OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

December 03, 2025

SENT BY EMAIL

Mike Niedbalski
mike.niedbalski@syntechresearch.com
COSACO LLC

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 - label notification to update marketing changes
Product Name: KOCIDE 2000
Admin Number: 91411-1
EPA Receipt Date: 11/14/2025
Action Case Number: 00675882

Dear Mike Niedbalski:

The U.S. Environmental Protection Agency is in receipt of your application for notification under Pesticide Registration Notice 98-10 for the above referenced product. The EPA 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 labeling submitted with this application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

If you have questions, please contact Yasmin Bowers via email at bowers.yasmin@epa.gov.

Sincerely,

YASMIN BOWERS

Digitally signed by YASMIN BOWERS
Date: 2025.12.03 14:20:43 -05'00'

Yasmin Bowers, Risk Manager FB, RD
Office of Pesticide Programs

[Note to Reviewer: [Text] in brackets denotes optional text.]

NOTIFICATION

91411-1

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:

12/03/2025

COPPER	GROUP	M1	FUNGICIDE

Kocide® 2000

fungicide/bactericide

FOR USE IN: CITRUS, VEGETABLES, TREE CROPS, SMALL FRUITS, VINES, FIELD CROPS, GREENHOUSES, TURF AND ORNIMENTALS

Dry Flowable

Active Ingredients	***By Weight***
Copper Hydroxide* (CAS No. 20427-59-2)	53.8%
Other Ingredients	46.2%
	TOTAL 100.0%

(* Metallic Copper Equivalent 35%)

KEEP OUT OF REACH OF CHILDREN

WARNING - AVISO

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

FIRST AID	
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF INHALED	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 further treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-255-3924 for emergency medical treatment information. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate use of gastric lavage.	

Kocide®

EPA Reg. No. 91411-1 **EPA Est. No. _____**

Nonrefillable Container Net: _____

OR

Refillable Container Net: _____

Manufactured For:
Cosaco LLC
12701 Almeda Rd.
Houston, TX 77045-5807

[Note to Reviewer: [Text] in brackets denotes optional text.]

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING - AVISO

Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if absorbed through the skin. Harmful if inhaled. Do not get in eyes, on skin, or on clothing. Avoid breathing dust.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made out of: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride ≥14 mils, or viton ≥14 mils
- Shoes plus socks
- Protective eyewear such as safety glasses, goggles, or face shield

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

ENGINEERING CONTROL:
Pilots must use an enclosed cab that meets the definition listed in the WPS for agricultural pesticides [40 CFR 170.305].

USER SAFETY RECOMMENDATIONS

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 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

Fish Advisory Statement: This copper product is toxic to fish and aquatic organisms and may contaminate water through runoff. Unlike most organic pesticides, copper is an element and will not break down in the environment and will therefore accumulate in sediment with repeated applications. Copper is a micronutrient, but its pesticidal application rate exceeds the amount of copper needed as a nutrient.

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. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters or rinsate.

Drift and runoff may be hazardous to aquatic organisms in waters adjacent to treated areas.

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 State or Tribal agency responsible for pesticide regulation.

RESTRICTIONS

ENGINEERING CONTROL:
Pilots must use an enclosed cab that meets the definition listed in the WPS for agricultural pesticides [40 CFR 170.305].

[Note to Reviewer: [Text] in brackets denotes optional text.]

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 protection of agricultural workers on farms, forests, nurseries and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours without required PPE.

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:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made out of: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride ≥14 mils, or viton ≥14 mils
- Shoes plus socks
- Protective eyewear such as safety glasses, goggles, or face shield

For Greenhouse Uses ONLY:

The 48 hour restricted entry interval (REI) may be reduced to 24 hour REI, provided that the following conditions are met: For at least seven days following the application of copper-containing products in greenhouses:

- at least one 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 the 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.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides 40 CFR Part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter until sprays have dried.

PRODUCT INSTRUCTIONS

KOCIDE® 2000 may be applied as an aerial, ground dilute or ground concentrate spray unless specifically directed otherwise in the specific crop use directions.

The per acre use rate of KOCIDE® 2000 is applicable for both dilute and concentrate spraying. Depending upon the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to Minimum Recommended Spray Volume Table. Complete spray coverage is essential to assure optimum performance from KOCIDE® 2000. When treating by aerial application or with low volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial utilization.

Consult the KOCIDE® 2000 label for specific rates and timing of application by crop. Where application rates and intervals are provided in a range (e.g. 4 to 12 pounds and 7 to 10 days), the higher rates and shorter spray intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops.

The Pre-Harvest Interval (PHI) for KOCIDE® 2000 is 0-days unless noted.

RESTRICTIONS

- Do not tank mix KOCIDE® 2000 with “Aliette” fungicide for use on any registered crops unless appropriate precautions have been taken to buffer the spray solution because severe phytotoxicity may result. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.
- 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, etc.

[Note to Reviewer: [Text] in brackets denotes optional text.]

- The Pre-Harvest Interval (PHI) is 0 days.

SPECIAL PRECAUTIONS

- If KOCIDE® 2000 is applied in a spray solution having a pH of less than 6.5, phytotoxicity may occur.
- Environmental conditions such as extended periods of wet weather, acid rain, etc. which alter the pH of the leaf surface may affect the performance of KOCIDE® 2000 resulting in possible phytotoxicity or loss of effectiveness.
- Agricultural chemicals may perform in an unpredictable manner when tank mixed, especially where several products are involved. Reduced effect on pests or crop injury may occur. Unless recommended on this label or by a State/local expert, it is advisable to test for compatibility and potential crop injury prior to commercial use of a new tank mix; otherwise, tank mixing should not be undertaken.
- It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment, such as aluminum, rubber and some synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use.
- Apply this product only through one or more of the following types of systems: sprinkler, including center pivot, lateral move, traveler, big gun, or plastic pipe solid set system(s). Do not apply this product through any other type of irrigation system. In California, do not apply in systems which contain aluminum parts or components.
- While volume is important in obtaining full spray coverage, often factors such as foliage density, environmental conditions and sprayer calibration have a greater impact. Always be sure that sprayers are calibrated to spray equipment manufacturer's specifications and environmental conditions are within those recommended by State and local regulatory authorities.
- When mixing, fill the spray tank one-half full with water. Add KOCIDE® 2000 slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Spreaders, stickers, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank or contact your chemical supplier. Observe all precautions and limitations on the labels of all products used in mixtures.

RESISTANCE MANAGEMENT

KOCIDE® 2000 contains a Group M1 fungicide. Fungal isolates/bacterial strains with acquired resistance to Group M1 may eventually dominate the fungal/bacterial population if Group M1 fungicides/bactericides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by KOCIDE® 2000 or other Group M1 fungicides.

To delay fungicide/bactericide resistance consider:

- Avoiding the consecutive use of KOCIDE® 2000 or other target site of action Group M1 fungicides/bactericides that might have a similar target site of action, on the same fungal pathogen species.
- Using tank mixtures or premixes with fungicides/bactericides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank mix or premix rate on the fungal pathogen of concern.
- Basing fungicides/bactericides use on a comprehensive Integrated Pest Management (IPM) program.
- Monitoring treated fungal pathogen populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors and/or manufacturer for fungicides/bactericides resistance management and/ or integrated management recommendations for specific crops and resistant biotypes.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Application

- Do not release spray at a height greater than 10 ft. above the vegetative canopy or water, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser droplet size (in accordance with the most current version of the American Society of Agricultural & Biological Engineers Standard 641 (ASABE S641)
- Do not apply when wind speed exceeds 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the application area.
- Do not apply during temperature inversions.

Ground Boom Applications

- Apply with the spray release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (in accordance with the most current version of the

[Note to Reviewer: [Text] in brackets denotes optional text.]

American Society of Agricultural & Biological Engineers Standard 572 (ASAE S572)).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- **Volume -** Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure -** Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle -** Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

- **Adjust Nozzles -** Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT – Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 ft. above the crop canopy, unless a greater application height is necessary for pilot safety**.**

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

TANK MIXING

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: sprinkler, including center pivot, lateral move, traveler, big gun, or plastic pipe solid set system(s). Do not apply this product through any other type of irrigation system. In California, do not apply in systems which contain aluminum parts or components.

