



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

SEP 8 1993

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Morris Gaskins  
MICRO FLO CO.  
Box 5948  
Lakeland, FL 33807

SUBJECT: Label Amendment Submission of 05/24/93 in Compliance  
with PR Notice 93-7  
EPA Reg. No. 51036-166  
CAPTAN 50 WETTABLE POWDER

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR Notices 93-7 and 93-11, which reflect the WPS labeling requirements of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs (H-7504C)  
U.S. Environmental Protection Agency  
401 M Street SW  
Washington, DC 20460-0001

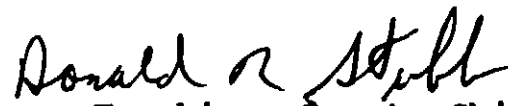
**Hand or courier deliveries of final labels may be made to:**

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

**Please correct the typographical errors circled on the draft before printing final labeling.**

**In your final labeling the "Agricultural Use Requirements" text" must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.**

**Sincerely,**

*f*   
**James Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (H7505W)**

MICRO-FLO CO.  
CAPTAN 50 WETTABLE POWDER  
51036-166 05/24/93

User Safety Recommendations must either be placed in a box or printed on the label in a contrasting color from surrounding text.

The Agricultural Use Requirements section must either be placed in a box or printed on the label in a contrasting color from the surrounding text.

Delete "notification to workers" from the first paragraph of the Agricultural Use Requirements section.

Delete from the Agricultural Use Requirements the following: "Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas."

There is a typographical error(s) in the User Safety Recommendations section.

Draft labeling for WPS language in response to PR 93-7

**CAPTAN 50  
WETTABLE POWDER**

A Fungicide For Plant Disease Control Captan 50 Wettable Powder is a microfine wettable powder for use in water as a spray for the control of certain fungus diseases of fruit and ornamental crops, and as a soil treatment for the control of certain seed rots and damping-off diseases.

**ACTIVE INGREDIENTS:**

*Captan .....	48.9%
Related Derivatives .....	1.1%
<b>INERT INGREDIENTS:</b> .....	<b>50.0%</b>
<b>TOTAL .....</b>	<b>100.0%</b>

\*N-Trichloromethylthio-4-cyclohexene-1,2-dicarboximide

**KEEP OUT OF REACH OF CHILDREN**

**DANGER      PELIGRO**

**CORROSIVE, CAUSES IRREVERSIBLE EYE DAMAGE**

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

**STATEMENT OF PRACTICAL TREATMENT**

**FIRST AID:** If a known exposure occurs or is suspected, immediately start the procedures given below and contact a POISON CENTER, PHYSICIAN, OR THE NEAREST HOSPITAL. Describe the type and extent of exposure, the victim's symptoms and follow the advice given.

**IF IN EYES:** Flush with plenty of water. Call a physician.

**IF SWALLOWED:** Drink promptly a large quantity of milk, egg whites, gelatin solutions, or if these are not available, drink large quantities of water. Avoid alcohol.

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention if abnormal reaction occurs.

**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D (327-8633).**

**FOR CHEMICAL EMERGENCY:** Spill, leak fire, exposure, or accident call CHEMTREC 1-800-424-9300.

EPA REG. NO. 51036-166

EPA EST. NO. 51036-GA-1

**Manufactured By  
MICRO FLO COMPANY  
P.O. BOX 5948  
LAKELAND, FL 33807**

ACCEPTED  
with COMMENTS  
In EPA Letter Dated  
SEP 16 1993  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
51036-166

**PRECAUTIONARY STATEMENTS**  
**Hazards To Humans And Domestic Animals**

**DANGER**

**Causes irreversible eye damage. Harmful if swallowed or inhaled. May cause allergic skin reactions. Do not get in eyes. Avoid contact with skin and clothing. Avoid inhalation of dust or spray mist.**

**PERSONAL PROTECTIVE EQUIPMENT**

**Applicators and other handlers must wear:**

- 1. Coveralls over long-sleeved shirt and long pants**
- 2. Waterproof gloves**
- 3. Chemical-resistant footwear plus socks**
- 4. Protective eyewear**
- 5. Chemical-resistant headgear for overhead exposure**
- 6. Chemical-resistant apron when cleaning equipment, mixing or loading**

**Mixers and loaders must wear:**

- 1. Coveralls over long-sleeved shirt and long pants**
- 2. Waterproof gloves**
- 3. Chemical-resistant footwear plus socks**
- 4. Protective eyewear**
- 5. Chemical-resistant headgear**
- 6. Chemical resistant apron when mixing or loading**
- 7. Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)**

**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 and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.**

**Engineering Controls:**

**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:**

- 1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet**
- 2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing**
- 3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing**

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not clean equipment or dispose of equipment washwaters in a manner that will contaminate water resources.

