SPECIMEN LABEL

Agri Star®

Nu-Cop 50 WP

Agricultural Fungicide/Bactericide

ACTIVE INGREDIENT:	
Copper Hydroxide*	77.0%
OTHER INGREDIENTS	23.0%
TOTAL	100.0%

*(Metallic copper equivalent 50.0%)

CAS No. 20427-59-2

EPA Reg. No. 45002-7 **EPA Est. No. 45002-MX-002**

KEEP OUT OF REACH OF CHILDREN

DANGER – PELIGRO

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 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.
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 ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate use of gastric lavage.

See inside booklet for additional PRECAUTIONARY STATEMENTS.

NET WEIGHT:
20 Lbs.

Manufactured for:
ALBAUGH, LLC
1525 NE 36th Street
Ankeny, Iowa 50021

FOR CHEMICAL SPILL, LEAK, FIRE, OR EXPOSURE, CALL CHEMTREC (800) 424-9300

Albaugh®
Your Alternative™

AD031512
PRODUCT OF MEXICO

PRECAUTIONARY STATEMENTS

DANGER

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through the skin. Harmful if inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing dust.

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, PVC and viton. If you want more options, follow the instructions for category ***A*** on an EPA chemical-resistance category selection chart.

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

1. Long-sleeved shirt and long pants
2. Chemical-resistant gloves made of any waterproof material
3. Shoes plus socks
4. Protective eyewear, goggles or faceshield

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

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

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

Certain water conditions including low pH (<6.5), low dissolved organic carbon (DOC) levels (3.0 mg/L or lower), and "soft" waters (i.e., alkalinity less than 50 mg/L), increases the potential acute toxicity to non-target aquatic organisms.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval (REI). 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 provided the following instructions are followed.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear

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 their eyes, that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes, that if they do get residues in their eyes, they should immediately flush their eyes with the eye flush container 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.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, secure, dry area in original containers.

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

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

PESTICIDE INSTRUCTIONS

NU-COP 50 WP may be applied by Aerial, or by Dilute or Concentrated Ground Sprayers, or Chemigation on crops and at rates given on this label unless specifically prohibited for that crop use. Sufficient spray volume and spray pressure is essential to thoroughly penetrate the plant canopy and give thorough spray coverage and at the times indicated. On crops sensitive to copper fungicides use the higher volumes of spray water per acre. Use the higher dosage of NU-COP 50 WP on mature trees, or when disease pressure is severe or weather conditions warrant.

When using adjuvants or other pesticides in combination with this product, always observe the most restrictive statements on the product's label and required days before harvest. Sprays of NU-COP 50 WP may be applied up to 24 hours pre-harvest. Before mixing with other products in spray tank, be sure that products are compatible. If compatibility is in question, use the compatibility jar test before mixing a whole tank. NU-COP 50 WP should not be applied in spray water having a pH of less than 6.5 as phytotoxicity may result. Use a buffering agent to increase the pH to 6.5–7.0 if your water source is below 6.5. Also avoid using water having a pH of greater than 9.0 as effectiveness may be reduced.

MIXING INSTRUCTIONS FOR SPRAY APPLICATION

Fill the spray tank one-fourth to one-third full with clean water. Start agitation (**NOTE:** Proper agitation creates a rippling or rolling action on the liquid surface). Add NU-COP 50 WP at the recommended rate.

Mix thoroughly and then add enough water to fill spray tank. Maintain sufficient agitation during mixing and during application of sprays to ensure a uniform spray mixture. When tank mixing with other products, follow the mixing sequence below: (1) micronutrients and fertilizers, (2) wettable powders, dry flowables, and water dispersible granules, (3) liquid flowables, (4) emulsifiable concentrates, and (5) adjuvants. Before adding the second pesticide, be sure that the prior product is well mixed and suspended.

MINIMUM RECOMMENDED SPRAY VOLUME IN GALLONS PER ACRE (GPA)

If a crop is sensitive to copper sprays, higher volumes of spray water will decrease potential injury. A full dilute spray on tree crops means the maximum amount of spray when uniformly applied that an acre of such trees will hold to the point that excess spray begins to drip off. Thus the dilute spray volume per acre will depend on tree size and leaf surface per acre. The following listed dilute spray volumes is the volume that will generally provide such coverage on average size of full-leafed trees. A concentrate spray is a spray applied in less volumes than a dilute. The extent of the concentration varies by equipment used. Thus the following spray volumes for a concentrated spray are the minimum volumes recommended per acre.

Use NU-COP 50 WP as noted below unless indicated otherwise in the specific crop directions. NU-COP 50 WP is adaptable to spraying from aircraft and ground spraying equipment. Depending on the equipment used and the specific crop, the volume applied per acre will differ. Refer to recommended volumes below:

	Aerial	Ground	
		Dilute	Concentrate
Vegetables and Field Crops	3	20	–
Small Fruits	5	150	50
Vines	5	150	50
Fruit and Nut Trees*	10	400	50
Citrus	10	800	100 (20 FL)**

*On young fruit trees, use a minimum of 1 gallon spray per acre.

CHEMIGATION INSTRUCTIONS

Do not apply this product through any irrigation system using aluminum parts or components as damage to the system may occur. Such application is prohibited regardless of whether the irrigation system is flushed with water after use of this product.

Apply this product only through one or more of the following types of systems: sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveling gun, solid set, or hand move irrigation system(s) which contain no aluminum parts or components. Do not apply this product through any other type of irrigation system.

Crop injury or lack of effectiveness can result from non-uniform 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 device for public water systems is 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.

A. **Center Pivot, Traveler, Big Gun, Motorized Lateral Move, End Tow, and Side Wheel Roll Irrigation Equipment:** Operate system and injection equipment at normal pressures recommended by the manufacturer of injection equipment used. Fill tank or injection equipment with water. Operate system for one complete circle for center pivot or one complete run for the other recommended equipment, measuring time required, amount of water injected, and acreage contained in circle or run. Mix recommended amount of product for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run, but continue to operate irrigation system until the product has been cleared from last sprinkler head. Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur.