[Note to Reviewer: [Text] in brackets denotes optional text.]

Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Shut off injection equipment after treatment and continue to operate irrigation system until KOCIDE® 2000 has been cleared from the last sprinkler head.

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

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into the reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

IMPORTANT: It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment, such as aluminum, rubber and some synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use.

When mixing, fill the nurse tank half full with water. Add KOCIDE® 2000 slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Stickers, spreaders, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all precautions and limitations on the labels of all products used in mixtures. Agitation of the mixture in the nurse tank is recommended.

KOCIDE® 2000 should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set irrigation systems. Shut off injection equipment after treatment and continue to operate irrigation system until KOCIDE® 2000 has been cleared from the last sprinkler head.

SPRINKLER CHEMIGATION
The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on

[Note to Reviewer: [Text] in brackets denotes optional text.]

the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must also contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.
IMPORTANT: It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment, such as aluminum, rubber and some synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use.

When mixing, fill the nurse tank half full with water. Add KOCIDE® 2000 slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Spreaders, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all precautions and limitations on the labels of all products used in mixtures. Agitation of the mixture in the nurse tank is recommended.

KOCIDE® 2000 should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set irrigation systems. Shut off injection equipment after treatment and continue to operate irrigation system until KOCIDE® 2000 has been cleared from the last sprinkler head.

Minimum Recommended Spray Volume (Gallons Per Acre) When Applying KOCIDE® 2000

	Aerial	Ground	
		Dilute	Concentrate
Citrus	10	800	100**
Conifers	10	100	30
Field Crops	3	20	3
Small Fruits	5	150	50
Tree Crops	10	400	50
Vegetables	3	20	3
Vines	5	150	50
Miscellaneous	10	150	50

**Pesticide application equipment such as "Curtec" or other similar sprayers which are capable of obtaining thorough coverage at low volumes may be used at as low as 20 gallons per acre of spray volume.

The following specific instructions are based on general application procedures. The recommendations of the State Agricultural Extension Service should be closely followed as to timing, frequency and number of sprays per season.

FROST INJURY PROTECTION

BACTERIAL ICE NUCLEATION INHIBITOR

Application of KOCIDE® 2000 made to all crops listed on this label at rates and stages of growth indicated on this label, 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.

[Note to Reviewer: [Text] in brackets denotes optional text.]

CITRUS ***including Grapefruit, Kumquat, Lemon, Lime, Orange, Pummelo, Tangelo and Tangerine***			
KOCIDE® 2000 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. KOCIDE® 2000 per acre rates in these mixes must not exceed the maximum specified labeled rates for disease control. Adding foliar nutritionals or other products to spray mixtures containing KOCIDE® 2000 and applying to citrus during the post bloom period when young fruit are present may result in spray burn.			
Disease	**Application Rate/Acre**	**Maximum Annual Application Rate/Acre**	**Use Instructions**
Algal Spot, Melanose, Scab	3-9 lbs. *(1.05-3.15 lbs. metallic copper per application)*	36 lbs. *(12.6 lbs. metallic copper annual maximum)*	Apply as pre-bloom and post-bloom sprays. Use the higher rates when conditions favor disease.
Greasy Spot, Pink Pitting	1.5-4.5 lbs. *(0.53-1.58 lbs. metallic copper per application)*		Apply in summer on expanded new flush. Repeat on subsequent flushes where disease pressure is severe. Use the higher rates when conditions favor disease.
Alternaria Brown Spot	3-6 lbs. *(1.05-2.1 lbs. metallic copper per application)*		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 7 to 21 day schedule if needed. Use the higher rates when conditions favor disease.
Phytophthora Brown Rot, Septoria Spot			Begin application in fall before or just after the first rain and continue if 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 one foot beyond skirt. Use the higher rates when conditions favor disease. **IMPORTANT:** In California, in areas subject to copper injury, add 1/3 to 1 pound of high quality lime per pound of KOCIDE® 2000.
Phytophthora Foot Rot	0.75 lb. *(0.26 lb. metallic copper per application)*		Mix with 1 quart of 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. **IMPORTANT:** Areas where microjet or low volume irrigation hit the tree trunk may require retreatment due to wash off.
Citrus Canker (suppression)	2-4 lbs. *(0.7-1.4 lbs. metallic copper per application)*		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*			Begin treatment prior to or when disease first appears and repeat every 7 to 21 days if needed. Use the higher rates and shorter spray intervals when conditions favor disease.
IMPORTANT: Phytotoxicity may occur on young tender flush when KOCIDE® 2000 is applied to citrus seedlings grown in greenhouses or shadehouses.			
Restrictions: • Do not apply more than 36 pounds of product (12.6 pounds metallic copper) per acre per year. • Minimum retreatment interval is 7 days.			
*Not registered for use in California.			
CITRUS ***Field Nursery Grown*** To control Melanose, Scab, Pink Pitting, Greasy Spot, Brown Rot and for suppression of Citrus Canker, apply 3 to 6 pounds of KOCIDE® 2000 per acre *(1.05-2.1 lbs. metallic copper per application).*			

[Note to Reviewer: [Text] in brackets denotes optional text.]

Apply KOCIDE® 2000 at 28 day intervals if needed depending on disease severity.

FIELD CROPS
including Alfalfa, Barley, Corn, Oats, Peanut, Potato, Sugar Beet and Wheat.

Crop	Disease	Application Rate/Acre	Maximum Annual Rate/Acre	Use Instructions
Alfalfa	Cercospora Leaf Spot, Leptosphaerulina Leaf Spot	1.5 lbs. *(0.53 lb. metallic copper per application)*	3.2 lbs. *(1.1 lbs. metallic copper annual maximum)*	Apply 10 to 14 days before each harvest or earlier if disease threatens. Repeat every 30 days if needed. **IMPORTANT:** Spray injury may occur with sensitive varieties such as Lahontan. **Restrictions:** • Minimum retreatment interval is 30 days. • Do not apply within 9 days of harvest. • Do not make more than 2 applications.
Corn* (Field Corn, Popcorn, Seed Corn, Sweet Corn)	Bacterial Stalk Rot	1-3 lbs. (0.35-12.6 *lbs. metallic copper per application)*	12 lbs. *(4.2 lbs. metallic copper annual maximum)*	Begin treatment when disease first appears and repeat every 7 to 10 days if needed. Use the higher rates and shorter spray intervals when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not make more than 12 applications.
Peanut	Cercospora Leaf Spot	1-2.25 lbs. *(0.4-0.79 lb. metallic copper per application)*	13.5 lbs. *(4.7 lbs. metallic copper annual maximum)*	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 7 to 14 day intervals if needed. Reduce sprays to 7 day intervals during humid weather. Use the higher rates when conditions favor disease. Flowable sulfur may be added. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not make more than 13 applications.
Potato	Early Blight, Late Blight	0.75-3 lbs. *(12.6-1.1 lbs. metallic copper per application)*	71.4 lbs. *(25 lbs. metallic copper annual maximum)*	Apply 0.75 to 1.25 lbs. *(0.26-0.44 lbs. metallic copper)* at 5 to 10 day intervals if needed starting when plants are 2 to 6 inches high in locations where disease is light. Apply up to 3 lbs. *(1.1 lbs. metallic copper)* per acre when disease is more severe. Under conditions of severe disease, control with KOCIDE® 2000 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. **Restriction:** • Minimum retreatment interval is 5 days.
Sugar Beet	Cercospora Leaf Spot	1.5-3.74 lbs. *(5.3-1.3 lbs. metallic copper per application)*	22.5 lbs. *(7.9 lbs. metallic copper annual maximum)*	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals if needed. Use the higher rates when conditions favor disease. Addition of a spreader/sticker is recommended. **Restrictions:** • Minimum retreatment interval is 10 days. • Do not make more than 15 applications.
Wheat, Barley, Oats	Fusarium Head Blight Suppression*, Helminthosporium Spot Blotch, Powdery Mildew Suppression, Stagonospora Leaf and	1-1.5 lbs. *(1.4-0.53 lbs. metallic copper per application)*	3.0 lbs. *(1.1 lbs. metallic copper annual maximum)*	Make applications for early season disease control through heading. Use higher rates when conditions favor disease. Addition of adjuvants is recommended. **Restrictions:** • Minimum retreatment interval is 10 days.

