

# U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505C) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460 EPA Reg. Number:

Date of Issuance:

42750-168

JUN 0 5 2007

NOTICE OF PESTICIDE:

x Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product:

Basic Copper 50W HB

Name and Address of Registrant (include ZIP Code):

Albaugh, Inc. P.O. Box 2127 Valdosta, GA 31604-2127

Attention: Morris Gaskins

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration of your product under FIFRA Section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for re-registration of your product under FIFRA Section 4.
- 2. Submit acceptable Storage Stability (OPPTS No. 830.6317) and Corrosion Characteristics (OPPTS No. 830.6320) studies within in one year of the date of this notice.
- 3. Revise the EPA Registration Number to read, "EPA Reg. No. 42750-168
- 4. Insert a "Note to the Physician" on the front panel of the label as according the EPA Pesticide User's Manual.

Signature of Approving Official:

Date:

Tony Kish

Product Manager, Team 22Fungicide Branch

Registration Division (7505P)

JUN 0 5 2007

- 5. In the Warranty section on page 33, begin the first sentence with "Consistent with applicable law, the exclusive remedy against the Company...". In the second paragraph, change "To the extent allowed by law..." to "To the extent consistent with applicable law..."
- 6. Make the Signal Word "WARNING ADVISO" larger typesize as per the EPA Label Review Manual requirements.
- 7. Submit two copies of a final printed label within 30 days from the date of this Notice.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA Section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A copy of the label stamped "Accepted with comments" is enclosed for your records.

#### BASIC COPPER 50 HB

ACTIVE INGREDIENT:

Basic Copper Sulfate 94.34%

OTHER INGREDIENTS: 5.66%

TOTAL: 100.00%

CAS # 1344-73-6

(Metallic copper equivalent ...... 50.0%)

### 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

IE IN EVEO	
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	Call a poison control center or doctor immediately for treatment advice.
SWALLOWED:	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.
IF ON SKIN OR	Take off contaminated clothing.
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.	
See Inside Bookle	et for Additional Precautionary Statements.

EPA Reg. No. 42750-RAI

EPA Est. No. 45002-MEX-2

MANUFACTURED FOR: Albaugh, Inc. Ankeny, IA 50021

with COMMENTS in EPA Letter Dated:

Under the Federal Insecticities, Completes, and Rosentialde Act as amended, for the posticide registered under EPA Reg. No.

### PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING - AVISO

Causes substantial but temporary eye injury. Wear protective clothing and goggles. Harmful if swallowed, absorbed through the skin, or inhaled. Do not get in eyes, on skin, or on clothing. Avoid inhaling dust or spray mists. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT

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

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

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:

- 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. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish 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. For terrestrial uses, 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.

Certain water conditions including low pH ( $\leq$ 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. 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 provide the following instructions are followed.

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

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 over long-sleeved shirt and pants
- Chemical resistant gloves made of any waterproof material
- Chemical resistant footwear plus socks
- Chemical resistant headgear if overhead exposure
- Protective eyewear

## NON-AGRICULTURAL USE REQUIREMENTS

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

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

## STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep in a cool place. Do not store at temperatures below 32°F. Open dumping is prohibited. Do not reuse empty container.

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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

### GENERAL INSTRUCTIONS

Use Basic Copper 50 HB as noted below. Basic Copper 50 HB is adaptable to spraying from all types of spray equipment. Depending on the equipment used and the specific crop, the volume applied per acre will differ. For dilute, high volume sprays use from 25 to 100 gallons of water per acre for most vegetable crops, 400 to 800 GPA for fruit and nut crops, and up to 1500 gallons per acre as may be required for large citrus groves. For aerial spraying, 3 to 15 GPA are commonly used. For concentrate ground sprays, apply from 5 to 20 gallons per acre for vegetable crops and 25 to 100 gallons per acre for fruit and nut crops.

Add Basic Copper 50 HB slowly to spray tank partially filled with water. Spreader-stickers, insecticides, nutrients, etc. should be added last. Basic Copper 50 HB is compatible with most commercially formulated spreader-stickers, oils and other fungicides. Observe all cautions and limitations on label of all products used in mixtures.

Basic Copper 50W HB should not be applied in a spray solution having a pH of less than 6.5 to minimize phytotoxicity risk.

Basic Copper 50WP HB may be reactive on masonary and metal surfaces such as galvanized roofing. Avoid contact of metal surfaces. Do not allow spry to contact cars, houses, lawn furniture, etc.

The following specific instructions are based on general applications. The recommendations of the State Agricultural Extension Services should be closely followed as to timing, frequency, and number of sprays per season. When a range of doses are given for the use site, use the low dose when conditions are not favorable for disease development and use the high dose when conditions are favorable for disease development. Consult your State Agricultural Extension Service for guidance in determining what conditions favor diseases for the particular use site.

# GENERAL CHEMIGATION INSTRUCTIONS

NOTE: 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, traveler, big 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 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.

- 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

#### 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 systems 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 a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The system must 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.