B. **Solid Set and Hand Move Irrigation Equipment:** Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty- to forty-five minute period. Mix desired amount of product for acreage to be covered into quantity of water used during calibration and operate entire system at normal pressures recommended by the manufacturer of injection equipment used for amount of time established during calibration. Provide constant mechanical agitation in the mix tank to insure that the product will remain in suspension during the injection cycle. This product can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until pesticide is cleared from last sprinkler head.

SAFETY DEVICES

(1) The systems designated above must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
(2) All pesticide injection pipelines must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
(3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
(4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
(5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
(6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
(7) Do not apply when wind speed favors drift beyond the area intended for treatment.

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 a 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 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.

For additional instructions on safety precautions refer to statements (2), (3), (4), (6), and (7) in the section on SAFETY DEVICES.

POSTING INSTRUCTIONS

Posting of areas to be chemigated is required when any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or when chemigated area is open to the public, such as golf courses or retail greenhouses.

Posting must conform to the following requirements: Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. This sign is in addition to any sign posted to comply with the Worker Protection Standard. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of material to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2-1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

FROST INJURY PROTECTION

Bacterial ice nucleation inhibitor – Application of NU-COP 50 WP made to all crops listed on this label at rates and stages of growth indicated on this label at least 24 hours and not more than 72 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria *(Pseudomonas syringae, Erwinia herbicola,* and *Pseudomonas flourescens)* may thereby provide some protection against light frost. The degree of frost protection will vary with weather conditions and other factors. Not recommended for those geographical areas where weather conditions favor severe frost.

SPRAY DRIFT MANAGEMENT

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

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

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

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

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

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

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

Additional requirements for ground boom application:
- Do not apply with a nozzle height greater than 4 feet above the crop canopy.

CROPS

ALFALFA			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Cercospora & Leptosphaerulina Leaf Spots	1.0 (0.5 lb. of metallic equivalent)	30 Days	Apply 10 to 14 days before each harvest or earlier if disease threatens. Apply with ground or aerial equipment. Spray injury may occur with sensitive varieties such as Lahontan.
RESTRICTIONS: • Maximum single application rate is 1.0 lb./A (0.5 lb. metallic copper equivalent). • Maximum annual application rate is 2.0 lbs./A (1.0 lb. metallic copper equivalent).			

ALMONDS			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Dormant to Pink Bud Season: Bacterial Blast *(Pseudomonas)* Coryneum Blight (Shot hole)	8.0–16.0	7	Use at dormant to early pink bud. For blast control in sprinkler irrigated orchards or where disease is severe, apply 2–4 sprays or as many as required at 1.0–3.0 lbs. per acre at 2-week post-bloom intervals or just before sprinkling. Slight leaf injury may occur from post-bloom spray.
Bloom/Growing Season: Coryneum Blight Blossom Brown Rot	3.0	5	Use during the early bloom stage (popcorn). A second application in late dormant before foliage buds swell may be necessary when frequent rainfall occurs. To avoid plant injury, do not use after full bloom.
RESTRICTIONS: • Maximum single dormant application rate is 16.0 lbs./A (8.0 lbs. metallic copper equivalent). • Maximum single bloom/growing application rate is 3.0 lbs./A (1.5 lbs. metallic copper equivalent). • Maximum annual application rate is 36.0 lbs./A (18.0 lbs. metallic copper equivalent).			

APPLES			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Fall & Late Dormant: Anthracnose European Canker *Pseudomonas Syringae*	12.0–16.0	Only one dormant application allowed per season.	Apply before fall rains. Use on yellow varieties may cause discoloration. To avoid, pick before spraying.
Fireblight	12.0		Make application between silver-tip and green-tip. **ATTENTION:** Phytotoxicity may occur from late application. (Discontinue use when green-tip is 1/2 inch.)
Bloom & Growing Season: Fireblight	1.0–3.0	5	Extended spray schedule where fruit finish is not a concern. Continued applications may be made at 5- to 7-day intervals. **NOTE:** Crop injury may occur from extended spray schedule. Not intended for fresh market apples due to possible russeting. The addition of 1–3 lbs of lime per pound of NU-COP 50 WP may reduce injury.
Crown or Collar Rot *(Phytophthora cactorum)*	See COMMENTS		Apply either in early spring or in fall after harvest each year. Do not use if soil pH is below 5.5 or copper toxicity may result. Mix 4 lbs. in 100 gallons of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree.
RESTRICTIONS: • Maximum single dormant season application rate is 16.0 lbs./A (8.0 lbs. metallic copper equivalent). • Maximum single silver-tip to green-tip growing season is 12.0 lbs./A (6.0 lbs. metallic copper equivalent). • Maximum single growing season application rate is 3.0 lbs./A (1.5 lbs. metallic copper equivalent). • Maximum annual application rate is 32.0 lbs./A (16.0 lbs. metallic copper equivalent).			

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APRICOTS

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Fall & Late Dormant: Anthracnose European Canker *Pseudomonas Syringae*	12.0–16.0	Only one dormant application allowed per season.	Apply before fall rains. Use the higher rates when conditions favor disease. Use on yellow varieties may cause discoloration. To avoid, pick before spraying.
Bloom/Growing Season: Coryneum Blight (Shot Hole) Blossom Brown Rot	2.0–3.0	5	Apply at popcorn to full bloom as a full-cover spray. To avoid spray injury, do not apply after full bloom.

RESTRICTIONS:
- Maximum single dormant application rate is 16.0 lbs./A (8.0 lbs. metallic copper equivalent).
- Maximum single bloom/growing application rate is 3.0 lbs./A (1.5 lbs. metallic copper equivalent).
- Maximum annual application rate is 36.0 lbs./A (18.0 lbs. metallic copper equivalent).

ATEMOYA, SUGAR APPLE (Annona)

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Anthracnose	6.3	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.

RESTRICTIONS:
- Maximum single application rate is 6.3 lbs./A (3.15 lbs. metallic copper equivalent).
- Maximum annual application rate is 25.2 lbs./A (12.6 lbs. metallic copper equivalent).

AVOCADOS

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Anthracnose Blotch Scab	4.0–6.3	14	Apply when bloom buds begin to swell. Continue application at 14- to 28-day intervals for 5 to 6 applications. Use higher rate when conditions favor disease.

RESTRICTIONS:
- Maximum single application rate is 6.3 lbs./A (3.15 lbs. metallic copper equivalent).
- Maximum annual application rate is 37.8 lbs./A (18.9 lbs. metallic copper equivalent).

