



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

July 28, 2015

Neal Blossom
Director of Global Regulatory and Environmental Affairs
American Chemet Corporation
P.O. Box 1160
East Helena, MT 59635

Subject: Notification per PRN 98-10 – Adding OMRI Listed certification logo; updating emergency hotline number; adding booklet referral statement for Direction of Use
Product Name: Chem Copp 50
EPA Registration Number: 26883-20
Application Date: 07/09/2015
Decision Number: 506981

Dear Mr. Blossom:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records. We note that the OMRI certificate expires 12/1/2015. Therefore, to keep the logo and organic claim on the label, a valid OMRI certificate and a copy of this letter must be submitted before each expires.

If you have any questions, you may contact Fatima Sow at (703) 347-8303 or via email at sow.fatima@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Tony Kish".

Tony Kish, Product Manager 22
Fungicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Chem Copp 50

AMERICAN CHEMET CORPORATION

FUNGICIDE INTENDED FOR AGRICULTURAL USE

ACTIVE INGREDIENTS:

Copper (I) Oxide (CAS No.1317-39-1).....55.1%*

OTHER INGREDIENTS:.....44.9%

TOTAL:100%

*Metallic copper equivalent: 50% (includes 1.1% metallic copper in other forms)

Net Contents: _____Kg

NOTIFICATION

26883-20

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

07/28/2015



WARNING

KEEP OUT OF REACH OF CHILDREN

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.)

FIRST AID (STATEMENT OF PRACTICAL TREATMENT)	
IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have a person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes • Call a poison control center or doctor for treatment advice.
IF IN EYES	<ul style="list-style-type: none"> • Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five (5) minutes, then continue rinsing eyes. • Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.
<p>NOTE TO PHYSICIAN: Possible mucosal damage may contraindicate the use of gastric lavage. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p style="text-align: center;">You may also contact 3E Company Day or Night.</p> <p style="text-align: center;">North America 1-866-519-4752 (US, Canada, Mexico) or 1-760-476-3962</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. May cause skin irritation. Avoid contact with skin. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling.

Manufactured by: American Chemet Corporation
 P.O. Box 1160
 East Helena, MT 59635 U.S.A.
 EPA Est. No. 26883MT01
 EPA Registration No.: 26883-20

[Front Panel]

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in a cool, dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: Non-refillable container. Do not reuse or refill this container. Completely empty package into application equipment. Then offer for recycling if available or dispose of empty package in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

(Note to EPA: Alternate instructions for rigid, non-refillable 5 gallon pails.)

Container Handling: Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or dispose of empty package in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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 requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

SEE BOOKLET FOR DIRECTIONS FOR USE.

[Lot/batch number: _____]

Chem Copp 50

AMERICAN CHEMET CORPORATION

FUNGICIDE INTENDED FOR AGRICULTURAL USE

ACTIVE INGREDIENTS:

Copper (I) Oxide (CAS No.1317-39-1).....55.1%*

OTHER INGREDIENTS:.....44.9%

TOTAL:100%

*Metallic copper equivalent: 50% (includes 1.1% metallic copper in other forms)

Net Contents: _____Kg



WARNING

KEEP OUT OF REACH OF CHILDREN

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.)

FIRST AID (STATEMENT OF PRACTICAL TREATMENT)	
IF SWALLOWED	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have a person sip a glass of water if able to swallow.• DO NOT induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything to an unconscious person.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes• Call a poison control center or doctor for treatment advice.
IF IN EYES	<ul style="list-style-type: none">• Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five (5) minutes, then continue rinsing eyes.• Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN: Possible mucosal damage may contraindicate the use of gastric lavage. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact CHEMTREC Day or Night. Domestic North America 1-800-424-9300 International 703-527-3887 (collect calls accepted)	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. May cause skin irritation. Avoid contact with skin. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling.

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 A on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, and other handlers must wear the following:

- Long sleeved shirt
- Long pants
- Protective eyewear
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

USER SAFETY RECOMMENDATIONS

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

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply directly to water, to areas where surface water is present or intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in a cool, dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: Non-refillable container. Do not reuse or refill this container. Completely empty package into application equipment. Then offer for recycling if available or dispose of empty package in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

(Note to EPA:-Alternate instructions for rigid, non-refillable 5 gallon pails.)

Container Handling: Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or dispose of empty package in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

LIMITED WARRANTY AND LIABILITY

NOTICE: Read this Limited Warranty and Liability before buying or using this product. If the terms are not acceptable, return it at once unopened. It is critical that this product be used and mixed only as specified on the label. The laws of a State may make some or all of this paragraph inapplicable or may give you rights in addition to your rights hereunder. To

the extent consistent with applicable law, the exclusive remedy of the User or Buyer and the limit of liability of this Company or any other Seller for any and all losses, personal injuries or damages resulting from the use of this product, shall be the purchase price paid by the User or Buyer for the quantity of product involved. To the extent consistent with applicable law, there is no warranty, and this Company and other Sellers disclaim all liability for losses, personal injury or damages: (i) arising from any use of this product in a manner or for a purpose not listed in its label directions, or from mixing this product before use with any substance except as recommended by the product's label; (ii) arising from handling or storage in violation of label instructions; (iii) for all indirect special or consequential damages; (iv) when not reported to this company within one year of discovery; and (v) arising from product not used within the label-designated shelf life or four years from date of purchase, whichever first occurs. THERE ARE NO IMPLIED WARRANTIES, AND NO WARRANTIES OF MERCHANTABILITY OR FITNESS.

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 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 (WPS), 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), notification to workers, and restricted entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

- Do not enter or allow worker entry into treated areas during the REI of 12 hours.
- PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as soil or water is:
 - Coveralls
 - Shoes plus socks
 - Chemical-resistant gloves made of any waterproof material
 - Protective eyewear
- Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

For at least seven (7) days following the application of copper-containing products in greenhouses: at least one (1) container or station designed specifically for flushing eyes is available in operating condition with the WPS-required decontamination supplies for workers entering the area treated with copper-containing products, workers are informed orally, in a manner they can understand:

- that residues in the treated area may be highly irritating to their eyes,
- that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes,
- that if they do get residues in their eyes, they should immediately flush their eyes with the eye flush container or eye flush station that is located with the decontamination supplies, and
- how to operate the eye flush container or eye flush station.

PRODUCT INSTRUCTIONS

Use Chem Copp 50 product as noted. Chem Copp 50 is adaptable to spraying from all types of spray equipment. Depending on the equipment used and the specific crop, the volume applied per acre will differ. For dilute, high volume sprays: use from 25 to 100 gallons of water per acre (GPA); for most vegetable crops, 400 to 800 GPA; for fruit orchards

and up to 1500 GPA as may be required for large citrus groves. For concentrate ground sprays apply from 5 to 20 GPA for most vegetable crops and 25 to 100 GPA for fruit and nut crops. For aerial spraying, 3 to 15 GPA are commonly used. When using pesticide application equipment such as Curtec® or other similar sprayers which are capable of obtaining thorough coverage at low volumes, application rates as low as 20 gallons per acre of spray volume may be used.

MIXING DIRECTIONS

Add Chem Copp 50 slowly to a spray tank partially filled with water. Spreader/stickers, insecticides, and nutrients should be added last. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition (approximately 3 to 10 mph), and there are no sensitive areas within 250 feet (80 meters) downwind.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversions exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of copper compounds. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications:

- The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
- When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

Additional requirements for ground boom application:

- Do not apply with a nozzle height greater than 4 feet above the crop canopy.

CROP USE DIRECTIONS

The recommendations of your local State Agricultural Extension Service should be closely followed as to timing, frequency and number of sprays per season.