	Al	_FALFA	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Cercospora Leaf Spot Leptosphaeruiina Leaf Spot	0.5 – 1.0	30	Apply 10 to 14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.

#### RESTRICTIONS

Maximum single application rate is 1.0 lbs/A (0.5 lbs. metallic copper equivalent) Maximum annual application rate is 2.0 lbs/A (1.0 lbs metallic copper equivalent)

	A	PPLES	
		ate Dormant	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose European Canker Pseudomonas Syringae	4 - 16	Only one dormant application allowed per season PPLES	Apply after harvest before fall rains. Use higher rates under severe disease conditions.
		FreeS Browing Season	
Fireblight	0.5 - 1	5	Make application between silver-tip and green-tip.  ATTENTION: Phytotoxicity may occur from late application (Discontinue use when green-tip is 1/2 inch)
Black Rot, Black Pox, Brooks Spot Flyspeck Sooty Blotch Summer Scab White Rot	0.5 - 1	5	Recommended for processing apples only as fruit russeting and leaf spotting are likely to occur.  NOTE: Do not apply prior to 4 <sup>th</sup> cover spray and make only 2 applications in rotation with other registered fungicides.  Use of copper on weak or stressed trees can increase potential for leaf spotting.
Crown Rot, Collar Rot	See Comment	n/a	Mix in 100 gallons of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree. Apply either in early spring or in late fall after harvest.  NOTE: Do not use if soil pH is below 5.5 since copper toxicity may result

Maximum single dormant season application rate is 16 lbs/A (8.0 lbs. metallic copper equivalent)
Maximum single growing season application rate is 1 lb/A (0.5 lbs. metallic copper equivalent)
Maximum annual application rate is 32 lbs/A (16 lbs. metallic copper equivalent)

	AL	MONDS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Blast (Pseudomonas) Bacterial Canker Shot-Hole	4 – 16	7	Make first application before fall rains and a second at late dormant. Use higher rates when rainfall is heavy and disease pressure is high. One pint of superior-type oil per 100 gallons of water may be added.
Bacterial Blast (bloom/growing season)	1 – 3	5	For bacterial blast control in sprinkler irrigated orchards or where disease is severe, apply 1.5 to 3 pounds per acre post-bloom at 2 week intervals or just before irrigation. NOTE: Injury may occur from post-bloom sprays on almonds, especially on neplus varieties.

Maximum single dormant application rate is 16 lbs/A (8 lbs. metallic copper equivalent)

Maximum single bloom/growing application rate is 3 lbs/A (1.5 lbs. metallic copper equivalent)

Maximum annual application rate is 36 lbs/A (18 lbs metallic copper equivalent)

APRICOTS				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT	
Dormant Season:	4 - 16	7	Apply as a dormant spray.	
Coryneum blight (Shot hole)			Use the higher rate when rainfall is heavy and/or disease pressure is high.	
Bloom/growing season:	1 - 3	5	Apply at popcorn to full bloom as a full cover spray.	
Coryneum Blight (Shot Hole) Blossom Brown Rot			To avoid spray injury, do not apply after bloom.	

# RESTRICTIONS

Maximum single dormant season application rate is 16 lbs/A (8.0 lbs metallic copper equivalent) Maximum single growing season application rate is 3 lbs/A (1.5 lbs metallic copper equivalent) Maximum annual application rate is 36 lbs/A (18.0 lbs metallic copper equivalent)

APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENTINTERVAL	COMMENT
3 – 6	7	Make initial application just before flowering and repeat on a weekly schedule.
	(Ibs/Acre)	(lbs/Acre) RETREATMENT

Maximum single dormant application rate is 6 lbs/A (3 lbs. metallic copper equivalent) Maximum annual application rate is 25 lbs/A (12.5 lbs metallic copper equivalent)

	OCADOS	
APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
3 – 6	14	Apply when bloom buds begin to swell. Continue application at 2 - 4 week intervals.
		Use higher rates when conditions favor disease development.
	(Ibs/Acre)	(lbs/Acre) RETREATMENT INTERVAL

RESTRICTIONS

Maximum single application rate is 6 lbs/A (3 lbs metallic copper equivalent) Maximum annual application rate is 25 lbs/A (12.5 lbs metallic copper equivalent)

	BA	ANANA	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Sigatoka  Black Pitting	1-2	7	Apply by air in 10 gallons of water combining 0.5 gallon of agricultural oil. Apply on a 7-14 day schedule throughout the wet season. Apply at 21-day intervals during dry periods.  Mix in 100 gallons of water directly to the fruit stem and include the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.

