate EPA-registered fungicide for Pythium control at least once during the season.

Rotational Crops

Do not plant any crop which is not registered for use with metlaxyl in metlaxyl-treated soil for a period of 12 months.

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 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 (One Quart, One Gallon)

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 1-800-888-8372 day or night.

### Container Refilling and Disposal (Fifteen Gallons)

This is a refillable container. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than Subdue 2E. Reseal and return the container to an authorized Ciba-Geigy refilling facility. If the container is not to be refilled, 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 procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-888-8372 day or night.

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Precautionary Statements

Hazards to Humans and Domestic Animals

WARNING/AVISO

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

Statement of Practical Treatment

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

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

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

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

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.

Personal Protective Equipment (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category G on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

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- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or viton
- Shoes plus socks
- Protective eyewear

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 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 or enclosed cabs 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**

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

**Physical and Chemical Hazards**

Do not use or store near heat or open flame.

Apron®, Banner®, D.z.n®, Pennant®, Sprint®, Subdue®, and Triumph® trademarks of Ciba-Geigy Corporation

U.S. Patent Nos. 4,151,299, 4,079,062, 3,937,730, 3,932,629, 3,867,396,

Acti-dione TGF® trademark of Upjohn Company

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Ciba Plant Protection  
Turf and Ornamental Products  
Ciba-Geigy Corporation  
Greensboro, North Carolina 27419

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CGA 64L7G 042 (Gallon) Product ID: 51590  
CGA 64L8F 042 (Quart) Product ID: 54920  
CGA 64L18 013 (15 Gallon) Product ID: 50395

Revised October 24, 1983  
Revised February 10, 1984  
Revised June 18, 1985  
Revised September 13, 1985  
Revised January 15, 1986  
Revised February 16, 1987  
Revised September 18, 1989  
Revised Metalaxyl FRSTR  
November 29, 1991  
adm. amend.  
Revised April 9, 1992  
adm. amend.  
Revised January 1993  
Added container  
disposal for 15 gals.  
refillable  
Revised June 22, 1993  
WPS

[GANNONC.LABELS]SUBD2WPS - 7/8/93

(Back Cover)  
(For 1 Quart, 1 Gallon)

Subdue® 2E

Fungicide

For the control of certain diseases  
in conifers, nonbearing citrus,  
nonbearing deciduous fruits and  
nuts, ornamentals and turf

Active Ingredient:

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

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

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See directions for use in attached booklet.

**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. 100-619

EPA Est. 100-AL-1

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.)

Precautionary Statements

Hazards to Humans and Domestic Animals

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

Statement of Practical Treatment

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

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

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

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

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

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

Physical and Chemical Hazards

Do not use or store near heat or open flame.

CHEMIGATION: See attached booklet for use directions for chemigation. Do not apply this product through any irrigation systems unless the labeling on chemigation is followed.

Store at temperatures above 40°F.

Subdue® trademark of Ciba-Geigy Corporation for metalaxyl

U.S. Patent No. 4,151,299

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CGA 64L7G 042 - 1 Gallon  
CGA 64L8F 042 - 1 Quart

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