



**OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION**

WASHINGTON, D.C. 20460

August 22, 2024

Jeffrey Currie  
Consultant  
Agro-K Corp.  
c/o Spring Regulatory Sciences  
6620 Cypresswood Dr., Suite 250  
Spring, TX 77379

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – The Addition of Language to the Environmental Hazards Section. And the Addition of the Required Copper Compound ID Mitigation per the Interim Registration Review for Copper Products  
Product Name: Sysstem-Cal Blue  
EPA Registration Number: 48222-15  
Application Date: 09/01/2023  
Action Code Case Number: 00489463

Dear Mr. Currie:

The amended labeling 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 terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this 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 18 months from the date of this letter. After 18 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.

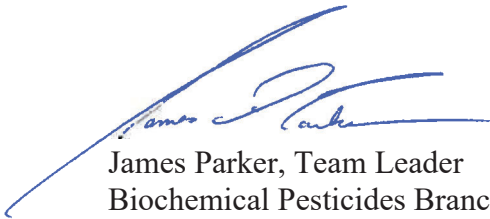
Should you wish to add/retain a reference to your company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section

12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains 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 Assurance.

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

If you have any questions, please contact Chris Pfeifer of my team by phone at (202) 566-1599 or via email at [pfeifer.chris@epa.gov](mailto:pfeifer.chris@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "James Parker", is written over a horizontal line.

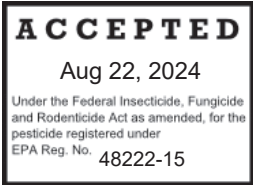
James Parker, Team Leader  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)  
Office of Pesticide Programs

Enclosure

[ ] – Brackets denote optional text

# Sysstem®-Cal Blue

**[[A Calcium Enriched] Fungicide]**  
**ACTIVE INGREDIENTS:**



Calcium Salts of Phosphorous Acid*	7.87%
Phosphorous Acid**	13.4%
Copper Sulfate Pentahydrate <sup>+</sup>	1.1%
<b>OTHER INGREDIENTS</b>	<b>77.23%</b>
<b>TOTAL</b>	<b>100.0%</b>

\*Contains 0.79 lbs/gal of Calcium Salts of Phosphorous Acid

\*\*Contains 1.35 lbs/gal of Phosphorus Acid

<sup>+</sup>Contains 0.03 lbs/gal of elemental Copper

Contains 4% by weight of Calcium (Ca)

## 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	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>Call poison control or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water, if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the oison control center or doctor</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>Move person to fresh air</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-tomouth, if possible.</li> <li>Call poison control center or doctor for further treatment,</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.	
<b>Hotline Number</b> <ul style="list-style-type: none"> <li>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</li> <li>For medical emergencies, call the poison control center at 1-800-222-1222</li> <li>For general information on this product, call 1-800-328-2418 between the hours of 8AM-4PM CST, or contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8AM to 12PM PST, or at <a href="http://npic.orst.edu">http://npic.orst.edu</a>.</li> </ul>	

[See [Back] [Side] [Other] Panel for Precautionary Statements]

Net Contents: \_\_\_\_\_ Gallons

Batch No.: \_\_\_\_\_

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

## **DANGER – PELIGRO**

**DANGER:** Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Harmful if inhaled. Avoid breathing vapor or spray mist. Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wear long-sleeved shirt and long pants, shoes plus socks, protective goggles, waterproof or chemical resistant gloves, and a NIOSH approved respirator with an organic vapor (OV) cartridge with any combination N, R or P filter with NIOSH approval number prefix TC – 84A; or a NIOSH approved gas mask with an organic vapor canister with NIOSH approval number prefix TC – 14G; or a NIOSH approved powered air purifying respirator with organic vapor (OV) cartridge and combination HE filter with NIOSH approval number prefix TC – 23C). 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

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks, waterproof or chemical resistant gloves, protective goggles, and a NIOSH approved respirator with an organic vapor (OV) cartridge with any combination N, R or P filter with NIOSH approval number prefix TC – 84A; or a NIOSH approved gas mask with an organic vapor canister with NIOSH approval number prefix TC – 14G; or a NIOSH approved powered air purifying respirator with organic vapor (OV) cartridge and combination HE filter with NIOSH approval number prefix TC – 23C). . Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

### **ENGINEERING CONTROLS**

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

### **USERS SAFETY RECOMMENDATIONS**

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. This product is toxic to fish and aquatic invertebrates.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office for the EPA.

## **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers to be in the area during application. For any Requirements specific to your state or Tribe, consult the state or tribal agency responsible for pesticide regulation.

### **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), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Workers Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is: coveralls over long-sleeved shirt and long pants, socks, shoes, chemical resistant gloves and protective eyewear.

### **NON-AGRICULTURAL USE REQUIREMENTS**

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

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

#### **Restrictions**

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

### **PESTICIDE RESISTANCE MANAGEMENT**

For resistance management, Blue Cal Rx contains a Group (M1) fungicide. Any fungal population may contain individuals naturally resistant to Blue Cal Rx and other Group (M1) fungicides/bactericides. 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 Clue Cal Rx or other M1 fungicides/bactericides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides/bactericides 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/bactericide 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/bactericide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal/bacterial 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. Report any incidence of non-performance of this product against a particular pathogen to your Agro-K Inc. retailer, representative or call 800-328-2418. If resistance is suspected, treat pathogens with a fungicide/bactericide having a different mechanism of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further reproduction.

## **AGRICULTURAL USE INSTRUCTIONS**

### **GENERAL APPLICATION INSTRUCTIONS**

Apply this product by various application methods, including foliar spray (aerial and ground), soil drench, soil incorporation and bare root dip. For foliar sprays, apply this product with sufficient water volumes for adequate coverage of foliage, according to crop and growth stage.

Make applications prior to disease development in conjunction with good cultural management practices. Do not exceed the use rates or apply more frequently than the specified interval or plant injury can occur. Do not apply to plants that are heat or moisture stressed. Allow foliage to dry completely after application. Do not apply when conditions favor wet plant tissues for prolonged periods (>4 hours).

### **MIXING INSTRUCTIONS**

1. Fill the spray tank with 1/2 to 3/4 of the required volume of water before adding the product.
2. Add the product slowly to the tank and agitate by hydraulic or mechanical means.
3. Continue to fill the tank with water to the desired volume while agitating.
4. Continue agitation when applying.

#### **Mandatory Spray Drift Management**

##### **Aerial Applications:**

- Do not release spray at a height greater than 10ft. 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 S641)
- Do not apply when wind speed exceeds 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the application area.
- Do not apply during temperature inversions.

##### **Ground Boom Applications:**

- Apply with the spray release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572).
- Do not apply when wind speed 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** *{Note: remove if aerial application prohibited on label}*

- Volume – Increasing spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a 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** *{Note: remove if aerial application prohibited on label}*

- 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 10ft. 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.

## COMPATIBILITY

This product is compatible with most products used in agriculture. However, crop sensitivity to these mixtures may vary. If these combinations or others have not been previously used, do not tank mix without first testing the mixture's compatibility nor apply it without assessing its safety to the crop (Phytotoxicity).

The use of spray adjuvants (i.e. stickers, spreaders, wetting agents) will enhance this products performance. If an adjuvant is used with this product, test before use for compatibility. Do not use strongly acidifying compatibility agents.

To determine the compatibility of this product with other products, use a jar compatibility test. Add the correct proportions of each product and the appropriate quantity of water to clean container, thoroughly mix, then let stand for 3-5 minutes. If the mixture remains in solution or can be remixed readily, the products are considered compatible.



To determine if a combination is phytotoxic to a specific crop, spray a few plants/trees/vines, then evaluate 3-7 days later for visual effects.

**CHEMIGATION:** Apply this product only through the following types of systems: sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, and hydroponic solutions. 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.

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

Chemigation systems connected to public water system must contain a functional, reduced pressure zone (RPZ) backflow preventer 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 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 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.

Use a pesticide supply tank that is equipped with a means for continuous agitation either by recirculation or a mechanical agitator. Charge the supply tank with the appropriate amount of water and add the pesticide slowly followed by any sticker- spreaders, insecticides, nutrients, etc. Observe all directions, cautions and limitations on the label of the product(s) being mixed.



For fixed position irrigation systems, apply the pesticide towards the end of the irrigation period. Exact timing will depend on the desired pesticide application rate and calibration of the system. Apply the pesticide continuously through irrigation systems that move and do not irrigate the same or fixed area during the irrigation cycle.