**STORE IN COOL, DRY PLACE - PROTECT FROM EXCESSIVE HEAT**

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified: Country: United States

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all precautions and directions for use before using. Use only for claims listed and only as specified on this label. In order that pesticide residues on food and forage crops will not exceed Federal tolerances, use only at recommended rates and intervals, and do not apply closer to harvest than specified. Do not apply or allow to drift to adjoining food, fiber or pasture crops. Consult State Agricultural Experiment Stations or State Agricultural Extension Service for additional information, as the time of applications needed will vary with the local conditions.

#### **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, notification to workers, and restricted-entry intervals. 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 4 days.

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:

1. Coveralls over long-sleeved shirt and long pants]
2. Waterproof gloves
3. Chemical-resistant footwear plus socks
4. Protective eyewear
5. Chemical-resistant headgear

**EXCEPTION:** For the last 48 hours of the REI, workers may enter the treated area to perform hand labor or other tasks involving contact with anything that has been treated, such as plants, soil, or water, without time limit, if they wear the early-entry personal protective equipment listed below.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

**COMPATIBILITY AND PLANT SAFETY**

Captan 50 Wettable Powder can be combined safely and effectively at recommended dosage rates with most commonly used fungicides and insecticides, with the exception of oil and strongly alkaline materials. Alkaline materials such as spray lime, lime-sulfur and bordeaux mixture will reduce the fungicidal activity of Captan. Do

not apply Captan in combination with or immediately before or closely following oil sprays. The time factor governing the safe interval between Captan and oil sprays varies due to general climatic conditions, therefore, consult local agricultural spray programs and authorities to determine the proper timing. The use of spreaders which cause excessive wetting is not advised. Combinations with solvent formulations of organic phosphates should not be used. Combinations with solvent formulations of organic phosphates should not be used. Combinations of Captan and sulfur should not be used on crops sensitive to sulfur. Used at high rates or in drenching sprays, Captan may cause a necrotic spotting of tender, immature leaves of certain varieties of apples, peaches, plums and cherries. This type of injury is most likely to occur in the early cover sprays during long periods of warm, cloudy, humid weather. To avoid the hazard of leaf spotting under such conditions, use Captan and other spray materials at lowest recommended rates and avoid drenching trees. Applications can be made by aircraft or ground power equipment (including concentrate and semi-concentrate equipment). Pour recommended amount of this material into nearly filled spray tank. Add balance of water. Maintain agitation during filling and spraying operations. Do not allow mixture to stand. Do not combine with emulsifiable liquids or wettable powders unless previous experience has proven them to be physically compatible and safe to plants. (Read compatibility and plant safety information). For aerial or concentrate spray applications, apply the same amount of Captan 50 Wettable Powder per acre as would normally be applied for dilute spray applications. Apply aerial or concentrate sprays in sufficient water for coverage. Use spray volumes of 5 to 20 gallons per acre for aerial applications.

#### CHEMIGATION PROHIBITION

Do not apply this product through any type of irrigation system.

#### STORAGE AND DISPOSAL

**PROHIBITIONS:** Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited. Do not reuse empty container.

**STORAGE:** Keep pesticide in original container. Keep container tightly closed when not in use. Protect from excessive heat. Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Do not reuse container. Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.



**RECOMMENDATIONS**

Except as specified begin applications before or at first sign of disease and repeat as needed to maintain control but observe use limitations. Unless otherwise specified, application can be made on the day of harvest. Apply the high rate when climatic conditions most favors disease(s) and the low rate when climatic conditions least favors disease(s). If you are unaware of the climatic conditions favorable for disease(s) claimed for the specific use sites, you must consult with your State Agricultural Extension Service to learn of these conditions.

**FRUIT AND NUT CROPS**

**IMPORTANT:** Read label carefully. Although most of the directions on this label may be followed nationwide, a few are limited to either the eastern or western U.S. Follow those directions for your growing area where specified.

**ALMONDS:**

Brown rot twig and blossom blight, shothole, scab, leaf blight - Apply 9 lbs. Captan 50 Wettable Powder per acre in 20 to 300 gallons of water using ground equipment. Apply at popcorn, bloom and petal fall stages and up to 5 weeks after petal fall. Do not apply within 30 days of harvest. Hulls may be fed to livestock. Subsequent applications may be made up to 12 days of harvest in accordance with pest infestations and state agricultural extension service recommendations, provided the hulls are not fed to dairy animals or animals being finished for slaughter.