Where a dosage range is specified, apply higher dosage when the disease conditions are severe. The recommendations of the State Agriculture Extension Services should be closely followed as to timing, frequency and number of sprays per season.

CHEMIGATION: DO NOT APPLY THIS PRODUCT THROUGH ANY IRRIGATION SYSTEM.

FROST INJURY PROTECTION (Bacterial Ice Nucleation Inhibitor)

Application of Chem Copp 50 made to all crops listed on this label at the rates and stages of growth indicated, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (*Pseudomonas syringae*, *Erwinia herbicola* and *Pseudomonas fluorescens*) and may therefore provide some protection against light frost. Not recommended for those geographical areas where weather conditions favor severe frost.

CROP USES

CITRUS: Grapefruit, Kumquat, Lemon, Lime, Orange, Pummelo, Tangelo and Tangerine.

FIELD CROPS: Alfalfa, Barley, Clover*, Corn*, Oats, Peanut, Potato, Soybean, Sugar Beet, Sugarcane* and Wheat.

SMALL FRUITS: Blackberry, Blueberry, Cranberry, Currant, Gooseberry, Raspberry and Strawberry.

TREE CROPS: Almond, Apple, Apricot, Avocado, Banana, Cacao, Cherimoya*, Cherry, Chestnut*, Coffee, Filbert, Mango*, Nectarine, Nutmeg*, Olive, Peach, Pear, Pecan, Pistachio, Plantain*, Plum, Prune, Quince* and Walnut.

VEGETABLES: Artichoke*, Asparagus*, Bean, Beet, Beet Greens, Broccoli, Brussels Sprout, Cabbage, Cantaloupe, Carrot, Cauliflower, Celeriac*, Celery, Chard, Cucumber, Eggplant, Endive*, Escarole*, Garlic*, Greens (Collard, Mustard and Turnip), Honeydew, Kale*, Kohlrabi*, Leek*, Lettuce, Muskmelon, Okra*, Onion, Pea, Pepper, Pumpkin, Radish*, Rhubarb*, Rutabaga*, Shallot*, Spinach, Squash, Tomato, Turnip*, Watercress* and Watermelon.

VINES: Grape, Hops and Kiwi.

MISCELLANEOUS: Atemoya*, Carambola*, Chives*, Cilantro*, Coriander*, Dill*, Ginseng, Guava, Litchi*, Live Oak*, Macadamia, Mamey Sapote*, Mint*, Papaya*, Parsley*, Passion Fruit*, Persimmon*, Rosemary*, Sugar Apple* and Sycamore, and Turfgrass*.

GREENHOUSE AND SHADEHOUSE CROPS: Chem Copp 50 may be used in greenhouses and shadehouses to control diseases on any crop on this label where physiology allows greenhouse or shadehouse culture. While specific directions are presented for Citrus, Cucumber, Eggplant, Pepper, and Tomato; general use may occur for any crop on this label where physiology allows greenhouse or shadehouse culture. Do not exceed maximum rates expressed in lbs copper per unit area.

ORNAMENTALS: Specified as listed.

*Except California

CITRUS

Chem Copp 50 may be mixed with dry foliar nutritionals (micronutrients) to create “Shot Bag” mixes to meet the various nutritional requirements of citrus and provide disease protection as described on this label. Chem Copp 50 per acre rates in these mixes must not exceed the maximum label rates for disease control. Adding foliar nutritionals or other products to spray mixtures containing Chem Copp 50 and applying to citrus during the post-bloom period when young fruit are present may result in spray burn.

Disease	App. Rate (Lbs. Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Min. Retreatment Interval (Days)	Comments
Algal Spot, Melanose, Scab	1.5-6	12.6 ¹	25.2 ¹	7	Apply as pre-bloom and post-bloom sprays. Use the higher rates when conditions favor disease development.
Greasy Spot, Pink Pitting	0.75-3	12.6 ¹	25.2 ¹	7	Apply in summer on expanded new flush. Repeat on subsequent flushes where disease pressure is severe. Use the higher rates when conditions favor disease development.
Alternaria Brown Spot	0.75-4.5	12.6 ¹	25.2 ¹	21	On susceptible varieties apply when the first spring flush appears and each flush thereafter. Application to fruit should start after two thirds of the petals have fallen and be repeated on a 21-day schedule. Use the higher rates when conditions favor disease development.
Phytophthora Brown Rot, Septoria Spot	0.75-4.5	12.6 ¹	25.2 ¹	7	Begin application in fall before or just after the first rain and continue as needed. For brown rot only, apply to skirts of trees to a height of at least 4 feet. For control of Septoria spot or where fruit have already been infected with brown rot, apply to entire tree. Apply also to bare ground 1 foot beyond skirt. Use the higher rates when conditions favor disease development. NOTE: In California, in areas subject to copper injury, add 1/3 to 1 pound of high quality lime per pound of Chem Copp 50.
Phytophthora Foot Rot	0.4	12.6 ¹	25.2 ¹	7	Mix with 1 quart water, Tre-Hold® or latex paint. Paint trunks of trees from the soil surface to the lowest scaffold limbs. Apply in May prior to summer rains and/or in the fall prior to wrapping trees for freeze protection. Treatment serves as protection for up to 1 year, but does not cure existing infections. NOTE: Areas where micro jet or low volume irrigation hit the tree trunk may require retreatment due to wash off.
Citrus Canker (Suppression)	0.75-6	12.6 ¹	25.2 ¹	7	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require an additional application. Number and timing of applications will be dependent upon disease pressure. Under heavy pressure, each flush of new growth should be sprayed.
Black spot*	0.75-3	12.6 ¹	25.2 ¹	7	Initiate treatment prior to or at the first appearance of disease and repeat on a 7 to 21 day interval as needed. Use higher rates and short application intervals when conditions favor disease development.

NOTE: Phytotoxicity may occur on young tender flush when Chem Copp 50 is applied to citrus seedlings grown in greenhouses or shade houses.

¹ Maximum annual amount allowed for all disease applications combined.

*Except California

CITRUS (FIELD NURSERY GROWN)

To control Melanose, Scab, Pink Pitting, Greasy Spot and Brown Rot and for suppression of Citrus Canker, apply 0.75 to 2.25 pounds of product per acre. Apply Chem Copp 50 at 7 to 28 day intervals depending on disease severity and rainfall. The maximum annual application rate is 12.6 pounds of Cu per acre. The minimum retreatment interval is 7 days.

FIELD CROPS

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Alfalfa	Cercospora Leaf Spot Leptosphaerulina Leaf spot	0.4-1	1.12	2.24	30	Apply 10 to 14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.
Cereal Grains (Barley, Millet, Oat, Rye, Sorghum, Wheat)	Fusarium Head Blight Suppression, Helminthosporium, Powdery Mildew suppression, Septoria Leaf Blotch, Spot Blotch, Stagonospora Leaf and Glume Blotch, Stem Rust	0.4-1	1.06	2.12	10	Chem Copp 50 can be applied as a foliar application for early season disease control and again at early heading then followed with another application 10 days later. Use the higher rates when conditions favor disease development.
Clover*	Anthracnose, Bacterial Blight, Bacterial Leaf Spot, Cercospora Leaf Spot, Powdery Mildew	0.4-1	4.74	9.48	7	Begin applications when conditions first favor disease development and repeat at 7 to 14 day intervals. Use the higher rates when conditions favor disease development.
Corn* (Field Corn, Popcorn, Seed, Sweet Corn)	Bacterial Stalk Rot	0.4-1	4.2	8.4	7	Begin treatment when disease first appears and repeat every 7 to 10 days. Use the higher rates and shorter spray intervals when conditions favor disease development.
Peanut	Cercospora leaf spot, Rust	0.4-1.5	4.74	9.48	7	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals. Reduce sprays to 7 day intervals during humid weather. Use the higher rates when conditions favor disease development.