## RESTRICTIONS

Maximum single dormant application rate is 2 lbs/A (1.0 lb. metallic copper equivalent) Maximum annual application rate is 37 lbs/A (18.5 lbs metallic copper equivalent)

	BEANS	(Dry, Green)	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Blight (Halo & Common) Brown Spot Common Blight Downy Mildew	0.5 – 1.5	7	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule depending upon environmental conditions.  Use the higher rates when conditions favor disease development.
DESTRICTIONS			

Maximum single application rate is 1.5 lbs/A (0.75 lbs. metallic copper equivalent)
Maximum annual application rate is 9 lbs/A (4.5 lbs metallic copper equivalent)

	BLU	EBERRIES	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Canker	1 – 4	7	Make first application before fall rains and a second application 4 weeks later.
DECEDIOTIONS			Make additional applications if disease pressure persists.

## RESTRICTIONS

Maximum single dormant application rate is 4 lbs/A (2 lbs. metallic copper equivalent)
Maximum annual application rate is 16 lbs/A (8 lbs metallic copper equivalent)

BRAMBLES (Santiams, Logans, Boysens, Marions, Auroras, Cascades, Chehalems, Thornless				
BRAMBLES (Santial	ms, Logans, Boysens, M Evergreens, Bla	arions, Auroras, Casca ackberry & Raspberry)	des, Chenalems, Thornless	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT	
Anthracnose Cane Spot Leaf Spot Pseudomonas Blight Purple Blotch Yellow Rust	1 – 4	7	Make fall application after harvest. Apply delayed dormant spray after training in the spring.	
Anthracnose Cane Spot Leaf Spot Pseudomonas Blight Purple Blotch Yellow Rust	1 - 3		Apply when leaf buds begin lo open and repeat when lower buds show white.  NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist environmental conditions.  Discontinue applications if signs of crop injury appear.	

Maximum single application rate is 4 lbs/A (2.0 lbs metallic copper equivalent)

Maximum annual application rate is 20 lbs/A (10.0 lbs metallic copper equivalent)

BROCCOLI, BRUSSEL		E, CAULIFLOWER, CO TURNIP GREENS	OLLARD GREENS, MUSTARD
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew	0.25 – 1.0	7	Apply in a minimum of 25 GPA at 7-10 day intervals.
Black Leaf Spot (Alternaria) Black Rot (Xanthomonas)	0.5 1.0	7	Begin applications after transplants are set in the field or shortly after emergence of field seeded crops or when conditions favor disease development. Use higher rates when conditions favor disease.  NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.

#### RESTRICTIONS

Maximum single application rate is 1 lb/A (0.5 lbs metallic copper equivalent)

Maximum annual application rate is 5 lbs/A (2.5 lbs metallic copper equivalent)

DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Black Pod	2=4.5	14	Begin applications at the start of the rainy season and continue while infection periods persist. Apply at 14-21 day intervals in high rainfall areas.

Maximum single dormant 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)

	CAF	RAMBOLA	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	1 – 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 dormant application rate is 4 lbs/A (2 lbs. metallic copper equivalent)

Maximum annual application rate is 21 lbs/A (10.5 lbs metallic copper equivalent)

CARROTS				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT	
Alternaria Leaf Spot Cercospora Leaf Spot	0.5 – 2.0	7	Begin applications when disease first threatens and repeat at 7 to 14 day intervals or as needed depending on disease severity. Use on yellow varieties may cause discoloration. To avoid, pick before spraying.	
Fireblight			Make application between silver-tip and green-tip. NOTE: Phytotoxicity may occur from late application (Discontinue use when green-tip is 1/2 inch.)	
Crown or Collar Rot (Phytophthora cactorum)			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.	

RESTRICTIONS

Maximum single application rate is 2 lbs/A (1.0 lbs metallic copper equivalent)
Maximum annual application rate is 10 lb/A (5.0 lbs metallic copper equivalent)

CELERY & CELERIAC				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT	
Bacterial Blight Cercospora Early Blight Septoria Late Blight	0.5 - 2	7	Begin applications when plants are first established In the field, repeating at 7 day intervals depending on disease severity and environmental conditions.	

Maximum single application rate is 2 lbs/A (1.0 lbs metallic copper equivalent)

Maximum annual application rate is 10.5 lbs/A (5.25 lbs metallic copper equivalent)

	CHERRY				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT		
Dormant & Late Bloom Season:  Dead Bud (Pseudomonas syringae) Coryneum Blight	4 – 16	7	In orchards where the disease is severe a second spray should also be applied shortly after harvest.		
Bloom & Growing Season:	1 – 3	5	Applied at popcorn and full bloom.		
Brown Rot Blossom					

## RESTRICTIONS

Maximum single dormant season application rate is 16 lbs/A (8.0 lbs metallic copper equivalent) Maximum single growing season application rate is 3 lbs/A (1.5 lbs metallic copper equivalent) Maximum annual application rate is 36 lbs/A (18.0 lbs metallic copper equivalent)

CHIVES			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew	0.5 – 1	7	Begin applications when plants are established in the field. Repeat applications every 7 to 10 days as dictated by disease conditions. If disease pressure is high, use the shorter spray interval.