BANANAS

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Sigatoka (black and yellow)	2.1	7	Apply by air at 2.1 lbs. per acre in 3 gallons of water containing 0.5 gallon agricultural oil. Apply on a 7- to 14-day schedule throughout the wet season. Apply at 14- to 21-day intervals during dry periods.
Black Pitting	2.1	7	Dilute in 50–100 gallons of water and apply directly to the fruit stem and include the basal portion of the leaf crown. Apply during the first and second weeks after emergence.

RESTRICTIONS:
- Maximum single application rate is 2.1 lbs./A (1.05 lbs. metallic copper equivalent).
- Maximum annual application rate is 37.8 lbs./A (18.9 lbs. metallic copper equivalent).

BEANS (Dry, Green)

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Bacterial Blight (Halo & Common) Brown spot	1.0–1.5	7	For protective sprays apply first application when plants are five to six inches high. Apply on 7- to 14-day schedule depending on local conditions. Use higher rate for more severe disease pressure.

RESTRICTIONS:
- Maximum single application rate is 1.5 lbs./A (0.75 lb. metallic copper equivalent).
- Maximum annual application rate is 9.0 lbs./A (4.5 lbs. metallic copper equivalent).

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BLUEBERRIES

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Bacterial Canker	3.0–4.2	7	Make first application before the fall rains, preferably the first week in October and a second application 4 weeks later. Use higher rate when conditions favor disease.

RESTRICTIONS:
- Maximum single application rate is 4.2 lbs./A (2.1 lbs. metallic copper equivalent).
- Maximum annual application rate is 16.8 lbs./A (8.4 lbs. metallic copper equivalent).

BRAMBLES
(Blackberry, Santiams, Logans, Boysens, Marions, Auroras, Cascades, Chehalems, Raspberry & Thornless Evergreens)

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Anthracnose Leaf & Cane Spot Purple Blotch Yellow Rust	4.0	7	Make fall spray application after harvest. Apply delayed dormant spray after pruning/training in spring.
	2.0	7	Apply when leaf buds begin to open and repeat when flower buds show white. **NOTE:** Crop injury may occur if applied to foliage under hot or moist environmental conditions. Discontinue applications if injury noted.

RESTRICTIONS:
- Maximum single application rate is 4.0 lbs./A (2.0 lbs. metallic copper equivalent).
- Maximum annual application rate is 20.0 lbs./A (10.0 lbs. metallic copper equivalent).

CACAO

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Black Pod	3.0–4.5	14	Begin applications at the start of the rainy season and continue while infection conditions persist. Sprays should be made as often as 14–21 days in high rainfall areas at varying rates per acre depending on disease severity. For drier areas where 2 to 4 applications are recommended during critical infection periods and at long intervals, use 2–4 lbs. per acre, according to disease incidence and planting density.

RESTRICTIONS:
- Maximum single application rate is 4.5 lbs./A (2.25 lbs. metallic copper equivalent).
- Maximum annual application rate is 31.5 lbs./A (15.75 lbs. metallic copper equivalent).

CARAMBOLA

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Anthracnose	4.2	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.

RESTRICTIONS:
- Maximum single application rate is 4.2 lbs./A (2.1 lbs. metallic copper equivalent).
- Maximum annual application rate is 21.0 lbs./A (10.5 lbs. metallic copper equivalent).

CARROTS

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Carrot Blight *(Cercospora)*	2.0	7	Begin application when disease first threatens and repeat at 7- to 14-day intervals as needed depending on disease severity.

RESTRICTIONS:
- Maximum single application rate is 2.0 lbs./A (1.0 lb. metallic copper equivalent).
- Maximum annual application rate is 10.0 lbs./A (5.0 lbs. metallic copper equivalent).

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CELERY & CELERIAC

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Early, Late & Bacterial Blights	2.0	7	Apply as soon as plants are first established in the field, then every 7 days depending on severity and weather.

RESTRICTIONS:
- Maximum single application rate is 2.0 lbs./A (1.0 lb. metallic copper equivalent).
- Maximum annual application rate is 10.0 lbs./A (5.0 lbs. metallic copper equivalent).

CHERRY

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Dormant & Late Bloom Season: Dead Bud *(Pseudomonas syringae)* Coryneum Blight	8.0–16.0	7	In orchards where the disease is severe a spray should also be applied shortly after harvest.
Bloom & Growing Season: Brown Rot Blossom	2.0–3.0	5	Apply at popcorn and full bloom.

RESTRICTIONS:
- Maximum single dormant season application rate is 16.0 lbs./A (8.0 lbs. metallic copper equivalent).
- Maximum single growing season application rate is 3.0 lbs./A (1.5 lbs. metallic copper equivalent).
- Maximum annual application rate is 36.0 lbs./A (18.0 lbs. metallic copper equivalent).

CHIVES

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Downy Mildew	1.0	7	Begin applications when plants are established in the field. Repeat applications every 7–10 days as dictated by disease conditions.

RESTRICTIONS:
- Maximum single application rate is 1.0 lb./A (0.5 lb. metallic copper equivalent).
- Maximum annual application rate is 5.0 lbs./A (2.5 lbs. metallic copper equivalent).

CITRUS
(Grapefruit, Kumquat, Lemon, Orange, Pummelo, Tangelo, Tangerine & Lime)

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Melanose Scab Pink Pitting Greasy Spot	4.0–6.3	7	Apply as pre-bloom and post-bloom sprays. Use higher rates when conditions favor disease.
Brown Rot Septoria Spot	4.0–6.3	7	Apply beginning in the fall and continuing as needed. For Brown Rot, apply to skirts of trees to a height of at least 4 feet. Apply also to bare ground one foot beyond skirt. Use higher rates when conditions favor disease. **NOTE:** In California, in areas subject to copper injury, add 1/4 lb. of high-quality lime per lb. of NU-COP 50 WP.
Citrus Canker (SUPPRESSION ONLY)	6.3	7	Spraying flushes 7–14 days after shoots begin to grow. Young fruit may need additional application. Number of applications will depend on disease pressure. Under heavy disease pressure, each flush of new growth should be sprayed.
Phytophthora Foot Rot	See COMMENTS	7	Mix 1.0 lb. with one gallon of water and paint trunks of trees from the soil surface to the lowest scaffold limbs. Apply in May before summer rains and/or in the fall before wrapping trees for freeze protection. This treatment serves as protection for up to one year, but does not cure existing infections.
Field Nursery Grown To control melanose, scab, pink pitting, greasy spot, brown rot and for citrus canker (suppression).	4.0–6.3	7	Apply 2.0 pounds of NU-COP 50 WP per 100 gallons of water. Repeat application may be necessary if humid conditions conducive to disease pressure persist.