Complete the pesticide injection in sufficient time to allow the pesticide to be completely flushed out of the irrigation system before the system is shut down.

**SPRINKLER CHEMIGATION:** 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 back flow.

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 system interlock.

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

Use a pesticide supply tank that is equipped with a means for continuous agitation either by recirculation or a mechanical agitator. Charge the supply tank with the appropriate amount of water and add the pesticide slowly followed by any sticker- spreaders, insecticides, nutrients, etc. Observe all directions, cautions and limitations on the label of the product(s) being mixed.

For fixed position irrigation systems, apply the pesticide towards the end of the irrigation period. Exact timing will depend on the desired pesticide application rate and calibration of the system. Apply the pesticide continuously through irrigation systems that move and do not irrigate the same (fixed) area during the irrigation cycle.

Complete the pesticide injection in sufficient time to allow the pesticide to be completely flushed out of the irrigation system before the system is shut down.

## **GENERAL HYDROPONIC APPLICATION [\*]**

General Root Rots ( <i>Pythium</i> , <i>Phytophthora</i> )	For use with plants grown in recirculating hydroponic systems to aid in the control of pathogens.	Add 1-3 quarts [(1-3 L)] SYSTEM-CAL BLUE per 5,000 gallons [(20,000 L)] nutrient solution.	Repeat every 4-6 weeks in summer and every eight weeks in winter. Depending on crop load and the water quality, the application time interval may be reduced.
--	---	--	---

[\*Not registered for use in California.]

**Note: For Recirculating (i.e. closed systems) use only.**

## AVOCADO

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Canker ( <i>Phytophthora citricola</i> )	Trunk Spray	Mix 1.5-3 quarts [(3.5-7 L)] in 5 gallons [(20 L)] of water. Add 0.25% wetting agent to the solution.	Apply to trunk lesions using enough spray volume to thoroughly wet the lesions. In the absence of lesions, apply to the trunk from the soil line to about two feet up the trunk. Use the higher rate when lesions are present. Apply one time in the Spring, Summer and Fall.
Root Rot ( <i>Phytophthora cinnamorni</i> )	Foliar Spray	Apply 1.5-3 quarts/acre [(3.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	Apply up to 6 applications per year at 4-8 week intervals at the start of the growing season.
	Aerial:		
	Ground:	Apply 3 quarts/acre [(7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Chemigation Low Volume:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply one time in the Spring, Summer and Fall.
[*]Suppression of Powdery Mildew	Foliar Spray Ground:	Apply 2-3 quarts/acre [(5-7L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.  [SYSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other registered fungicides.]	Apply at the first onset of the disease and repeat at 7-10 day intervals until disease abatement.
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre [(0.135 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]

**[\*]BANANA**

<b>DISEASE</b>	<b>APPLICATION METHOD</b>	<b>APPLICATION RATE</b>	<b>APPLICATION PROGRAM</b>
[*]Suppression of Root Rot Complex and Sigatoka	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)]. At the low rate, use 3 gallons/acre [(25 L/ha)] of water and at the high rate, use 6 gallons/acre [(50 L/ha)] of water.	Apply every 4 weeks as needed.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 15 gallons/acre [(150 L/ha)] of water.	
	Chemigation	Apply 2-3 quarts/acre [(5-7 L/ha)] in at least 100 gallons/acre [(1,000 L/ha)] of water.	Apply 4 times per year.
[*]Suppression of Bunch Diseases	Foliar Spray	Mix a 0.75-1 % v/v spray solution (4 fl oz/10 gallons of water or [300 ml/L] of water).	Apply a full cover spray to the fruit bunches when the flower rachis are fully expanded (approximately at bunch cover) and again 14 days later.
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	36 quarts/acre [(0.27 lbs Cu <sup>2+</sup> /A)]	14 days

[\*Not registered for use in California.]

## BERRY CROPS:

Blackberry, Boysenberry, Blueberry, Dewberry, Elderberry, Loganberry, Marionberry, Evergreen Berry, Cranberry, Boysenberry, and Raspberry

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium spp.</i>	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	Begin applications in the Spring after bud break (1-3 inches of new growth) and when conditions favor disease development. <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 2-3 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*</b> : Apply higher rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Root Dip	Mix a 3% v/v solution (1.5 quarts/10 gallons of water or [(2.5 L/40 L)] of water).	Apply as pre-plant dip to the roots for 5 seconds. Plant within 48 hours after dipping. Mix a fresh solution daily.
	Chemigation Overhead:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 4 times per crop cycle.
	Low Volume:	Apply 2- quarts/acre [(5L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-2 quarts/acre [(2.5-5L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre [(2.5-5 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
[*] <b>Suppression</b> of General Leaf and Berry Diseases such as those caused by <i>Septoria spp</i> and <i>Anthraco</i> <i>nose spp.</i>	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.  Ideally SYSSTEM-CAL BLUE is best used in combination with conventional registered fungicides to increase the performance of the disease control program.
	Ground:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
[*]Suppression of Powdery Mildew	[Foliar Spray]	[Apply 1.5-2 quarts/acre [(3.5-5 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.]	<b>[Low Disease Pressure*]:</b> Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>[High Disease Pressure*]:</b> Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.]
	[Aerial:]	[Ground:]	
[Apply 1.5-2 quarts/acre [(3.5-5 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water. SYSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other registered fungicides.]			
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre [(0.135 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]

## BULB VEGETABLE CROPS:

Garlic, Leek, Onion (dry bulb and green), and Shallot

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> spp.  [*] Suppression** of Bacterial Diseases	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	Begin applications after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*:</b> Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*:</b> Apply higher rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Aerial:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
	Ground:	Apply 4 pints at planting or to newly planted seedling by side dressing or shank application.	
	Transplant and Furrow Application:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Chemigation Overhead:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Low Volume:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 10-14 day intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
	Aerial:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre [(0.135 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]



## **BRASSICA CROPS:**

Broccoli, Brussels Sprouts, Cabbage, Chinese Cabbage Cauliflower, Collards, Kale, Kohlrabi, and Mustard Greens

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root Rots and Damping Off <i>(Phytophthora and Pythium spp.)</i>  [*]Suppression of Bacterial Diseases	Foliar Spray Aerial:  <		

[\*Not registered for use in California.]



## CEREAL GRAINS, FORAGE AND FIBER CROPS:

Barley, Clover (all types), Corn (all types), Millet, Oats, Popcorn, Rye, Sorghum, Sugarcane, and Wheat

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> spp.  [*]Suppression of <i>Fusarium</i> spp., <i>Rhizoctonia</i> spp., and Head Diseases	Foliar Spray	Apply 0.5-2 quarts/acre (1.5-5 L/ha) in a minimum of 15 gallons/acre [(140 L/ha)] of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*</b> : Apply higher rate at 10-14 day intervals. Do not apply more than 6 times per crop cycle.
	Aerial:		
	Ground:	Apply 0.5-3 quarts/acre (1.5-7 L/ha) in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Chemigation	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
	Overhead:		
	Low Volume:	Apply 2-4 quarts/acre [(5-9 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
Downy Mildew	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 10-14 day intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 10-14 day intervals. Do not apply more than 6 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
[*]Suppression of Powdery Mildew	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 10-14 day intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	4 quarts/acre [(0.03 lbs Cu2+/A)]	24 quarts/acre [(0.18 lbs Cu2+/A)]	10 days

[\*Not registered for use in California.]

## ALFALFA:

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> spp.  [*]Suppression of <i>Fusarium</i> spp., <i>Rhizoctonia</i> spp., and Head Diseases	Foliar Spray Aerial:	Apply 0.5-2 quarts/acre (1.5-5 L/ha) in a minimum of 15 gallons/acre [(140 L/ha)] of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 30 day intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*</b> : Apply higher rate at 30 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 0.5-3 quarts/acre (1.5-7 L/ha) in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Chemigation Overhead:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	
	Low Volume:	Apply 2-4 quarts/acre [(5-9 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 30 day intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 30 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
[*]Suppression of Powdery Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 30 day intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 30 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	4 quarts/acre [(0.03 lbs Cu2+/A)]	24 quarts/acre [(0.18 lbs Cu <sup>2+</sup> /A)]	30 days

[\*Not registered for use in California.]

