OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

August 7, 2024

Nikki Ryan
Domestic Regulatory Specialist
Gowan Company, LLC
PO Box 5569
Yuma, AZ 85366-5569

Subject: Label Amendment – Label amendment incorporating Copper ID revisions, adding specific directions for use on Apple, and other minor revisions.
Product Name: GWN-10073-10120
EPA Registration Number: 10163-330
Application Date: 8/1/23, 12/13/18, 12/21/20
Case Number: 480283, 605624, 605630

Dear Nikki Ryan:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Copper Interim Decision, and has concluded that your submission is acceptable.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the

Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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

If you have any questions, please contact James Orrock by phone at 202-566-2862 or by email at orrock.james@epa.gov.

Sincerely,

Kristy Crews, Ph.D., Product Manager 22
Fungicide Branch, Registration Division (7505T)
Office of Pesticide Programs, USEPA

Enclosure- Stamped Label

GWN-10073-10120
COPPER FUNGICIDE/BACTERICIDE

ABN: PREVISTO FUNIGICIDE

ACCEPTED
08/07/2024
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 10163-330

FOR ORGANIC PRODUCTION

ACTIVE INGREDIENT:

Copper hydroxide*	5.0%
OTHER INGREDIENTS:	95.0%
Total:	100.00%

*Metallic copper equivalent, 3.3%

Contains 0.30 pounds metallic copper per gallon.

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. • Call a poison control center or doctor for treatment advice.
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.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • **DO NOT** induce vomiting unless told to do so by the poison control center or doctor. • Have person sip a glass of water if able to swallow. • **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 by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-888-478-0798** for emergency medical treatment information.	
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate use of gastric lavage. See label for additional precautions and directions for use.	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER/PELIGRO

Corrosive. Causes skin burns. Causes irreversible eye damage. Harmful if swallowed. **DO NOT** get in eyes, on skin, or on clothing. Wear coveralls worn over long-sleeved shirt and long pants, socks, chemical-resistant footwear, and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Wear protective eyewear (goggles, face shield, or safety glasses).

EPA Reg. No. 10163-330
EPA Est. No. XXXXX-XX-XX

Gowan
The Go To Company

Produced For:
Gowan Company, LLC
P.O. Box 5569
Yuma, AZ 85366-5569

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PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Coveralls worn over long-sleeved shirt and long pants
- Chemical resistant footwear
- Waterproof or chemical-resistant gloves, such as Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Natural Rubber ≥ 14 mils, Polyethylene Polyvinyl Chloride (PVC) ≥ 14 mils, Viton ≥ 14 mils
- Protective Eyewear (goggles, face shield, safety glasses)

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 mixing or loading wear a chemical resistant apron.
When handlers used 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 170.2409(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.
See Engineering Controls for Additional Requirements.

ENGINEERING CONTROLS STATEMENTS

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

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrate and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

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

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Follow all directions on the EPA approved label and any supplemental 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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of **48 hours**.

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
- Socks
- Shoes
- Chemical-resistant gloves made of any waterproof material, such as Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Natural Rubber ≥ 14 mils, Polyethylene Polyvinyl Chloride (PVC) ≥ 14 mils, Viton ≥ 14 mils
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in the 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. Keep unprotected persons out of treated area until sprays have dried.

NOTICE: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

DIRECTIONS FOR USE

GWN-10073-10120 may be applied as a ground dilute, ground concentrate, aerial dilute, or aerial concentrate spray unless specifically directed otherwise in the specific crop use directions.

Application: Depending on the equipment used and the specific crop, the spray volume per acre will differ. Complete spray coverage is essential to assure optimum performance from GWN-10073-10120. The volume of water needed will depend on the spray equipment and the size of the crops. Use in sufficient water to provide thorough coverage. Metal piping or equipment used for application should be brass or stainless steel. While volume is important in obtaining full spray coverage, often factors such as foliage density, environmental conditions and sprayer calibrations, have a greater impact. Always be sure that sprayers are calibrated to the sprayer equipment manufacturer's specifications and environmental conditions are within those recommended by state and local regulatory authorities.

Consult the GWN-10073-10120 label crop sections for specific rates and timing. Where application rates are provided in a range (2 to 4 quarts), the higher rates are recommended when disease pressure is high or when treating a more susceptible variety. Under heavy disease pressure or when conditions favor such, use the higher rates and shorter interval specified for each crop.

Mixing: When mixing, fill spray tank half full with water. Add GWN-10073-10120 to tank while hydraulic or mechanical agitation is operating and continue filling with water. Spreaders, stickers (cleared for application to growing crops,) should be added last.

Use within 12 hours after mixing.

Note: GWN-10073-10120 should not be applied in a spray solution having a pH of less than 8.0 as phytotoxicity may occur.

Compatibility: Compatible with most fungal and insecticidal biopesticides when applied at least 2 days before or after application of the biopesticide. **DO NOT** mix with lime sulfur. The pH of GWN- 10073-10120 is high, even when mixed with water and diluted in a spray tank. Avoid tank mixing GWN-10073-10120 with pesticides known to degrade rapidly in high pH environments.

Plant Safety: Phytotoxicity – GWN-10073-10120 has been tested on a wide variety of plants without phytotoxicity symptoms. However, because it is not possible to test all plant species, varieties and cultivars and because environmental factors and varietal stage of growth will vary, unacceptable phytotoxicity may occur. If you are unsure of the phytotoxicity potential of using GWN-10073-10120 on your crop it is recommended that a small group of test plants be treated at the anticipated dosage rate and observed for 5 to 7 days to determine phytotoxicity before treating large numbers of those plants.

Use of GWN-10073-10120 on Comice and D'Anjou pears is not recommended due to a high potential for unacceptable phytotoxicity to fruit and foliage.

SPRAY DRIFT

Aerial Applications:

- **DO NOT** release spray at a height greater than 10 ft. above the vegetative canopy or water, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speed exceeds 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the application area.
- **DO NOT** apply during temperature inversions

Ground Boom Applications:

- Apply with the spray release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions

SPRAY DRIFT ADVISORIES

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size – Ground Boom

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

Controlling Droplet Size – Aircraft

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

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

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

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

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

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

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

CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: sprinklers, including center pivot, lateral move, traveler, big gun, or plastic pipe solid set system(s). **DO NOT** apply this product through any other type of irrigation system. Crop injury, lack of effectiveness or illegal pesticide residues in the crop 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. Shut off injection equipment after treatment and continue to operate irrigation system until GWN-10073-10120 has been cleared from the last sprinkler head.

Posting of areas to be chemigated is required when 1) 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 2) when the 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 area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other locations 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 materials to event 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.

NOTE: It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment, such as aluminum, rubber and some synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use. When mixing, fill the nurse tank half full with water. Add GWN-10073-10120 slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Stickers, spreaders, insecticides, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all precautions and limitations on the labels of all products used in mixtures. Agitation of the mixture in the nurse tank is recommended. GWN-10073-10120 should be added through a traveling irrigation system continuously or at the last 30 minutes of solid irrigation systems.

Using Water from Public Water Systems: Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow 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 flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

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

Sprinkler or Drip Chemigation Systems
The system 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.
The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

RESISTANCE MANAGEMENT

For resistance management, GWN-10073-10120 contains a Group M1 fungicide. Any fungal population may contain individuals naturally resistant to GWN-10073-10120 and other Group M1 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide/bactericide resistance, take one or more of the following steps:

- Rotate the use of GWN-10073-10120 or other Group M1 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact a Gowan Company representative. You can also contact your pesticide distributor or university extension specialist to report resistance.