RESTRICTIONS:
- Maximum single application rate is 6.3 lbs./A (3.15 lbs. metallic copper equivalent).
- Maximum annual application rate is 25.2 lbs./A (12.6 lbs. metallic copper equivalent).

(continued)

COFFEE

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Coffee Berry Disease *(Collectotrichum coffeanum)*	4.2	14	Apply after flowering and before the start of long rains and then at 14- to 28-day intervals until picking.
Bacterial Blight *(Pseudomonas syringae)*		14	Begin spray program before the start of long rains and continue until picking. The critical time of spraying to control disease is just before, during, and after flowering(s), especially when these times coincide with wet weather.
Iron Spot *(Cercospora coffeicola)* & Pink Disease *(Corticium salmonicolor)*	2.0	14	Begin treatment at start of wet season and continue for three applications.
Leaf Rust	3.0–4.2	14	Apply before the onset of rain and then at 14- to 21-day intervals while rains continue.

RESTRICTIONS:
- Maximum single application rate is 4.2 lbs./A (2.1 lbs. metallic copper equivalent).
- Maximum annual application rate is 25.2 lbs./A (12.6 lbs. metallic copper equivalent).

CRANBERRY

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Fruit Rot	4.2	7	One or two additional applications made at 7- to 14-day intervals may be required, depending on disease pressure.
Rose Bloom			Apply three sprays on a 10- to 14-day schedule as soon as symptoms are observed.
Bacterial Stem Canker			Apply post-harvest and again in spring before bud burst. One or two additional applications at 10- to 14-day intervals may be required depending upon disease severity.
Tip Blight *(Monolinia)* Stem and Leaf Blight Red Leaf Spot			Apply delayed dormant spray in the Spring. Repeat at 10- to 14-day intervals as needed through pre-bloom.

RESTRICTIONS:
- Maximum single application rate is 4.2 lbs./A (2.1 lbs. metallic copper equivalent).
- Maximum annual application rate is 12.6 lbs./A (6.3 lbs. metallic copper equivalent).

CRUCIFERS
(Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collard Greens, Mustard Greens, & Turnip Greens)

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Downy Mildew Black Rot *(Xanthomonas)* Black Leaf Spot *(Alternaria)*	1.0	7	Begin application after transplants are set in the field, or shortly after emergence of field seeded crops or when conditions favor disease development. (**CAUTION:** A slight reddening of older leaves may occur on broccoli, and a slight flecking of wrapper leaves may occur on cabbage.)

RESTRICTIONS:
- Maximum single application rate is 1.0 lb./A (0.5 lb. metallic copper equivalent).
- Maximum annual application rate is 5.0 lbs./A (2.5 lbs. metallic copper equivalent).

CUCURBITS
(Cucumbers, Cantaloupes, Honeydews, Muskmelons, Pumpkins, Squash & Watermelons)

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Alternaria Leaf Spot Angular Leaf Spot Anthracnose Downy Mildew Powdery Mildew Gummy Stem Blight Watermelon Bacterial Fruit Blotch (suppression)	1.5–2.0	5	Begin application when conditions are favorable for disease development. Repeat at 5- to 10-day intervals. Use higher rates when conditions favor disease. **NOTE:** Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.

RESTRICTIONS:
- Maximum single application rate is 2.0 lbs./A (1.0 lb. metallic copper equivalent).
- Maximum annual application rate is 10.5 lbs./A (5.25 lbs. metallic copper equivalent).

(continued)

CURRANTS & GOOSEBERRY			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Anthracnose Leaf Spot	5.0 – 8.0	10	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule during wet conditions in the Spring. Make an additional application after harvest.
RESTRICTIONS: • Maximum single application rate is 8.0 lbs./A (4.0 lbs. metallic copper equivalent). • Maximum annual application rate is 20.0 lbs./A (10.0 lbs. metallic copper equivalent).			

DILL			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Phoma Leaf Spot Rhizoctonia Foliage Blight	1.5	7	Begin applications when plants are first established in the field and repeat at 7- to 10-day intervals depending upon disease severity and environmental conditions.
RESTRICTIONS: • Maximum single application rate is 1.5 lbs./A (0.75 lb. metallic copper equivalent). • Maximum annual application rate is 7.5 lbs./A (3.75 lbs. metallic copper equivalent).			

DOUGLAS FIR			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Rhabdocline needlecast	2.0–4.0	7	Begin applications at bud break and repeat at 7- to 28-day intervals. Use higher rates when conditions favor disease.
RESTRICTIONS: • Maximum single application rate is 4.0 lbs./A (2.0 lbs. metallic copper equivalent). • Maximum annual application rate is 40.0 lbs./A (20.0 lbs. metallic copper equivalent).			

EGGPLANT			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Alternaria Blight Anthracnose Phomopsis	1.5	7	Begin applications prior to development of disease symptoms. Repeat sprays at 7- to 10-day intervals depending on disease severity.
RESTRICTIONS: • Maximum single application rate is 1.5 lbs./A (0.75 lb. metallic copper equivalent). • Maximum annual application rate is 15.0 lbs./A (7.5 lbs. metallic copper equivalent).			

FILBERTS (Permitted only in WA and OR)			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Bacterial Blight (Post-harvest application)	8.0–12.0	14	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-quarters of leaves have dropped. Add 1 pint of superior-type oil per 100 gallons of water.
Eastern Filbert Blight			Apply as a dilute spray in adequate water for thorough coverage. Make initial application after harvest in October before heavy winter rains begin. The next application should be made in late February to early March followed by another application 1 month later. If desired, add 1 pint of a sticking agent or superior-type oil per 100 gallons of water.
RESTRICTIONS: • Maximum single application rate is 12.0 lbs./A (6.0 lbs. metallic copper equivalent). • Maximum annual application rate is 48.0 lbs./A (24.0 lbs. metallic copper equivalent).			