*Except California

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Potato	Early Blight, Late Blight, Powdery Mildew	0.75-4.5	25	50	5	Apply 0.75 to 2.6 pounds per acre at 7 to 10 day intervals starting when plants are 2 to 6 inches high in locations where disease is light. Apply up to 4.5 pounds per acre when disease is more severe. Under conditions of severe disease, control with Chem Copp 50 will be improved by tank mixing with other compatible fungicides registered for use on potatoes. Read and follow all label instructions of tank mix partners. Use the higher rates when conditions favor disease development.
Soybean	Bacterial Blight, Downy mildew, Powdery Mildew	0.4-1.5	4.74	9.48	7	For preventive applications, begin first application when plant height reaches 6 inches and repeat on a 7 to 14 day interval as needed. Use the higher rates when conditions favor high disease pressure.
Sugar Beet	Cercospora Leaf Spot, Downy Mildew	0.4-2.25	7.86	15.7	10	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals. Use the higher rates when conditions favor disease development. Addition of a spreader/sticker is recommended.
Sugarcane*	Rusts (brown and orange)	1	1.06	2.12	10	Recommended for tank mixture with other products registered for rust control. For suppression of rust, begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals. Use the higher rates when conditions favor disease development. Addition of a spreader/sticker is recommended.

*Except California

SMALL FRUITS

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Brambles - Blackberry Raspberry (Aurora, Boysen, Cascade, Chehalem, Logan, Marion, Santiam, Thornless Evergreen)	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	0.75-3.75	10 ¹	20.0 ¹	7	Make fall application after harvest. Apply delayed dormant spray after pruning/training in the spring. If needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	0.4-2	10 ¹	20.0 ¹	7	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue application if signs of crop injury appear.
Blueberry	Bacterial Canker	0.75-4	8.4 ¹	16.8 ¹	28	Make first application before rain falls and a second application 4 weeks later. Use the higher rates when conditions favor disease development.
	Fruit Rot, Phomopsis, Twig Blight	0.4-2.25	8.4 ¹	16.8 ¹	7	Dormant Application: Begin applications when bloom buds begin to swell. Make additional applications at 7 to 14 day intervals before blooms open. Use the higher rates when conditions favor disease development.
Cranberry	Fruit Rot	2-4	12.6 ¹	25.2 ¹	7	Make first application in late bloom. Apply one or two additional applications at 10 to 14 day intervals depending on disease severity.
	Rose Bloom	2-4	12.6 ¹	25.2 ¹	7	Apply three sprays on 10 to 14 day schedule as needed as soon as symptoms are observed.
	Bacterial Stem Canker	2-4	12.6 ¹	25.2 ¹	7	Apply postharvest and again in spring at bud swell. Apply one or two additional applications at 10 to 14 day intervals as needed depending on disease severity.
	Leaf Blight, Red Leaf Spot, Stem Blight, Tip Blight (Monilinia)	2-4	12.6 ¹	25.2 ¹	7	Apply delayed dormant spray in the spring. Repeat at 10 to 14 day intervals as needed through pre-bloom.

¹maximum annual amount allowed for all disease applications combined

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Currant, Gooseberry	Anthraco­nose, Leaf Spot	2.25-5.25	16	32	10	Make initial application after first leaves have expanded. Continue on a 10 to 14 day schedule during wet conditions in the spring. Make an additional application after harvest.
Strawberry	Angular Leaf Spot, (Xanthomonas) Leaf Blight, Leaf Scorch, Leaf Spot, Downy Mildew	0.4-1.5	8.19	16.35	7	Begin application when plants are established and continue on a weekly schedule throughout the season. Apply in at least 20 gallons of water. Use the higher rates when conditions favor disease development. NOTE: Discontinue applications if signs of crop injury appear.

¹maximum annual amount allowed for all disease applications combined

TREE FRUITS

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Apple	Anthraco­nose, Blossom Blast, European Canker (Nectria), Shoot Blast (Pseudomonas)	2.75-8	16 ¹	32 ¹	365	Apply before fall rains. Use the higher rate when conditions favor disease development. Only 1 application per season is permitted. NOTE: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	Apple Scab, Fire Blight	2-4	16 ¹	32 ¹	365	Make application between silver-tip and green-tip. Apply as a full-cover spray for early season disease suppression. Only 1 application per season is permitted. NOTE: Moderate to severe crop injury may occur from late application.
	Apple Scab	0.4-1	16 ¹	32 ¹	5	Extended spray schedule where fruit finish is not a concern: Continued application may be made at 5 to 7 day intervals as needed between 1/2 inch green-tip and first cover spray. NOTE: Moderate to severe crop injury may result from this extended spray schedule. It is not intended for fresh market apples or fresh apples where fruit finish is a concern as it is likely to cause fruit russetting. The addition of 1 to 3
	Fire Blight	0.4-1.1	16 ¹	32 ¹	5	
	Bitter Rot, Black Spot, Blotch, Powdery mildew	0.38-1.5	1.5	16 ¹	31.95 ¹	

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Apple, cont'd.						pounds of hydrated lime per pound of Chem Copp 50 may reduce crop injury.
	Brooks spot	0.75	16 ¹	32 ¹	5	Apply Chem Copp 50 plus 2 lbs. hydrated lime per 100 gallons. Make applications during late cover sprays.
	Bullseye rot	4.0	16 ¹	32 ¹	365	Use Chem Copp 50 plus sprayable oil in 100 gallons of water. Make applications after harvest. Only one application per season.
	Sooty blotch	0.4-1.5	16 ¹	32 ¹	5	Use Chem Copp 50 plus 2 ½ lbs hydrated lime per 100 gallons. Apply during late cover sprays. When conditions indicate the potential for increased copper injury, add additional lime.
	Collar Rot, Crown Rot	0.4-1.5	16 ¹	32 ¹	365	Mix in 100 gallons of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for best results. Do not apply to foliage or fruit. Only 1 application per growing season is permitted. NOTE: Do not use if soil pH is below 5.5 since copper toxicity may result.
Cherry, Plum, Prune	Bacterial Blast (Pseudomonas) Bacterial Canker, Coryneum Blight (Shot Hole)	2-8	18 ¹	36 ¹	7	Fall Applications: Make first application before fall rains and a second at late dormant (up to the pink bud stage). Use the higher rates when conditions favor disease development. If needed, agricultural- type spray oil may be added. For cherries: Where disease is severe, an additional application shortly after harvest may be required. Use the higher rates when conditions favor disease development.
	Blossom Brown Rot, Coryneum Blight (Shot Hole)	2-3	18 ¹	36 ¹	5	Apply during early bloom. Do not apply after full bloom or injury may occur. Use the higher rates when rainfall is heavy and disease pressure is high.