[Note to Reviewer: [Text] in brackets denotes optional text.]

	Glume Blotch, Stem Rust*			• Do not make more than 3 applications.
*Not registered for use in California.				

SMALL FRUITS ***including* Blackberry, Blueberry*, Cranberry, Currant, Gooseberry, Raspberry, and Strawberry**				
Crop	**Disease**	**Application Rate/Acre**	**Maximum Annual Rate/Acre**	**Use Instructions**
Blackberry (Aurora, Boysen, Cascade, Chehalem, Logan, Marion, Santiam, Thornless Evergreen)	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	3 lbs. *(1.1 lbs. metallic copper per application)*	28.6 lbs. *(10 lbs. metallic copper annual maximum)*	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	1.5 lbs. *(5.3 lbs. metallic copper per application)*		Apply when leaf buds begin to open and repeat when flower buds show white. Repeat on a 7 day interval if needed. If needed, agricultural-type spray oil may be added. **IMPORTANT:** Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not make more than 18 applications.
Blueberry*	Bacterial Canker	3-6 lbs. *(1.1-2.1 lbs. metallic copper per application)*	24 lbs. *(8.4 lbs. metallic copper annual maximum)*	Make first application before fall rains and a second application 4 weeks later. Use the higher rates when conditions favor disease.
	Fruit Rot, Phomopsis Twig Blight	2-4 lbs. *(0.7-1.4 lbs. metallic copper per application)*		Dormant Application: Begin applications when bloom buds begin to swell. Make additional applications at 7 to 14 day intervals if needed before blooms open. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not make more than 12 applications.
Cranberry	Fruit Rot	6 lbs. *(2.1 lbs. metallic copper per application)*	36 lbs. *(12. 6 lbs. metallic copper annual maximum)*	Make first application in late bloom. Apply one or two additional applications at 7 to 14 day intervals if needed depending on disease severity.
	Rose Bloom			Apply three sprays on 7 to 14 day schedule if needed as soon as symptoms are observed.
	Bacterial Stem Canker			Apply post-harvest and again in spring at bud swell. Apply one or two additional applications at 7 to 14 day intervals if needed depending on disease severity.
	Leaf Blight, Red Leaf Spot, Stem Blight, Tip Blight (*Monilinia*)			Apply delayed dormant spray in the spring. Repeat at 7 to 14 day intervals if needed through pre-bloom. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not make more than 6 applications.

[Note to Reviewer: [Text] in brackets denotes optional text.]

Currant, Gooseberry	Anthracnose, Leaf Spot	7.5 lbs. *(2.6 lbs. metallic copper per application)*	45.7 lbs. *(16 lbs. metallic copper annual maximum)*	Make initial application after first leaves have expanded. Continue on a 10 to 14 day schedule if needed during wet conditions in the spring. Make an additional application after harvest. **Restrictions:** • Minimum retreatment interval is 10 days. • Do not make more than 6 applications.
Raspberry	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	3 lbs. *(1.1 lbs. metallic copper per application)*	28.6 lbs. *(10 lbs. metallic copper annual maximum)*	Make fall application after harvest. Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	1.5 lbs. *(0.53 lbs. metallic copper per application)*		Apply when leaf buds begin to open and repeat when flower buds show white. Repeat on a 7 day interval if needed. If needed, agricultural-type spray oil may be added. **IMPORTANT:** Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not make more than 19 applications.
Strawberry	Angular Leaf Spot (*Xanthomonas*), Leaf Blight, Leaf Scorch, Leaf Spot	1.5-2.25 lbs. *(0.53-0.79 lb. metallic copper per application)*	17.2 lbs. *(6 lbs. metallic copper annual maximum)*	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. **IMPORTANT:** Discontinue applications if signs of crop injury appear. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not make more than 11 applications.
*Not registered for use in California.				

TREE CROPS
including Almond, Apple, Apricot, Avocado, Banana/Plantain, Cacao, Cherry, Coffee, Filbert, Mango, Nectarine, Olive, Peach, Pear, Pecan, Pistachio, Plum, Prune, Quince and Walnut.

Crop	Disease	Application Rate/Acre	Maximum Annual Rate/Acre	Use Instructions
Almond only	Bacterial Blast	0.57 lb. *(0.2 lb. metallic copper per application)*	51.4 lbs. *(18 lbs. metallic copper annual maximum)*	Almond Only: For bacterial blast control in sprinkler irrigated orchards or where disease is severe, apply 0.75 pounds per acre post-bloom at 5 to 14 day intervals if needed or just before sprinkling. **Restrictions:** • Minimum Dormant, late dormant retreatment interval is 5 days. • Minimum bloom/growing season retreatment interval is 7 days.
Almond, Apricot, Cherry, Plum, Prune	Bacterial Blast (*Pseudomonas*), Bacterial Canker, Coryneum Blight	6-12 lbs. *(2.1-4.2 lbs. metallic copper per*	51.4 lbs. *(18 lbs. metallic copper*	Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease. Minimum retreatment interval is 7 days. If needed, agricultural-type spray oil may be added.

[Note to Reviewer: [Text] in brackets denotes optional text.]

	(Shot Hole)	*application)*	*annual maximum)*	For Cherries: Where disease is severe, an additional application shortly after harvest may be required. **IMPORTANT:** Foliar injury may occur from post-bloom sprays on almonds, especially on NePlus varieties.
	Blossom Brown Rot, Coryneum Blight (Shot Hole)	4.3 lbs. *(1.5 lbs. metallic copper per application)*		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. Minimum retreatment interval is 5 days.
	Black Knot* (Plum)	3-4.3 lbs. *(1.1-1.5 lbs. metallic copper per application)*		Make an application at bud swell up to early bloom for early season disease suppression. Apply before full bloom. Minimum retreatment interval is 5 days. Use the higher rates when rainfall is heavy and disease pressure is high. **IMPORTANT:** To avoid plant injury, do not use after full bloom.
	Cherry Leaf Spot* (Sour Cherries Only)	4.3 lbs. *(1.5 lbs. metallic copper per application)*		Apply at petal fall as well as 1 to 2 times after petal fall. 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. Minimum retreatment interval is 5 days. 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 KOCIDE® 2000 may reduce crop injury. **IMPORTANT:** Moderate to severe injury such as leaf spotting and defoliation may occur from post-bloom applications.
Restrictions: • Minimum dormant, late dormant retreatment interval is 5 days. • Minimum bloom/growing season retreatment interval is 7 days.				
Apple	Anthracnose, Blossom Blast, European Canker (*Nectria*), Shoot Blast (*Pseudomonas*)	9-12 lbs. *(3.2 -4.2 lbs. metallic copper per application)*	45.7 lbs. *(16 lbs. metallic copper annual maximum)*	Apply before fall rains. Use the higher rates when conditions favor disease. **IMPORTANT:** Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	Apple Scab*, Fire Blight	6-12 lbs. *(2.1-4.2 lbs. metallic copper per application)*		Make application between silver-tip and green-tip. Apply as a full cover spray for early season disease suppression. **IMPORTANT:** Moderate to severe crop injury may occur from late application; discontinue use when green- tip reaches 1/2 inch.
	Apple Scab*	0.75-1.75 lbs. (0.26-0.63 *lb. metallic copper per application)*		Extended spray schedule where fruit finish is not a concern: Continued applications may be made at 5 to 7 day intervals if needed between 1/2 inch green-tip and first cover spray. **IMPORTANT:** Moderate to severe crop injury may result from this extended spray schedule. It is not intended for fresh market apples or for apples where fruit finish is a concern as it is likely to cause fruit russetting. The addition of 1 to 3 pounds of hydrated lime per pound of KOCIDE® 2000 may reduce crop injury.
	Fire Blight*	0.5-0.75 lb. *(0.18-0.26 lb. metallic copper per application)*		
	Collar Rot, Crown Rot	3 lbs. *(1.1 lbs. metallic copper per application)*		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. **IMPORTANT:** Do not use if soil pH is below 5.5 since copper toxicity may result.