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GINSENG			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Alternaria Leaf and Stem Blight	2.1	7	Begin tank mix applications as a tank mix with two pounds of Iprodione 50WP in 100 gallons of water per acre as soon as plants have emerged in spring. Applications should be repeated every seven days until plants become dormant in fall. Apply fungicides at least eight hours before rain, giving the fungicides time to dry on the plants. Use of a spreader-sticker is advised. **NOTE:** Alternaria Leaf and Stem Blight is most severe in humid conditions such as those found in the dense canopies of two-, three-, and four-year-old ginseng. Complete and thorough spray is required for control.
RESTRICTIONS: • Maximum single application rate is 2.1 lbs./A (1.05 lbs. metallic copper equivalent). • Maximum annual application rate is 10.5 lbs./A (5.25 lbs. metallic copper equivalent).			

GRAPES			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Black Rot Powdery Mildew Downy Mildew Phomopsis	2.0–6.0	3	Begin applications at late dormant up to bud break with subsequent applications throughout the season depending upon disease severity. **NOTE:** Foliage injury may occur on copper-sensitive varieties such as Concord, Delaware, Niagara, and Rosettes. Either test for sensitivity or add 1 to 3 pounds of hydrated lime per pound of NU-COP 50 WP.
RESTRICTIONS: • Maximum single application rate is 6.0 lbs./A (3.0 lbs. metallic copper equivalent). • Maximum annual application rate is 40.0 lbs./A (20.0 lbs. metallic copper equivalent).			

GUAVA			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Anthracnose Red Algae	2.46	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
RESTRICTIONS: • Maximum single application rate is 2.46 lbs./A (1.23 lbs. metallic copper equivalent). • Maximum annual application rate is 9.84 lbs./A (4.92 lbs. metallic copper equivalent).			

HOPS			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Downy Mildew	1.0	10	Apply as a fungicide crown treatment (after pruning, but before training). After training, additional fungicide treatments are needed at 10-day intervals. Discontinue use 2 weeks before harvest.
RESTRICTIONS: • Maximum single application rate is 1.0 lb./A (0.5 lb. metallic copper equivalent). • Maximum annual application rate is 5.0 lbs./A (2.5 lbs. metallic copper equivalent).			

KIWI			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Pseudomonas syringae *Erwinia herbicola* *Pseudomonas fluorescens*	4.2	30	Make applications on a monthly basis. A maximum of 3 applications may be made.
RESTRICTIONS: • Maximum single application rate is 4.2 lbs./A (2.1 lbs. metallic copper equivalent). • Maximum annual application rate is 12.6 lbs./A (6.3 lbs. metallic copper equivalent).			

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LETTUCE, ENDIVE & ESCAROLE

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Downy Mildew	1.0–2.0	5	Begin treatment when disease first appears and repeat every 5–10 days as needed to suppress disease. **NOTE:** Flecking and/or yellowing of leaves will occur under certain environmental conditions such as extended periods of moist weather, acid rains, or other conditions favoring reduced pH on leaf surfaces. Injury may be severe enough to reduce crop value. Increasing the volume of spray water may decrease phytotoxicity potential.

RESTRICTIONS:
- Maximum single application rate is 2.0 lbs./A (1.0 lb. metallic copper equivalent).
- Maximum annual application rate is 16.0 lbs./A (8.0 lbs. metallic copper equivalent).

LITCHI

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Anthracnose	2.4	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.

RESTRICTIONS:
- Maximum single application rate is 2.4 lbs./A (1.2 lbs. metallic copper equivalent).
- Maximum annual application rate is 9.6 lbs./A (4.8 lbs. metallic copper equivalent).

LIVE OAK
(Not For Use in California Unless Accompanied by a Supplemental Label)

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Ball Moss	See COMMENTS*	A second application may be required after 12 months.	*Mix 4–6 lbs. per 100 gallons of water. Apply in spring after heavy rain, using 1.5 gallons of spray per foot of tree height. Make sure to set tufts thoroughly. (**NOTE:** NU-COP 50 WP may be injurious to some ornamentals grown under live oaks.)

RESTRICTIONS:
- Maximum single application rate is 4.0 lbs./A (2.0 lbs. metallic copper equivalent).
- Maximum annual application rate is 40.0 lbs./A (20.0 lbs. metallic copper equivalent).

MACADAMIA NUTS

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Anthracnose	4.7	7	Initiate sprays at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
Blossom blight Raceme blight	3.0–4.0	7	Apply during peak raceme development and bloom period. Use higher rates when conditions favor disease.

RESTRICTIONS:
- Maximum single application rate is 4.7 lbs./A (2.36 lbs. metallic copper equivalent).
- Maximum annual application rate is 18.8 lbs./A (9.44 lbs. metallic copper equivalent).

MAMEY SAPOTE

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Anthracnose Algal Leaf Spot	3.0–4.2	14	Use the higher rates when conditions favor disease development. Repeat on a 14- to 30-day schedule as disease severity and environmental conditions dictate.

RESTRICTIONS:
- Maximum single application rate is 4.2 lbs./A (2.1 lbs. metallic copper equivalent).
- Maximum annual application rate is 16.8 lbs./A (8.4 lbs. metallic copper equivalent).

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MANGO			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Anthracnose	4.0–6.4	30	Apply monthly after fruit set until harvest.
RESTRICTIONS: • Maximum single application rate is 6.4 lbs./A (3.2 lbs. metallic copper equivalent). • Maximum annual application rate is 36.4 lbs./A (18.2 lbs. metallic copper equivalent).			

OLIVES			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Peacock Spot Olive Knot	5.0–12.0	30	Apply before winter rains fall. A second application in early spring should be made if disease is severe. Use higher rates when conditions favor disease.
RESTRICTIONS: • Maximum single application rate is 12.0 lbs./A (6.0 lbs. metallic copper equivalent). • Maximum annual application rate is 12.6 lbs./A (6.3 lbs. metallic copper equivalent).			