APPLICATION DIRECTIONS

CROP	PESTS	QUARTS PER ACRE (lbs metallic Cu/acre)	INSTRUCTIONS
CITRUS			
CITRUS	Algal Spot, Melanose, Scab	0.1 – 10 (0.0075 – 0.75)	Apply as pre-bloom and post-bloom sprays. Use higher rates when conditions favor disease development.
	Greasy Spot, Pink Pitting	0.1 – 10 (0.0075 – 0.75)	Apply in summer on expanded new flush. Repeat on subsequent flushes where disease pressure is severe. Use higher rates when conditions favor disease development.
	Alternaria Brown Spot (Suppression)	0.1 – 10 (0.0075 – 0.75)	On susceptible varieties, apply when the first spring flush appears and each flush thereafter. Application to the fruit should start after two thirds of the petals have fallen and be repeated on a 21-day schedule. NOTE: When using lower rates, use shorter spray intervals (7 to 14 days).
	Phytophthora Brown Rot, Septoria Spot	0.1 – 10 (0.0075 – 0.75)	Begin application in fall before or just after the first rain and continue as needed. Apply to entire tree for Septoria, or just the lower 4 to 5 feet of the tree for Brown Rot. Apply also to bare ground 1 foot beyond skirt. Use higher rates when conditions favor disease development.
	Phytophthora Foot Rot	0.1 – 10 (0.0075 – 0.75)	Mix with 1 gallon of water and paint trunks of trees from the soil surface to the lowest scaffold limbs. Apply in May prior to summer rains and/or in the fall prior to wrapping trees for freeze protection. Treatment serves as protection for up to 1 year, but does not cure existing infections. NOTE: Areas where microjet or low volume irrigation hit the tree trunk may require retreatment due to wash off.
	Citrus Canker (Suppression)	0.1 – 10 (0.0075 – 0.75)	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require an additional application. Number and timing of applications will be dependent upon disease pressure. Under heavy pressure, each flush of new growth should be sprayed.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application. • **DO NOT** apply more than 167 quarts of formulated product (12.525 lbs Cu) per acre per year. • Adding foliar micronutrients or other products to spray mixture containing GWN-10073-10120 and applying to citrus during the post-bloom period when young fruit is present may result in phytotoxicity. • **DO NOT** use GWN-10073-10120 on citrus seedlings grown in greenhouses or shadehouses. • Field Nursery Grown: To control brown rot, citrus canker (suppression), greasy spot, melanose, pink pitting, and for scab, apply 0.1-10 quarts per acre at a rate of 200 gallons of spray mixture per acre. Apply GWN-10073-10120 at 28-day intervals or as needed depending on disease severity.		
FIELD CROPS			
ALFALFA	Cercospora Leaf Spot, Leptosphaerulina Leaf Spot	0.1 – 7 (0.0075 – 0.525)	Apply 10 to 14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.
	• Minimum retreatment interval = 30 days • **DO NOT** apply more than 7 quarts of formulated product (0.525 lbs Cu) per acre per application. • **DO NOT** apply more than 14.5 quarts of formulated product (1.0875 lbs Cu) per acre per year.		
PEANUTS	Cercospora Leaf Spot	0.1 – 9.5 (0.0075 – 0.7125)	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals as needed. Use higher rates and reduce spray intervals to 7 days when conditions favor disease development.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 9.5 quarts of formulated product (0.7125 lbs Cu) per acre per application. • **DO NOT** apply more than 62 quarts of formulated product (4.65 lbs Cu) per acre per year.		

POTATOES	Early Blight, Late Blight, Black Leg, Aerial Stem Rot	0.1 – 10 (0.0075 – 0.75)	Apply lower rates at 7 to 10 day intervals starting when plants are 6 inches high when disease pressure is light and higher rates when disease pressure is more severe. Under conditions of severe disease, control with GWN-10073-10120 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.
	• Minimum retreatment interval = 5 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application. • **DO NOT** apply more than 331 quarts of formulated product (24.825 lbs Cu) per acre per year.		
SOYBEANS	Alternaria Leaf Spot (*Alternaria* spp.)	0.1 – 9.5 (0.0075 – 0.7125)	Apply when mechanical injury, insect damage or another disease has occurred. Continue on a 7 to 10 day schedule if weather conditions remain cool and wet.
	Bacterial Blight (*Pseudomonas syringae*), Bacterial Pustule (*Xanthomonas campestris*)	0.1 – 9.5 (0.0075 – 0.7125)	Begin applications from the first node through third node development on the main stem with fully developed leaves beginning with the unifoliate leaves (V1 – V3 growth stages) or when extended periods of wet weather are favorable for disease development. Continue on a 7 to 10 day schedule when conditions continue to favor disease development.
	Brown Spot (*Septoria glycines*)	0.1 – 9.5 (0.0075 – 0.7125)	Begin application 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 to 10 day schedule when conditions continue to favor disease development.
	Cercospora Leaf Blight (*Cercospora kikuchii*)	0.1 – 9.5 (0.0075 – 0.7125)	Begin application when seed in a pod is 1/8” long through beginning pod maturity (R5 – R7 growth sages). Continue on a 7 to 10 day schedule when conditions are favorable for disease development.
	Downy Mildew (*Peronospora manchurica*)	0.1 – 9.5 (0.0075 – 0.7125)	Begin applications when conditions favor disease development (high humidity and cool temperatures). Continue on a 7 to 10 day schedule if weather conditions remain cool and wet.
	Frogeye Leaf Spot (*Cercospora sojina*)	0.1 – 9.5 (0.0075 – 0.7125)	Begin applications when wet conditions exist. Continue on a 7 to 10 day schedule when conditions are favorable for disease development.
	Pod & Stem Blight (*Diaporthe phaseolorum* and *Phomopsis longicola*)	0.1 – 9.5 (0.0075 – 0.7125)	Begin application when seed in a pod is 1/8” long through beginning pod maturity (R5 – R7 growth sages) or when extended periods of wet weather are favorable for disease development. Continue on a 7 to 10 day schedule if conditions continue to favor disease development.
	Powdery Mildew (*Microsphaera manshurica*)	0.1 – 9.5 (0.0075 – 0.7125)	Begin applications when conditions favor disease development (cool humid nights and mild daytime temperatures). Continue on a 7 to 10 day schedule if weather conditions remain cool and wet.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 9.5 quarts of formulated product (0.7125 lbs Cu) per acre per application • **DO NOT** apply more than 62 quarts of formulated product (4.65 lbs Cu) per acre per year		
SUGAR BEETS	Cercospora Leaf Spot	0.1 – 10 (0.0075 – 0.75)	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use the higher rate when disease is severe.
	• Minimum retreatment interval = 10 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 104 quarts of formulated product (7.8 lbs Cu) per acre per year		