[Note to Reviewer: [Text] in brackets denotes optional text.]

Restrictions: • Do not make more than one dormant application per year. • Do not make more than one application between silver-tip and green-tip application per year • Minimum growing season retreatment interval is 5 days. • Do not use if soil pH is below 5.5 since copper toxicity may result.				
Avocado	Anthracnose, Blotch, Scab	6-9 lbs. *(2.1-3.2 lbs. metallic copper per application)*	54 lbs. *(18.9 lbs. metallic copper annual maximum)*	Apply when bloom buds begin to swell and continue application at 14 to 30 day intervals for five to six applications. Use the higher rates when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 14 days. • Do not exceed 9 applications per year.
Banana, Plantain	Sigatoka (Black and Yellow)	1.5 lbs. *(0.53 lb. metallic copper per application)*		Apply at 7 to 14 day intervals if needed.
	Black Pitting	3 lbs. *(1.1 lbs. metallic copper per application)*		Mix in 100 gallons of water. Apply to the fruit stem and the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 36 applications per year.
Cacao	Black Pod	1.5-6.4 lbs. *(0.3-2.2 lbs. metallic copper per application)*	45 lbs. *(15.8 lbs. metallic copper annual maximum)*	Begin applications at the start of the rainy season and continue while infection conditions persist. Apply 1.5 to 3.5 lbs. at 14 to 21 day intervals if needed depending on disease severity. For drier areas, make two to four applications using 4.5 to 6.4 pounds per acre according to disease incidence and planting density. **Restrictions:** • Minimum retreatment interval is 14 days. • Do not exceed 30 applications per year.
Coffee	Coffee Berry Disease (*Colletotrichum coffeanum*)	4.5-6 lbs. *(1.6-2.1 lbs. metallic copper per application)*	36 lbs. *(12.6 lbs. metallic copper annual maximum)*	Apply first spray after flowering and before onset of long rains and then at 14 to 28 day intervals if needed until picking. Use the higher rates when conditions favor disease.
	Bacterial Blight (*Pseudomonas syringae*)			Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals if needed. The critical time for 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.
	Leaf Rust (*Hemileia vastatrix*)	1.5-3 lbs. *(0.53-1.1 lbs. metallic copper per application)*		Apply before the onset of rain and then at 14 to 21 day intervals if needed 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*)	1.5 lbs. *(0.53 lb. metallic copper per application)*		Use concentrate or dilute spray. Begin treatment at the start of wet season and continue at monthly intervals for three applications. **Restrictions:** • Minimum retreatment interval is 14 days. • Do not exceed 24 applications per year.
Filbert (Washington State and	Bacterial Blight	12-17 lbs. *(4.2-6 lbs. metallic copper*	68.6 lbs. *(24 lbs. metallic*	Apply as a post-harvest 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

[Note to Reviewer: [Text] in brackets denotes optional text.]

Oregon only)		*per application)*	*copper annual maximum)*	disease pressure is high. If needed, agricultural-type spray oil may be added.
	Eastern Filbert Blight			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 if needed 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 or sticking agent may be added. **Restrictions:** • Minimum retreatment interval is 14 days. • Do not exceed 22 applications per year.
Mango	Anthracnose	6-9 lbs. *(2.1-3.2 lbs. metallic copper per application)*	137 lbs. *(48 lbs. metallic copper annual maximum)*	Apply at 7 day intervals after fruit set until harvest. Use the higher rates when rainfall is heavy and disease pressure is high. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 22 applications per year.
Olive	Olive Knot, Peacock Spot	6-9 lbs. (2.1-3.2 lbs. metallic copper per application)	51 lbs. *(17.9 lbs. metallic copper annual maximum)*	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. **Restrictions:** • Minimum retreatment interval is 30 days. • Do not exceed 8 applications per year.
Peach, Nectarine	Bacterial Blast (*Pseudomonas*), Bacterial Canker, Bacterial Spot (*Xanthomonas*), Coryneum Blight (Shot Hole), Leaf Curl	6-12 lbs. *(2.1-4.2 lbs. metallic copper per application)*	51.4 lbs. *(18 lbs. metallic copper annual maximum)*	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. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. **Restriction:** • Minimum retreatment interval is 7 days.
	Blossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl	4.3 lbs. *(1.5 lbs. metallic copper per application)*		Full cover spray at pink bud. Use the higher rates when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 5 days. • Do not exceed 12 applications per year.
	Bacterial Spot	0.75 lb. *(0.26 lb. metallic copper per application)*		Post-bloom application applied at first and second cover sprays. **Restrictions:** • **Do not spray 3 weeks prior to harvest. Use only specified rates. Spotting of leaves and defoliation may occur from use in cover sprays.** • Minimum retreatment interval is 5 days. • Apply post bloom only
Pear	Fire Blight	0.75 lb. *(0.26 lbs. metallic copper per application)*	45.7 lbs. *(16 lbs. metallic copper annual maximum)*	Apply at 5 day intervals if needed throughout the bloom period. **IMPORTANT:** Russetting may occur in copper sensitive varieties. Excessive dosages may cause fruit russet on any variety.
	Blossom Blast (*Pseudomonas*)	9-12 lbs. *(3.2-4.2 lbs. metallic copper per*		Apply before fall rains and again during dormancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor disease development.

[Note to Reviewer: [Text] in brackets denotes optional text.]

		application)		**Restriction:** • Minimum retreatment interval is 5 days.
Pecan	Kernel Rot, Shuck Rot (*Phytophthora cactorum*), Zonate Leaf Spot (*Cristulariella pyramidalis*)	1.5-3 lbs. *(0.53-1.1 lbs. metallic copper per application)*	18 lbs. *(6.3 lbs. metallic copper annual maximum)*	For suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 week intervals if needed, starting at kernel growth and continue until shucks open. Use the higher rates and shorter spray intervals if frequent rainfall occurs. **Restrictions:** • Minimum retreatment interval is 14 days. • Do not exceed 12 applications per year.
	Ball Moss*, Spanish Moss*	4.5-6 lbs. *(1.56-2.1 lbs. metallic copper per application)*		Apply in 100 gallons of water in the spring when ball moss is actively growing, using 1 1/2 gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.
Pistachio	Botryosphaeria Panicle and Shoot Blight, Botrytis Blight, Late Blight (*Alternaria alternata*), Septoria Leaf Blight	3-6 lbs. *(1.1-2.1 lbs. metallic copper per application)*	24 lbs. *(8.4 lbs. metallic copper annual maximum)*	Make initial application at bud swell and repeat on a 14 to 28 day schedule if needed. If disease conditions are severe, use the higher rates and shorter spray intervals. **Restrictions:** • Minimum retreatment interval is 14 days. • Do not exceed 8 applications per year.
Quince	Fire Blight	0.75 lb. *(0.26 lbs. metallic copper per application)*	45.7 lbs. *(16 lbs. metallic copper annual maximum)*	Apply at 5 day intervals if needed throughout the bloom period. Apply in adequate water for thorough coverage. **Restriction:** • Minimum retreatment interval is 5 days.
Walnut	Walnut Blight	6-9 lbs. *(2.1-3.2 lbs. metallic copper per application)*	91 lbs. *(31.9 lbs. metallic copper annual maximum)*	Apply first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage on a 7 day interval if needed when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves and nutlets is essential for effective control. **IMPORTANT:** Adequate control may not be obtained when copper tolerant species of *Xanthomonas* bacteria are present. **Restriction:** • Minimum retreatment interval is 7 days.
*Not registered for use in California.				

VEGETABLES

including Bean, Beet, Beet Greens, Broccoli, Brussels Sprout, Cabbage, Chinese Cabbage, Cantaloupe, Carrot, Cauliflower, Celeriac, Celery, Cucumber, Eggplant, Greens (Collard, Mustard and Turnip), Honeydew, Kale, Kohlrabi, Muskmelon, Okra*, Onion/Garlic/Leek, Pea, Pepper, Pumpkin, Spinach, Squash, Tomato, Watercress, and Watermelon

Crop	Disease	Application Rate/Acre	Maximum Annual Rate/Acre	Use Instructions
Bean (Dry, Green)	Brown Spot, Common Blight, Downy Mildew*, Halo Blight	0.75-2.25 lbs. *(0.26- 0.79 lb. metallic copper per application)*	13.5 lbs. *(4.7 lbs. metallic copper annual maximum)*	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule if needed depending on environmental conditions. Use the higher rates for more severe disease. **Restrictions:** • Minimum retreatment interval is 7 days.