ONION & GARLIC			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Purple Blotch Downy Mildew	2.0	7	Begin when plants are 4 to 6 inches high and repeat at 7- to 10-day intervals as needed depending upon disease pressure. Can cause phytotoxicity to leaves.
Bacterial Blight	1.0–1.5		
RESTRICTIONS: • Maximum single application rate is 2.0 lbs./A (1.0 lb. metallic copper equivalent). • Maximum annual application rate is 12.0 lbs./A (6.0 lbs. metallic copper equivalent).			

PAPAYA			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Anthracnose	4.0–5.26	14	Begin application before disease is expected to appear. Repeat at 14-day intervals. Use the higher rates when conditions favor disease. The addition of a suitable spreader-sticker may be desirable especially during periods of heavy rains.
RESTRICTIONS: • Maximum single application rate is 5.26 lbs./A (2.65 lbs. metallic copper equivalent). • Maximum annual application rate is 42.4 lbs./A (21.2 lbs. metallic copper equivalent).			

PARSLEY			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Bacterial Blight *(Pseudomonas* sp.*)*	2.0	10	Begin applications when plants are first established in the field and repeat at 10-day intervals.
RESTRICTIONS: • Maximum single application rate is 2.0 lbs./A (1.0 lb. metallic copper equivalent). • Maximum annual application rate is 4.0 lbs./A (2.0 lbs. metallic copper equivalent).			

PASSION FRUIT			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Anthracnose	4.7	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
RESTRICTIONS: • Maximum single application rate is 4.7 lbs./A (2.36 lbs. metallic copper equivalent). • Maximum annual application rate is 18.8 lbs./A (9.44 lbs. metallic copper equivalent).			

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PEACHES & NECTARINES

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Dormant & late dormant: Bacterial Spot Leaf Curl Coryneum Blight (Shot Hole)	8.0–16.0	7	Apply at leaf fall as dormant application. Use the higher rate when rainfall is very heavy and disease pressure is high. May be used with an agricultural spray oil.
Brown Rot Blossom Blight	8.0–12.0	7	Apply as a full-cover spray at pink bud. (Application at this time also affords some control of Leaf Curl and Coryneum Blight). **NOTE:** Do not spray later than three weeks prior to harvest. Do not use at rates above those labeled.
Bloom & Growing Season: Bacterial Spot	1.0–3.0	5	Post-bloom application applied at first and second cover sprays. **NOTE:** Do not spray 3 weeks prior to harvest. Spotting of leaves and some defoliation may occur from use in post-bloom cover sprays.

RESTRICTIONS:
- Maximum single dormant season application rate is 16.0 lbs./A (8.0 lbs. metallic copper equivalent).
- Maximum single growing season application rate is 3.0 lbs./A (1.5 lbs. metallic copper equivalent).
- Maximum annual application rate is 36.0 lbs./A (18.0 lbs. metallic copper equivalent).

PEANUTS

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Cercospora Leaf Spot	1.5	7	Begin spraying 25–40 days after planting or when disease symptoms appear. Use sufficient water to get adequate coverage. Continue applications at 7- to 14-day intervals. Reduce spray interval to 7 days during humid weather.

RESTRICTIONS:
- Maximum single application rate is 1.5 lbs./A (0.75 lb. metallic copper equivalent).
- Maximum annual application rate is 9.0 lbs./A (4.5 lbs. metallic copper equivalent).

PEARS, QUINCE

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Bloom & Growing Season: Fireblight	1.0–3.0	5	Apply at 5-day intervals throughout bloom period. Excessive dosages may cause fruit russet.
Fall & Late Dormant Season: Pseudomonas blight	12.0–16.0	Only one dormant application allowed per season.	Apply before fall rain begins.

RESTRICTIONS:
- Maximum single dormant season application rate is 16.0 lbs./A (8.0 lbs. metallic copper equivalent).
- Maximum single growing season application rate is 3.0 lbs./A (1.5 lbs. metallic copper equivalent).
- Maximum annual application rate is 32.0 lbs./A (16.0 lbs. metallic copper equivalent).

PEAS

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Powdery Mildew	1.5	7	Begin spray treatment when disease symptoms first appear. Repeat applications at weekly intervals.

RESTRICTIONS:
- Maximum single application rate is 1.5 lbs./A (0.75 lb. metallic copper equivalent).
- Maximum annual application rate is 7.5 lbs./A (3.75 lbs. metallic copper equivalent).

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PECANS
(Not For Use in California Unless Accompanied by a Supplemental Label)

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Shuck and Kernel rot *(Phytophthora cactorum)* Zonate leaf spot *(Cristulariella pyramidalis)*	2.0–4.2	14	Apply in sufficient water for good coverage at 2- to 4-week intervals starting at kernel growth and continuing until shucks open. Use the higher rate and shorter intervals if frequent rainfall occurs.
Mosses Algae Lichen	See COMMENTS	Make only one application per year.	Mix 2 lbs. per 100 gallons spray plus spreader-sticker on a dilute spray basis and apply in dormant season before buds swell, thoroughly wetting limbs and mosses.

RESTRICTIONS:
- Maximum single application rate is 4.2 lbs./A (2.1 lbs. metallic copper equivalent).
- Maximum annual application rate is 16.4 lbs.A (8.4 lbs. metallic copper equivalent).

PEPPERS

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Bacterial Spot	1.5	3	Apply, when disease threatens, in sufficient water to provide adequate coverage. Use at 3- to 14-day intervals depending on disease severity.

RESTRICTIONS:
- Maximum single application rate is 1.5 lbs./A (0.75 lb. metallic copper equivalent).
- Maximum annual application rate is 23.5 lbs./A (11.75 lbs. metallic copper equivalent).

PISTACHIOS

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Botrytis Blight Botryosphaeria Panicle Shoot Blight Septoria Leaf Blight Late Blight *(Alternaria)*	3.0–4.2	14	Make initial application at bud swell and repeat on a 14- to 28-day schedule. Use higher rates when conditions favor disease.

RESTRICTIONS:
- Maximum single application rate is 4.2 lbs./A (2.1 lbs. metallic copper equivalent).
- Maximum annual application rate is 16.8 lbs./A (8.4 lbs. metallic copper equivalent).

PLUMS & PRUNES

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Dormant Season: Coryneum blight (Shot hole)	8.0–16.0	7	Apply as a dormant spray. Use the higher rate when rainfall is heavy and/or disease pressure is high.
Bloom & Growing Season: Brown rot blossom blight Black Knot	3.0	5	Apply full-cover application at pink, red or early white bud stage.