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Cherry (cont'd) Plum Prune	Black Knot (Plum)	0.75-3	18 ¹	36 ¹	7	Make an application at bud swell up to early bloom for early season disease suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, do not use after full bloom. Use the higher rates when conditions favor disease development.
	Cherry Leaf Spot (Sour Cherries Only)	0.4-3	18 ¹	36 ¹	5	Cover Sprays: Apply at petal fall as well as one to two times after petal fall. Use the lower rates where disease infection is light and use the higher rates for a dormant application (up to the pink bud stage) or where disease infection is moderate to heavy. Do not apply to sweet cherry or the English Morello variety as severe injury will result. The addition of 1 to 3 pounds of hydrated lime per pound of Chem Copp 50 may reduce crop injury. NOTE: Moderate to severe injury such as leaf spotting and defoliation may occur from post-bloom applications.
Apricot, Peach, Nectarine	Bacterial Blast (Pseudomonas), Bacterial Canker, Bacterial Spot, (Xanthomonas), Coryneum Blight (Shot Hole), Leaf Curl	2-8	18 ¹	36 ¹	7	Fall Applications: Make first application before fall rains and a second at late dormant. For peach leaf curl, late dormant application must be made before leaf buds swell (up to the pink bud stage). Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural type spray oil may be added.
	Blossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl	2-3	18 ¹	36 ¹	5	Full cover spray at pink bud. Use the higher rates when conditions favor disease development.
	Bacterial Spot	0.4-1.1	18 ¹	36 ¹	5	Post-bloom application applied at first and second cover sprays. NOTE: Do not spray 3 weeks prior to harvest. Use only listed rates. Spotting of leaves and defoliation may occur from use in cover sprays.
Atemoya, Sugar Apple (Annona)	Anthraxnose	0.75-4.5	12.6	25.2	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Avocado	Anthracoze, Blotch, Scab	2-6	18.9	37.8	14	Apply when bloom buds begin to swell and continue application at monthly intervals for five to six applications. Use the higher rates when conditions favor disease development.
Banana *	Sigatoka (Black and Yellow)	0.4-1.1	18.9 ¹	37.8 ¹	7	Apply by air in 3 gallons of water. If needed, agricultural-type spray oil may be added. Apply on a 14 day schedule throughout the wet season. Apply at 21 day intervals during the dry periods.
	Black Pitting	0.75-2	18.9 ¹	37.8 ¹	7	Mix in 100 gallons of water. Apply to the fruit stem and basal portion of the leaf crown. Apply during the first and second weeks after the fruit emergence.
Carambola*	Anthracoze	0.75-2.25	10.5	21	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Cherimoya (custard apple)*	Anthracoze	0.4-2.25	8.4	16.8	14	Begin applications when conditions first favor disease development; repeat using a 14-day interval. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease. Make first application to a small area to test for crop sensitivity. The addition of 1 to 3 pounds of hydrated lime per pound of Chem Copp 50 may reduce crop injury.
Guava	Anthracoze, Red Algae	0.75-2.25	4.92	9.84	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease pressure.
Mamey Sapote*	Algal Leaf Spot, Anthracnose	1.5-3.75	8.4	16.8	14	Apply when conditions favor disease development. Repeat on 14 to 30 day schedule as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease development.
Mango*	Anthracoze	1-5.25	48	96	7	Apply monthly after fruit set until harvest. Use the higher rates when rainfall is heavy and disease pressure is high.

*Except California

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Olive	Anthraco-nose Olive Knot, Olive Leaf Spot, Peacock Spot	2-6	18	36	30	Make first application before winter rains begin. A second application in early spring should be made if disease is severe. Apply the higher rates for heavy disease pressure or when conditions favor disease development.
Papaya*	Anthraco-nose	1-5.25	21.2	42.3	7	Apply before disease appears. Apply at 14 day intervals. The addition of an approved spreader is desirable. Use the higher rates when conditions favor disease development.
Pear	Fire Blight	0.4-0.75	16 ¹	32 ¹	5	Apply at 5 day intervals throughout the bloom period. NOTE: Russetting may occur in copper sensitive varieties. Excessive dosages may cause fruit russet on any variety.
	Blossom Blast (Pseudomonas)	3-7.5	16 ¹	32 ¹	365	Apply before fall rains or during dormancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor disease development. Only 1 application per season is permitted.
Persimmon*	Cercospora Leaf Spot	0.4-0.75	6.0	12	14	Begin applications in May/June at leaf flush and repeat applications on a 14 day interval or greater depending on disease severity and environmental conditions.
Quince	Fire Blight, Blossom Blast	0.4-0.75	16	32	5	Apply at 5 day intervals throughout the bloom period. Apply in adequate water for thorough coverage.

¹maximum annual amount allowed for all disease applications combined

*Except California

TREE NUTS

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Almond	Bacterial Blast (Pseudomonas) Bacterial Canker, Coryneum Blight (Shot Hole)	2-7.5	18 ¹	36 ¹	7	Fall Applications: Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease development. If needed, agricultural-type spray oil may be used.

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Almond (cont'd)	Blossom Brown Rot, Coryneum Blight (Shot Hole)	1.5-2	18 ¹	36 ¹	5	Apply during early bloom. Do not apply after full bloom or injury may occur. Use the higher rates when rainfall is heavy and disease pressure is high.
	Bacterial Blast (Pseudomonas)	0.4-0.75	18 ¹	36 ¹	5	Post Bloom: To control bacterial blast in sprinkler irrigated orchards or when disease is severe, apply 0.75 lbs. Chem Copp 50 post-bloom at 2 week intervals or just prior to sprinkler irrigation. NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlus varieties.
Cacao	Black Pod	0.4-4.5	15.75	31.5	14	Begin applications at the start of the rainy season and continue while infection conditions persist. Apply 1.1 to 3 pounds at 14 to 21 day intervals depending on disease severity. For drier areas, make two to four applications using 3.75 to 4.5pounds per acre according to disease incidence and planting density. Use the higher rates when conditions favor disease development.
Chestnut*	Leaf Spot	0.4-2.25	8.4	16.8	14	Begin applications when conditions first favor disease development. Make applications to protect shoot growth throughout the season. Use the lower rates where disease infection is light and use the higher rates for a dormant application or where disease infection is moderate to heavy.
Coffee	Coffee Berry Disease (Colletotrichum coffeanum)	1.5-3.75	12.6 ¹	25.2 ¹	14	Apply fist spray after flowering and before onset of long rains and then at 21 to 28 day intervals until picking. Use the higher rates when conditions favor disease development.
	Bacterial Blight (Pseudomonas syringae)	1.5-3.75	12.6 ¹	25.2 ¹	14	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals. The critical time of spraying to control this disease is just before, during and after flowering(s), especially when coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.

*Except California

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Coffee (cont'd)	Leaf Rust (Hemileia vastatrix)	0.4-1.5	12.6 ¹	25.2 ¹	14	Apply before the onset of rain; then at 21 day intervals while the rains continue. Use the higher rates when rainfall is heavy and disease pressure is high.
	Iron Spot (Cercospora coffeicola) Pink Disease (Corticium salmonicolor)	0.4-0.75	12.6 ¹	25.2 ¹	28	Use concentrate or dilute spray. Begin treatment at the start of wet season and continue at monthly intervals for three applications.
Filbert	Bacterial Blight	3.5-7	24 ¹	48 ¹	14	Apply as a postharvest spray. In seasons of heavy rainfall apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Use only in the states of Oregon and Washington.
	Eastern Filbert Blight	3.5-7	24 ¹	48 ¹	14	Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 2 week intervals until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Use only in the states of Oregon and Washington.
Litchi*	Anthracnose	0.75-2.25	4.92	9.84	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease pressure.
Macadamia	Anthracnose	1.5-4.5	9.44 ¹	18.9 ¹	7	Initiate sprays at first sign of flowering and repeat on weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease pressure.
	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)	0.75-3	9.44 ¹	18.9 ¹	7	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease development.