### RESTRICTIONS

Maximum single dormant application rate is 1 lb/A (0.5 lbs. metallic copper equivalent) Maximum annual application rate is 5 lbs/A (2.5 lbs metallic copper equivalent)

CITRUS (Grapefruit, Kumquat, Lemon, Orange, Pummelo, Tangelo, Tangerine & Lime)				
APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT		
1 - 6	7	Apply as pre-bloom and post-bloom sprays.  May be used in dilute or concentrate sprays at equivalent rates. For concentrate application use a minimum 10 gallons per acre.  For Scab suppression, make 2 applications, one just before trees begin to flush and repeat at 2/3 petal fall.  For Melanose, make		
		application 1- 3 weeks after petal fall and repeat 14 days later if necessary.		
3 - 6	7	Spraying flushes 7-14 days after shoots begin to grow.  Young fruit may need additional application. Number and timing of applications will depend on disease pressure.  Under heavy disease pressure, each flush of new growth should be sprayed.		
	APPLICATION RATE (lbs/Acre) 1 - 6	APPLICATION RATE (lbs/Acre)  1 - 6  MINIMUM DAYS RETREATMENT INTERVAL  7		

Maximum single application rate is 6 lbs/A (3.0 lbs metallic copper equivalent)
Maximum annual application rate is 25 lbs/A (12.5 lbs metallic copper equivalent)

	C	OFFEE	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Coffee Berry Disease	1 – 4	14	Apply first spray after flowering and before onset of rains and then at 21-28 day intervals until picking.
Bacterial Blight			Begin spray program applications before the onset of the rains and continue throughout the rainy season at 14-21 day intervals. The critical time of spraying to control this disease is just before, during, and after flowering especially when coinciding with wet weather.
Leaf Rust (Hemileiavastatrix)	1 - 2		Apply before the onset of rain and then at 21-day intervals while the rains continue.
Iron Spot (Cercospora) Pink Disease (Corticium)	1		Use concentrate or dilute spray. Begin treatments at the start of the wet season and continue at monthly intervals for three applications.

Maximum single dormant application rate is 4 lbs/A (2 lbs. metallic copper equivalent)
Maximum annual application rate is 25 lbs/A (12.5 lbs metallic copper equivalent)

NOTE: Use higher rates or shorter intervals when rainfall is heavy and disease pressure is high.

CRANBERRIES				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT	
Bacterial Canker	2 – 4	7	Make first application in late bloom. One or two additional applications at 10-14 day intervals may be required depending upon disease severity.	
Rose Bloom			Apply three sprays on 10-14 day schedule as soon as symptoms are observed.	
Bacterial Stem Canker			Apply postharvest and again in spring before bud burst. One or two additional applications at 10-14 day intervals may be required depending upon disease severity.	
Leaf Blight Red Leaf Spot Stem Blight Tip Blight (Manilinia)			Apply delayed dormant spray in the spring. Repeat at 10-14	
Blight (Monilinia)			day intervals or as needed through pre-bloom.	
RESTRICTIONS				

CUCURBITS					
MŁ	(CUCUMBERS, CANTALOUPES, HONEYDEWS, MUSKMELONS, PUMPKINS, SQUASH & WATERMELONS)				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT		
Alternaria Leaf Spot Angular Leaf Spot Anthracnose Downy Mildew Powdery Mildew Gummy Stem Blight Watermelon Bacterial Fruit Blotch (suppression)	0.5 - 2	5	Begin application when conditions are favorable for disease development. Repeat at 5-10 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 lbs/A (1.0 lbs metallic copper equivalent)  Maximum annual application rate is 10.5 lbs/A (5.25 lbs metallic copper equivalent)					

Maximum single dormant application rate is 4 lbs/A (2 lbs. metallic copper equivalent)

Maximum annual application rate is 12.5 lbs/A (6.25 lbs metallic copper equivalent)

DILL				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT	
Phoma Leaf Spot	0.5 – 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. If disease pressure is high, use the shorter spray interval and the higher rate.	

Maximum single dormant application rate is 1.5 lbs/A (0.75 lbs. metallic copper equivalent) Maximum annual application rate is 7.5 lbs/A (3.75 lbs metallic copper equivalent)

	CURRANTS & GOOSEBERRY				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT		
Anthracnose Leaf Spot	2.5 - 5	10	Make applications, starting after harvest, before bloom and after petal fall.		
			Continue on a 10-14 day schedule during wet conditions in the spring.		
			Make an additional application after harvest.		

# RESTRICTIONS

Maximum single application rate is 5 lbs/A (2.5 lbs metallic copper equivalent)
Maximum annual application rate is 20 lbs/A (10 lbs metallic copper equivalent)

	DOU	GLAS FIR	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Rhabdocine Needlecast	2 – 4	7	Begin applications at bud break and repeat at 7-28 day intervals based on disease pressure and environmental conditions. Apply in a tank mix with another registered compatible fungicide if moderate to severe disease pressure is present.

## RESTRICTIONS

Maximum single dormant application rate is 4 lbs/A (2 lbs. metallic copper equivalent)
Maximum annual application rate is 40 lbs/A (20 lbs metallic copper equivalent)

	EG	GPLANT	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Alternaria Blight Anthracnose Phomopsis	0.5 – 1.5	7	Begin applications prior to development of disease symptoms. Repeat sprays at 7-10 day intervals or as needed depending on disease severity.