RESTRICTIONS:
- Maximum single dormant season application rate is 16.0 lbs./A (8.0 lbs. metallic copper equivalent).
- Maximum single growing season application rate is 3.0 lbs./A (1.5 lbs. metallic copper equivalent).
- Maximum annual application rate is 36.0 lbs./A (18.0 lbs. metallic copper equivalent).

POTATOES

DISEASE	APPLICATION RATE (lbs./Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENTS
Early & Late Blight	1.0–5.0	5	Apply 1.0–1.5 pounds at 5- to 10-day intervals starting when plants are 2–6 inches high until 2 weeks before harvest in locations where disease is light and up to 3 to 5 pounds per acre where disease is more severe. Under conditions of severe disease, control with NU-COP 50 WP 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.

RESTRICTIONS:
- Maximum single application rate is 5.0 lbs./A (2.5 lbs. metallic copper equivalent).
- Maximum annual application rate is 50.0 lbs./A (25.0 lbs. metallic copper equivalent).

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STRAWBERRIES			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Downy Mildew Leaf Spot Leaf Blight	2.0–3.0	7	Begin application when plants are established and continue on a weekly schedule throughout season. Apply in at least 20 gallons of water. Use the higher rates when conditions favor disease. **NOTE:** Discontinue applications if signs of phytotoxicity appear.
RESTRICTIONS: • Maximum single application rate is 3.0 lbs./A (1.5 lbs. metallic copper equivalent). • Maximum annual application rate is 16.0 lbs./A (8.0 lbs. metallic copper equivalent).			

SUGAR BEETS & TABLE BEETS			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Cercospora Leaf Spot	2.0–2.5	10	Begin applications when conditions first favor disease development and repeat at 10- to 14-day intervals as needed. Use the higher rate when disease is severe.
RESTRICTIONS: • Maximum single application rate is 2.5 lbs./A (1.25 lbs. metallic copper equivalent). • Maximum annual application rate is 15.0 lbs./A (7.5 lbs. metallic copper equivalent).			

SYCAMORE			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Anthracnose	2.0–4.0	7	Make two applications as a full-cover spray. Use a minimum of 100 gallons water per acre. Make first application at bud crack and second application 7 to 14 days later at 10% leaf expansion.
RESTRICTIONS: • Maximum single application rate is 4.0 lbs./A (2.0 lbs. metallic copper equivalent). • Maximum annual application rate is 40.0 lbs./A (20.0 lbs. metallic copper equivalent).			

TOMATOES (Processing Market)			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Early Blight Bacterial Speck Bacterial Spot Anthracnose Gray Leaf Mold Gray Leaf Spot Septoria Leaf Spot Late Blight	1.0	3	When disease threatens, apply at 3- to 10-day intervals, more frequently when disease is severe.
RESTRICTIONS: • Maximum single application rate is 1.0 lb./A (0.5 lb. metallic copper equivalent). • Maximum annual application rate is 34.5 lbs./A (17.25 lbs. metallic copper equivalent).			

TOMATOES (Fresh Market)			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Early Blight Bacterial Speck Bacterial Spot Anthracnose Gray Leaf Mold Gray Leaf Spot Septoria Leaf Spot Late Blight	3.2	3	When disease threatens, apply at 3- to 10-day intervals, more frequently when disease is severe.
RESTRICTIONS: • Maximum single application rate is 3.2 lbs./A (1.6 lbs. metallic copper equivalent). • Maximum annual application rate is 34.5 lbs./A (17.25 lbs. metallic copper equivalent).			

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TURFGRASS (Sod Farms and other non-residential sites only)			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Algae	4.0–6.0	10	May be used as a maintenance spray as needed. May be used alone or in combination with fungicides such as dithiocarbamates. Use a minimum of 100 gallons of water per acre. Phytotoxicity may depend on varietal differences. Apply the directed rate to a small area and observe 7–10 days for phytotoxicity. If phytotoxicity occurs, discontinue use.
RESTRICTIONS: • Maximum single application rate is 6.0 lbs./A (3.0 lbs. metallic copper equivalent). • Maximum annual application rate is 18.0 lbs./A (9.0 lbs. metallic copper equivalent).			

WALNUTS			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Walnut Blight	4.0–8.0	7	Apply first spray at early pre-bloom when catkins are partially expanded. Make three additional applications during bloom and early nutlet stages at 7- to 10-day intervals. Additional applications may be necessary when frequent rainfall occurs. Thorough coverage of catkins, leaves and nutlets is essential for effective control. When applied as a dilute spray, 1 pint of summer oil emulsion may be added per 100 gallons of spray. **NOTE:** Adequate control may not be obtained when copper-tolerant species of *Xanthamonas* bacteria are present.
RESTRICTIONS: • Maximum single application rate is 8.0 lbs./A (4.0 lbs. metallic copper equivalent). • Maximum annual application rate is 50.4 lbs./A (25.2 lbs. metallic copper equivalent).			

WATERCRESS			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Cercospora Leaf Spot	1.0	7	Begin application when plants are first established in the field, repeating at 7- to 14-day intervals depending on disease severity and environmental conditions. Do not exceed 4 applications per crop. Apply using ground spray equipment at no less than 50 gallons of spray solution per acre.
RESTRICTIONS: • Maximum single application rate is 1.0 lb./A (0.5 lb. metallic copper equivalent). • Maximum annual application rate is 4.0 lbs./A (2.0 lbs. metallic copper equivalent).			

WHEAT, BARLEY & OATS			
DISEASE	**APPLICATION RATE (lbs./Acre)**	**MINIMUM DAYS RETREATMENT INTERVAL**	**COMMENTS**
Septoria Leaf Blotch Helminthosporium Spot Blotch	1.0	10	Make first application at early heading and follow with second application 10 days later.
RESTRICTIONS: • Maximum single application rate is 1.0 lb./A (0.50 lb. metallic copper equivalent). • Maximum annual application rate is 2.0 lbs./A (1.0 lb. metallic copper equivalent).			