**APPLES (Eastern U.S.):**

Primary scab, black rot (frog-eye), botrytis blossom-end rot - Apply 8 lbs. Captan 50 Wettable Powder per acre in 20 to 400 gallons of water using ground equipment. Apply at 5 to 7 day intervals as needed to maintain control in prebloom, bloom, petal fall and first cover sprays.

Secondary scab, Brooks fruit spot, sooty blotch, fly speck, black rot, black pox, botryosphaeria rot, bitter rot - Apply 4 to 8 lbs. Captan 50 Wettable Powder per acre in 20 to 400 gallons of water using ground equipment. Apply at 10 to 14 day intervals in second and later cover sprays up to start of harvest.

Powdery mildew - If powdery mildew is a problem add 6 to 12 lbs. sulfur per acre or 1 to 2 lbs. of Karathane per acre to all post-bloom sprays until foliage matures. Use 2 lbs. Karathane per acre if interval between sprays is longer than 7 days.

**CAUTION** - Do not use Captan 50 Wettable Powder in combination with or closely following or in alternation with wettable sulfur products on sulfur sensitive varieties of apples such as Red Delicious, Staymen, Baldwin, King, etc. as severe injury and defoliation may occur.

**APPLES (Western U.S.):**

Primary scab - Apply 8 lbs. Captan 50 Wettable Powder per acre in

a high volume application for preblossom sprays. In mid-summer, the dosage may be reduced to 4 lbs. per acre in high volume applications.

(Pacific northwest) - Bull's eye rot, Botrytis rot - Apply 3 lbs. Captan 50 Wettable Powder per acre in 20 to 400 gallons of water using ground equipment. Make 1 or 2 applications with late cover sprays and 1 final spray prior to harvest.

**APRICOTS:**

Brown rot (twig blight), jacket rot - Apply 5 lbs. Captan 50 Wettable Powder per acre in 20 to 250 gallons of water using ground equipment. Apply in red bud, bloom, 75% petal fall, and cover sprays.

**BLUEBERRIES (Western U.S.):**

Botrytis gray mold or berry rot, mummy berry - Apply 2 to 5 lbs. Captan 50 Wettable Powder per acre in sufficient water for thorough coverage. Begin at mid-bloom, repeat at 7 to 10 day intervals until maturity.

**BLUEBERRIES (Eastern U.S.):**

Botrytis gray mold or berry rot, mummy berry - Apply 5 lbs. Captan 50 Wettable Powder per acre in sufficient water for thorough coverage. Start spray program when buds swell or when buds have loose scales. Repeat at 7 day intervals through blossom period. Repeat at 7 to 10 day intervals from late bloom.

**CHERRIES (Eastern U.S.):**

Brown rot, leaf spot, Botrytis rot - Apply 4 lbs. Captan 50 Wettable Powder per acre in 20 to 200 gallons of water using ground equipment. Apply in pre-bloom, bloom, petal fall, shuck, cover, and pre-harvest sprays. Applications at 3 to 4 day intervals may be necessary during bloom to control blossom blight. Repeat applications at 7 to 20 day intervals as needed to maintain control up to start of harvest. If powdery mildew is a problem add 6 lbs. sulfur per acre to the petal fall, shuck and early cover sprays. If sulfur is added, Captan 50 Wettable Powder may be reduced to 2 lbs. per acre in these sprays.

Post harvest sprays: leaf spot - Apply 4 lbs. Captan 50 Wettable Powder per acre in 20 to 200 gallons of water using ground equipment. Apply immediately after harvest and repeat application in 10 to 14 days.

**CHERRIES (Western U.S.):**

Brown rot blossom blight, brown rot (fruit), leaf spot - Apply 4 lbs. Captan 50 Wettable Powder per acre in 20 to 200 gallons of water using ground equipment. Apply in pre-bloom, bloom, petal fall, shuck, cover and preharvest sprays.

**GRAPES (Eastern U.S.):**

Black rot, downy mildew - Apply 4 lbs. Captan 50 Wettable Powder per acre in 20 to 200 gallons water using ground equipment. Make

first application just before bloom, repeat just after bloom and at 10 to 14 day intervals for 1 to 3 additional applications depending upon the susceptibility of the grape variety.

Dead Arm (current season infection) - Apply 2 to 4 lbs. Captan 50 Wettable Powder per acre in 20 to 200 gallons of water using ground equipment. Apply first application when shoots are 1/2 to 1 inch long. Repeat application when shoots are 4 to 6 inches long.