Maximum single application rate is 1.5 lbs/A (0.75 lbs metallic copper equivalent)
Maximum annual application rate is 15 lbs/A (7.5 lbs metallic copper equivalent)

	ENDIVE, ESC	AROLE, LETTUCE	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew	0.25 - 2	5	Begin treatment when disease first appears and repeat every 5 - 10 days as needed to suppress disease.

## RESTRICTIONS

Maximum single application rate is 2 lbs/A (1.0 lbs metallic copper equivalent)

Maximum annual application rate is 16 lbs/A (8.0 lbs metallic copper equivalent)

	FIL	BERTS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Blight  (Post Harvest application)	4 - 12	14	Apply as a post harvest spray. In seasons of heavy rainfall, apply a second spray when three fourths of the leaves have dropped. Add 1 pint of superior-type oil per 100 gallons of water. Use higher rates when rainfall is heavy and disease pressure is high.
Eastern Filbert Blight			Apply as a dilute spray in adequate water for thorough coverage. Make initial application after harvest in October before 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. Use higher rates when rainfall is heavy and disease pressure is high.

RESTRICTIONS

Maximum single application rate is 12 lbs/A (6.0 lbs metallic copper equivalent)

Maximum annual application rate is 48 lbs/A (24.0 lbs metallic copper equivalent)

	GI	NSENG	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Alternaria Leaf Blight Stem Slight	0.5 – 2	7	Use as a tank mix with Rovral 50W in 100 gallons of water. Begin applications as soon as plants have emerged in spring. Applications should be repeated every 7 days until plants become dormant. Apply fungicides at least 8 hours before rain. Use of a spreadersticker or sticker is advised. NOTE: Alternaria Leaf and Stem Blight is most severe in humid conditions such as those found in the dense canopies of 2 to 4 year old ginseng. It is very important that the stems be thoroughly covered with fungicide; therefore, use a spray apparatus which distributes the fungicide throughout the canopy.
DECTRICTIONS			

Maximum single dormant application rate is 2 lbs/A (1 lb. metallic copper equivalent)

Maximum annual application rate is 10.5 lbs/A (5.25 lbs metallic copper equivalent)

	G	RAPES	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Black Rot Downy Mildew Phomopsis Powdery Mildew	0.5 - 6	3	Begin applications at late dormant up to bud break with subsequent applications throughout the season depending upon disease severity.
DESTRICTIONS			NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara, and Rosette.

RESTRICTIONS

Maximum single application rate is 6 lbs/A (3.0 lbs metallic copper equivalent)

Maximum annual application rate is 40 lbs/A (20.0 lbs metallic copper equivalent)

	(	GUAVA	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose Red Algae	1 – 2.4	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water volume for thorough coverage.

Maximum single dormant 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)

		HOPS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew	0.5 – 1	10	Make crown treatment after pruning, but before training. After training, make additional applications at 10 day intervals or as needed.

RESTRICTIONS

Maximum single dormant application rate is 1 lbs/A (0.5 lbs. metallic copper equivalent) Maximum annual application rate is 5 lbs/A (2.5 lbs metallic copper equivalent)

		KIWIS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Erwinia herbicola Pseudomonas fluorescens Pseudomonas syringae	1 – 4	30	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.

## RESTRICTIONS

Maximum single dormant application rate is 4 lbs/A (2 lbs. metallic copper equivalent)

Maximum annual application rate is 12 lbs/A (6 lbs metallic copper equivalent)

	Li	VE OAK	
DISEASE	APPLICATION RATE	RETREATMENT INTERVAL	COMMENT
Ball moss Spanish moss	Mix 1 ½ – 4 lbs per 100 gallons of water.	A second application may be required after 12 months.	Apply in spring after heavy rain, using 1.5 gallons of spray per foot of tree height. Make sure to wet tufts thoroughly.  NOTE: Basic Copper 50 HB may be injurious to some ornamentals grown under live oaks.  This product may be reactive on metal and masonry surfaces such as galvanized
			roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.

Maximum single application rate is 4 lbs/A (2.0 lbs metallic copper equivalent)

Maximum annual application rate is 40 lbs/A (20.0 lbs metallic copper equivalent)

	MAG	CADAMIA	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	2 – 4.5	7	Begin applications at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
Phytophthora Blight (P. capsici) Raceme Blight (Botrytis cinerea)	1 – 3		Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use higher rates when conditions favor disease development.

# RESTRICTIONS

Maximum single dormant application rate is 4.5 lbs/A (2.25 lbs. metallic copper equivalent)

Maximum annual application rate is 18 lbs/A (9 lbs metallic copper equivalent)

	MAME	EY SAPOTE	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Algal Leaf Spot Anthracnose	2 – 4	14	Apply when conditions favor disease development. Repeat on 14-28 day schedule as disease severity and environmental conditions dictate. Use higher rates when conditions favor disease development.