[Note to Reviewer: [Text] in brackets denotes optional text.]

				• Do not exceed 18 applications per acre per year.
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot	1.5-3.74 lbs. *(0.53-1.31 lbs. metallic copper per application)*	22.5 lbs. *(7.9 lbs. metallic copper annual maximum)*	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals if needed. Use the higher rates when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 10 days. • Do not exceed 15 applications per acre per year.
Carrot	Alternaria Leaf Spot, Cercospora Leaf Spot	1.5 - 2.75 lbs. *(0.53-0.96 lb. metallic copper per application)*	14.3 lbs. *(5.0 lbs. metallic copper annual maximum)*	Begin applications when disease first threatens and repeat at 7 to 14 day intervals if needed depending on disease severity. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 9 applications per year.
Celery, Celeriac	Bacterial Blight, Cercospora Early Blight, Septoria Late Blight	1.5 lbs. *(0.53 lb. metallic copper per application)*	15.1 lbs. *(5.3 lbs. metallic copper annual maximum)*	Begin applications as soon as plants are first established in the field, repeating at 7 day intervals if needed depending on disease severity and environmental conditions. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 10 applications per year.
Crucifers (Broccoli; Brussels Sprout; Cabbage; Cabbage, Chinese; Cauliflower; Greens, Collard; Greens, Mustard; Greens, Turnip; Kale; Kohlrabi)	Black Leaf Spot (*Alternaria*), Black Rot (*Xanthomonas*), Downy Mildew	0.75-1.5 lbs. *(0.26-0.53 lb. metallic copper per application)*	7.57 lbs. *(2.6 lbs. metallic copper annual maximum)*	Begin application after transplants are set in the field, or shortly after emergence of field seeded crops or when conditions favor disease development. Apply at 7 to 10 day intervals if needed. Use the higher rates when conditions favor disease **IMPORTANT:** Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 10 applications per year.
Cucurbits (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	Alternaria Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermelon Bacterial Fruit Blotch (suppression)	1-2.25 lbs. *(0.35- 0.79 lb. metallic copper per application)*	15 lbs. *(5.3 lbs. metallic copper annual maximum)*	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat at 5 to 7 day intervals if needed. Use the higher rates when conditions favor disease. **IMPORTANT:** Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs. **Restrictions:** • Minimum retreatment interval is 5 days. • Do not exceed 15 applications per year.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	1.5 lbs. *(0.53 lb. metallic copper per application)*	22.6 lbs. *(7.9 lbs. metallic copper annual maximum)*	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals if needed depending on disease severity. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 15 applications per year.
Okra*	Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew	1.5-3 lbs. *(0.53-1.1 lbs. metallic copper per application)*	15 lbs. *(5.3 lbs. metallic copper*	Begin treatment when disease first threatens and repeat every 5 to 10 days if needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions favor disease.

[Note to Reviewer: [Text] in brackets denotes optional text.]

			annual maximum)	**Restrictions:** • Minimum retreatment interval is 5 days. • Do not exceed 10 applications per year.
Onion, Garlic, Leek	Bacterial Blight, Downy Mildew, Purple Blotch	0.75 - 1.5 lbs. *(0.26- 0.53 lb. metallic copper per application)*	17.1 lbs. *(6 lbs. metallic copper annual maximum)*	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals if needed depending on disease severity. Can cause phytotoxicity to leaves. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 22 applications per year.
Pea	Powdery Mildew	1-2.25 lbs. *(0.35-0.79 lb. metallic copper per application)*	11.3 lbs. *(4 lbs. metallic copper annual maximum)*	Begin applications when disease symptoms first appear and repeat at weekly intervals if needed. Use the higher rates when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 11 applications per year.
Pepper	Anthracnose, Bacterial Spot, Cercospora Leaf Spot	1.5-2.25 lbs. *(0.53-0.79 lb. metallic copper per application)*	33.9 lbs. *(11.9 lbs. metallic copper annual maximum)*	Begin applications when conditions first favor disease development and repeat at 3 to 10 day intervals if needed depending on disease severity. Use the higher rates when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 3 days. • Do not exceed 22 applications per year.
Spinach	Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust disease	1.5-2.25 lbs. *(0.53-0.79 lb. metallic copper per application)*	11.3 lbs. *(4 lbs. metallic copper annual maximum)*	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals if needed. Use the higher rates when conditions favor disease. **IMPORTANT:** Flecking may occur on spinach leaves. **Restriction:** • Minimum retreatment interval is 7 days.
Tomato	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	1.5 lbs. (processing) *(0.53 lb. metallic copper per application)*	49.7 lbs. (processing) *(17.4 lbs. metallic copper annual maximum)*	Begin applications when disease first threatens and repeat at 3 to 10 day intervals if needed depending on disease severity. Use the higher rates when conditions favor disease. **Restriction:** • Minimum retreatment interval is 3 days.
		1.5-3 lbs. (fresh market) *(0.53-1.1 lbs. metallic copper per application)*	22.8 lbs. (fresh market) *(7.9 lbs. metallic copper annual maximum)*	
Watercress	Cercospora Leaf Spot	1.5 lbs. *(0.53 lb. metallic copper per application)*	6.06 lbs. *(2.1 lbs. metallic copper annual maximum)*	Begin applications when plants are first established in the field, repeating at 7 to 14 day intervals if needed 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. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 4 applications per crop. • Production fields must be drained of water at least 24 hours prior to each application and water must not be reapplied to the field for a minimum of 24

[Note to Reviewer: [Text] in brackets denotes optional text.]

				hours following each application. • Copper must not to be applied to watercress during the aquatic production phase.
*Not registered for use in California.				

VINES ***including Grape, Hops, and Kiwi***				
Crop	**Disease**	**Application Rate/Acre**	**Maximum Annual Rate/Acre**	**Use Instructions**
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	1.5-3 lbs. *(0.53-1.1 lbs. metallic copper per application)*	57.1 lbs. *(19.9 lbs. metallic copper annual maximum)*	Begin applications at bud break with subsequent applications throughout the season depending on disease severity. Use the higher rates when conditions favor disease. **IMPORTANT:** Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara and Rosette. Either test for sensitivity or add 1 to 3 pounds of hydrated lime per pound of KOCIDE® 2000. **Restrictions:** • Minimum retreatment interval is 3 days. • Do not exceed 38 applications per year.
Hops	Downy Mildew	1.5 lbs. *(0.53 lbs. metallic copper per application)*	7.57 lbs. *(2.6 lbs. metallic copper annual maximum)*	Make crown treatment after pruning, but before training. **Restrictions:** • Minimum retreatment interval is 10 days. • Do not exceed 5 applications per year. • Do not use within 2 weeks of harvest.
Kiwi	*Erwinia herbicola, Pseudomonas fluorescens, Pseudomonas syringae*	6 lbs. *(2.1 lbs. metallic copper per application)*	18 lbs. *(6.3 lbs. metallic copper annual maximum)*	Apply in 200 gallons of water per acre. Make applications on a monthly basis. **Restrictions:** • Minimum retreatment interval is 30 days. • Do not make more than 3 applications per crop.

MISCELLANEOUS ***including Atemoya, Carambola, Chives, Dill, Ginseng, Guava, Litchi, Macadamia, Mamey Sapote, Papaya, Parsley, Passion Fruit, Sugar Apple and Sycamore***				
Crop	**Disease**	**Application Rate/Acre**	**Maximum Annual Rate/Acre**	**Use Instructions**
Atemoya	Anthracnose	2.25-3.5 lbs. *(0.79-1.2 lbs. metallic copper per application)*	36 lbs. *(12.6 lbs. metallic copper annual maximum)*	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. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 16 applications per year.
Carambola	Anthracnose	4.5-6 lbs. *(1.58-2.1 lbs. metallic copper per application)*	30 lbs. *(10.5 lbs. metallic copper annual maximum)*	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. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 6 applications per year.
Chives	Downy Mildew	1.5 lbs.	7.57 lbs.	Begin applications when plants are established in the field.