*Except California

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Nutmeg*	Leaf Spot, Shot Hole	0.4-2.25	8.4	16.8	14	Begin applications when conditions first favor disease development. Make applications to protect leaves during the rainy season. Use the lower rates where disease infection is light and use the higher rates where disease infection is moderate to heavy. Make first application to a small area to test for crop sensitivity. The addition of 1 to 3 pounds of hydrated lime per pound of Chem Copp 50 may reduce crop injury.
Pecan	Kernel Rot, Shuck Rot, (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis)	0.4-2.25	8.4 ¹	16.8 ¹	14	For disease suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 week intervals starting at kernel growth and continue until shucks open. Use the higher rates and shorter spray intervals if frequent rainfall occurs.
	Ball Moss* Spanish Moss*	1.5-4	8.4 ¹	16.8 ¹	365	Apply in 100 gallons of water in the spring when ball moss is actively growing, using 1 ½ gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of a nonionic surfactant will improve control. A second application may be required after 12 months.
Pistachio	Botryosphaeria Panicle and Shoot Blight, Botrytis Blight, Late Blight (Alternaria alternate), Septoria Leaf Blight	0.75-3.75	2.1	16.8 ¹	14	Make initial application at bud swell and repeat on a 14 to 28 day schedule. If disease conditions are severe, use the higher rates and shorter spray intervals.
Walnut	Walnut Blight	2-6	32	63.9	7	Apply first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves and nutlets is essential for effective control. Use the higher rates when conditions favor disease development. NOTE: Adequate control may not be obtained when copper tolerant species of Xanthomonas bacteria are present.

¹maximum annual amount allowed for all disease applications combined.

*Except California

VEGETABLES

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Artichoke	Ramularia Leaf Spot, Powdery mildew	0.4-0.75	2.65	5.3	7	Recommended for tank mixture with other products registered for control of listed diseases. For suppression, begin applications when conditions first favor disease development and repeat using a 7-day interval. Use the higher rates when conditions favor disease development. Addition of a spreader/sticker is recommended.
Asparagus*	Rust	0.4-1.5	5	9.99	10	Recommended for tank mixture with other products registered for control of rust. For suppression, begin applications when conditions first favor disease development and repeat using a 10-day interval. Use the higher rates when conditions favor disease development. Addition of a spreader/sticker is recommended.
Bean (Dry, Green)	Anthrachnose, Bacterial Blight, Brown Spot, Common Blight, Cercospora Leaf Spot, Downy Mildew, Halo Blight	0.4-1.1	4.74	9.48	7	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule depending on environmental conditions. Use the higher rates for more severe disease pressure.
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot, Downy Mildew	0.4-2.25	7.86	15.7	10	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals. Use the higher rates when conditions favor disease development.
Carrot	Alternaria Leaf Spot, Cercospora Leaf Spot, Downy Mildew	0.4-1.1	5	10	7	Begin applications when disease first threatens; repeat at 7 to 14 day intervals depending on disease severity. Use the higher rates when conditions favor disease development.
Celery, Celeriac	Bacterial Blight, Cercospora Early Blight, Downy Mildew, Septoria Late Blight	0.4-2	5.3	10.6	7	Begin applications as soon as plants are first established in the field, repeating at 7 day intervals depending on disease severity and environmental conditions. Use the higher rates when conditions favor disease development.
Chard*	Cercospora Leaf Spot, Ramularia Leaf Spot	0.4-1.5	3.95	7.9	7	Begin applications when conditions first favor disease development and repeat at 7 to 14 day intervals. Use the higher rates when conditions favor disease development.

*Except California

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Crucifers (Broccoli, Brussels Sprout, Cabbage, Cauliflower, Chinese Cabbage, Collard Greens, Kale, Kohlrabi, Mustard Greens, Turnip Greens)	Black Leaf Spot (Alternaria), Black Rot (Xanthomonas), Downy Mildew	0.4-0.75	2.65	5.3	7	Apply at 7 to 10 day intervals. Begin application after transplants are set in the field or shortly after emergence of field seeded crops or when conditions favor disease development. Use the higher rates when conditions favor disease development. NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.
Cucurbits (Cantaloupe, Casaba, Chayote, Citron Melon, Cucumber, Gourd, Honeydew, Muskmelon, Pumpkin, Squash (summer and winter), Watermelon)	Alternaria Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermelon Bacterial Fruit Blotch (Suppression)	0.4-1.5	5.25	10.5	5	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat sprays at 5 to 7 day intervals. Use the higher rates when conditions favor disease development. NOTE: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
Eggplant	Alternaria Blight, Anthracnose, Downy Mildew, Phomopsis, Phytophthora*	0.4-0.75	7.9	15.75	7	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals depending on disease severity.
Lettuce (Head and Leaf), Endive*, Escarole*	Anthracnose, Downy Mildew, Leaf Spot, Powdery Mildew	0.4-0.75	8	16	5	Begin treatment at the first sign of disease. Repeat on a 7 to 10 day interval to suppress disease. Slight injury may occur under adverse conditions.
Okra*	Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew	0.4-0.75	5.25	10.5	5	Begin treatment when conditions are favorable for disease development and repeat using a 5 to 10 day interval as needed. Use higher rates and shorter intervals when conditions favor disease.
Onion, Garlic, Leek, Shallot	Alternaria, Bacterial Blight, Downy Mildew, Purple Blotch, Rust	0.4-0.75	6	12	7	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals depending on disease severity. Can cause phytotoxicity to leaves.
Pea	Powdery Mildew	0.4-1.5	3.95	7.9	7	Begin applications when disease symptoms first appear and repeat at weekly intervals. Use the higher rates when conditions favor disease development.
Pepper (bell, chili)	Alternaria, Anthracnose, Bacterial Spot, Cercospora Leaf Spot, Downy Mildew, Early and Late Blight, Phytophthora Blight*	0.4-1.1	11.85	23.7	3	Begin applications when conditions first favor disease development and repeat at 3 to 10 day intervals depending on disease severity. Use the higher rates when conditions favor disease development.

*Except California

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Radish, Rutabaga, Turnip*	Alternaria, Anthracnose, Bacterial Leaf Spot, Black Rot, Cercospora Leaf Spot, Downy Mildew, White Rust	0.4-1.1	7.86	15.7	10	Begin application when disease first appears or when conditions favor disease development. Repeat using a 10 day interval. Use the higher rates when conditions favor disease development.
Rhubarb*	Leaf Spot	0.4-1.1	3.95	7.9	7	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals. Use the higher rates when conditions favor disease development.
Spinach	Anthracnose, Blue Mold, Cercospora Leaf Spot, Downy Mildew, White Rust	0.4-0.75	3.95	7.9	7	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals. Use the higher rates when conditions favor disease development. NOTE: Flecking may occur on spinach leaves.
Tomato Processing	Anthracnose, Bacterial Canker, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	0.4-0.75	17.4	34.8	3	Begin application when disease first threatens and repeat at 5 to 10 day intervals depending on disease severity. Use the higher rates when conditions favor disease development.
Tomato Fresh Market		0.4-0.75	8	16	3	
Watercress*	Cercospora Leaf Spot	0.4-0.75	2.12	4.23	7	Begin applications when plants are first established in the field, repeating at 7 to 14 day intervals depending on disease severity. Do not exceed four applications per crop. Apply using ground spray equipment at no less than 50 gallons of spray solution per acre.