Maximum single dormant application rate is 4 lbs/A (2 lbs. metallic copper equivalent)
Maximum annual application rate is 16 lbs/A (8 lbs metallic copper equivalent)

	M	ANGO	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	2 - 5	30	Apply monthly after fruit set until harvest.

# RESTRICTIONS

Maximum single application rate is 5 lbs/A (2.5 lbs metallic copper equivalent)

Maximum annual application rate is 35 lbs/A (17.5 lbs metallic copper equivalent)

DISEASE  APPLICATION RATE (lbs/Acre)  Peacock Spot Olive Knot  APPLICATION RATE (lbs/Acre)  MINIMUM DAYS RETREATMENT INTERVAL  Apply post harves winter rains fall. A application in ear	OLIVES				
Olive Knot winter rains fall. A application in ear	IENT				
should be made in severe. Apply the heavy disease prowhen conditions to development.	A second rly spring if disease is high rate or ressure or				

# RESTRICTIONS

Maximum single application rate is 6 lbs/A (3 lbs metallic copper equivalent)

Maximum annual application rate is 12 lbs/A (6 lbs metallic copper equivalent)

Consult Extension Service for local recommendations.

	ONIO	V & GARLIC	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Purple Blotch Downy Mildew	0.5 - 2	7	Begin when plants are 4 to 6 inches high and repeat at 7-10 day intervals or as needed depending upon disease pressure.  NOTE: Can cause phytotoxicity to leaves.

Maximum single application rate is 2 lbs/A (1.0 lbs metallic copper equivalent)

Maximum annual application rate is 12 lbs/A (6.0 lbs metallic copper equivalent)

	PAPAYA				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT		
Anthracnose	0.75 – 5	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, such as Kinetic®, may be desirable especially during periods of heavy rains.		

# RESTRICTIONS

Maximum single application rate is 5 lbs/A (2.5 lbs metallic copper equivalent)

Maximum annual application rate is 42 lbs/A (21 lbs metallic copper equivalent)

	PA	ARSLEY	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Blight (Pseudomonas sp.)	1 – 2	10	Begin applications when plants are first established in the field and repeat at 10 day intervals. Use the higher rates when conditions favor disease.

## RESTRICTIONS

Maximum single dormant application rate is 2 lbs/A (1 lb. metallic copper equivalent)
Maximum annual application rate is 4 lbs/A (2 lbs metallic copper equivalent)

	PASS	ION FRUIT	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	2 – 4.5	7	Make initial application just before flowering and repeat every 7 days until just before harvest. Apply in sufficient water volume for thorough coverage.

Maximum single dormant application rate is 4.5 lbs/A (2.25 lbs. metallic copper equivalent)
Maximum annual application rate is 18 lbs/A (9 lbs metallic copper equivalent)

	PEACHES & NECTARINES				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT		
Dormant Season:  Bacterial Blast (Pseudonionas) Bacterial Canker Bacterial Spot (Xanthomonas) Leaf Curl Shot-Hole	4 – 16	7	Make dormant application after leaf drop and/or prior to bud swell. Can be used with superior type oils.		
Bloom & Growing Season: Brown Rot Blossom Blight (California)	1 - 3	5	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 recommended.		

## RESTRICTIONS

Maximum single dormant application rate is 16 lbs/A (8.0 lbs metallic copper equivalent)
Maximum single growing application rate is 3 lbs/A (1.5 lbs metallic copper equivalent)
Maximum annual application rate is 36 lbs/A (18.0 metallic copper equivalent)

	PE	ANUTS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Cercospora Leaf Spot	0.5 – 1.5	7	Begin spraying 35-40 days after planting or when disease symptoms appear.
			Use sufficient water to get adequate coverage.
			Continue applications at 10-14 day intervals.
			Reduce spray interval to 7 days during humid weather.
DESTRICTIONS			Use higher rates when conditions favor disease.

Maximum single application rate is 1.5 lbs/A (0.75 lbs metallic copper equivalent)
Maximum annual application rate is 9 lbs/A (4.5 metallic copper equivalent)

	PEARS & QUINCE				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT		
Bloom & Growing Season:	0.5 - 1	5	Apply at 5 day intervals throughout bloom period.		
Fireblight			NOTE: Do not apply to d'Anjou pears. Excessive dosages may cause fruit russet.		
Fall & Late Dormant:	6 - 16	Only one dormant application allowed	Apply before fall rain begins.		
Pseudomonas blight		per season	NOTE: Excessive dosages may cause fruit russet.		

# RESTRICTIONS

Maximum single dormant season application rate is 8 lbs/A (4.0 lbs metallic copper equivalent)
Maximum single growing season application rate is 1 lb/A (0.5 lbs metallic copper equivalent)
Maximum annual application rate is 32 lbs/A (16 lbs metallic copper equivalent)

		PEAS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Powdery Mildew	0.75 – 1.5		Begin applications when disease symptoms first appear and repeat every 7 days as needed. Use higher rates when conditions favor disease development.