[Note to Reviewer: [Text] in brackets denotes optional text.]

		(0.53 lb. metallic copper per application)	*(2.6 lbs. metallic copper annual maximum)*	Repeat applications every 7 to 10 days if needed depending on disease conditions. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 5 applications per year.
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	1.5-2.25 lbs. *(0.53-0.79 lb. metallic copper per application)*	11.3 lbs. *(4 lbs. metallic copper annual maximum)*	Begin applications when plants are first established in the field and repeat at 7 to 10 day intervals if needed depending upon disease severity and environmental conditions. Use the higher rates when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 7 applications per year.
Ginseng	Alternaria Leaf Blight, Stem Blight	2-3 lbs. *(0.7-1.1 lbs. metallic copper per application)*	15 lbs. *(5.3 lbs. metallic copper annual maximum)*	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. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing. Begin KOCIDE® 2000-"Rovral" applications as soon as plants have emerged in spring. Applications should be repeated every 7 days if needed until plants become dormant in fall. Apply fungicides at least 8 hours before rain. Use of a spreader-sticker or sticker is advised. **IMPORTANT**: 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. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 7 applications per year.
Guava	Anthracnose, Red Algae	2.25-3.5 lbs. *(0.79-1.23 lbs. metallic copper per application)*	14.1 lbs. *(5 lbs. metallic copper annual maximum)*	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. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 6 applications per year.
Litchi	Anthracnose			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. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 6 applications per year.
Macadamia	Anthracnose	4.5-6.74 lbs. *(1.6-2.4 lbs. metallic copper per application)*	27 lbs. *(9.5 lbs. metallic copper annual maximum)*	Initiate sprays at first sign of 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.
	Phytophthora Blight (*P. capsici*), Raceme Blight (*Botrytis cinerea*)	3.5-4.5 lbs. *(1.2-1.6 lbs. metallic copper per application)*		Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 7 applications per year.

[Note to Reviewer: [Text] in brackets denotes optional text.]

Mamey Sapote	Algal Leaf Spot, Anthracnose	4.5-6 lbs. *(1.6-2.1 lbs. metallic copper per application)*	24 lbs. *(8.4 lbs. metallic copper annual maximum)*	Apply when conditions favor disease development. Repeat on 14 to 30 day schedule if needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 14 days. • Do not exceed 5 applications per year.
Papaya	Anthracnose	3-7.5 lbs. *(1.1-2.6 lbs. metallic copper per application)*	60.6 lbs. *(21.1 lbs. metallic copper annual maximum)*	Apply before disease appears. Apply at 7 day intervals if needed. The addition of an approved spreader is desirable. Use the higher rates when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 20 applications per year.
Parsley	Bacterial Blight (*Pseudomonas sp.*)	2.25 lbs. *(0.79 lbs. metallic copper per application)*	5.7 lbs. *(2 lbs. metallic copper annual maximum)*	Begin applications when plants are first established in the field and repeat at 10 day intervals if needed depending on disease severity and environmental conditions. **Restrictions:** • Minimum retreatment interval is 10 days. • Do not exceed 2 applications per year.
Passion Fruit	Anthracnose	4.5-6.74 lbs. *(1.6-2.4 lbs. metallic copper per application)*	27 lbs. *(9.5 lbs. metallic copper annual maximum)*	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 when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 6 applications per year.
Sugar Apple (*Annona*)	Anthracnose	9 lbs. *(3.2 lbs. metallic copper per application)*	36 lbs. *(12.6 lbs. metallic copper annual maximum)*	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 when conditions favor disease. **Restrictions:** • Minimum retreatment interval is 7 days. • Do not exceed 4 applications per year.
Sycamore	Anthracnose	1.5-2.25 lbs. *(0.53-0.79 lb. metallic copper per application)*	57.1 lbs. *(20 lbs. metallic copper annual maximum)*	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. **Restriction:** • Minimum retreatment interval is 7 days.

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 KOCIDE® 2000 as a thorough cover spray at rates ranging from 1.5 to 3 pounds per acre *(0.53-1.1 lbs. metallic copper)*. Begin applications in the spring at the initiation of new growth and repeat at 7 to 30 day intervals if needed. Use the higher rates when disease pressure is severe or when environmental conditions favor disease development. Maximum yearly rate per acre is 57.1 lbs. (*20 lbs. metallic copper)*.

KOCIDE® 2000 is recommended for use on the listed conifers for control of the following diseases:

Crop	**Scientific Name**	**Disease**
Douglas Fir	*Pseudotsuga menziesii*	Rhabdocline Needlecast
Fir*	*Abies* spp.	Needlecasts
Juniper	*Juniperus* spp.	Anthracnose, Phomopsis Twig Dieback*

[Note to Reviewer: [Text] in brackets denotes optional text.]

Leyland Cypress*	*X Cupressocyparis leylandii*	Cercospora Needle Blight
Pine*	*Pinus* spp.	Needlecasts
Spruce*	*Picea* spp.	Needlecasts

Lichens*: To control lichens on any of the conifers above, apply 6 to 10 pounds of Kocide® 2000 per acre *(2.1-3.5 lbs. metallic copper* as a dormant application before new growth emerges in the spring. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.

Restrictions:

- Minimum retreatment interval is 7 days.
- Do not buffer or combine with emulsifiable concentrate insecticides.

*Except California

GREENHOUSE AND SHADEHOUSE CROPS

Notice to User: KOCIDE® 2000 may be used in greenhouses and shadehouses to control diseases 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 or not KOCIDE® 2000 can be used safely on all greenhouse and shadehouse grown crops. Consequently; injury arising from the use of KOCIDE® 2000 on these types of greenhouse and shadehouse crops is the responsibility of the user. The user should determine if KOCIDE® 2000 can be used safely prior to commercial use. In a small area, apply the specified rates to the plants in question, i.e., foliage, fruit, etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

Apply KOCIDE® 2000 according to specific rates given for those crops in pounds per acre. **One level tablespoon of KOCIDE® 2000 per 1,000 square feet is equivalent to 1.5 pounds of product per acre.** KOCIDE® 2000 should be applied in adequate water for thorough coverage of plant parts. Begin application at first sign of disease and repeat if needed; use shorter spray intervals during periods when severe disease conditions persist. For maximum seasonal rates per acre, refer to the crop specific directions.

IMPORTANT: Phytotoxicity may occur on young tender flush when KOCIDE® 2000 is applied to citrus seedlings grown in greenhouses or shadehouses.

Crop	Disease	Rate per 1,000 Sq. Ft.	Use Instructions
Citrus (Non-Bearing Nursery)	Brown Rot, Citrus Canker, Greasy Spot, Melanose, Pink Pitting, Scab	3 TBSP (1.6 *lbs. metallic copper)*	Begin applications when disease first threatens. Repeat at 7 to 30 day intervals if needed depending on disease severity.
Cucumber	Angular Leaf Spot, Downy Mildew	1 - 2 1/2 TBSP *(0.53-1.3 lbs. metallic copper*	Apply at 5 to 7 day intervals when plants begin to vine. Use the higher rates when conditions favor disease.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	1 1/2 TBSP (0.6 lbs. metallic copper	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals if needed depending on disease severity.
Pepper	Bacterial Spot	1 - 2 1/2 TBSP (0.53-1.3 lbs. metallic copper)	Begin applications when conditions first favor disease development and repeat at 3 to 10 day intervals if needed depending on disease severity. Use the higher rates when conditions favor disease.
Tomato	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	1 1/2 - 3 TBSP (0.6-1.6 lbs. metallic copper)	Begin applications when disease first threatens and repeat at 3 to 10 day intervals if needed depending on disease severity. Use the higher rates when conditions favor disease.