¹maximum annual amount allowed for all disease applications combined

*Except California

VINES

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	0.4-1.5	20	40	3	Begin applications at bud break with subsequent applications throughout the season depending on disease severity. Use the higher rates when conditions favor disease development. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara and Rosette. Either test for sensitivity

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Grape (cont'd)						or add 1 to 3 pounds of hydrated lime per pound of Chem Copp 50.
Hops	Downy Mildew	0.4-0.75	2.65	5.3	10	Make crown treatment after pruning, but before training. After training, additional treatments are needed at about 10 day intervals. NOTE: Discontinue use 2 weeks before harvest.
Kiwi	Erwinia Herbicola, Pseudomonas Fluorescens, Pseudomonas Syringae	1.1-3.75	6.3	12.6	30	Apply in 200 gallons of water per acre. Make application on a monthly basis. A maximum of three applications may be made per year.
Passion Fruit*	Anthracoese	1.1-4.5	9.44	18.87	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease pressure.

¹maximum annual amount allowed for all disease applications combined

*Except California

MISCELLANEOUS CROPS

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Chives	Downy Mildew	0.4-0.75	2.65	5.3	7	Begin application when plants are established in the field. Repeat applications every 7 to 10 days depending on disease conditions.
Cilantro, Coriander, Rosemary	Leaf Spot	0.4-0.75	2.65	5.3	10	Begin applications when plants are established in the field. Begin applications prior to disease development and repeat every 10 days depending on disease conditions.
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	0.4-1.5	3.95	7.9	7	Begin application when plants are established in the field. Repeat applications every 7 to 10 day intervals depending upon disease severity and environmental conditions. Use the higher rates when conditions favor disease development.
Ginseng	Alternaria Leaf Blight, Stem Blight	0.4-2	5.25	10.5	7	Use as a tank mix with 2 pounds Rovral® 50W in 100 gallons of water. Use in accordance with the most restrictive of label limitations and precautions. Do not exceed any labeled dosage

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Ginseng (cont'd)						rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Begin Chem Copp 50-Rovral applications as soon as plants have emerged in spring. Application should be repeated every 7 days until plants become dormant in fall. Apply fungicides at least 8 hours before rain. Use of a spreader-sticker or sticker is advised. NOTE: Alternaria Leaf and Stem Blight is most severe in humid conditions such as those found in the dense canopies of 2 to 4 year old Ginseng. It is very important that the stems be thoroughly covered with fungicide; therefore, use a spray apparatus which distributes the fungicide throughout the canopy.
Live Oak*	Ball Moss	1.5-4	20	40	365	Apply in the spring when ball moss is actively growing in 100 gallons water. Use 1.5 gallons spray per foot of tree height. Ensure ball moss tufts are thoroughly wetted. The addition of nonionic surfactant will improve control. A follow up application may be needed 12 months later.
Mint*	Downy Mildew, Leaf Spot, Powdery Mildew, Rust	0.4-0.75	2.65	5.3	10	Begin applications prior to disease development and repeat every 10 days depending on disease conditions.
Parsley	Bacterial Blight (Pseudomonas sp.)	0.75-1.5	2	4	10	Begin application when plants are first established in the field and repeat at 10-day intervals depending on disease severity and environmental conditions.
Sycamore	Anthrachnose	0.4-1.5	20	40	7	Apply as a full cover spray in 100 gallons of water or sufficient volume for thorough coverage. Make first application at bud crack and second application 7 to 10 days later at 10% leaf expansion. Use the higher rates when conditions favor disease development.

Crop	Disease	App. Rate (Lbs Product/A)	Max. Annual Rate (Lbs Cu/A)	Max. App. Rate/Year (Lbs Product/A)	Minimum Retreatment Interval (Days)	Comments
Turfgrass*	Algae	2.25-3	21	42	10	May be used in combination with other fungicides. Use a minimum application volume of 100 gallons of water per acre. Apply to a small area prior to large area applications to check for phytotoxicity. If phytotoxicity is present, discontinue use.

¹maximum annual amount allowed for all disease applications combined.

*Except California

GREENHOUSE AND SHADEHOUSE CROPS

Notice to User: Chem Copp 50 may be used in greenhouses and shadehouses to control disease on crops which appear on this label and specific instructions have been developed for the crops listed. The grower should bear in mind that the sensitivity of crops grown in greenhouses and shadehouses differs greatly from crops grown under field conditions. Neither the manufacturer nor seller has determined whether Chem Copp 50 can be used safely on all greenhouse and shadehouse grown crops. In a small area, apply the labeled rates to the plants in question; i.e., foliage, fruit, and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

Apply Chem Copp 50 according to specific rates given for those crops in pounds per acre. For these crops grown in small areas less than one acre we have provided application rates in tablespoons per 1000 square feet rather than pounds per acre. **One level tablespoon of Chem Copp 50 contains 0.042 pounds of product.** Chem Copp 50 should be applied in adequate water for thorough coverage of plant parts. Begin application at first sign of disease and repeated as indicated below; use shorter spray intervals during periods when severe disease conditions persist. With low volume sprayers apply 0.1 to 0.5 gallons per 1000 square feet for high volume sprayers apply 2.5 to 5 gallons per 1000 square feet. Spray plants to point of drip and apply to both sides of leaves is possible.

Crop	Disease	App. Rate (TBSP Product/1000 Sq. Ft.)	Max. App. Rate/Year (TBSP Product/1000 Sq. Ft.)	Max. App. Rate/Year (Lbs Cu/1000 Sq. Ft.)	Minimum Retreatment Interval (Days)	Comments
Citrus (Non-Bearing Nursery)	Brown Rot, Citrus Canker, Greasy Spot, Melanose, Pink Pitting, Scab	0.75	13.7	0.289	7	Begin application when conditions favor disease development. Repeat sprays at 30 day intervals depending on disease severity.
Cucumber	Angular Leaf Spot, Downy Mildew	0.3-0.75	5.7	0.12	5	Apply weekly when plants begin to vine. Use the higher rates when conditions favor disease.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	0.3-0.75	8.6	0.18	7	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals depending on disease severity.

Crop	Disease	App. Rate (TBSP Product/1000 Sq. Ft.)	Max. App. Rate/Year (TBSP Product/1000 Sq. Ft.)	Max. App. Rate/Year (Lbs Cu/1000 Sq. Ft.)	Minimum Retreatment Interval (Days)	Comments
Pepper	Bacterial Spot	0.3-1	12.8	0.27	3	Begin applications when conditions first favor disease development and repeat at 3 to 10 day intervals depending on disease severity.
Tomato (fresh market)	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	0.3-0.75	8.5	0.18	3	Begin applications when disease first threatens and repeat at 3 to 10 day intervals depending on disease severity.

CONIFERS

For use on conifers, including Douglas Fir, Fir*, Juniper, Leyland Cypress*, Pine* and Spruce*, in Christmas tree plantings, forest stands and silviculture nurseries. For control of foliar diseases, apply Chem Copp 50 as a thorough cover spray at rates ranging from 0.4 to 0.75 pounds per acre. Begin applications in the spring at the initiation of new growth and repeat at 2 to 4 week intervals. Use the higher rates when disease pressure is severe or when environmental conditions favor disease development. There is a maximum annual rate of 20 lbs Cu/A with a minimum retreatment interval of 7 days.

Chem Copp 50 may be used on the listed conifers for control of the following diseases:

CROP	LATIN NAME	DISEASE
Douglas Fir	<i>Pseudotsuga menziesii</i>	Rhabdocline Needlecase
Fir*	<i>Abies spp.</i>	Needlecasts
Juniper	<i>Juniperus spp.</i>	Anthracnose, Phomopsis Twig Dieback*
Leyland Cypress*	<i>X Cupressocyparis leylandii</i>	Cercospora Needle Blight
Pine*	<i>Pinus spp.</i>	Needlecasts
Spruce*	<i>Picea spp.</i>	Needlecasts

Lichens*: To control lichens on any of the conifers above, apply 2 pounds of Chem Copp 50 per acre as a dormant application before new growth emerges in the spring. The addition of a non-ionic surfactant (NIS) will improve control. A second application may be required after 12 months. NOTE: Do not buffer or combine with emulsifiable concentrate insecticides.