## **CITRUS CROPS:**

Citrus Citron, Clementines, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Orange and Pummelo

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root, Trunk and Crown Rots <i>(Phytophthora spp.)</i>	Foliar Spray Aerial:	Apply 2 quarts/acre [(5 L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.	Apply 3-4 times per year during the Spring, Summer, and Fall when conditions favor disease development.
	Ground:	Apply 2 quarts/acre [(5 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Chemigation Low Volume:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply with normal irrigation schedule. Follow Foliar Spray <b>APPLICATION PROGRAM</b> as stated above. Do not apply more than 4 times per crop cycle.
	Trunk and Scaffold Branches Spray:	Mix 1-3 quarts [(2.5-7 L)] in 5 gallons [(20 L)] of water and apply with a wetting agent or adjuvant on and around the affected area.	Use higher rates when lesions are present. Clean the wound site and apply on and around the lesions using enough spray volume to thoroughly wet the lesions. In the absence of lesions, use the lower rate and apply to the trunk from the soil line to 2 feet up the trunk. Apply in Spring, Summer, and Fall.
[*]Suppression of Pre-Harvest Blue and Green Mold & Brown Rot <i>(Phytophthora citricola)</i>	Foliar Spray Ground:	Apply 2 quarts/acre [(5 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply 2-4 weeks prior to harvest. Ensure that fruit is thoroughly covered by the spray application.
[Downy Mildew]	[Foliar Spray] [Aerial:]	[Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.]	[Apply at 2-3 week intervals and repeat as needed.]
	[Ground:]	[Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.]	
[*]Suppression of Powdery Mildew]	[Foliar Spray] [Aerial:]	[Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.]	[Apply at 2-3 week intervals and repeat as needed.]
	[Ground:]	[Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.] [ <b>SYSSTEM-CAL BLUE</b> is most effectively applied to control downy mildew when tank mixed with other registered fungicides.]	
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	3 quarts/acre [(0.023 lbs Cu2+/A)]	78 quarts/acre [(0.59 lbs Cu2+/A)]	14 days

[\*Not registered for use in California.]



## CUCURBIT CROPS:

Waxgourd, Citron Melon, Cucumber, Cantaloupe, Gourd (edible), Muskmelon, Pumpkin, Summer and Winter Squash and Watermelon

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root Rots and Damping Off ( <i>Phytophthora</i> and <i>Pythium spp.</i> )	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	Begin applications after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*:</b> Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle.  <b>Disease Control/High Pressure Program*:</b> Apply higher rate at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
	Pre-Plant Seedling Nursery Application:  Transplant and Furrow Application:	Apply 1 qt/100 gallons water to nursery plants in seedling trays 17 days prior to out  Apply 3 pints at planting or to newly planted seedling by side dressing or shank application.	
	Chemigation Overhead:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
	Low Volume:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.  <b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water  SYSSTEM-CAL BLUE is most effectively applied to control downy mildew when tank mixed with other registered fungicides.	

[*] <b>Suppression</b> of Powdery Mildew and other Leaf Diseases such as Anthracnose and Alternaria Leaf Blight	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	3 quarts/acre	18 quarts/acre	7 days
	[(0.023 lbs Cu <sup>2+</sup> /A)]	[(0.135 lbs Cu <sup>2+</sup> /A)]	

[\*Not registered for use in California.]

## FRUITING VEGETABLE CROPS (Except Cucurbits):

Pepper (Bell, Chili), Tomato and Eggplant

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Damping Off and Root Rots ( <i>Phytophthora</i> and <i>Pythium spp.</i> )  [*]Suppression of Bacterial Diseases	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	Begin applications after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*:</b> Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*:</b> Apply higher rate at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	For control of Bacterial leaf spot of Tomato, apply the high rate of SYSTEM-CAL BLUE with registered bactericides.
	Pre-Plant Seedling Nursery Application:	Apply 1 qt/100 gallons water to nursery plants in seedling trays 17 days prior to out planting.	
	Transplant and Furrow Application:	Apply 3 pints at planting or to newly planted seedling by side dressing or shank application.	
	Chemigation Overhead:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Low Volume:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	<b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
[*]Suppression of Powdery Mildew and other Leaf Diseases such as Anthracnose and Alternaria Leaf Blight	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	<b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre [(0.135 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]

## GRAPES

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root Rots ( <i>Phytophthora</i> and <i>Pythium spp.</i> )	Foliar Spray Aerial: Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.  Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.	Apply to vines that have stressed root system that can lead to root rots. factors such as nematode pressure, water logging and compaction contribute to vine declines.  Table Grapes: Begin applications in the Spring at the 4-6 inch shoot stage. Continue applications at 1-2 week intervals until flowering. Resume applications in the Fall after harvest. Do not apply more than 4 times per crop cycle. Wine and Raisin Grapes: Begin applications in the Spring at the 4-6 inch shoot stage. Continue applications at 1-2 week intervals through flowering. Do not apply more than 4 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:  Ground:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.  Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.  [SYSTEM-CAL BLUE is most effectively applied to control downy mildew when tank mixed with other registered fungicides.]	Begin applications at bud break with additional applications made at 7-10 day intervals in rotational programs with other labeled fungicides. Use higher rates and volumes based on disease density of canopy. Do not apply more than 6 times per crop cycle.
[*]Suppression of Powdery Mildew	Foliar Spray Aerial:  Ground:	Apply 1.5-2 quarts/acre [(3.5-5 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.  Apply 1.5-2 quarts/acre [(3.5-5 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.  [SYSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other	<b>Low Disease Pressure*:</b> Apply lower at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*:</b> Apply higher at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>

	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre [(0.135 lbs Cu <sup>2+</sup> /A)]	7 days
--	--	---	--------

[\*Not registered for use in California.]

## HERB AND SPICE CROPS:

Chicory, Chive, Cinnamon, Clove, Coriander, Dill, Ginseng, Mint, Nutmeg, Parsley, and Rosemary

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root Rots and Damping Off <i>(Phytophthora and Pythium spp.)</i>  [*]Suppression of <i>Fusarium spp.</i> and <i>Rhizoctonia spp.</i>	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 2 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*</b> : Apply higher rate at 2 week intervals. Do not apply more than 6 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
	Pre-Plant Nursery Treatment:	Apply 1 qt/100 gallons water to nursery plants in seedling trays 17 days prior to out planting.	
	Transplant and Furrow Application:	Apply 3 pints at planting or to newly planted seedling by side dressing or shank application.	
	Chemigation Overhead:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
	Low Volume:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
Downy Mildew	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 2 week intervals. Do not apply more than 6 times per crop cycle.
	Aerial:		
[*]Suppression of Powdery Mildew	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 2 week intervals. Do not apply more than 6 times per crop cycle.
	Foliar Spray	Apply 1.5-2 quarts/acre [(3.5-5 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	
	Aerial:	Apply 1.5-2 quarts/acre [(3.5-5 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	3 quarts/acre	18 quarts/acre	14 days
	[(0.023 lbs Cu <sup>2+</sup> /A)]	[(0.135 lbs Cu <sup>2+</sup> /A)]	

[\*Not registered for use in California.]





**[\*]HOPS**

<b>DISEASE</b>	<b>APPLICATION METHOD</b>	<b>APPLICATION RATE</b>	<b>APPLICATION PROGRAM</b>
Downy Mildew	Foliar Spray Aerial:  Ground:	Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.  Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 25 gallons/acre [(235 L/ha)] of water.	Make applications during favorable development conditions; 1)when shoots are 6-12 inches high; 2)after training when vines are 5-6 feet tall; application; and 4) during bloom.  During periods of high disease pressure, apply at 10 day intervals until disease abatement. Do not apply more than 6 applications per season.
<b>[*]Suppression of Powdery Mildew</b>	[Foliar Spray] [Aerial:]  [Ground:]	[Apply 1.5-3 quarts/acre [(3.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.]  [Apply 1.5-3 quarts/acre [(3.5-7L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.]  [SYSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other registered fungicides.]	<b>[Low Disease Pressure*]:</b> Apply lower at the first onset of the disease. Repeat applications at 10 day intervals. Do not apply more than 6 times per crop cycle.] <b>[High Disease Pressure*]:</b> Apply higher rate at the first onset of the disease. Repeat applications at 10 day intervals. Do not apply more than 6 times per crop cycle.]
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	3 quarts/acre  [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre  [(0.135 lbs Cu <sup>2+</sup> /A)]	10 days

[\*Not registered for use in California.]