#### GRAPES (California):

Bunch rot (Botrytis) - Apply 4 lbs. Captan 50 Wettable Powder per acre in 20 to 200 gallons of water using ground equipment. Make 2 applications before bloom and 1 immediately after bloom. Repeat periodically making 3 cover applications before the bunches close.

Dead Arm (current season infection) - Apply 3 to 4 lbs. Captan 50 Wettable Powder per acre in 20 to 200 gallons of water using ground equipment or apply 4 lbs. Captan 50 Wettable Powder per acre in 7 to 20 gallons of water by aircraft. Apply first spray when green tissue begins to show but before shoots are 1 inch long and repeat application when shoots are 6 to 8 inches long.

#### NECTARINES:

Brown rot, scab - Apply 8 lbs. Captan 50 Wettable Powder per acre in 20 to 250 gallons of water using ground equipment. Apply in full pink, bloom, petal fall, shuck, cover and preharvest sprays. Applications at 3 to 4 day intervals may be necessary during bloom to control blossom blight. Repeat application at 7 to 14 day intervals as needed to maintain control. Continue applications throughout harvest if conditions favor brown rot. If powdery mildew is a problem, add 7.5 lbs. sulfur per acre to the petal fall shuck and early cover spray. If sulfur is added, Captan 50 Wettable Powder may be reduced to 2.5 lbs. per acre in these sprays.

Coryneum blight (peach blight, shothole) - Apply 8 lbs. Captan 50 Wettable Powder per acre in 20 to 250 gallons of water using ground equipment. Apply in pink bud, full bloom, petal fall and cover sprays as necessary and as a post harvest spray (but before leaves drop).

#### PEACHES:

Brown rot, scab - Apply 8 lbs. Captan 50 Wettable Powder per acre in 20 to 400 gallons of water using ground equipment. Apply in full pink, bloom, petal fall, shuck stages and in cover and preharvest sprays. Applications at 3 to 4 day intervals may be necessary during bloom to control blossom blight. Repeat application at 7 to 14 day intervals as needed to maintain control. Continue applications through harvest if conditions favor brown rot. If powdery mildew is a problem, add 12 lbs. sulfur per acre to the petal fall, shuck and early cover spray. If sulfur is added, Captan 50 Wettable Powder may be reduced to 4 lbs. per acre in these sprays.

Coryneum blight (peach blight, shothole) - Apply 8 lbs. Captan 50 Wettable Powder per acre in 20 to 400 gallons of water using ground

equipment. Apply in pink bud, full bloom, petal fall stages and cover sprays as necessary and as a post harvest spray (but before leaves drop).

**PEACHES (NURSERY STOCK) (CALIFORNIA):**

Preventative preplant dip treatment for crown gall. Use 4 lbs. Captan 50 Wettable Powder plus 3.2 pints diluted sodium hypochlorite (5.25% household bleach) per 100 gallons water. Wash nursery trees to remove soil from roots. Cut off all dormant buds and suckers in crown area and prune root system if necessary. Submerge the entire dormant tree for 5 minutes. Recharge dip during operation as necessary to maintain a proper concentration of 200 ppm chlorine. Check the concentration frequently using a chlorine test kit.

**PLUMS, FRESH PRUNES (Eastern U.S.):**

Brown rot - Apply 6 lbs. Captan 50 Wettable Powder per acre in 20 to 300 gallons of water using ground equipment. Apply in full pink, bloom and petal fall sprays. Repeat applications at 7 to 14 day intervals as needed to maintain control. Continue applications through harvest if conditions favor brown rot. The addition of a neutral spreader has improved coverage.

**PLUMS, FRESH PRUNES (Western U.S.):**

Brown rot - Apply 6 lbs. Captan 50 Wettable Powder per acre in 20 to 300 gallons of water using ground equipment. Apply at green bud, popcorn, bloom and petal fall stages. Repeat in cover sprays as conditions warrant.

Prune russet scab (lacy scab) (in California only) - Apply 6 lbs. Captan 50 Wettable Powder per acre in 20 to 300 gallons of water using ground equipment. Apply at full bloom.

**STRAWBERRIES:**

Botrytis (gray mold), leaf spot - Apply 6 lbs. Captan 50 Wettable Powder per acre in sufficient water for thorough coverage. Begin applications when new growth starts in the spring and before fruit starts to form. Repeat at weekly intervals. Under conditions favorable to fruit rot continue applications through harvest period treating immediately after each picking.