WHEAT, OATS, BARLEY	Helminthosporium Blotch, Helminthosporium Spot, Septoria Leaf Blotch	0.1 – 6.5 (0.0075 – 0.4875)	Make first applications at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor disease development.
	• Minimum retreatment interval = 10 days • **DO NOT** apply more than 6.5 quarts of formulated product (0.4875 lbs Cu) per acre per application • **DO NOT** apply more than 14 quarts of formulated product (1.05 lbs Cu) per acre per year		
SMALL FRUIT			
BLACKBERRIES (AURORA, BOYSEN, CASCADE, CHEHALEM, LOGAN, MARION, SANTIAM, THORNLESS EVERGREEN)	Alternaria, Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight,	0.1 – 10 (0.0075 – 0.75)	Make first application post-harvest and continue as needed on a 7 day interval. Apply as a full coverage spray.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	0.1 – 10 (0.0075 – 0.75)	Apply when leaf buds begin to open and repeat when flower buds show white. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 132 quarts of formulated product (9.9 lbs Cu) per acre per year		
BLUEBERRIES	Bacterial Canker	0.1 – 10 (0.0075 – 0.75)	Make first application before fall rains and a second application 4 weeks later.
	Fruit Rot, Phompsis Twig	0.1 – 10 (0.0075 – 0.75)	Dormant application: Begin applications when bloom buds begin to swell. Make additional applications at 10 to 14 day intervals or as needed before blooms open.
	Anthracnose, Alternaria, Pseudomonas Blight	0.1 – 10 (0.0075 – 0.75)	Make first application post-harvest and continue as needed on 7-10 day intervals. Apply as a full cover spray. Use higher rates for more susceptible varieties.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 111 quarts of formulated product (8.325 lbs Cu) per acre per year		
CRANBERRIES	Fruit Rots	0.1 – 10 (0.0075 – 0.75)	Make first application post-harvest and continue as needed on 7-10 day intervals. Apply as a full cover spray. Use higher rates for more susceptible varieties.
	Rose Bloom	0.1 – 10 (0.0075 – 0.75)	Apply three sprays on 10 to 14 day schedule as soon as symptoms are observed.
	Leaf Spots, Lophodermium Twig Blight, Red Leaf Spot, Tip Blight (*Monilinia*)	0.1 – 10 (0.0075 – 0.75)	Apply delayed dormant spray in the spring. Repeat at 10 to 14 day intervals or as needed through pre- bloom.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 167 quarts of formulated product (12.525 lbs Cu) per acre per year		
CURRANTS GOOSEBERRIES	Anthracnose, Leaf Spot	0.1 – 10 (0.0075 – 0.75)	Make initial application after fist leaves have expanded. Continue on a 10 to 14 day schedule during wet conditions in the spring. Make an additional application after harvest.
	• Minimum retreatment interval = 10 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 212 quarts of formulated product (15.9 lbs Cu) per acre per year		

RASPBERRIES	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust, Alternaria	0.1 – 10 (0.0075 – 0.75)	Make first application post-harvest and continue as needed on 7-10 day intervals. Apply as a full cover spray. Use higher rates for more susceptible varieties.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	0.1 – 10 (0.0075 – 0.75)	Apply when leaf buds begin to open and repeat when flower 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.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 132 quarts of formulated product (9.9 lbs Cu) per acre per year		
STRAWBERRIES	Angular Leaf Spot (*Xanthonomas*), Leaf Blight, Leaf Scorch, Leaf Spot	0.1 – 10 (0.0075 – 0.75)	Begin application when plants are established and continue on a weekly schedule throughout the season. Use the higher rates when conditions favor disease. NOTE: Discontinue applications if signs of crop injury appear.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 80 quarts of formulated product (6 lbs Cu) per acre per year		
TREE CROPS			
ALMONDS, APRICOTS	Alternaria, Bacterial Blast (*Pseudomonas*), Bacterial Canker, Shot-Hole	0.1 – 10 (0.0075 – 0.75)	Make first application before fall rains and a second at late dormant. Use higher rates when rainfall is heavy and disease pressure is high. For bacterial blast control in sprinkler irrigated orchards or where disease is severe apply at 2-week intervals or just before irrigation. NOTE: Injury may occur from post-bloom sprays on almonds, especially on Neplus varieties.
	Blossom Brown Rot, Shot- Hole	0.1 – 10 (0.0075 – 0.75)	Early bloom (popcorn) application: Apply before full bloom. Use higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, **DO NOT** use higher rates after full bloom.
	• Minimum retreatment interval = 7 days for dormant, late dormant up to pink bud • Minimum retreatment interval = 5 days for bloom / growing season • For dormant or late dormant application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • For bloom/growing season application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 238 quarts of formulated product (17.85 lbs Cu) per acre per year		
CHERRIES	Bacterial Blast (*Pseudomonas*), Bacterial Canker, Cherry leaf spot	0.1 – 10 (0.0075 – 0.75)	Make first application before fall rains and a second at late dormant. Use higher rates when rainfall is heavy and disease pressure is high. For cherries, where disease is severe, an additional application at leaf fall may be required.
	Blossom Brown Rot, Cherry leaf spot	0.1 – 10 (0.0075 – 0.75)	Early bloom (popcorn) application: Apply before full bloom. Use higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, **DO NOT** use higher rates after full bloom.
	• Minimum retreatment interval = 7 days for dormant, late dormant • Minimum retreatment interval = 5 days for bloom / growing season • For dormant or late dormant application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • For bloom/growing season application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 238 quarts of formulated product (17.85 lbs Cu) per acre per year • **DO NOT** tank mix with other pesticides, foliar nutrients, adjuvants, spreaders, buffering agents or stickers		

TART CHERRIES	Cherry Leaf Spot	0.1 – 10 (0.0075 – 0.75)	Begin applications at the first cover spray (7 to 10 days after shuck split). Repeat as needed at 10-day intervals depending on the use of other cherry leaf spot fungicides in the disease control program. Use the high rate under severe disease pressure. Use of copper Fungicides, including GWN-10073-10120, may result in phytotoxicity including yellow leaf blotches, bronzing of lower leaf surfaces, and premature leaf drop. Phytotoxicity will be more likely under warm dry conditions.
	• Minimum retreatment interval = 7 days for dormant, late dormant, up to pink bud • Minimum retreatment interval = 7 days for bloom, growing season • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application during dormant and late dormant up to pink bud • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per application during bloom /growing season • **DO NOT** apply more than 238 quarts of formulated product (17.85 lbs Cu) per acre per year		
PLUMS, PRUNE	Black Knot (Not for use in CA)	0.1 – 10 (0.0075 – 0.75)	Make an application at bud swell up to early bloom for early season disease suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: to avoid plant injury, **DO NOT** use after full bloom.
	• Minimum retreatment interval = 7 days for dormant, late dormant, up to pink bud • Minimum retreatment interval = 5 days for bloom, growing season • For dormant or late dormant up to pink bud application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • For bloom/growing season application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 238 quarts of formulated product (17.85 lbs Cu) per acre per year		
APPLES (Silver-tip – green-tip)	Fire Blight	2 – 4 (0.15 – 0.30)	Use of a reliable fire blight disease model is highly recommended. Use higher rates for more susceptible varieties. If injury is observed, discontinue use immediately.
	• Only 1 application per season permitted between silver-tip and green-tip • For between silver tip and green tip application, **DO NOT** apply more than 4 quarts of formulated product (0.30 lbs Cu) per acre per application • For all application timings, **DO NOT** apply more than 212 quarts of formulated product (15.9 lbs Cu) per acre per year • Spray volume should not exceed 100 GPA. • Cease spray activities and allow spray to dry before daytime temperatures exceed 85 degrees • **DO NOT** apply when conditions favor slow drying or immediately after or during frost control or crop irrigation, unacceptable markings to foliage may occur. • **DO NOT** tank mix with other pesticides, foliar nutrients, adjuvants, spreaders, buffering agents or stickers		
APPLES (Bloom, growing season)	Fire Blight	2 – 4 (0.15 – 0.30)	Begin applications at 10% bloom and repeat as necessary. Use of a reliable fire blight disease model is highly recommended. Use higher rates for more susceptible varieties. If injury is observed, discontinue use immediately.
	• Minimum retreatment interval = 5 days for bloom, growing season • For bloom/growing season application, **DO NOT** apply more than 4 quarts of formulated product (0.30 lbs Cu) per acre per application • For all application timings, **DO NOT** apply more than 212 quarts of formulated product (15.9 lbs Cu) per acre per year • Spray volume should not exceed 100 GPA. • Cease spray activities and allow spray to dry before daytime temperatures exceed 85 degrees • **DO NOT** apply when conditions favor slow drying or immediately after or during frost control or crop irrigation, unacceptable markings to fruit and/or foliage may occur. • **DO NOT** tank mix with other pesticides, foliar nutrients, adjuvants, spreaders, buffering agents or stickers • **EAST OF THE ROCKIES:** Moderate to severe crop injury may result from extended spray schedule after dormant stage of bud development. Various factors can influence russet development. User should weigh the benefits of this product use for disease control versus the potential for fruit quality downgrades due to surface russet.		