## LEAFY VEGETABLE CROPS (Except Brassica Vegetables):

Celery, Endive (Escarole), Lettuce , Rhubarb, Spinach and Chard

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Damping Off and Root Rots <i>(Phytophthora and Pythium spp.)</i>	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*</b> : Apply higher rate at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
	Pre-Plant Nursery Application:	Apply 1 qt/100 gallons water to nursery plants in seedling trays 17 days prior to out planting.	
	Chemigation Overhead:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
	Low Volume:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Transplant and Furrow Application:	Apply 3 pints at planting.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
[*]Suppression of Powdery Mildew and Leaf Diseases such as Anthracnose <i>(Colletotrichum spp.)</i> , Leaf Blights <i>(Septoria &amp; Cercospora spp.)</i> and Bacterial Rots <i>(Erwinia spp.)</i>	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.  [SYSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other registered fungicides.]	
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval

	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre [(0.135 lbs Cu <sup>2+</sup> /A)]	7 days
--	---	---	--------

[\*Not registered for use in California.]

### LEGUME CROPS (Except Brassica Vegetables):

Bean (Lupins, all), Bean (Kidney, Lima, Navy, Pinto, Snap and Wax), Bean (Asparagus, Blackeyed), Broad Bean (Fava), and Chickpea (Garbanzo)

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium spp.</i>  [*]Suppression <i>Fusarium spp.</i> and <i>Rhizoctonia spp.</i>	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	Begin applications after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*</b> : Apply higher rate at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
	Pre-Plant Nursery Application:	Apply 1 qt/100 gallons water to nursery plants in seedling trays 17 days prior to out planting.	
	Transplant and Furrow Application:	Apply 3 pints at planting or to newly planted seedling by side dressing or shank application.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
	Chemigation Overhead:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	
Downy Mildew	Low Volume:	Apply 2-4 quarts/acre [(5-9 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Transplant and Furrow Application:	Apply 3 pints at planting.	
	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
---------	--------------------	------------------	---------------------

<p><b>[*]Suppression of Powdery Mildew and Leaf Diseases such as Anthracnose (<i>Colletotrichum spp.</i>), Leaf Blights (<i>Septoria</i> &amp; <i>Cercospora spp.</i>) and Bacterial Rots (<i>Erwinia spp.</i>)</b></p>	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<p><b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.</p> <p><b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.</p>
	Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
	Ground:	[SYSSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank	

**RESTRICTIONS:**

	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	4 quarts/acre [(0.03 lbs Cu <sup>2+</sup> /A)]	24 quarts/acre [(0.18 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]

## MISCELLANEOUS FOOD CROPS:

Asparagus, Cacao, Coffee, Okra, Persimmons and Sugarbeet

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> spp.  <b>[*]Suppression</b> of Bacterial and Leaf Diseases such as Coffee Berry Disease, ( <i>Colletotrichum</i> spp.), Anthracnose ( <i>Colletotrichum</i> spp.), and Various Leaf Spots ( <i>Septoria</i> and <i>Cercospora</i> spp.)	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 2 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*</b> : Apply higher rate at 2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(280 L/ha)] of water.	
	Root Dip:	Mix a 0.25% v/v solution (1/3 fl oz/1 gallon of water or [(2.5 ml/L)] of water).	Apply as pre-plant dip to transplants immediately prior to planting. Dip plants momentarily and plant within 48 hours. Mix a fresh solution daily.
	Chemigation Overhead:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
	Low Volume:	Apply 2-4 quarts/acre [(5-9 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Transplant and Furrow Application:	Apply 3 pints at planting or to newly planted seedling by side dressing or shank application.	
Pruning Wound and Trunk Canker ( <i>Phytophthora</i> spp.)	Trunk Spray:	Mix 1-3 quarts with 5 gallons of water [(2.5-7 L with 50 L water)].	Use higher rates when lesions are present. Clean the wound site and apply on and around the lesions using enough spray volume to thoroughly wet the lesions. In the absence of lesions, use the lower rate and apply to the trunk from the soil line to 2 feet up the trunk. Apply in Spring, Summer, and Fall.
Downy Mildew	Foliar Spray Aerial:	Apply 1- quarts/acre [(2.5 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
[*]Suppression of Powdery Mildew	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			
Ground:			

[\*Not registered for use in California.]

## OIL CROPS:

### Betel Nut

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium spp.</i>  [*]Suppression of Bacterial and Leaf Diseases such as, Anthracnose ( <i>Colletotrichum spp.</i> ), and Various Leaf Spots ( <i>Septoria</i> and <i>Cercospora spp.</i> )	Foliar Spray Aerial:	Apply 1-3 quart/acre [(2.5-7 L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*</b> : Apply higher rate at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quart/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
	Chemigation Overhead:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
	Low Volume:	Apply 2-4 quarts/acre [(5-9 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
[*]Suppression of Powdery Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	4 quarts/acre [(0.03 lbs Cu <sup>2+</sup> /A)]	24 quarts/acre [(0.18 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]



## PEANUTS

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root Rots, Pod Rots, Damping Off, Wilt, ( <i>Phytophthora</i> and <i>Pythium spp.</i> )	Foliar Spray Aerial:  Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.  Apply 1-3 quarts/acre [(2.5-7L/ha)] in a minimum of 100 gallons/acre [(280 L/ha)] of water.	Begin application after plants are established and conditions favor disease development.  <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 2 week intervals. Do not apply more than 6 times per cycle.
<b>[*]Suppression</b> of Leaf and Crown Diseases, Anthracnose ( <i>Colletotrichum spp.</i> )	Transplant and Furrow Application:	Apply 3 pints at planting or to newly planted seedlings by side/top dressing or shank application.	<b>Disease Control/High Pressure Program*</b> : Apply higher rate at 7-10 day intervals. Do not apply more than 6 times per crop
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre [(0.135 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]

## **POME FRUIT CROPS:**

Apple, Loquat, Pear and Quince

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root Rot, Collar rot, Foot Rot and Trunk Cankers <i>(Phytophthora and Pythium spp.)</i>  <b>[*]Suppression</b> of Blister Spot, and Green Mold, Alternaria Blotch , Blister Spot and Pear Black Spot	Chemigation Overhead:	Apply 2-3 quarts/acre [(5-7 in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times crop cycle.
	[Low Volume Irrigation:]	[Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of	<b>Low Disease Pressure*</b> : Apply lower at the first onset of the disease. Repeat applications at 1-2 week intervals. Do apply more than 6 times per crop cycle.
	[Foliar Spray]		<b>High Disease Pressure*</b> : Apply higher at the first onset of the disease. Repeat applications at 7-10 days intervals. Do not apply more than 6 times per crop
	[Aerial:]	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply during active plant growth. Commence from flowering for Fire blight suppression in combination with registered antibiotics.
	[Ground:]	[Apply 1.5-3 quarts/acre [(3.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.]	
	[Trunk Spray]	[Mix 1.5-3 quarts with [(3.5-7 L) 5 gallons [(20 L)] of water. Add 0.25% wetting agent to the solution.]	[Apply to trunk lesions using enough volume to thoroughly wet the lesions. In absence of lesions, apply to the trunk from the soil line to about two feet up the trunk.  Use the higher rate when lesions are present. Apply one time in the Spring, Summer and Fall.]
	[Foliar Spray] [Aerial:]	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times crop cycle. <b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. applications at 1-2 week intervals. Do not
	[Ground:]	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	apply more than 6 times per crop cycle. <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 days intervals. Do not apply more than 6 times per crop cycle. Apply during active plant growth. Commence from flowering for Fire blight suppression in combination with registered antibiotics.
<b>[*]Suppression</b> of Powdery Mildew	Foliar Spray		<b>Low Disease Pressure*</b> : Apply lower at the first onset of the disease. Repeat applications at 1-2 week intervals. Do apply more than 6 times per crop cycle.
	Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	<b>High Disease Pressure*</b> : Apply higher at the first onset of the disease. Repeat applications at 7-10 days intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	

[*][ <b>Suppression</b> of Fire Blight]	[Foliar Spray Ground:]	[Apply at 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 25 gallons/acre [(235 L/ha)] of water.]  [SYSSTEM-CAL BLUE is most effectively applied to control fire blight when tank mixed with other registered bactericides.]	<b>[Low Disease Pressure*]:</b> Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.] <b>[High Disease Pressure*]:</b> Apply higher rate at the first onset of the disease. Repeat applications at 7-10 days intervals. Do not apply more than 6 times per crop cycle.]
--	---------------------------	---	--

<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
Fall, late dormant	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre [(0.135 lbs Cu <sup>2+</sup> /A)]	n/a (only 1 application per season permitted)
Between silver-tip and green-tip	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]		n/a (only 1 application per season permitted)
Bloom, growing season	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]		7 days

[\*Not registered for use in California.]