ORNAMENTALS

Use KOCIDE® 2000 for control of bacterial and fungal diseases of foliage, flowers and stems on ornamentals in greenhouses, shade houses, 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 of KOCIDE® 2000 (0.26-1.1 lbs. metallic copper). When new growth is present, apply as a thorough cover spray at rates ranging from 0.75 to 2 pounds per acre of KOCIDE® 2000 (0.26-0.7 lbs. metallic copper). **One level tablespoon of KOCIDE® 2000 per 1,000 square feet is equivalent to 1.5 pounds of product per acre.** Begin application at first sign of disease and repeat at 7 to 14 day intervals if needed; use the higher rates and shorter spray intervals during periods of frequent rains or when severe disease conditions persist. Maximum seasonal rate per acre is 57.1 lbs. (*20 lbs. metallic copper)*.

[Note to Reviewer: [Text] in brackets denotes optional text.]

KOCIDE® 2000 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 should be exceeded. **Notice to User**: Plant sensitivities to KOCIDE® 2000 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 KOCIDE® 2000. Neither the manufacturer nor seller has determined whether or not KOCIDE® 2000 can be safely used on ornamental or nursery plants not listed on this label. The user must determine if KOCIDE® 2000 can be used safely prior to commercial use. In a small area, apply the specified rates to the plants in question, i.e., bedding plants, foliage, etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

Restrictions:

- Minimum retreatment interval is 7 days.
- Maximum annual rate for Easter Lilies is 75 lbs. metallic copper
- Maximum annual rate for Ornamentals (except Easter Lilies) is 20 lbs. metallic copper
- 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, etc.

Crop	Scientific Name	Disease
Aglaonema*	*Aglaonema* spp.	Bacterial Leaf Spot
Althea (Rose of Sharon)	*Hibiscus syriacus*	Bacterial Leaf Spot
Andromeda, Japanese*	*Pieris japonica*	Leaf Spots, Twig Blight
Aralia	*Dizygotheca elegantissima*	Alternaria, Cercospora Leaf Spot, Xanthomonas Leaf Spot
Arborvitae	*Thuja* spp.	Alternaria Twig Blight, Cercospora Leaf Blight
Aster*	*Aster* spp.	Downy Mildew, Leaf Spots
Azalea[1]/	*Rhododendron* spp.	Botrytis Blight, Cercospora Leaf Spot, Phytophthora Dieback, Powdery Mildew
Beech*	*Fagus* spp.	Leaf Spots
Begonia	*Begonia semperflorens*	Bacterial Leaf Spot (*Erwinia* spp., *Pseudomonas* spp., *Xanthomonas* spp.)
Bougainvillea	*Bougainvillea spectabilis*	Anthracnose, Bacterial Leaf Spot
Boxwood*	*Buxus* spp.	Leaf Spots
Camellia	*Camellia japonica, C. sasanqua*	Anthracnose, Bacterial Leaf Spot
Camphor Tree	*Cinnamomum camphora*	Pseudomonas Leaf Spot
Canna	*Canna* spp.	Pseudomonas Leaf Spot
Carnation[1/]	*Dianthus* spp.	Alternaria Blight, Botrytis Blight, Pseudomonas Leaf Spot
Cedar*	*Cedrus* spp.	Tip Blight
Cherry, Nanking*	*Prunus tomentosa*	Bacterial Leaf Spot
Chinese Tallow Tree	*Sapium sebiferum*	Bacterial Leaf Spot (*Pseudomonas* spp., *Xanthomonas* spp.)
Chrysanthemum[1/]	*Chrysanthemum morifolium*	Botrytis Blight, Pseudomonas Leaf Spot, Septoria Leaf Spot
Cotoneaster	*Cotoneaster* spp.	Botrytis Blight
Crabapple*	*Malus* spp.	Fire Blight
Cypress*	*Cupressus* spp.	Twig Blight
Dahlia	*Dahlia pinnata*	Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot
Delphinium*	*Delphinium* spp.	Leaf Spots
Dianthus	*Dianthus* spp.	Bacterial Soft Rot, Bacterial Spot
Dogwood, Flowering	*Cornus florida*	Anthracnose
Dogwood, Kousa*	*Cornus kousa*	Fungal Leaf Spots
Douglas Fir	*Pseudotsuga menziesii*	Rhabdocline Needlecast
Dracaena*	*Dracaena marginata*	Bacterial Leaf Spot
Dumb Cane*	*Dieffenbachia* spp.	Bacterial Leaf Spot
Dusty Miller	*Senecio cineraria*	Bacterial Leaf Spot (*Pseudomonas cichorii*)
Echinacea	*Echinacea* spp.	Bacterial Leaf Spot (*Pseudomonas cichorii*)
Elm, Chinese	*Ulmus parvifolia*	Xanthomonas Leaf Spot
Euonymus	*Euonymus* spp.	Anthracnose, Botrytis Blight
Fern Boston*	*Nephrolepis exaltata*	Bacterial Leaf Spot
Fern, Holly	*Cyrtomium falcatum*	Pseudomonas Leaf Spot
Fig, Weeping*	*Ficus benjamina*	Bacterial Leaf Spot
Filbert (Ornamental)*	*Corylus* spp.	Filbert Blight
Fir*	*Abies* spp.	Needlecasts
Gardenia	*Gardenia jasminoides*	Alternaria Leaf Spot, Botrytis Bud Rot, Cercospora Leaf Spot

[Note to Reviewer: [Text] in brackets denotes optional text.]

Geranium	*Pelargonium* spp.	Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot
Gladiola	*Gladiolus* spp.	Alternaria Leaf Spot, Anthracnose, Bacterial Leaf Blight, Botrytis Gray Mold
Golden Rain Tree	*Koelreuteria paniculata*	Bacterial Leaf Spot
Grape Ivy*	*Cissus* spp.	Bacterial Leaf Spot
Hawthorn*	*Crataegus* spp.	Fire Blight
Hibiscus[4/]	*Hibiscus* spp.	Bacterial Leaf Spot
Holly*	*Ilex* spp.	Bacterial Blight, Leaf Spots
Honeylocust*	*Gleditsia triacanthos*	Bacterial Leaf Spot
Honeysuckle, Tatarian*	*Lonicera tatarica*	Bacterial Leaf Spot
Impatiens	*Impatiens sallerana*	Bacterial Leaf Spot
Indian Hawthorn[5/]	*Raphiolepis indica*	Anthracnose, Entomosporium Leaf Spot
Iris[6/]*	*Iris* spp.	Bacterial Leaf Spot
Ivy (English, Algerian)[1/]	*Hedera helix, H. canariensis*	Xanthomonas Leaf Spot
Ixora	*Ixora coccinea*	Xanthomonas Leaf Spot
Juniper	*Juniperus* spp.	Anthracnose, Phomopsis Twig Dieback*
Lantana	*Lantana camera*	Bacterial Leaf Spot
Leyland Cypress*	*X Cupressocyparis leylandii*	Cercospora Needle Blight
Lilac	*Syringa* spp.	Cercospora Leaf Spot, Pseudomonas Blight*
Lily, Easter[2/]	*Lilium longiflorum*	Botrytis Blight
Linden*	*Tilia spp.*	Anthracnose, Leaf Blight
Loblolly Bay	*Gordonia lasianthus*	Anthracnose
Loquat	*Eriobotrya japonica*	*Colletotrichum* spp., *Entomosporium maculata*
Magnolia (Southern)	*Magnolia grandiflora*	Algal Leaf Spot, Anthracnose, Bacterial Leaf Spot
Magnolia (Sweet Bay)	*Magnolia virginiana*	Anthracnose
Magnolia (Oriental)	*Magnolia soulangiana*	Bacterial Leaf Spot
Mandevilla	*Mandevilla* spp.	Anthracnose
Maple*	*Acer* spp.	Pseudomonas Leaf Blight
Marigold	*Tagetes* spp.	Alternaria Leaf Spot, Botrytis Leaf Rot, Cercospora Leaf Spot, Flower Rot
Mountain-Ash*	*Sorbus* spp.	Fire Blight
Mulberry, Contorted*	*Morus bombycis*	Bacterial Leaf Spot
Mulberry, Weeping	*Morus alba*	Bacterial Leaf Spot
Narcissus*	*Narcissus* spp.	Leaf Blight
Nephthytis*	*Syngonium podophyllum*	Bacterial Leaf Spot
Oak*	*Quercus* spp.	Leaf Spots
Oak, Laurel	*Quercus laurifolia*	Algal Leaf Spot (*Cephaleuros virescens*)
Oleander	*Nerium oleander*	Bacterial Leaf Spot, Fungal Leaf Spot
Oregon Grapeholly*	*Mahonia aquifolium*	Leaf Spots
Pachysandra	*Pachysandra procumbens*	Volutella Leaf Blight
Palm, Date	*Phoenix canariensis*	Pestalotia Leaf Spot
Palm, European Fan	*Chamaerops humilis*	Pestalotia Leaf Spot
Palm, Parlor*	*Chamaedorea elegans*	Bacterial Leaf Spot
Palm, Queen	*Arecastrum romanzoffianum*	Exosporium Leaf Spot, Phytophthora Bud Rot
Palm, Washingtonia	*Washingtonia robusta*	Pestalotia Leaf Spot
Peach (Flowering)[3/]*	*Prunus* spp.	Bacterial Blast, Brown Rot, Fire Blight
Pear (Flowering)	*Pyrus calleryana*	Fire Blight, Leaf Spots
Pentas (Egyptian Star)	*Pentas* spp.	Bacterial Leaf Spot (*Pseudomonas* spp.*, *Xanthomonas* spp.)
Peony	*Paeonia* spp.	Botrytis Blight
Periwinkle	*Catharanthus roseus, Vinca* spp.	Phomopsis Stem Blight
Philodendron	*Philodendron selloum*	Bacterial Leaf Spot
Phlox	*Phlox* spp.	Alternaria Leaf Spot
Photinia (Red Tip)	*Photinia x fraseri, P. glabra*	Anthracnose, Entomosporium Leaf Spot
Pine*	*Pinus* spp.	Needlecasts
Pistachio	*Pistacia chinensis*	Anthracnose
Plantain Lily[6/]	*Hosta* spp.	Bacterial Leaf Spot
Plum (Flowering)[3/]*	*Prunus* spp.	Bacterial Blast, Brown Rot, Fire Blight