APPLES (Fall, late dormant)	Fire Blight	0.1 – 10 (0.0075 – 0.75)	Apply as a full cover spray.
	Black Pox, Black Rot, Brooks Spot, Flyspeck, Sooty Blotch, Summer Scab, White Rot	0.1 – 10 (0.0075 – 0.75)	
	Collar Rot, Crown Rot	0.1 – 10 (0.0075 – 0.75)	Apply suspension as a drench on the lower trunk area of each tree. NOTE: **DO NOT** use if soil pH is below 5.5 since copper toxicity may result.
	Anthracnose, Blossom Blast, European Canker, Fire Blight, Shoot Blast/Blister Spot (*Pseudomonas*)	0.1 – 10 (0.0075 – 0.75)	Apply after harvest before fall rains. Use higher rates under severe disease conditions.
	• Only 1 application per season permitted for fall, late dormant • For fall or late dormant application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • For all application timings, **DO NOT** apply more than 212 quarts of formulated product (15.9 lbs Cu) per acre per year • **DO NOT** tank mix with other pesticides, foliar nutrients, adjuvants, spreaders, buffering agents or stickers		
AVOCADOS	Anthracnose, Blotch, Scab	0.1 – 10 (0.0075 – 0.75)	Apply when bloom buds begin to swell and continue application at monthly intervals for five to six applications. Use higher rates when conditions favor disease development.
	• Minimum retreatment interval = 14 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 250 quarts of formulated product (18.75 lbs Cu) per acre per year		
BANANAS	Sigatoka	0.1 – 10 (0.0075 – 0.75)	For aerial applications, apply a minimum of 10 gallons finished spray per acre. Apply on a 7 day schedule throughout the wet season. Apply at 1 day intervals during dry periods.
	Black Pitting	0.1 – 10 (0.0075 – 0.75)	Mix in 100 gallons of water directing to the fruit stem and include the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 250 quarts of formulated product (18.75 lbs Cu) per acre per year		
CACAO	Black Pod	0.1 - 10 (0.0075 – 0.75)	Begin applications at the start of the rainy season and continue while infection periods persist. Apply lower rates at 14 to 21 day intervals in high rainfall areas. For drier areas, use higher rates according to disease incidence and planting density.
	• Minimum retreatment interval = 14 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 209 quarts of formulated product (15.675 lbs Cu) per acre per year		
COFFEE	Coffee Berry Disease	0.1 – 10 (0.0075 – 0.75)	Apply first spray after flowering and before onset of rains and then at 21 to 28 day intervals until picking. Use higher rates when rainfall is heavy and disease pressure is high.
	Bacterial Blight	0.1 – 10 (0.0075 – 0.75)	Begin spray program applications before the onset of the rains and continue throughout the rainy season at 14 to 21 day intervals. The critical time of spraying to control this disease is just before, during, and after flowering(s) especially when coinciding with weather. Use higher rates when rainfall is heavy and disease pressure is high.

	Leaf Rust (*Hemileia vastatrix*)	0.1 – 10 (0.0075 – 0.75)	Apply before the onset of rain and then at 21 day intervals while the rains continue. Use higher rates when rainfall is heavy and disease pressure is high.
	Iron Spot (*Cercospora*), Pink Disease (*Corticium*)	0.1 – 10 (0.0075 – 0.75)	Us concentrate or dilute spray. Begin treatments at the start of the wet season and continue at monthly intervals for three applications.
	• Minimum retreatment interval = 14 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 167 quarts of formulated product (12.525 lbs Cu) per acre per year		
FILBERTS	Bacterial Blight	0.1 – 12 (0.0075 – 0.9)	Apply as a postharvest spray. In seasons of heavy rainfall, apply a second spray when three fourths of the leaves have dropped. Use higher rates when rainfall is heavy and disease pressure is high.
	Eastern Filbert Blight	0.1 – 12 (0.0075 – 0.9)	Apply as a dilute spray in adequate water for thorough coverage. Make an application after harvest in October before winter rains begin. Additional applications should be made at bud swell to bud break and continued on a two week interval or as needed until early May. Use higher rates when rainfall is heavy and disease pressure is high.
	• Minimum retreatment interval = 14 days • **DO NOT** apply more than 12 quarts of formulated product (0.9 lbs Cu) per acre per application • **DO NOT** apply more than 240 quarts of formulated product (18 lbs Cu) per acre per year		
MACADAMIA	Anthracnose	0.1 – 10 (0.0075 – 0.75)	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*)	0.1- 10 (0.0075 – 0.75)	Apply during raceme development and bloom periods. Apply in sufficient water for thorough overage. Use higher rates when conditions favor disease development.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 125 quarts of formulated product (9.375 lbs Cu) per acre per year		
MANGO	Anthracnose	0.1 – 10 (0.0075 – 0.75)	Apply at 7 day intervals after fruit set until harvest. Use the higher rates when rainfall is heavy and disease pressure is high.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 637 quarts of formulated product (47.775 lbs Cu) per acre per year		
OLIVES	Olive Knot, Peacock Spot	0.1 – 10 (0.0075 – 0.75)	Apply post-harvest before winter rains fall. For best performance, apply within 24 hours after harvest. A second application in early spring should be made if disease is severe. Apply the high rate for heavy disease pressure of when conditions favor disease development.
	• Minimum retreatment interval = 30 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 238 quarts of formulated product (17.85 lbs Cu) per acre per year		
PEACHES, NECTARINES (WEST OF THE ROCKIES)	Bacterial Canker/Bacterial Blast (*Pseudomonas*), Bacterial Spot (*Xanthomonas*), Leaf Curl, Shot-Hole	0.1 – 10 (0.0075 – 0.75)	Make dormant application after leaf drop and/or prior to bud swell. Can be used with superior type oils.
	Blossom Brown Rot, Shot- Hole	0.1 – 10 (0.0075 – 0.75)	Full cover spray at pink bud.
	Bacterial Spot	0.1 – 10 (0.0075 – 0.75)	Post-bloom application applied at first and second cover sprays. Use only recommended rates. Spotting of leaves and defoliation may occur from use in cover sprays.