## POTATOES

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Pink Rot, Pythium Leak ( <i>Phytophthora infestans</i> , <i>Phytophthora erythroseptica</i> and <i>Pythium</i> spp.)  [*]Suppression of Late Blight	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*:</b> Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*:</b> Apply higher rate at 7-10 day intervals. Do not apply more than 6 times per crop cycle. **Late Blight management using Fungi-Phite Ca requires the high application rate and is most effectively applied when tank mixed with other registered fungicides.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.	
	Chemigation Overhead:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 4 times per crop cycle.
	Low Volume:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Seed Piece Spray:	Mix a 15% v/v solution (0.3 quart/2 quarts of water or [(0.3 L/2 l)] of water). Treat 2 tons of tubers with 1 gallon of solution.	Treat seed pieces with a full coverage spray.
[*]Suppression of Powdery Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.	<b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 4 times per crop cycle.
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre [(0.14 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]

## ROOT AND TUBER VEGETABLE CROPS, such as:

Artichoke (all types), Beet (all types), Carrot, Chayote, Chervil (turnip-rooted), Parsley (turnip- rooted),  
Radish (all types), Rutabaga, and Turnip

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium spp.</i>  <b>[*]Suppression</b> of Foliar and Bacterial Diseases	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*:</b> Apply lower rate at 10-14 day intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*:</b> Apply higher rate at 10-14 day intervals. Do not apply more than 6 times per crop cycle.
	Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.	
	Pre-Plant Nursery Seedling Application:	Apply 1 qt/100 gallons water to nursery plants in seedling trays 17 days prior to out planting.	Apply as pre-plant dip to the roots for 2 minutes. Plant within 48 hours after dipping. Mix a fresh solution daily.
	Root and Tuber Dip	Mix a 0.5% v/v solution (2 quarts/100 gallons of water or [(0.5 L/100 L)] of water).	
	Chemigation Overhead:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	
Downy Mildew	Low Volume:	Apply 2-4 quarts/acre [(5-9 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply with normal irrigation schedule beginning at the 4-6 true leaf stage. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
	Transplant and Furrow Application:	Apply 3 pints at planting or to newly planted seedling by side dressing or shank application.	
[*]Suppression of Powdery Mildew	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 10-14 day intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 10-14 day intervals. Do not apply more than 6 times per crop cycle.
	Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	
	[Ground:]	[Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.]	<b>[Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 10-14 day intervals. Do not apply more than 4 times per crop cycle.] <b>[High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 10-14 day intervals. Do not apply more than 4 times per crop cycle.]
<b>RESTRICTIONS:</b>			

	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	4 quarts/acre [(0.03 lbs Cu <sup>2+</sup> /A)]	24 quarts/acre [(0.18 lbs Cu <sup>2+</sup> /A)]	10 days

[\*Not registered for use in California.]

## STONE FRUIT CROPS:

Apricot, Cherry, Nectarine, Peach, Plum, and Prune

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root Rot, Crown rot, Collar Rot and Foot Rot ( <i>Phytophthora</i> and <i>Pythium</i> spp.)	Trunk and Scaffold Branches Spray:	Mix 1-3 quarts [(2.5-7 L)] in 5 gallons [(20 L)] of water and apply with a wetting agent or adjuvant on and around the affected area.	Use higher rates when lesions are present. Clean the wound site and apply on and around the lesions using enough spray volume to thoroughly wet the lesions. In the absence of lesions, use the lower rate and apply to the trunk from the soil line to 2 feet up the trunk. Apply in Spring, Summer, and Fall.
	Root Dip:	Mix a 0.25% v/v solution (1 quart/100 gallons of water or [(0.25 L/100 L)] of water).	Apply as pre-plant dip to the roots for 10 seconds. Plant within 48 hours after dipping. Mix a fresh solution daily.
	Chemigation Overhead:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 4 times per crop cycle.
	Low Volume:	Apply 2-4 quarts/acre [(5-9 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply during the active growing season a maximum of 4 times.
[*]Suppression of Powdery Mildew and other Fungal and Bacterial Diseases such as Fire Blight, ( <i>Erwinia</i> spp.) Scab ( <i>Venturia</i> spp.) and Blister Spot ( <i>Xanthomonas</i> spp.)	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	<b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 4 times per crop cycle.
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	4 quarts/acre [(0.03 lbs Cu <sup>2+</sup> /A)]	16 quarts/acre [(0.12 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]



## STRAWBERRY

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Red Stele, Leather Rot and Root Rot ( <i>Phytophthora</i> and <i>Pythium</i> spp.)  [*]Suppression of Foliar Fungal and Bacterial	Foliar Spray Aerial:  Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.  Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.	Begin application during active plant growth. Repeat on a 2-4 week interval when conditions favor disease development.  Perennial planting: Start Spring applications when the plants start active growth. Repeat application at 2-4 week interval if disease conditions persist or reoccur.
Diseases ( <i>Anthracnose</i> and <i>Rhizopus</i> spp. [and <i>Botrytis</i> ].)	Chemigation Overhead:  Low Volume:  Transplant and Furrow Application:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.  Apply 2-4 quarts/acre [(5-9 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.  Apply 3 pints at planting or to newly planted seedling by side dressing or shank application.	If using Red Stele susceptible varieties or if disease pressure is severe, use higher rates, shortest application time and maximum number of applications. Do not apply more than 6 times per crop cycle.  Grey mold and Anthracnose suppression using SYSSTEM-CAL BLUE requires the use of the high application rates and is most effectively applied when tank mixed with other registered fungicides.
[*] <i>Phytophthora</i> spp.	Dip:	Mix a 0.25% v/v solution (1 quart/100 gallons of water or [(0.25 L/100 L)] of water).	Dip runners in the solution for 1-2 minutes. Plant within 48 hours. Mix a fresh solution daily.
Leather Rot ( <i>Phytophthora cactorum</i> )	Foliar Spray Aerial:  Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.  Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.	Start application at 10% bloom and early fruit set. Continue applications on a 7-14 day interval when conditions favor disease development. Under heavy disease pressure, use the higher rate and apply on a 7 day interval. Do not apply more than 6 times per crop cycle.
[*]Suppression of Powdery Mildew	Foliar Spray Aerial:  Ground:	Apply 1-3 quart/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.  Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.  [SYSSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other registered fungicides.]	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle. <b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
<b>RESTRICTIONS:</b>			

	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	4 quarts/acre [(0.03 lbs Cu <sup>2+</sup> /A)]	24 quarts/acre [(0.18 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]

**[\*]TOBACCO**

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium spp.</i> Root Rot and Damping Off  Blue Mold <i>(Peronospora tabacina)</i>  Black Shank ( <i>P. parasitica</i> ) and Root Declines	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*:</b> Apply lower rate at 4 week intervals. Do not apply more than 4 times per crop cycle. <b>Disease Control/High Pressure Program*:</b> Apply higher rate at 2 week intervals. Do not apply more than 4 times per crop cycle.
	Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Ground:	Apply 1 qt/100 gallons water to nursery plants in seedling trays 1-7 days prior to out planting.	
	Pre-Plant Nursery Seedling Application:		Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 4 times per crop cycle.
	Chemigation Overhead:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	
	Low Volume:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	12 quarts/acre [(0.09 lbs Cu <sup>2+</sup> /A)]	14 days

[\*Not registered for use in California.]

**[\*]HEMP**

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Downy mildew, <i>Phytophthora</i> and <i>Pythium spp.</i> Root Rot and Damping Off  Blue Mold ( <i>Peronospora tabacina</i> )  Black Shank ( <i>P. parasitica</i> ) and Root Declines	Foliar Spray	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 4 week intervals. Do not apply more than 4 times per crop cycle. <b>Disease Control/High Pressure Program*</b> : Apply higher rate at 2 week intervals. Do not apply more than 4 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Pre-Plant Nursery Seedling Application:	Apply 1 qt/100 gallons water to nursery plants in seedling trays 1-7 days prior to out planting.	
	Chemigation Overhead:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.	
	Low Volume:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 4 times per crop cycle.
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	12 quarts/acre [(0.09 lbs Cu <sup>2+</sup> /A)]	14 days

[\*Not registered for use in California.]