[Note to Reviewer: [Text] in brackets denotes optional text.]

Pothos*	*Scindapsus* spp.	Bacterial Leaf Spot
Powder Puff Plant	*Calliandra* spp.	Bacterial Leaf Spot
Pyracantha	*Pyracantha* spp.	Fire Blight, Scab
Rhododendron	*Rhododendron* spp.	Alternaria Flower Spot
Rose[1/]	*Rosa* spp.	Black Spot, Powdery Mildew
Snapdragon	*Antirrhinum majus*	Anthracnose, Dieback, Downy Mildew
Spathe Flower*	*Spathiphyllum* spp.	Bacterial Leaf Spot
Spirea*	*Spiraea* spp.	Fire Blight
Spruce*	*Picea* spp.	Needlecasts
Sycamore	*Platanus* spp.	Anthracnose, Leaf Spots*
Tulip	*Tulipa* spp.	Anthracnose, Botrytis Blight
Umbrella Tree*	*Schefflera* spp.	Bacterial Leaf Spot
Verbena	*Verbena* spp.	Xanthomonas Leaf Spot
Viburnum	*Viburnum odoratissimum, V. plicatum, V. suspensum*	Anthracnose
Viola (Pansy, Violet)	*Viola* spp.	Downy Mildew
Willow	*Salix* spp.	Anthracnose
Yew*	*Taxus* spp.	Needle Blight
Yucca (Adam's Needle)	*Yucca* spp.	Cercospora Leaf Spot, Septoria Leaf Spot
Zinnia*	*Zinnia* spp.	Leaf Spots

[1] Discoloration of foliage and/or blooms have been noted on some varieties. To prevent residues on commercial plants, do not spray immediately before selling season.
[2] Apply KOCIDE® 2000 at 2.25 to 3.75 pounds per acre. Maximum seasonal rate per acre is 214 lbs. 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 Hawthorn use 1.5 to 3.0 pounds per acre.
[6] Some cultivars may be sensitive to KOCIDE® 2000.

IMPORTANT: Some cultivars may be sensitive to KOCIDE® 2000. Phytotoxicity may depend on varietal differences. If unfamiliar with the use of KOCIDE® 2000, apply the specified 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 Ornamental and Shade Trees: Apply KOCIDE® 2000 in early spring when the trees are dormant. Apply 4.5 to 6 pounds of KOCIDE® 2000 (1.56-2.1 *lbs. metallic copper)* in 100 gallons of water, using 1 1/2 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.

IMPORTANT: KOCIDE® 2000 may be injurious to some ornamental plants growing beneath the 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, etc.

Cold Storage Protection for Dormant Rootstock*: To protect bare-root nursery trees from Phytophthora Crown Rot and Botrytis, use 2 to 3 pounds of KOCIDE® 2000 (0.7-1.1 lbs. metallic copper) 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.

*Not registered for use in California.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: 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 HANDLING: Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by State and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities

[Note to Reviewer: [Text] in brackets denotes optional text.]

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by State and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Nonrefillable Paper or Plastic Bags, Fiber Sacks including Flexible Intermediate Bulk Containers (FIBC) or Fiber Drums With Liners: Nonrefillable container. Do not reuse or refill this container. Completely empty paper or plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer for recycling if available or dispose of empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by State and local ordinances.

Refillable Fiber Drums With Liners: Refillable container (fiber drum only). Refilling Fiber Drum: Refill this fiber drum with KOCIDE® 2000 containing copper hydroxide only. Do not reuse this fiber drum for any other purpose. Cleaning before refilling is the responsibility of the refiller. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Disposing of Fiber Drum and/or Liner: Do not reuse this fiber drum for any other purpose other than refilling (see preceding). Cleaning the container (liner and/or fiber drum) before final disposal is the responsibility of the person disposing of the container. Offer the liner for recycling if available or dispose of liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by State and local ordinances. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner. To clean the fiber drum before final disposal, completely empty the fiber drum by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the fiber drum for recycling if available or dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by State and local ordinances.

All Other Refillable Containers: Refillable container. Refilling Container: Refill this container with KOCIDE® 2000 containing copper hydroxide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use the container, contact ChemTel at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact ChemTel at the number below for instructions. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by State and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Outer Foil Pouches of Water Soluble Packets (WSP): Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken. If the outer pouch contacts the formulated product in any way, the pouch must be triple rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer pouch as described previously.

Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire or other emergency, contact ChemTel at 1-800-255-3924, day or night.

[Note to Reviewer: [Text] in brackets denotes optional text.]

NOTICE TO BUYER: Purchase of this material does not confer any rights under patents of countries outside of the United States.

~~KOCIDE® is a registered trademark of Cosaco LLC.~~
~~The KOCIDE logo is a trademark of Cosaco LLC.~~
"Aliette" is a registered trademark of Bayer CropScience SA.
"Curtec" is a registered trademark of Bei Incorporated.
"Rovral" is a registered trademark of Bayer CropScience Inc.
"Tre-Hold" is a registered trademark of Amvac Chemical Corporation.

LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read this Limitation of Warranty and Liability Before Buying or Using This Product. If the Terms Are Not Acceptable, Return the Product at Once, Unopened, and the Purchase Price Will Be Refunded.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, soil factors, off target movement, unconventional farming techniques, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of **Cosaco**. These risks can cause: ineffectiveness of the product, crop injury, or injury to non-target crops or plants. WHEN YOU BUY OR USE THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.

Cosaco warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, **COSACO** MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL **COSACO** OR SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BUYER'S OR USER'S BARGAINED-FOR EXPECTATION IS CROP PROTECTION. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF **COSACO** OR SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, TORT OR STRICT LIABILITY), WHETHER FROM FAILURE TO PERFORM OR INJURY TO CROPS OR OTHER PLANTS, AND RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT, OR AT THE ELECTION OF **COSACO** OR SELLER, THE REPLACEMENT OF THE PRODUCT.

To the extent consistent with applicable law that allows such requirement, **Cosaco** or your Ag Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify **Cosaco** or your Ag Retailer of any claims, whether based on contract, negligence, strict liability, other tort or otherwise, or be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.

[OPTIONAL MARKETING LANGUAGE]

1	cosaco essential copper salts