	• Minimum retreatment interval = 7 days • For dormant or late dormant up to pink bud application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • For bloom/growing season application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 238 quarts of formulated product (17.85 lbs Cu) per acre per year		
PEACHES, NECTARINES (EAST OF THE ROCKIES)	Bacterial Canker/Bacterial Blast (*Pseudomonas*), Bacterial Spot (*Xanthomonas*), Leaf Curl	0.1 – 10 (0.0075 – 0.75)	Make dormant application after leaf drop and/or prior to bud swell. Can be used with superior type oils.
	Bacterial Spot	0.1 – 10 (0.0075 – 0.75)	After initial dormant application, apply at early bud swell. At pink bud, make another application. Make a third application at petal fall.
	• Minimum retreatment interval = 7 days • For dormant or late dormant up to pink bud application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • For bloom/growing season application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 238 quarts of formulated product (17.85 lbs Cu) per acre per year		
PEARS (Silver –Tip – green-tip)	Fire Blight	2 – 4 (0.15 – 0.3)	Use of a reliable fire blight disease model is highly recommended. Use higher rates for more susceptible varieties. If injury is observed, discontinue use immediately. Use on D'Anjou and Comice pears is not recommended due to a high potential for unacceptable phytotoxicity to fruit and foliage.
	• Only 1 application per season permitted between silver-tip and green-tip • For between silver tip and green tip application, **DO NOT** apply more than 4 quarts of formulated product (0.3 lbs Cu) per acre per application • For all application timings, **DO NOT** apply more than 212 quarts of formulated product (15.9 lbs Cu) per acre per year • Spray volume should not exceed 100 GPA. • Stop spray activities and allow spray to dry before daytime temperatures exceed 85 degrees • **DO NOT** apply when conditions favor slow drying or immediately after or during frost control or crop irrigation, unacceptable markings to foliage may occur. • **DO NOT** tank mix with other pesticides, foliar nutrients, adjuvants, spreaders, buffering agents or stickers		
PEARS (Bloom, growing season)	Fire Blight	2 – 4 (0.15 – 0.3)	Begin applications at 10% bloom and repeat as necessary. Use of a reliable fire blight disease model is highly recommended. Use higher rates for more susceptible varieties. If injury is observed, discontinue use immediately. Use on D'Anjou and Comice pears is not recommended due to a high potential for unacceptable phytotoxicity to fruit and foliage.
	• Minimum retreatment interval = 5 days for bloom, growing season • For bloom/growing season application, **DO NOT** apply more than 4 quarts of formulated product (0.3 lbs Cu) per acre per application • For all application timings, **DO NOT** apply more than 212 quarts of formulated product (15.9 lbs Cu) per acre per year • Spray volume should not exceed 100 GPA. • Cease spray activities and allow spray to dry before daytime temperatures exceed 85 degrees • **DO NOT** apply when conditions favor slow drying or immediately after or during frost control or crop irrigation, unacceptable markings to fruit and/or foliage may occur. • **DO NOT** tank mix with other pesticides, foliar nutrients, adjuvants, spreaders, buffering agents or stickers		
PEARS (Fall, late dormant)	Fire Blight	0.1 – 10 (0.0075 – 0.75)	Use higher rates for more susceptible varieties. If injury is observed, discontinue use immediately. Use on D'Anjou and Comice pears is not recommended due to a high potential for unacceptable phytotoxicity to fruit and foliage.
	Blossom Blast *(Pseudomonas)*	0.1 – 10 (0.0075 – 0.75)	Apply before fall rains or during dormancy before spring growth starts. Use the higher rate when disease pressure is high or when conditions favor disease development.

	• Only 1 application per season permitted for fall, late dormant • For fall or late dormant application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • For all application timings, **DO NOT** apply more than 212 quarts of formulated product (15.9 lbs Cu) per acre per year • **DO NOT** tank mix with other pesticides, foliar nutrients, adjuvants, spreaders, buffering agents or stickers		
PECANS	Kernel Rot (*Phytophthora cactorum*), Shuck Rot, Zonate Leaf Spot (*Cristulariella pyramidalis*)	0.1 – 10 (0.0075 – 0.75)	For suppression, apply in sufficient water volume to ensure complete coverage at 2 to 4 week intervals starting at kernel growth and continuing until shucks open. Use the higher rate and shorter interval if frequent rainfall occurs.
	• Minimum retreatment interval = 14 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 84 quarts of formulated product (6.3 lbs Cu) per acre per year		
PISTACHIOS	Botryosphaeria, Panicle Blight, Botrytis Blight, Late Blight (*Alternaria alternate*), Septoria Leaf Blight, Shoot Blight	0.1 – 10 (0.0075 – 0.75)	Make initial application at bud swell and repeat on a 14 day schedule as dictated by disease conditions. If disease conditions are severe, use the higher rates.
	• Minimum retreatment interval = 14 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 111 quarts of formulated product (8.325 lbs Cu) per acre per year		
QUINCE	Fire Blight	0.1 – 10 (0.0075 – 0.75)	Apply at 5 day intervals throughout the bloom period. Apply in adequate water volume for thorough coverage.
	• Minimum retreatment interval = 5 days for bloom, growing season • Only 1 application per season permitted for fall, late dormant and between silver-tip and green-tip • For fall or late dormant application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • For between silver tip and green tip application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • For bloom/growing season application, **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • For all application timings, **DO NOT** apply more than 212 quarts of formulated product (15.9 lbs Cu) per acre per year		
WALNUTS	Walnut Blight	0.1 – 10 (0.0075 – 0.75)	Apply first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications 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. NOTE: Adequate control may not be obtained when copper tolerant strains of Xanthomonas bacteria are present.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 424 quarts of formulated product (31.8 lbs Cu) per acre per year		
CROP	**PESTS**	**QUARTS PER ACRE (lbs metallic Cu/acre)**	**INSTRUCTIONS**
VEGETABLES			
BEANS (DRY, GREEN)	Brown Spot, Common Blight, Downy Mildew, Halo Blight, Cercospora	0.1 – 10 (0.0075 – 0.75)	Use the higher rates when conditions favor disease development. For protective sprays, make fist application when plants are 6 inches high; repeat on a 7 to 14 day schedule depending upon environmental conditions.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application		

	• **DO NOT** apply more than 62 quarts of formulated product (4.65 lbs Cu) per acre per year		
CARROTS	Alternaria Leaf Spot, Cercospora Leaf Spot	0.1 – 10 (0.0075 – 0.75)	Begin applications when disease first threatens and repeat at 7 to 14 day intervals or as needed depending on disease severity.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 66 quarts of formulated product (4.95 lbs Cu) per acre per year		
CELERY, CELERIAC	Bacterial Blight, Cercospora Early Blight, Septoria Late Blight	0.1 – 10 (0.0075 – 0.75)	Begin applications when plants are first established in the field, repeating at 7 day intervals depending on disease severity and environmental conditions.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 70 quarts of formulated product (5.25 lbs Cu) per acre per year		
CRUCIFERS (BROCCOLI, BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER, COLLARD GREENS, MUSTARD GREENS, TURNIP GREENS)	Black Leaf Spot (*Alternaria*), Black Rot (*Xanthomonas*), Downy Mildew	0.1 – 7 (0.0075 – 0.525)	Apply at 7 to 10 day intervals. Begin applications after transplants are set in the field or shortly after emergence of field seeded drops 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.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 7 quarts of formulated product (0.525 lbs Cu) per acre per application • **DO NOT** apply more than 35 quarts of formulated product (2.625 lbs Cu) per acre per year		
CUCURBITS (CANTALOUPES, CUCUMBERS, HONEYDEW, MUSKMELON, PUMPKINS, SQUASH, WATERMELONS)	Alternaria Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermelon Bacterial Fruit Blotch (Suppression)	0.1 – 10 (0.0075 – 0.75)	Begin application when conditions are favorable for disease development. Repeat at 5 to 7 day intervals. Use shorter intervals when conditions are favorable for disease development. NOTE: Crop injury may occur from applications at shorter intervals. Discontinue use if injury occurs.
	• Minimum retreatment interval = 5 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 69 quarts of formulated product (5.175 lbs Cu) per acre per year		
EGGPLANT	Alternaria Blight, Anthracnose, Phomopsis	0.1 – 10 (0.0075 – 0.75)	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals or as needed depending on disease severity.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 104 quarts of formulated product (7.8 lbs Cu) per acre per year		
LETTUCE	Downy mildew	0.1 – 10 (0.0075 – 0.75)	Apply by ground or air when disease appears and repeat at 7-10 day intervals. Slight injury may occur under adverse weather conditions.
	• Minimum retreatment interval = 5 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 106 quarts of formulated product (7.95 lbs Cu) per acre per year		
ONIONS, GARLIC	Bacterial Blight, Downy Mildew, Purple Blotch	0.1 – 10 (0.0075 – 0.75)	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals or as needed depending upon disease pressure. Can cause phytotoxicity to leaves.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 79 quarts of formulated product (5.925 lbs Cu) per acre per year		