Maximum single application rate is 1.5 lbs/A (0.75 lbs metallic copper equivalent)

Maximum annual application rate is 7.5 lbs/A (3.75 lbs metallic copper equivalent)

	· P	ECANS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Shuck and Kernel rot (Phytophthora cactorum)  Zonate leaf spot (Cristulariella pyramidalis)	1 - 4	14	Apply in sufficient water for good coverage at 2-4 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 Comment	Make only one application per year	Mix 3 lbs per 100 gallons spray plus spreader-sticker, such as Kinetic®, 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 lbs/A (2.0 lbs metallic copper equivalent)

Maximum annual application rate is 16 lbs/A (8.0 lbs metallic copper equivalent)

	PE	PPERS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Spot	0.5 – 1.5		Begin applications when conditions first favor disease development and repeat at 3-10 day intervals as needed depending on disease severity. Use higher rates when conditions are favorable for disease development.

### RESTRICTIONS

Maximum single application rate is 1.5 lbs/A (0.75 lbs metallic copper equivalent)

Maximum annual application rate is 22.5 lbs/A (11.25 lbs metallic copper equivalent)

	PIS <sup>*</sup>	TACHIOS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Botrycsphaeria Panicle Blight Botrytis Blight Late Blight (Alternaria alternata) Septoria Leaf Blight Shoot Blight	1 – 4	14	Make initial application at bud swell and repeat on a 14 to 28 day schedule as dictated by disease conditions. If disease conditions are severe, use :he higher rates and shorter spray interval.

Maximum single dormant application rate is 4 lbs/A (2 lbs. metallic copper equivalent)

Maximum annual application rate is 16 lbs/A (8 lbs metallic copper equivalent)

	PLUMS	& PRUNES	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Dormant Season:	4 - 16	7	Apply as a dormant spray.
Coryneum blight (Shot hole)			Use the higher rate when rainfall is heavy and/or disease pressure is high.
Blooming & Growing Season:	1 – 3	5	Apply full cover application at pink, red or early white bud stage.
Brown rot blossom blight			Use the higher rate when disease pressure is heavy or conditions favor disease development.

## RESTRICTIONS

Maximum single dormant season application rate is 16 lbs/A (8.0 lbs metallic copper equivalent) Maximum single growing season application rate is 3 lbs/A (1.5 lbs metallic copper equivalent) Maximum annual application rate is 36 lbs/A (18.0 lbs metallic copper equivalent)

	PO	TATOES	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Early & Late Blight	1 - 5	5	Apply at 5 to 10 day intervals beginning when plants are 6 inches high until two weeks before harvest.

### RESTRICTIONS

Maximum single application rate is 5 lbs/A (2.5 lbs metallic copper equivalent)

Maximum annual application rate is 50 lbs/A (25 lbs metallic copper equivalent)

	SO	YBEANS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Blight (Pseudomonas syringae) Bacterial Pustule (Xanthomonas campestris)	0.75 – 1.5	7	Begin applications from first node through third node development on the main stem with fully developed leaves beginning with true unifoliolate leaves (V1 - V3 growth stages) or when extended periods of wet weather are favorable for disease development. Continue on a 7-10 day schedule when conditions continue to favor disease development.
Brown Spot (Septoria glycines)			Begin applications at full bloom to when pods are 3/16" in length (R2 - R3 growth stages) or when extended periods of wet weather are favorable for disease development. Continue on a 7-10 day schedule when conditions continue to favor disease development.
Pod & Stem Blight (Diaporthe phaseolorum and Phomopsis longicola]			Begin applications when seed pod is 1/8° long through beginning pod maturity (R5 - R7 growth stages) or when extended periods of wet weather are favorable for disease development. Continue on a 7-10 day schedule if conditions continue to favor disease development.
Powdery Mildew (Microsphaera manshurica)			Begin applications when conditions favor disease development (cool humid nights and mild daytime temperatures). Continue on a 7-10 day schedule if weather conditions remain cool and wet.
Downy Mildew (Peronospora manchurica)			Begin applications when conditions favor disease development (high humidity and cool temperatures). Continue on a 7-10 day schedule if weather conditions remain cool and wet.
Frogeye Leaf Spot (Cercospora sojina)			Begin applications when wet conditions exist. Continue on a 7-10 day schedule when conditions are favorable for disease development.

	SO	YBEANS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Cercospora Leaf Blight (Cercospora kikuchii)		,	Begin applications when seed pod is 1/8" long through beginning pod maturity (R5 - R7 growth stages). Continue on a 7-10 day schedule when conditions are favorable for disease development.
Alternaria Leaf Spot (Alternaria spp.)			Apply when mechanical injury, insect damage or other disease has occurred.