## TREE NUT CROPS:

Almond, Chestnut, Filbert, Hazelnuts, Macadamia, Pecan, Pistachio, and Walnut

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root rots, Crown rots ( <i>Phytophthora</i> and <i>Pythium spp.</i> ) Trunk Cankers, Foliar Blights.  <b>[*]Suppression of</b> Foliar Bacterial and Fungal Diseases Anthracnose ( <i>Colletotrichum</i> ), Hull rot ( <i>Monolia spp.</i> ), Flower diseases ( <i>Cladosporium spp.</i> ), leaf Spots ( <i>Alternaria spp.</i> ), Raceme Blight ( <i>Phytophthora</i> ) in Macadamia.	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	Begin application during active plant growth after plants are established and conditions favor disease development.  <b>Disease Prevention/Low Pressure Program*:</b> Apply lower rate at 3 month intervals. Do not apply more than 4 times per crop cycle.  <b>Disease Control/High Pressure Program*:</b> Apply higher rate at monthly intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Root Dip:	Mix a 0.5% v/v solution (2 quarts/100 gallons of water or [(5 L/1000 L)] of water).	Apply as pre-plant dip to the roots for 30 seconds. Plant within 48 hours after dipping. Mix a fresh solution daily.
	Chemigation Overhead:          Low Volume:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.          Apply 2-4 quarts/acre [(5-9 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
Pruning Wound, Crown and Trunk Canker ( <i>Phytophthora spp.</i> )	Trunk Spray	Mix 1-3 quarts with [(2.5-7 L)] in 5 gallons [(20 L)] of water.	Use higher rates when lesions are present. Clean the wound site and apply on and around the lesions using enough spray volume to thoroughly wet the lesions. In the absence of lesions, use the lower rate and apply to the trunk from the soil line to 2 feet up the trunk. Apply one time in the Spring, Summer, and Fall.
<b>[*]Suppression of</b> Powdery Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 14 day intervals. Do not apply more than 6 times per crop cycle.  <b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 14 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.   SYSSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other registered fungicides.	

[Downy Mildew]	[Foliar Spray] [Aerial:]  [Ground:]	[Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.]  [Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.]	[Begin applications at bud break with additional applications made at 14 day intervals in rotational programs with other labeled fungicides. Use higher rates and volumes based on disease severity and density of canopy. Do not apply more than 6 times per crop cycle.]
[*] Scab ( <i>Cladosporium caryigenum</i> )]	[Foliar Spray] [Ground:]	[Apply 1-1.25 quarts/acre [(2-3 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water]	[Apply SYSSTEM-CAL BLUE in a spray schedule beginning at bud break, continue on a 14 day interval. Applications to the nuts may be alternated with other labeled fungicides.]  [Do not apply SYSSTEM-CAL BLUE to pecans in less than 100 gal/acre.] [ <b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Do not apply more than 6 times per crop cycle.] [ <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Do not apply more than 6 times per crop cycle.]
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	4 quarts/acre [(0.03 lbs Cu <sup>2+</sup> /A)]	24 quarts/acre [(0.18 lbs Cu <sup>2+</sup> /A)]	14 days

[\*Not registered for use in California.]

## KIWI, OLIVES:

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root rots, Crown rots ( <i>Phytophthora</i> and <i>Pythium spp.</i> ) Trunk Cankers, Foliar Blights.  <b>[*]Suppression of Foliar Bacterial and Fungal Diseases</b> Anthracnose ( <i>Colletotrichum</i> ), Hull rot ( <i>Monolia spp.</i> ), Flower diseases ( <i>Cladosporium spp.</i> ), leaf Spots ( <i>Alternaria spp.</i> ), Raceme Blight ( <i>Phytophthora</i> ) in Macadamia.	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	Begin application during active plant growth after plants are established and conditions favor disease development.  <b>Disease Prevention/Low Pressure Program*:</b> Apply lower rate at 3 month intervals. Do not apply more than 4 times per crop cycle.  <b>Disease Control/High Pressure Program*:</b> Apply higher rate at 30 day intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Root Dip:	Mix a 0.5% v/v solution (2 quarts/100 gallons of water or [(5 L/1000 L)] of water).	Apply as pre-plant dip to the roots for 30 seconds. Plant within 48 hours after dipping. Mix a fresh solution daily.
	Chemigation Overhead:   Low Volume:	Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.   Apply 2-4 quarts/acre [(5-9 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
Pruning Wound, Crown and Trunk Canker ( <i>Phytophthora spp.</i> )	Trunk Spray	Mix 1-3 quarts with [(2.5-7 L)] in 5 gallons [(20 L)] of water.	Use higher rates when lesions are present. Clean the wound site and apply on and around the lesions using enough spray volume to thoroughly wet the lesions. In the absence of lesions, use the lower rate and apply to the trunk from the soil line to 2 feet up the trunk. Apply one time in the Spring, Summer, and Fall.
<b>[*]Suppression of Powdery Mildew</b>	Foliar Spray Aerial:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	<b>Low Disease Pressure*:</b> Apply lower rate at the first onset of the disease. Repeat applications at 30 day intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.   SYSSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other registered fungicides.	<b>High Disease Pressure*:</b> Apply higher rate at the first onset of the disease. Repeat applications at 30 days intervals. Do not apply more than 6 times per crop cycle.

[Downy Mildew]	[Foliar Spray] [Aerial:]  [Ground:]	[Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.]  [Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.]	[Begin applications at bud break with additional applications made at 30 day intervals in rotational programs with other labeled fungicides. Use higher rates and volumes based on disease severity and density of canopy. Do not apply more than 6 times per crop cycle.]
[*] Scab ( <i>Cladosporium caryigenum</i> )]	[Foliar Spray] [Ground:]	[Apply 1-1.25 quarts/acre [(2-3 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water]	[Apply SYSSTEM-CAL BLUE in a spray schedule beginning at bud break, continue on a 30 day interval. Applications to the nuts may be alternated with other labeled fungicides.]  [Do not apply SYSSTEM-CAL BLUE to pecans in less than 100 gal/acre.] [ <b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Do not apply more than 6 times per crop cycle.] [ <b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Do not apply more than 6 times per crop cycle.]
RESTRICTIONS:			
	Maximum per Application Rate	Maximum Annual Rate	Minimum Retreatment Interval
	4 quarts/acre [(0.03 lbs Cu <sup>2+</sup> /A)]	24 quarts/acre [(0.18 lbs Cu <sup>2+</sup> /A)]	30 days

[\*Not registered for use in California.]



## ROSES

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root Rot and Cankers <i>(.Phytophthora and Pythium spp.)</i> Downy Mildew, Bacterial Blight, <i>[^Suppression** of Foliar Diseases</i> Black Spot <i>(Diplocarpon spp.)</i>	Foliar Spray:	Apply 1-2 quarts/acre [(2.5-5 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply at 2-4 week intervals and repeat as needed. Application rates depend upon plant type, maturity and spray technique/method. Do not apply more than 6 times per crop cycle.
	Soil Drench:	Mix 1-2 quarts [(2.5-5 L)] in 100 gallons [(380 L)] of water.	Apply using hand held, mechanical, or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler or low volume irrigation systems to propagation beds, containers, pots, trays, or nursery or landscape beds at a rate to thoroughly soak the growing media through the root zone. A general guide is 1-2 quarts/sq ft [(5-10 L/m <sup>2</sup> )] of the diluted mixture depending on the media type and depth (about 3 fl oz/3 inch pot or 6 fl oz/6 inch pot or about 80 ml/10 cm pot and 120 ml/15 cm pot).
	Soil Incorporation:	Mix 4-16 fl oz/cubic yard (150700 ml/m <sup>3</sup> ) of soil media.	Mix product with soil media immediately before potting. If conditions are favorable for disease development, applications as a foliar spray or soil drench will enhance protection.
<i>[*] Suppression** of Powdery Mildew</i>	Foliar Spray	Apply 1-2 quart/acre [(2.5-5 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	<i>Low Disease Pressure*</i> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Aerial:	Ground:	<i>High Disease Pressure*</i> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
		Apply 1-2 quarts/acre [(2.5-5 L/ha)] in a minimum of 75 gallons/acre [(700 L/ha)] of water.  [SYSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other registered fungicides.]	

[Downy Mildew]	[Foliar Spray]	[Apply 1-2 quarts/acre [(2.5-5 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.]	[ <i>Low Disease Pressure*</i> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.]
	[Aerial:]		
	[Ground:]	[Apply 1-2 quarts/acre [(2.5-5 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.]	[ <i>High Disease Pressure*</i> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.]
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	2 quarts/acre [(0.015 lbs Cu <sup>2+</sup> /A)]	12 quarts/acre [(0.09 lbs Cu <sup>2+</sup> /A)]	7 days

[\* Not registered for use in California.]