PEAS	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)	Begin applications when disease symptoms first appear and repeat at weekly intervals as needed. Use higher rates when conditions favor disease development.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 52 quarts of formulated product (3.9 lbs Cu) per acre per year		
PEPPERS	Anthracnose, Bacterial Spot, Cercospora Leaf Spot	0.1 – 10 (0.0075 – 0.75)	Begin applications when conditions first favor disease development and repeat at 5 to 10 day intervals as needed depending on disease severity. Use higher rates when conditions are favorable for disease development.
	• Minimum retreatment interval = 3 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 157 quarts of formulated product (11.775 lbs Cu) per acre per year		
SPINACH	Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust	0.1 – 10 (0.0075 – 0.75)	Begin applications when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals as needed. Use higher rates when conditions favor disease development. NOTE: Flecking may occur on spinach leaves.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 52 quarts of formulated product (3.9 lbs Cu) per acre per year		
TABLE BEETS	Cercospora Leaf Spot	0.1 – 10 (0.0075 – 0.75)	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use the higher rate when disease is severe.
	• Minimum retreatment interval = 10 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 104 quarts of formulated product (7.8 lbs Cu) per acre per year		
TOMATOES (FRESH MARKET)	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	0.1 – 7 (0.0075 – 0.525)	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use higher rates when conditions favor disease development.
	• Minimum retreatment interval = 3 days • **DO NOT** apply more than 7 quarts of formulated product (0.525 lbs Cu) per acre per application • **DO NOT** apply more than 106 quarts of formulated product (7.95 lbs Cu) per acre per year		
TOMATOES (PROCESSING)	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	0.1 – 7 (0.0075 – 0.525)	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use higher rates when conditions favor disease development.
	• Minimum retreatment interval = 3 days • **DO NOT** apply more than 7 quarts of formulated product (0.525 lbs Cu) per acre per application • **DO NOT** apply more than 230 quarts of formulated product (17.25 lbs Cu) per acre per year		
WATERCRESS	Cercospora Leaf Spot	0.1 – 7 (0.0075 – 0.525)	Begin applications when plants are first established in the field, repeating at 7 to 14 day intervals depending on disease severity and environmental conditions. Apply using ground equipment at no less than 50 gallons of water per acre. For applications made to watercress, production fields must be drained of water at least 24 hours prior to each application and water must not be reapplied to the field for a minimum of 24 hours following each application. Copper must not be applied to watercress during the aquatic production phase.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 7 quarts of formulated product (0.525 lbs Cu) per acre per application • **DO NOT** apply more than 28 quarts of formulated product (2.1 lbs Cu) per acre per year		

VINES			
GRAPES	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	0.1 – 10 (0.0075 – 0.75)	Begin applications at late dormant up to bud break with subsequent applications throughout the season depending up on disease severity. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara, and Rosette.
	• Minimum retreatment interval = 3 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 265 quarts of formulated product (19.875 lbs Cu) per acre per year		
HOPS	Downy Mildew	0.1 – 7 (0.0075 – 0.525)	Make crown treatment after pruning, but before training. After training, make additional applications at 10 day intervals or as needed.
	• Minimum retreatment interval = 10 days • **DO NOT** apply more than 7 quarts of formulated product (0.525 lbs Cu) per acre per application • **DO NOT** apply more than 35 quarts of formulated product (2.625 lbs Cu) per acre per year		
KIWI	Erwinia herbicola, Pseudomonas fluorescens, Pseudomonas syringae	0.1 – 10 (0.0075 – 0.75)	Apply in 200 gallons of water per acre. Make applications on a monthly basis.
	• Minimum retreatment interval = 30 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 83 quarts of formulated product (6.225 lbs Cu) per acre per year		
CROP	**PESTS**	**QUARTS PER ACRE (lbs metallic Cu/acre)**	**INSTRUCTIONS**
MISCELLANEOUS			
ATEMOYA	Anthracnose	0.1 – 10 (0.0075 – 0.75)	Make initial application just before flowering and repeat on a weekly schedule.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 167 quarts of formulated product (12.525 lbs Cu) per acre per year		
CARAMBOLA	Anthracnose	0.1 – 10 (0.0075 – 0.75)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 139 quarts of formulated product (10.425 lbs Cu) per acre per year		
CHIVES	Downy Mildew	0.1 – 7 (0.0075 – 0.525)	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.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 7 quarts of formulated product (0.525 lbs Cu) per acre per application • **DO NOT** apply more than 35 quarts of formulated product (2.625 lbs Cu) per acre per year		
DILL	Phoma Leaf Spot, Rhizoctonia Foliage Blight	0.1 – 10 (0.0075 – 0.75)	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.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 52 quarts of formulated product (3.9 lbs Cu) per acre per year		

DOUGLAS FIR	Rhabdocline Needlecast	0.1 – 10 (0.0075 – 0.75)	Begin applications at bud break and repeat at 3 to 4 week intervals. Apply in a tank mix with another registered compatible fungicide if moderate to severe disease pressure is present.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 265 quarts of formulated product (19.875 lbs Cu) per acre per year		
GINSENG	Alternaria Leaf Blight, Stem Blight	0.1 – 10 (0.0075 – 0.75)	Begin GWN-10073-10120 + Rovral 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 spreader-sticker or sticker is advised. NOTE: Alternaria Leaf and stem Blight is most severe in humid conditions such as those found in the dense canopies of 2 to 4 year old Ginseng. It is very important that the stems be thoroughly covered with fungicide; therefore, use a spray apparatus that distributes the fungicide throughout the canopy.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 69 quarts of formulated product (5.175 lbs Cu) per acre per year		
GUAVA	Anthracnose, Red Algae	0.1 – 10 (0.0075 – 0.75)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water volume for thorough coverage.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 65 quarts of formulated product (4.875 lbs Cu) per acre per year		
LITCHI	Anthracnose	0.1 – 10 (0.0075 – 0.75)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water volume for though coverage.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 65 quarts of formulated product (4.875 lbs Cu) per acre per year		
OKRA	Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew	0.1 – 10 (0.0075 – 0.75)	Begin treatment when disease first threatens and repeat every 5 to 10 days or as needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions favor disease.
	• Minimum retreatment interval = 5 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 69 quarts of formulated product (5.175 lbs Cu) per acre per year		
LIVE OAKS	Ball Moss	0.1 – 10 (0.0075 – 0.75)	Apply 4 quarts per 100 gallons of water in the spring when Ball Moss is actively growing, using 1.5 gallons of spray per foot of tree height. Make sure to wet Ball Moss tufts thoroughly. A second application may be required after 12 months.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 265 quarts of formulated product (19.875 lbs Cu) per acre per year		
MAMEY SAPOTE	Algal Leaf Spot, Anthracnose	0.1 – 10 (0.0075 – 0.75)	Apply when conditions favor disease development. Repeat on 14 to 28 day schedule as a disease severity and environmental conditions dictate. Use higher rates when conditions favor disease development.
	• Minimum retreatment interval = 14 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 111 quarts of formulated product (8.325 lbs Cu) per acre per year		