*Except California

ORNAMENTALS

Use Chem Copp 50 for control of bacterial and fungal diseases of foliage, flowers and stems on ornamentals in greenhouses, shadehouses, outdoor nurseries, and outdoor landscape plantings. For ornamental crops in dormancy, apply as a thorough cover spray at rates ranging from 0.75 to 3 pounds per acre (0.4 to 1.6 TBSP/1000 ft²) of Chem Copp 50. When new growth is present, apply as a thorough cover spray at rates ranging from 0.75 to 1.1 pounds per acre (0.4 to 0.6 TBSP/1000 ft²) of Chem Copp 50. **One level tablespoon of Chem Copp 50 contains 0.042 pounds of product.**

Begin application at first sign of disease and repeat at 7 to 14 day intervals; use the higher rates and shorter spray intervals during periods of frequent rains or when severe disease conditions persist.

The maximum annual rate is 20 pounds of Cu per acre and 40 pounds of product per acre which is a maximum 21.8 tablespoons of product per 1000 square feet. The minimum retreatment interval is 7 days.

Chem Copp 50 may be used alone or in combination with other fungicides registered for use on ornamentals as a maintenance spray. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates must be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

Notice to User: Plant sensitivities to Chem Copp 50 have been found to be acceptable for the specific genera and species listed on this label under the conditions tested. However, phytotoxicity may occur. Due to the large number of species and varieties of ornamental and nursery plants and the wide range of growing conditions, it is impossible to test every one for sensitivity to Chem Copp 50. Neither the manufacturer nor the seller has determined whether or not Chem Copp 50 can be safely used on ornamental or nursery plants not listed on this label. In a small area, apply the labeled rates to the plants in question, (bedding plants, foliage), and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use. **NOTE:** This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, or other metal surfaces.

Crop	Latin Name	Disease
Aglaonema*	<i>Aglaonema spp.</i>	Bacterial leaf spot
Althaea (Rose of Sharon)	<i>Hibiscus syriacus</i>	Bacterial leaf spot
Andromeda, Japanese*	<i>Pieris japonica</i>	Leaf spots, Twig blight
Aralia	<i>Dizygotheca elegantissima</i>	Xanthomonas leaf spot, Cercospora leaf spot, Alternaria
Arborvitae	<i>Thuja spp.</i>	Alternaria twig blight, Cercospora leaf blight
Aster*	<i>Aster spp.</i>	Downy mildew, Leaf spots
Azalea 1/	<i>Rhododendron spp.</i>	Bud Blight*, Cercospora leaf spot, Botrytis blight, Phytophthora dieback, Powdery mildew, Twig Blight*
Beech*	<i>Fagus spp.</i>	Leaf spots
Begonia	<i>Begonia semperflorens</i>	Bacterial leaf spot (Xanthomonas sp., Erwin sp., Pseudomonas sp.)
Bougainvillea	<i>Bougainvillea spectabilis</i>	Anthracoise, Bacterial leaf spot
Boxwood*	<i>Buxus spp.</i>	Leaf spots
Camellia	<i>Camellia japonica, C. sasanqua</i>	Anthracoise, Bacterial leaf spot
Camphor tree	<i>Cinnamomum camphora</i>	Pseudomonas leaf spot
Canna	<i>Canna spp.</i>	Pseudomonas leaf spot
Carnation 1/	<i>Dianthus spp.</i>	Alternaria blight, Pseudomonas leaf spot, Botrytis blight
Cedar*	<i>Cedrus spp.</i>	Tip blight
Cherry, Nanking*	<i>Prunus tomentosa</i>	Bacterial leaf spot
Chinese tallow tree	<i>Sapium sebiferum</i>	Bacterial leaf spot (Xanthomonas sp., Pseudomonas sp.)

Crop	Latin Name	Disease
Chrysanthemum 1/	<i>Chrysanthemum morifolium</i>	Septoria leaf spot, Pseudomonas Leaf Spot, Botrytis blight
Cotoneaster	<i>Cotoneaster spp.</i>	Botrytis blight
Crabapple*	<i>Malus spp.</i>	Fire blight
Cypress*	<i>Cupressus spp.</i>	Twig blight
Dahlia	<i>Dahlia pinnata</i>	Alternaria leaf spot, Botrytis gray mold, Cercospora leaf spot
Delphinium*	<i>Delphinium spp.</i>	Leaf spots
Dianthus	<i>Dianthus spp.</i>	Bacterial spot, Bacterial soft rot
Dogwood, Flowering	<i>Cornus florida</i>	Anthracnose
Dogwood, Kousa*	<i>Cornus kousa</i>	Fungal leaf spot
Douglas Fir	<i>Pseudotsuga menziesii</i>	Rhabdocline Needlecast
Dracaena*	<i>Dracaena marginata</i>	Bacterial leaf spot
Dumb Cane*	<i>Dieffenbachia spp.</i>	Bacterial leaf spot
Dusty miller	<i>Senecio cineraria</i>	Bacterial leaf spot (Pseudomonas cichorii)
Echinacea	<i>Echinacea spp.</i>	Bacterial leaf spot (Pseudomonas cichorii)
Elm, Chinese	<i>Ulmus parvifolia</i>	Xanthomonas leaf spot
Euonymus	<i>Euonymus spp.</i>	Botrytis blight, Anthracnose
Fern, Boston*	<i>Nephrolepis exaltata</i>	Bacterial leaf spot
Fern, Holly	<i>Crytomium falcatum</i>	Pseudomonas leaf spot
Fig, Weeping*	<i>Ficus benjamina</i>	Bacterial leaf spot
Filbert (Ornamental)*	<i>Corylus spp.</i>	Filbert blight
Fir*	<i>Abies spp.</i>	Needlecasts
Gardenia	<i>Gardenia jasminoides</i>	Alternaria leaf spot, Botrytis bud rot, Cercospora leaf spot
Geranium	<i>Pelargonium spp.</i>	Alternaria leaf spot, Botrytis gray mold, Cercospora leaf spot
Gladiola	<i>Gladiolus spp.</i>	Alternaria leaf spot, Botrytis gray mold, Bacterial leaf blight, Anthracnose
Golden Rain Tree	<i>Koelreuteria paniculata</i>	Bacterial leaf spot
Grape Ivy*	<i>Cissus spp.</i>	Bacterial leaf spot
Hawthorn*	<i>Crataegus spp.</i>	Fire blight
Hibiscus 4/	<i>Hibiscus spp.</i>	Bacterial leaf spot
Holly	<i>Ilex spp.</i>	Bacterial blight, leaf spots
Honeylocust*	<i>Gleditsia triacanthos</i>	Bacterial leaf spot
Honeysuckle, Tatarian*	<i>Lonicera tatarica</i>	Bacterial leaf spot
Impatiens	<i>Impatiens sallerana</i>	Bacterial leaf spot
Indian hawthorn 5/	<i>Rhaphiolepis indica</i>	Anthracnose, Entomosporium leaf spot
Iris 6/*	<i>Iris spp.</i>	Bacterial leaf spot
Ivy (English, Algerian) 1/	<i>Hedera helix, H. canariensis</i>	Xanthomonas leaf spot
Ixora	<i>Ixora coccinea</i>	Xanthomonas leaf spot