**SPECIAL USES**

**POST HARVEST DIP:** For control of various molds and storage rots (Botyrtis, Gleosporium, Rhizopus). Use as a post harvest dip or spray wash on the following fruits:

**APPLES, CHERRIES, PEARS -**

Use 2 1/2 lbs. Captan 50 Wettable Powder per 100 gallons of water. Apply as a spray or in a dip tank. When used as a dip, recharge wash solution periodically when tank volume is reduced by 25%. Bring water back to volume and add 1 lb. Captan 50 Wettable Powder for each 25 gallons added. At end of every 8 hour shift, empty

tank, flush and charge with fresh dilution. Do not allow dip tank solution to stand overnight. Maintain continuous agitation during dipping operation. Captan wastes are acutely hazardous. Improper disposal of spray or dip tank mixtures is a violation of Federal law. Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance concerning the disposal of spent or excessd dip tank mixtures.

#### ORNAMENTALS

Do not apply spray to ornamental plants listed below beyond the point of drip from the leaf surface. When applying as a drench apply only sufficient mixture to wet the surface of the soil except when the dose is specified in terms of volume of mixture per square foot of area.

##### AZALEAS:

Damping-off of cuttings - Use 4 lbs. Captan 50 Wettable Powder per 100 gallons of water. Dip cuttings before bedding.  
Petal blight - Use 2 lbs. Captan 50 Wettable Powder per 100 gallons water. Apply to soil area around plants and spray flowers just before bloom. Repeat at 7 to 14 day intervals through bloom.

##### BEGONIAS (Tuberous):

Damping-off, tuber rot - Use 4 lbs. Captan 50 Wettable Powder per 100 gallons of water. Dip tubers 30 minutes, drain and plant.

##### CAMELLIAS:

Petal blight - Use 1 lb. Captan 50 Wettable Powder per 100 gallons of water. Apply to drench soil around plants beginning when flowers start to open. Repeat at 7 to 10 day intervals through bloom.

##### CARNATIONS:

Alternaria leaf spot, rust - Use 2 lbs. Captan 50 Wettable Powder per 100 gallons of water. Begin application at first sign of disease. Repeat at 7 to 10 day intervals. Shorten intervals during frequent rains and heavy dews. Damping-off of cuttings - Use 4 lbs. Captan 50 Wettable Powder per 100 gallons of water. Dip cuttings before bedding.

##### CHRYSANTHEMUM:

Botrytis flower blight, Septoria leaf spot - Use 2 lbs. Captan 50 Wettable Powder per 100 gallons of water. Apply at first sign of disease. Repeat at 7 to 10 day intervals.  
Damping-off of cuttings - Use 4 lbs. Captan 50 Wettable Powder per 100 gallons of water. Dip cuttings before bedding.

##### DICHONDRA (California Only):

White mold (*Scierotium rolfsii*) - Use 2 lbs. Captan 50 Wettable Powder per 100 gallons of water. Apply 1 gallon spray per 10

square feet. Make 2 to 3 applications at 7 day intervals.

**GLADIOLUS (Corms):**

Corn rot and decay, damping-off - Use 1/2 to 1 1/2 lbs. Captan 50 Wettable Powder per 10 gallons, dip corms 20 to 30 minutes. Drain and plant.

**GRASSES (Ornamental in Non-Pastured Areas Only):**

Leaf spot, damping-off, brown patch, melting out, seedling blights, and brown spot on St. Augustine grass - Use 2 lbs. Captan 50 Wettable Powder per 100 gallons of water. Apply 10 gallons spray per 1,000 square feet. Begin when growth starts in spring. Repeat at 7 to 14 day intervals throughout season. Do not graze treated areas or feed clippings to livestock.

**GRASSES (Lawn Seedbeds):**

Damping-off and other soil borne diseases - Use 1/4 to 1/3 lb. Captan 50 Wettable Powder per 1,000 square feet or 2 lbs. Captan 50 Wettable Powder in 100 gallons water, using 15 gallons spray per 100 square feet. Cultivate into upper 3 to 4 inches before planting.

**ROSES:**

Black spot, Botrytis blossom blight - Use 2 lbs. Captan 50 Wettable Powder per 100 gallons of water. Begin at first growth or first sign of disease. Repeat at 7 to 14 day intervals, and more frequently during frequent rains and heavy dews.

**SOIL AND GREENHOUSE**

**BENCH TREATMENT:** Preplant treatment for damping-off and root rot diseases on seedling or transplants of roses (and other shrubs, trees, flowers), and lawn seedbeds - Use 2 lbs. Captan 50 Wettable Powder per 100 gallons water at a rate of 15 gallons per 1,000 square feet. Cultivate into upper 3 to 4 inches of soil before planting. Only the applicator is permitted to be in the greenhouse during application of Captan. Open vents to greenhouse during the application and for at least 1 hour after application. Workers planting in Captan treated soil must wear chemical resistant gloves.