PAPAYAS	Anthracnose	0.1 – 10 (0.0075 – 0.75)	Apply before disease appears. Apply at 10 to 14 day intervals under light disease pressure and at 7 day intervals under heavy disease pressure. The addition of an approved spreader is recommended. Use higher rates when conditions favor disease development.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 281 quarts of formulated product (21.075 lbs Cu) per acre per year		
PARSLEY	Bacterial Blight (*Pseudomonas* sp.)	0.1 – 10 (0.0075 – 0.75)	Begin applications when plants are fist established in the field and repeat at 10 day intervals depending upon disease severity and environmental conditions.
	• Minimum retreatment interval = 10 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 26 quarts of formulated product (1.95 lbs Cu) per acre per year		
PASSION FRUIT	Anthracnose	0.1 – 10 (0.0075 – 0.75)	Make initial application just before flowing and repeat on a weekly schedule until just before harvest. Apply in sufficient water volume for though coverage.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 125 quarts of formulated product (9.375 lbs Cu) per acre per year		
SUGAR APPLE	Anthracnose	0.1 – 10 (0.0075 – 0.75)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water volume for thorough coverage.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 167 quarts of formulated product (12.525 lbs Cu) per acre per year		
SYCAMORE	Anthracnose	0.1 – 10 (0.0075 – 0.75)	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.
	• Minimum retreatment interval = 7 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 265 quarts of formulated product (19.875 lbs Cu) per acre per year		

SPECIFIC DIRECTIONS FOR SPRAY APPLICATIONS IN GREENHOUSE, FIELD, LANDSCAPE AND INTERIOR:

Annual and Perennial Bedding Plants, Potted Flowering Crops, Tropical Foliage, Cut Flower Crops and Nursery Crops. Spray for thorough foliage coverage. Re-spray rates and intervals vary with severity of disease and adversity of environmental conditions. In the event of heavy disease pressure, intervals can be shortened to a minimum of 7 days. Lower rates may be as effective as higher rates and should be tried first. Routine preventive programs may be maintained at the lower rates. Use of low volume equipment is effective against Botrytis and not effective against established powdery mildew and Xanthomonas infections. Applications on actively growing tissue may be more effective than applications on dormant tissue.

APPLICATION DIRECTIONS

DO NOT apply more than 26 quarts of formulated product (1.95 lbs Cu) per acre per application
DO NOT apply more than 265 quarts of formulated product (19.875 lbs Cu) per acre per year

CROP	PEST	QUARTS PER 100 GALLONS OF TOTAL SPRAY SOLUTION (lbs metallic Cu)
ANNUAL AND PERENNIAL BEDDING PLANTS Such as but not limited to:		
ALYSSUM	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Downy Mildew	0.1 – 10 (0.0075 – 0.75)
BEGONIA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas	0.1 – 10 (0.0075 – 0.75)

DAYLILY	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Erwinia	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
DELPHINIUM	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
DUSTY MILLER	Alternaria	0.1 – 10 (0.0075 – 0.75)
	Botrytis	0.1 – 10 (0.0075 – 0.75)
FUCHSIA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
GERANIUM	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Rust (preventive)	0.1 – 10 (0.0075 – 0.75)
	Rust (therapeutic)	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas (preventive)	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas (therapeutic)	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas (preventive	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas (therapeutic)	0.1 – 10 (0.0075 – 0.75)
IMPATIENS	Alternaria	0.1 – 10 (0.0075 – 0.75)
	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
NEW GUINEA IMPATIENS	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
IPOMOEA	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
PANSY	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Cercospora	0.1 – 10 (0.0075 – 0.75)
	Phytophthora	0.1 – 10 (0.0075 – 0.75)
PERENNIALS	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Downy Mildew	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
PERIWINKLE / VINCA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Phytophthora	0.1 – 10 (0.0075 – 0.75)
RANUNCULUS	Bacterial Blight	0.1 – 10 (0.0075 – 0.75)
	Botrytis	0.1 – 10 (0.0075 – 0.75)
SALVIA	Downy Mildew	0.1 – 10 (0.0075 – 0.75)
SNAPDRAGON	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Downy Mildew	0.1 – 10 (0.0075 – 0.75)
	Rust	0.1 – 10 (0.0075 – 0.75)
ZINNIA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas	0.1 – 10 (0.0075 – 0.75)
POTTED FLOWERING CROPS Such as but not limited to:		
AFRICAN VIOLET	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
AZALEA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Colletotrichum	0.1 – 10 (0.0075 – 0.75)
	Cylindrocladium	0.1 – 10 (0.0075 – 0.75)

CALLA LILY	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Erwinia	0.1 – 10 (0.0075 – 0.75)
CHRYSANTHEMUM	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Erwinia	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
CYCLAMEN	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Erwinia	0.1 – 10 (0.0075 – 0.75)
EASTER LILY	Botrytis	0.1 – 10 (0.0075 – 0.75)
	• **DO NOT** apply more than 33 quarts of formulated product (2.475 lbs Cu) per acre per application • **DO NOT** apply more than 995 quarts of formulated product (74.625 lbs Cu) per acre per year • **DO NOT** apply any additional copper pesticide to this land for 36 months	
GERBERA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
HYDRANGEA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
KALANCHOE	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Erwinia	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
LISIANTHUS	Botrytis	0.1 – 10 (0.0075 – 0.75)
ORCHID	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Erwinia	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas	0.1 – 10 (0.0075 – 0.75)
POINSETTIA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew (preventive)	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew (therapeutic)	0.1 – 10 (0.0075 – 0.75)
	Scab	0.1 – 10 (0.0075 – 0.75)
	Erwinia (preventive)	0.1 – 10 (0.0075 – 0.75)
	Erwinia (therapeutic)	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas (preventative)	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas (therapeutic)	0.1 – 10 (0.0075 – 0.75)
PRIMULA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Erwinia	0.1 – 10 (0.0075 – 0.75)
ROSE BUSH	Black Spot (preventive)	0.1 – 10 (0.0075 – 0.75)
	Black Spot (therapeutic)	0.1 – 10 (0.0075 – 0.75)
	Botrytis (preventive)	0.1 – 10 (0.0075 – 0.75)
	Botrytis (therapeutic)	0.1 – 10 (0.0075 – 0.75)
	Cylindrocladium (preventive)	0.1 – 10 (0.0075 – 0.75)
	Cylindrocladium (therapeutic)	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew (preventive)	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew (therapeutic)	0.1 – 10 (0.0075 – 0.75)

TULIP	Botrytis	0.1 – 10 (0.0075 – 0.75)
TROPICAL FOLIAGE CROPS Such as but not limited to:		
DRACAENA	Rust	0.1 – 10 (0.0075 – 0.75)
HIBISCUS	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas	0.1 – 10 (0.0075 – 0.75)
IVY	Bacterial Leaf Spot	0.1 – 10 (0.0075 – 0.75)
	Botrytis	0.1 – 10 (0.0075 – 0.75)
SPATHIPHYLLUM	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Cylindrocladium	0.1 – 10 (0.0075 – 0.75)
	Phytophthora	0.1 – 10 (0.0075 – 0.75)
TROPICAL FOLIAGE (GENERAL)	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Erwinia	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas	0.1 – 10 (0.0075 – 0.75)
HERBACEOUS AND WOODY STOCK PLANTS AND CUTTINGS Limited to On-site Propagation Only Such as but not limited to: **Specific Directions for spray and dip applications during propagation:** When harvesting cuttings on site, spray or fog stock plants 1 to 2 days prior to taking cuttings. Spray cuttings to drench again at same rate 2 to 3 days after sticking in rooting media, or dip cuttings for a few seconds prior to sticking. When using rooted, callused, or unrooted cuttings shipped in, spray cuttings to drench 2 to 3 days after planting or sticking, or dip cuttings for a few seconds prior to sticking. Under severe disease pressure, repeat in 7 to 10 days. Cuttings are not for retail sale.		
AZALEA	Cylindrocladium	0.1 – 10 (0.0075 – 0.75)
CHRYSANTHEMUM	Erwinia	0.1 – 10 (0.0075 – 0.75)
GERANIUM	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas	0.1 – 10 (0.0075 – 0.75)
HYDRANGEA	Xanthomonas	0.1 – 10 (0.0075 – 0.75)
MINI-ROSE	Cylindrocladium	0.1 – 10 (0.0075 – 0.75)
POINSETTIA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Erwinia	0.1 – 10 (0.0075 – 0.75)
	Scab	0.1 – 10 (0.0075 – 0.75)
TROPICAL FOLIAGE	Cylindrocladium	0.1 – 10 (0.0075 – 0.75)
	Erwinia	0.1 – 10 (0.0075 – 0.75)
CUT FLOWER CROPS **For Pre-Harvest Application Only** Such as but not limited to:		
GERBERA	Botrytis	0.1 – 10 (0.0075 – 0.75)