## ORNAMENTALS, such as:

Annual and Perennial Flowers, Bedding Plants, Foliage Plants, Ground Covers, Deciduous and Evergreen Trees and Shrubs in the field, Container, and Conifer Nursery, Lath or Shade House, Greenhouse, Residential, Commercial and Municipal Landscapes. *Use in Greenhouses:* Ornamentals and Bedding Plants such as: Ageratum, Aglaonema, Algerian Ivy, Anthurium, Aphelandra, Arborvitae, Artemisia, Aster, Azaleas, Baby's Breath, Begonia, Bougainvillea, Boxwood, Caladium, Carnation, Cattelya Skinneri, Ceanothus, Chrysanthemum, Cissus, Coleus, Columbine, Cotoneaster, Daisy, Delphinium, Dieffenbachia, Dogwood, Easter Lily, English Ivy, Ficus, Foxglove, Gaillardia, Geranium, Gloxinia, Hibiscus, Impatiens, Japanese Holly Juniper, Leather-Leaf Fern, Marigold, Monterey Pine, Pansy, Peperomia, Petunia, Philodendron, Phlox, Photinia, Pieris, Pinks, Pittosporum, Poinsettia, Pothos, Primrose, Prostrate Rosemary, Rhododendron, Salvia, Schefflera, Sedum, Sempervivum, Snapdragon, Spathiphyllum, Taxus Media, Verbena, Vinca, White Cedar, White Pine, Zinnia, Zygocactus, etc.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root and Crown Rots, Stem Cankers and Foliar Blight. <i>(Phytophthora and Pythium spp.)</i>  [*] Suppression** of Foliar Diseases	Foliar Spray Aerial:	Apply 1-2 quart/acre [(2.5-5 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	Apply at 2-3 week intervals and repeat as needed. Use the lower rate on sensitive plants. For greenhouse applications, do not exceed the lower rate (1 quart/100 gallons/acre of water or 2 L/950 L/ha of water). Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre [(2.5-5 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Soil Drench	Mix 6-13 fl oz (180-390 ml) in 100 gallons [(380 L)] of water.	Apply 25 gallons of solution per 100 square feet. Irrigate to distribute solution through soil. Repeat as required. Limit to one application per month.
	Soil Incorporation	Mix 1-2 pints/cubic yard (600-1200 ml/m <sup>3</sup> ) of soil.	Mix immediately before potting. If conditions are favorable for disease development, a foliar spray or soil drench application will enhance protection.
	Root Dip	Mix a 0.25% v/v solution 1 quart/100 gallons of water or [(1 L/400 L)] of water.	Dip transplants into diluted mixture keeping roots submerged for 20-30 seconds. Plant within 48 hours. Make a fresh solution daily.
	Chemigation Overhead:  Low Volume:	Apply 2 quarts/acre [(5 L/ha)] in a minimum of 1,000 gallons/acre [(9,350 L/ha)] of water.  Apply 1-2 quarts/acre [(2.5-5 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	Apply with normal irrigation schedule. Follow Foliar Spray <i>APPLICATION PROGRAM</i> as stated above. Do not apply more than 6 times per crop cycle.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Downy Mildew	Foliar Spray Aerial:  Ground:	Apply 1-2 quart/acre [(2.5-5 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water. Apply 1-2.5 quarts/acre [(2.5-5.5 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	<i>Low Disease Pressure*</i> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.  <i>High Disease Pressure*</i> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 days intervals. Do not apply more than 6 times per crop cycle.  Application amount depends upon plant type, maturity and application technique/method.
[*] <i>Suppression**</i> of Powdery Mildew	Foliar Spray Aerial:  Ground:	Apply 1-2 quart/acre [(2.5-5 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water. Apply 1-2 quarts/acre [(2.5-5 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.  [SYSSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other	<i>Low Disease Pressure*</i> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.  <i>High Disease Pressure*</i> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	2.5 quarts/acre [(0.019 lbs Cu <sup>2+</sup> /A)]	15 quarts/acre [(0.113 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]

## CONIFERS IN COMMERCIAL NURSERIES, LANDSCAPE TREES, PLANTATIONS, FORESTRY AND PARK APPLICATIONS<sup>1</sup>, such as:

Christmas Tree Varieties, Firs, Spruces, Ash, Pines, Beech, Cedar, Chestnut, Crab Apple, Dogwood, Elm, Fir, Hawthorn, Juniper, Linden, Oaks, Birch, Eucalyptus and Willow.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Root Rot and Trunk Cankers <i>(Phytophthora Pythium spp.)</i>  <i>[*] Suppression** of Foliar Diseases</i>  <i>[*] Enhancement of Mycorrhization</i>	Foliar Spray	Apply 1-2 quarts/acre [(2.5-5 L/ha)] in a minimum of 20 gallons/acre [(190 L/ha)] of water.	Apply as a light cover spray to foliage. Apply at 2-4 week intervals and repeat as needed. Final application amounts depend on plant type, maturity, and application technique/method. Do not apply more than 4 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-2 quarts/acre [(2.5-5 L/ha)] in a minimum of 100 gallons/acre [(950 L/ha)] of water.	
	Soil Drench	Mix 1-2 quarts [(2.5-5 L)] in 100 gallons [(380 L)] of water.	Apply 0.25-0.5 pints/sq ft [(4-8 L/m <sup>3</sup> )] of the diluted mixture. Irrigate sufficiently to wet active root zone. Apply at a 2-4 week interval and repeat as needed. Do not apply more than 4 times per crop cycle.
	Root Dip	Mix a 0.25% v/v solution (1 quart/100 gallons of water or [(1 L/400 L of water)]).	Dip transplants into diluted mixture keeping roots submerged for 1 to 2 minutes. Plant within 48 hours. Make a fresh solution daily.
Christmas Trees	Soil Drench	1 gallon/acre immediately after transplanting then 2 qt/acre every 30 days for 3 applications in the active growing season.	

<sup>1</sup>Use in California is limited to Oaks (Coastal, live, Shreve, Black, and Canyon), Tan Oaks and other tree species that are host to *P. ramorum*. Applications limited to injection and basal bark spray of pines, apples and cranberries, and injection of Sycamores for control of Sycamore anthracnose. Do not apply to any other tree species without consulting the list of *P. ramorum* host species listed at the following website: <http://nature.berkeley.edu/comtf/index/html>

<p>Stem and Canker Blight (<i>Phytophthora ramorum</i>) i.e. Sudden Oak Death<sup>1</sup></p>	Trunk Injection	Make up a 15% v/v solution of SYSSTEM-CAL BLUE (20 fl oz/gallon of water or [(150 ml/L)] of water).	<p>Inject (according to injection equipment instructions) 0.5 fl oz (15 ml) of the diluted SYSSTEM-CAL BLUE solution into one injection hole.</p> <p><i>Dosage:</i> One (1) injection per yard (or meter) of canopy diameter at the drip line. (I.e. a tree with 6 yards (or meters) of canopy diameter will require 6 injections via 6 separate injection holes).</p> <p><i>Curative:</i> Inject 2 times per year in the Spring and Fall.</p> <p><i>Preventative:</i> Inject 1 time in the Spring.</p>
	[*] Bark Applications	Mix SYSSTEM-CAL BLUE and water in a 1:1 ratio (i.e. 1 gallon of SYSSTEM-CAL BLUE plus 1 gallon of water). Add to this 3 oz (100 ml) of a silicon based surfactant.	<p>Apply the SYSSTEM-CAL BLUE solution from the base of the tree to approximately 5 feet (1.5 M) above ground, ensuring complete bark coverage. Spray over active lesions if they are accessible.</p>

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
[Downy Mildew]	[Foliar Spray] [Aerial:]  [Ground:]	[Apply 2-3 quarts/acre [(5-7 L/ha)] in a minimum of 15 gallons/acre [(140 L/ha)] of water.]  [Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 50 gallons/acre [(470 L/ha)] of water.]	[Begin applications at bud break with additional applications made at 7-10 day intervals in rotational programs with other labeled fungicides. Use higher rates and density of canopy. Do not apply more than 6 times per crop cycle.]
[*] <i>Suppression</i> ** of Powdery Mildew]	[Foliar Spray Aerial:]  [Ground:]	[Apply 1.5-2 quarts/acre [(3.5-5 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.] [Apply 1.5-2 quarts/acre [(3.5-5 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.]  [SYSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other registered fungicides.]	[ <i>Low Disease Pressure</i> *: Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.] [ <i>High Disease Pressure</i> *: Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.]
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	3 quarts/acre [(0.023 lbs Cu <sup>2+</sup> /A)]	18 quarts/acre [(0.135 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]