ORNAMENTALS

(Not For Use in California Unless Accompanied by a Supplemental Label)

Notice to User: Plant sensitivities to NU-COP 50 WP have been found to be acceptable in specific genera and species listed on this label; however, phytotoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to NU-COP 50 WP. Neither the manufacturer nor seller has determined whether or not NU-COP 50 WP can be safely used on ornamental or nursery plants not listed on this label. The user should determine if NU-COP 50 WP can be used safely prior to commercial use. In a small area, apply the recommended rates to the plants in question, i.e., bedding plants, foliage, etc., and observe for 7–10 days for symptoms of phytotoxicity prior to commercial use.

Use NU-COP 50 WP on container, bench, or bed-grown ornamentals in greenhouses or outdoor nurseries, for professional use on ornamentals grown for indoor and outdoor landscaping, and for control of bacterial and fungal diseases of foliage, flowers and stems.

Apply 1.0–2.0 lbs per acre as a thorough coverage spray using 0.5 lb. NU-COP 50 WP per 100 gallons of water. Begin applications at first sign of disease and repeat at 7- to 14-day intervals as needed; use shorter interval during periods of frequent rains or when severe disease conditions persist.

NU-COP 50 WP may be used as a maintenance spray alone or in combination with other fungicides such as the dithiocarbamates.

RESTRICTIONS:
- Maximum single application rate is 4.0 lbs./A (2.0 lbs. metallic copper equivalent).
- Maximum annual application rate is 40.0 lbs./A (20 lbs. metallic copper equivalent).

ORNAMENTAL/DISEASES:
Althea (Rose of Sharon)/Bacterial Leaf Spot
Aralia/Xanthomonas & Cercospora Leaf Spots, Alternaria
Arborvitae/Alternaria Twig Blight, Cercospora Leaf Blight
Azalea*/Cercospora Leaf Spot, Botrytis Blight, Phytophthora Dieback & Powdery Mildew
Begonia/Xanthomonas Leaf Spot, Anthracnose
Bougainvillea/Anthracnose, Bacterial Leaf Spot
Bulbs (Easter Lily**, Tulip, Gladiolus)/Anthracnose, Botrytis Blight
Camellia/Anthracnose, Bacterial Leaf Spot
Camphor Tree/Pseudomonas Leaf Spot
Canna/Pseudomonas Leaf Spot
Carnation*/Alternaria Blight, Pseudomonas Leaf Spot, & Botrytis Blight
Chinese Tallow Tree/Bacterial Leaf Spot *(Xanthomonas* sp., *Pseudomonas* sp*.)*
Chrysanthemum*/Septoria Leaf Spot & Botrytis Blight
Cotoneaster/Botrytis Blight
Dahlia/Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot
Date Palm/Pestalotia Leaf Spot
Dianthus/Bacterial Spot, Bacterial Soft Rot
Dogwood/Anthracnose
Dusty Miller/Bacterial Leaf Spot *(Pseudomonas cichorii)*
Echinacea/Bacterial Leaf Spot *(Pseudomonas cichorii)*
Elm "Drake"/Xanthomonas Leaf Spot
Euonymus/Botrytis Blight & Anthracnose
European Fan Palm/Pestalotia Leaf Spot
Gardenia/Alternaria Leaf Spot, Botrytis Bud Rot, Cercospora Leaf Spot
Geranium/Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot
Gladiolus/Alternaria Leaf Spot, Botrytis Gray Mold, Bacterial Leaf Blight
Golden Rain Tree/Bacterial Leaf Spot
Hibiscus/Bacterial Leaf Spot
Holly Fern/Pseudomonas Leaf Spot
Impatiens/Bacterial Leaf Spot
India hawthorn (greenhouse)/Entomosporium Leaf Spot
Ivy*/Xanthomonas Leaf Spot
Ixora/Xanthomonas Leaf Spot
Juniper (Eastern Red Cedar)/Anthracnose
Lantana/Bacterial Leaf Spot
Lilac/Cercospora Leaf Spot
Loblolly Bay/Anthracnose
Loquat/*Entomosporium maculata, Colletotrichum* sp.
Magnolia (Southern)/Algal Leaf Spot, Anthracnose, Bacterial Leaf Spot
Mandevillas/Anthracnose
Marigold/Alternaria Leaf Spot, Botrytis Leaf and Flower Rot, Cercospora Leaf Spot
Mulberry, Weeping/Bacterial Leaf Spot
Oak, Laurel/Algal Leaf Spot *(Cephaleuros virescens)*
Oleander/Bacterial Leaf Spot, Fungal Leaf Spot
Pachysandra/Volutella Leaf Blight
Pansy/Downy Mildew
Pear (Flowering)/Fireblight, Leaf Spot
Pentas (Egyptian Star)/Bacterial Leaf Spot *(Xanthomonas* sp*.)*
Peony/Botrytis Blight
Periwinkle/Phomopsis Stem Blight
Philodendron/Bacterial Leaf Spot
Phlox/Alternaria Leaf Spot
Photinia (Red Tip)/Anthracnose, Entomosporium Leaf Spot
Pistachio/Anthracnose
Plantain Lily/Bacterial Leaf Spot
Powder Puff Plant/Bacterial Leaf Spot
Pyracantha/Fireblight & Scab
Queen Palm/Exosporium Leaf Spot, Phytophthora Bud Rot
Rhododendron/Alternaria Flower Spot
Rose*/Powdery Mildew, Black Spot
Verbena/Xanthomonas Leaf Spot
Viburnum/Anthracnose
Washingtonia Palm/Pestalotia Leaf Spot
Weeping Willow/Anthracnose
Yucca (Adams Needle)/Cercospora & Septoria Leaf Spot

*Discoloration of foliage and/or blooms have been noted on some varieties. To prevent residues on commercial plants, do not spray just before selling season.
**For Easter Lily, use 2.0–5.0 lbs per 100 gallons.

Restrictions (Easter Lily):
- Do not apply any additional copper pesticide to this land for 36 months.
- Maximum single application rate is 5.0 lbs./A (2.5 lbs. metallic copper equivalent).
- Maximum annual application rate is 150 lbs./A (75 lbs. metallic copper equivalent).

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on this label when used in accordance with directions under normal conditions of use; but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, expressed or implied, extends to the use of this product contrary to label instructions not reasonably foreseeable to seller; to the extent consistent with applicable law, the buyer assumes the risk of any such use.

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