GLADIOLA	Botrytis	0.1 – 10 (0.0075 – 0.75)
LISIANTHUS	Botrytis	0.1 – 10 (0.0075 – 0.75)
ORCHID	Botrytis	0.1 – 10 (0.0075 – 0.75)
ROSE	Botrytis	0.1 – 10 (0.0075 – 0.75)
ZINNIA	Botrytis	0.1 – 10 (0.0075 – 0.75)
NURSERY CROPS Such as but not limited to:		
AZALEA	Anthracnose	0.1 – 10 (0.0075 – 0.75)
	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Cylindrocladium	0.1 – 10 (0.0075 – 0.75)
	Phytophthora	0.1 – 10 (0.0075 – 0.75)
BUXUS	Volutella	0.1 – 10 (0.0075 – 0.75)
DOGWOOD	Anthracnose	0.1 – 10 (0.0075 – 0.75)
	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
EUONYMUS	Anthracnose	0.1 – 10 (0.0075 – 0.75)
	Botrytis	0.1 – 10 (0.0075 – 0.75)
HAWTHORN	Cedar Apple Rust	0.1 – 10 (0.0075 – 0.75)
HYDRANGEA	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Cercospora	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
	Xanthomonas	0.1 – 10 (0.0075 – 0.75)
INDIAN HAWTHORN	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Entomosporium	0.1 – 10 (0.0075 – 0.75)
JAPANESE MAPLE	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
	Verticillium	0.1 – 10 (0.0075 – 0.75)
LILAC	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
ROSACEAE SUCH AS: COTONEASTER, MALUS, MOUNTAIN ASH, ORNAMENTAL CRABAPPLE, ORNAMENTAL PEAR, PYRACANTHA	Apple Scab	0.1 – 10 (0.0075 – 0.75)
	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Fire Blight	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
RHODODENDRON	See Soil Drench Application for Rates	0.1 – 10 (0.0075 – 0.75)
ROSE	See Flowering Potted Crops for Rates	0.1 – 10 (0.0075 – 0.75)
WOODY NURSERY CROPS	Botrytis	0.1 – 10 (0.0075 – 0.75)
	Powdery Mildew	0.1 – 10 (0.0075 – 0.75)
	Pseudomonas	0.1 – 10 (0.0075 – 0.75)
	Rhizoctonia	0.1 – 10 (0.0075 – 0.75)
NON BEARING FRUIT TREES AND VINES (DO NOT APPLY TO TREES THAT WILL BEAR FRUIT WITHIN ONE YEAR.)	Melanose	0.1 – 10 (0.0075 – 0.75)
	Greasy spot	0.1 – 10 (0.0075 – 0.75)
	Brown rot	0.1 – 10 (0.0075 – 0.75)
	Canker	0.1 – 10 (0.0075 – 0.75)

	Leaf spot	0.1 – 10 (0.0075 – 0.75)
	Fire blight	0.1 – 10 (0.0075 – 0.75)
	Anthracnose	0.1 – 10 (0.0075 – 0.75)
	Downy mildew	0.1 – 10 (0.0075 – 0.75)
	Powdery mildew	0.1 – 10 (0.0075 – 0.75)
BULB DIP APPLICATIONS **Specific Directions:** Dip bulbs for 5 minutes, or spray bulbs to drip, then allow to dry before planting.		
CALLA LILY	Erwinia	0.1 – 10 (0.0075 – 0.75)
SOIL DRENCH APPLICATIONS – GEENHOUSE, FIELD, LANDSCAPE AND INTERIOR		
AFRICAN VIOLET	Phytophthora	0.1 – 10 (0.0075 – 0.75)
ASTER	Phytophthora	0.1 – 10 (0.0075 – 0.75)
AZALEA	Cylindrocladium	0.1 – 10 (0.0075 – 0.75)
	Rhizoctonia	0.1 – 10 (0.0075 – 0.75)
CYCLAMEN	Erwinia	0.1 – 10 (0.0075 – 0.75)
FERNS	Rhizoctonia	0.1 – 10 (0.0075 – 0.75)
GERANIUM	Botrytis	0.1 – 10 (0.0075 – 0.75)
HOSTA	Erwinia	0.1 – 10 (0.0075 – 0.75)
IMPATIENS	Phytophthora	0.1 – 10 (0.0075 – 0.75)
JAPANESE MAPLE	Verticillium	0.1 – 10 (0.0075 – 0.75)
PANSY	Phytophthora	0.1 – 10 (0.0075 – 0.75)
	Pythium	0.1 – 10 (0.0075 – 0.75)
PERIWINKLE	Phytophthora	0.1 – 10 (0.0075 – 0.75)
PITTOSPORUM	Rhizoctonia	0.1 – 10 (0.0075 – 0.75)
POINSETTIA	Rhizoctonia	0.1 – 10 (0.0075 – 0.75)
RHODODENDRON	Rhizoctonia	0.1 – 10 (0.0075 – 0.75)
ROSE	Black Spot	0.1 – 10 (0.0075 – 0.75)
SPATHIPHYLLUM	Phytophthora	0.1 – 10 (0.0075 – 0.75)

TURF			
CROP	**PEST**	**QUARTS PER 100 GALLONS OF TOTAL SPRAY SOLUTION**	**INSTRUCTIONS**
TURFGRASS	Algae	0.1 – 10 (0.0075 – 0.75)	Apply in 5 gallons of water to control algae. This product may be used alone or in combination with other registered fungicides as a maintenance spray.
	NOTE: Phytotoxicity may occur depending upon varietal differences. If injury occurs discontinue use. • Minimum retreatment interval = 10 days • **DO NOT** apply more than 10 quarts of formulated product (0.75 lbs Cu) per acre per application • **DO NOT** apply more than 278 quarts of formulated product (20.85 lbs Cu) per acre per year		

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.
PESTICIDE STORAGE: Store product in original container only, away from other pesticides, fertilizers, food or feed.
PESTICIDE DISPOSAL: Pesticide wastes may be 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 Region Office for guidance.
CONTAINER DISPOSAL: Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying.
For Plastic Containers: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.
For Plastic Containers: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.
CONTAINER DISPOSAL: For Bulk Containers – Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300.
For other product information, contact Gowan Company or see Material Safety Data Sheet.

NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS

Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Gowan Company, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer and User.

Gowan Company LLC warrants that this product conforms to the specifications on the label when used in strict conformance with Direction for Use, subject to the above stated risk limitations. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY'S LLC EXCLUSIVE LIABILITY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY IS STRICTLY LIMITED TO THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT, AT GOWAN COMPANY'S LLC SOLE DISCRETION.

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