Maximum single dormant application rate is 1.5 lbs/A (0.75 lbs. metallic copper equivalent)

Maximum annual application rate is 9 lbs/A (4.5 lbs metallic copper equivalent)

	SF	PINACH	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose Blue Mold Cercospora Leafspot Downy Mildew White Rust	0.5 – 1.5	, 7	Begin applications when disease first appears or when conditions favor disease development. Repeat at 7-10 day intervals as needed. Use higher rates when conditions favor disease development. NOTE: Flecking may occur on spinach leaves.

## RESTRICTIONS

Maximum single application rate is 1.5 lbs/A (0.75 lbs metallic copper equivalent)

Maximum annual application rate is 7.5 lbs/A (3.75 lbs metallic copper equivalent)

	STRA	WBERRIES	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew Leaf Spot Leaf Blight	. 1 – 3*	7	Begin application when plants are established and continue on a weekly schedule throughout season. Apply in at least 20 gallons of water.  NOTE: Discontinue applications if signs of phytotoxicity appear.

### RESTRICTIONS

Maximum single application rate is 3 lbs/A (1.5 lbs metallic copper equivalent)

Maximum annual application rate is 16 lbs/A (8.0 lbs metallic copper equivalent)

\*Use higher rates only when disease pressure is severe.

	SYC	CAMORE	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	2-4	7	Apply as a full cover spray. Apply 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 higher rates when conditions favor disease development.

Maximum single dormant application rate is 4 lbs/A (2 lbs. metallic copper equivalent)
Maximum annual application rate is 40 lbs/A (20 lbs metallic copper equivalent)

	SUGAR BEE	TS, TABLE BEETS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Cercospora Leaf Spot	1 – 2.5	10	Begin applications when conditions first favor disease development and repeat at 10-14 day intervals or as needed. Use the higher rate when disease is severe.

# RESTRICTIONS

Maximum single dormant application rate is 2.5 lbs/A (1.25 lbs. metallic copper equivalent)

Maximum annual application rate is 15 lbs/A (7.5 lbs metallic copper equivalent)

	TO	MATOES	
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Early Blight	0.5 - 1	3	Apply before fall rains.
			Use on yellow varieties may cause discoloration. To avoid, pick before spraying.
Bacterial Speck	0.5 - 1	3	Apply at 10-30 day intervals beginning when the disease threatens. Use more frequent applications when disease pressure is high.
Bacterial Spot Anthracnose Gray Leaf Mold Gray Leaf Spot Septoria Leaf Spot Late Blight	0.5 - 1	3	When disease threatens, apply at 3-10 day intervals. Use higher rate when disease is severe.

Maximum single application rate is 1 lb/A (0.5 lbs metallic copper equivalent)

Maximum annual application rate is 34 lbs/A (17.25 lbs metallic copper equivalent)

DISEASE  APPLICATION RATE (Ibs/Acre)  MINIMUM DAYS RETREATMENT INTERVAL  Apply first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications at 7-10 day intervals during bloom and early nutlet stage or as needed if 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. NOTE: Adequate control may not be obtained when copper tolerant strains of		W	ALNUTS	
bloom prior to or when catkins are partially expanded. Make additional applications at 7-10 day intervals during bloom and early nutlet stage or as needed if 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.  NOTE: Adequate control may not be obtained when copper tolerant strains of	DISEASE	1	RETREATMENT	COMMENT
Xanthomonas bacteria are present.	Walnut Blight	2 – 6	7	bloom prior to or when catkins are partially expanded. Make additional applications at 7-10 day intervals during bloom and early nutlet stage or as needed if 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. NOTE: Adequate control may not be obtained when copper tolerant strains of Xanthomonas bacteria are

RESTRICTIONS

Maximum single application rate is 6 lbs/A (3 lbs metallic copper equivalent) Maximum annual application rate is 50 lbs/A (25.0 lbs metallic copper equivalent)

	WATI	ERCRESS	
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Cercospora Leaf Spot	0.5 – 1	7	Begin applications when plants are first established in the field, repeating at 7-14 day intervals depending on disease severity and environmental conditions. Do not exceed four applications per crop. Apply using ground equipment at no less than 50 gallons of water per acre.

Maximum single dormant application rate is 1lb/A (0.5 lbs. metallic copper equivalent)

Maximum annual application rate is 4 lbs/A (2 lbs metallic copper equivalent)

WHEAT, OATS, BARLEY			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Helminth osporium Blotch Helminthosporium Spot Ssptoria Leaf Blotch	0.5 – 1	10	Make first application at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor disease development.

### RESTRICTIONS

Maximum single dormant application rate is 1 lb/A (0.5 lbs. metallic copper equivalent)
Maximum annual application rate is 2 lbs/A (1 lb metallic copper equivalent)

### CONDITIONS OF SALE

## LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale – Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Albaugh, Inc. (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Albaugh's election, one of the following:

- 1. Refund of the purchase price paid by the buyer or user for product bought, or
- 2. Replacement of the product used.

To the extent allowed by law, the Company shall not be liable and any claims against the Company are waived for special, indirect, incidental, or consequential damages or expenses of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the forgoing conditions of sale and limitation of warranty, liability and remedies.

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