Crop	Latin Name	Disease
Juniper (Eastern red cedar)	<i>Juniperus virginiana</i>	Anthracnose, Phomopsis Twig Dieback*
Lantana	<i>Lantana camara</i>	Bacterial leaf spot
Leyland Cypress*	<i>X Cupressocyparis leylandii</i>	Cercospora needle blight
Lilac	<i>Syringa spp.</i>	Cercospora leaf spot, Pseudomonas blight*
Lily, Easter 2/	<i>Lilium longiflorum</i>	Botrytis blight
Linden*	<i>Tilia spp.</i>	Anthracnose, leaf blight
Loblolly bay	<i>Gordonia lasianthus</i>	Anthracnose
Loquat	<i>Eriobotrya japonica</i>	Entomosporium maculata, Colletotrichum sp.
Magnolia (Oriental)	<i>Magnolia soulangiana</i>	Bacterial leaf spot
Magnolia (Southern)	<i>Magnolia grandiflora</i>	Algal leaf spot, Anthracnose, Bacterial leaf spot
Magnolia (Sweet bay)	<i>Magnolia virginiana</i>	Anthracnose
Mandevilla	<i>Mandevilla spp.</i>	Anthracnose
Maple*	<i>Acer spp.</i>	Pseudomonas leaf blight, Tar leaf spot
Marigold	<i>Tagetes spp.</i>	Alternaria leaf spot, Botrytis leaf and flower rot, Cercospora leaf spot
Mountain Ash*	<i>Sorbus spp.</i>	Fire blight
Mulberry, Contorted*	<i>Morus bombycis</i>	Bacterial leaf spot
Mulberry, weeping	<i>Morus alba</i>	Bacterial leaf spot
Oak*	<i>Quercus spp.</i>	Anthracnose, Leaf spots
Oak, laurel	<i>Quercus laurifolia</i>	Algal leaf spot (Cephaleuros virescens)
Oleander	<i>Nerium oleander</i>	Bacterial leaf spot, Fungal leaf spot
Oregon Grapeholly*	<i>Mahonia aquifolium</i>	Leaf spots
Pachysandra	<i>Pachysandra procumbens</i>	Canker, leaf spots, Twig Blight*, Volutella leaf blight
Palm, Date	<i>Phoenix canaries</i>	Pestalotia leaf spot
Palm, European Fan	<i>Chamaerops humilis</i>	Pestalotia leaf spot
Palm, Parlor*	<i>Chamaedorea elegans</i>	Bacterial leaf spot
Palm, Queen	<i>Arecastrum romanzoffianum</i>	Exosporium leaf spot, Phytophthora bud rot
Palm, Washingtonia	<i>Washingtonia robusta</i>	Pestalotia leaf spot
Peach (Flowering) 3/*	<i>Prunus spp.</i>	Bacterial blast, brown rot, fire blight
Pear (Flowering)	<i>Pyrus calleryana</i>	Fireblight, Leaf spot
Pentas (Egyptian star)	<i>Pentas spp.</i>	Bacterial leaf spot (Pseudomonas spp.*, Xanthomonas sp.)
Peony	<i>Paeonia spp.</i>	Botrytis blight
Periwinkle	<i>Catharanthus roseus, Vinca spp.</i>	Phomopsis stem blight
Philodendron	<i>Philodendron selloum</i>	Bacterial leaf spot

Crop	Latin Name	Disease
Phlox	<i>Phlox spp.</i>	Alternaria leaf spot
Photinia (Red Tip)	<i>Photinia fraseri, P. glabra</i>	Anthracnose, Entomosporium Leaf Spot
Pine*	<i>Pinus spp.</i>	Needlecasts
Pistachio(ornamental)	<i>Pistacia chinensis</i>	Anthracnose
Plantain lily 6/	<i>Hosta spp.</i>	Bacterial leaf spot
Pothos*	<i>Scindapsus spp.</i>	Bacterial leaf spot
Powder Puff Plant	<i>Calliandra spp.</i>	Bacterial leaf spot
Pyracantha	<i>Pyracantha spp.</i>	Fireblight, scab
Rhododendron	<i>Rhododendron spp.</i>	Alternaria flower spot
Rose 1/	<i>Rosa spp.</i>	Black spot, Powdery Mildew
Snapdragon	<i>Antirrhinum majus</i>	Anthracnose, Dieback, Downy Mildew
Spathe Flower*	<i>Spathiphyllum spp.</i>	Bacterial leaf spot
Spirea*	<i>Spiraea spp.</i>	Fire blight
Spruce*	<i>Picea spp.</i>	Needlecasts
Sycamore	<i>Platanus spp.</i>	Anthracnose, leaf spots*
Tulip	<i>Tulipa spp.</i>	Anthracnose, Botrytis blight
Umbrella Tree*	<i>Schefflera spp.</i>	Bacterial leaf spot
Verbena	<i>Verbena spp.</i>	Xanthomonas leaf spot
Viburnum	<i>Viburnum odoratissimum V. suspensum, V. plicatum</i>	Anthracnose
Viola (Pansy, Violet)	<i>Viola spp.</i>	Downy mildew
Willow	<i>Salix spp.</i>	Anthracnose
Yew*	<i>Taxus spp.</i>	Needle blight
Yucca (Adam's Needle)	<i>Yucca spp.</i>	Cercospora leaf spot, Septoria leaf spot
Zinnia*	<i>Zinnia spp.</i>	Leaf spots

*Except California

- 1/ Can cause discoloration of foliage and/or blooms on some varieties. To prevent residues on commercial plants, do not spray immediately before selling season.
- 2/ Apply at 2.5 to 4 pounds per acre (1.4 to 2.2 TBSP/1000 ft²) . The maximum amount of metallic copper which may be applied in a 12-month period is 75 pounds of Cu per acre (150 pounds of product per acre or 81 TBSP/1000 ft²). Do not apply any additional copper pesticide to this land for 36 months.
- 3/ Apply dormant through bloom only.
- 4/ Hibiscus – Do not apply to plants in flower.
- 5/ For Indian Hawthorne, use 1.5 to 3 pounds per acre (0.8 to 1.6 TBSP/1000 ft²).
- 6/ Some cultivars may be sensitive to Chem Copp 50.

NOTE: Phytotoxicity may depend on varietal differences. If unfamiliar with the use of Chem Copp 50, apply the labeled rate to a few plants and observe after 7 to 10 days for symptoms of phytotoxicity.

Control of Ball Moss*, Spanish Moss* and Lichens* on Ornamentals and Shade Trees: Apply Chem Copp 50 in early spring when trees are dormant. Apply 5 to 6.75 pounds of Chem Copp 50 in 100 gallons of water, using 1 ½ gallons of spray per foot of tree height. Be sure to thoroughly wet ball moss tufts, Spanish moss or lichens. The addition of a non-

ionic surfactant will improve control. A second application may be required after 12 months. Do not apply more than 4 pounds of product per acre in a single application.

NOTE: CHEM COPP 50 may be injurious to some ornamental plants growing beneath trees. This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, or other metal surfaces.

Cold Storage Protection for Dormant Rootstock*: To protect bare-root nursery trees from Phytophthora Crown Rot and Botrytis, use 2.25 to 3 pounds of Chem Copp 50 per 100 gallons of water. Apply as a dip or spray to the roots and lower stems of dormant rootstock prior to placing in cold storage. Do not apply to rootstock less than 2 years old.

*Except California

Alliete is a registered trademark of Bayer CropScience.

Chem Copp 50 is a registered trademark of American Chemet Corp.

Curtec is a registered trademark of Curtec Corporation.

Rovral is a registered trademark of Bayer CropScience.

Tre-Hold is a registered trademark of Amvac Chemical Corporation