## TURF (Warm & Cool season)\*\*\*, such as

Golf Course, Athletic Fields, Sod Farms, Residential, Amenity, Commercial and Municipal Lawns

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
[*] <i>Pythium spp.</i> and <i>Phytophthora</i> (except California)	Foliar Spray	Mix 4-6 fl oz (133-200 ml) in 1-2 gallons [(4-8 L)] of water.	Begin preventative applications when conditions first favor disease. Apply 1-2 gallons of diluted mixture/1,000 sq ft [(48 L/100 m <sup>2</sup> )] as a light cover spray. Apply at a 1-4 week interval as needed. Do not mow or irrigate treated area until sprays have completely dried.
Pythium Blight		6 fl oz/1000 sq. ft.	Apply at 7 day intervals.
Suppression** of Brown Patch ( <i>Rhizoctonia spp.</i> ) and Anthracnose ( <i>Colletotrichum</i> )		6 fl oz/1000 sq. ft. Apply at 1.5 gallons per 1000 sq. ft.	Apply at 7 day intervals.  Turf disease management is significantly improved when SYSTEM-CAL BLUE is used at the high labeled rate and is most effectively applied used when tank mixed with other registered fungicides.
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	6 fl. oz. /1000 sq. ft. [(0.061 lbs Cu <sup>2+</sup> /A)]	312 fl. oz. /1000 sq. ft. [(3.19 lbs Cu <sup>2+</sup> /A)]	7 days

[\*Not registered for use in California.]



## TURF TANK MIXTURES\*\*\*

For *Suppression\*\** or control of summer stress diseases caused by a complex of *Pythium spp.*, *Colletotrichum spp.* and *Rhizoctonia spp.* Also for improvement of existing fungicide programs and the minimization of resistance development in pathogenic fungi. Tank mix this product with fungicides from the classes of Fungicides as listed below in accordance with the most restrictive label limitations and precautions. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibiting against any such mixing. To determine the compatibility of this fungicide with other products, use a jar compatibility test. Add the correct proportions of each product and the appropriate quantity of water to a clean container. Thoroughly mix and let stand for 3-5 minutes. If the mixture remains in solution or can be remixed readily, the products are considered compatible.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Complex of <i>Pythium spp.</i> , <i>Colletotrichum spp.</i> and <i>Rhizoctonia spp.</i>	Tank mix with a registered fungicide for these turf declines such as a dithiocarbamate, a Triazole, a benzimidazole, a strobilurin or a Chloronitrile fungicide.	Follow product label.	Follow the most restrictive product label.
[Downy Mildew]	[Foliar Spray] [Aerial:]  [Ground:]	[Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.] [Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.]	[Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.] at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.]
[Suppression** of Powdery Mildew]	[Foliar Spray] [Aerial:]  [Ground:]	[Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 10 gallons/acre [(95 L/ha)] of water.] [Apply 1-3 quarts/acre [(2.5-7 L/ha)] in a minimum of 30 gallons/acre [(280 L/ha)] of water.]  [SYSTEM-CAL BLUE is most effectively applied to control powdery mildew when tank mixed with other registered fungicides.]	[Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.] at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.]
<b>RESTRICTIONS:</b>			
	<b>Maximum per Application Rate</b>	<b>Maximum Annual Rate</b>	<b>Minimum Retreatment Interval</b>
	3 quarts/acre	18 quarts/acre	7 days

	[(0.023 lbs Cu <sup>2+</sup> /A)]	[(0.135 lbs Cu <sup>2+</sup> /A)]	
--	-----------------------------------	-----------------------------------	--

**\*Check with your local Extension Agent or Crop Consultant if you are unsure about disease prevention, control or severity/pressure.**

**\*\*Suppression: SYSSTEM-CAL BLUE has suppressive properties on diseases caused by certain bacteria or fungi. When applying SYSSTEM-CAL BLUE for disease suppression, use it in combination with another registered bactericide or fungicide registered for the same crops listed on this label.**

**\*\*\*Do not graze livestock or poultry in treated turf areas. Do not feed forage or clippings from treated turf areas to livestock or poultry.**

## POST HARVEST APPLICATIONS

General Instructions: SYSSTEM-CAL BLUE can be applied in any aqueous application such as bin washers, dump tanks, soak tanks and pressure washers. When diluted per label mixing instructions, SYSSTEM-CAL BLUE is compatible with most post harvest chemicals. For Suppression of: Brown Rot (*Phytophthora* spp.) and Phythium Storage Rots (*Phythium* spp.). Sour Rot (*Geotrichum candidum*), Bitter Rot (*Glomularia* spp.), Blue Mold (*Penicillium italicum*), Green Mold (*Penicillium digitatum*), Anthracnose (*Colletotrichum gleosporoides*), Late Blight (*Phytophthora infestans*) and Pink Rot (*Phytophthora erythroseptica*) particularly when used in combination with other post-harvest fungicides.

SYSSTEM-CAL BLUE is especially effective in preventing the development of tolerant or resistant strains of fungi when tank mixed with a registered fungicide of a different class of chemistry or when registered chemicals require alternating with a different chemical class.

Use a suitable non-ionic surfactant in all post-harvest applications.

### [\*]Potatoes

DISEASE	APPLICATION RATE	APPLICATION PROGRAM
Suppression** of Late Blight ( <i>Phytophthora infestans</i> ) and Pink Rot ( <i>Phytophthora erythroseptica</i> )	Tuber low volume spray: Apply 1-3 pints of SYSSTEM-CAL BLUE per ton of tubers in 0.5-1 gallons of water as a spray.  Dipping: Make up a 1 % v/v solution of SYSSTEM-CAL BLUE	Ensure complete and even coverage. If dipping, ensure that potato tubers are immersed in solution for at least 30 seconds.

[\*Not registered for use in CA unless accompanied by supplemental labeling]

### Citrus including, but not limited to Grapefruit, Lemons, Limes, Oranges (sour and sweet), Tangelos, Tangerines, Citrus CitronClementines, Kumquat, and Pummelo

DISEASE	APPLICATION RATE	APPLICATION PROGRAM
Suppression** of Brown rot ( <i>Phytophthora</i> spp.), Green Mold ( <i>Penicillium digitatum</i> ) and Blue Mold ( <i>Penicillium italicum</i> ) & Sour Rot ( <i>Geotrichum candidum</i> )	Make up a 2% v/v solution of SYSSTEM-CAL BLUE in water. Use approximately 100 gallons of diluted solution per 30 bins# of fruit.  For applications to aqueous sprays prior to washing, apply 3 pints per 25 gallons spray mixture.	Ensure complete and even coverage and that fruit is drenched for at least 60 seconds.

#Note: Average Bin Weight = 800 lbs or 30 bins weigh 12 Tons

**[\*]For use on Avocado, Pome Fruit (Apples, Pears, Loquat, Quince), Stone Fruit [Apricots, Cherry (sour), Cherry (sweet), Nectarine, Peach, Plum, Prune], Banana, Mango, Papaya, Guava, Carambola, and Carrots in a Drench Tank or as a Spray**

<b>CROP</b>	<b>DISEASE</b>	<b>APPLICATION RATE</b>	<b>APPLICATION PROGRAM</b>
Avocado	Suppression** of Anthracnose ( <i>Colletotrichum spp.</i> ) <i>Dithiorella</i> and <i>Cercospora spp.</i>	Apply 1-1.5 gallons SYSSTEM-CAL BLUE per 100 gallons of water. Use approximately 100 gallons of diluted solution per 30 bins# of fruit.	Ensure complete and even coverage. Replace solution every 30 bins of fruit.
Pome Fruit	Suppression** of Brown Rot ( <i>Phytophthora spp.</i> ) Blue Mold ( <i>Penicillium spp.</i> ) Bitter Rot ( <i>Glomularia spp.</i> ) and <i>Monolinia spp.</i>	Apply 1-1.5 gallons SYSSTEM-CAL BLUE per 100 gallons of water. Use approximately 100 gallons [(950 L)] of diluted solution per 30 bins# of fruit.	Ensure complete and even coverage. Replace solution every 30 bins of fruit.
Stone Fruit	Suppression** of Brown Rot ( <i>Phytophthora spp.</i> ) ( <i>Monolinia spp.</i> ) Grey Mold ( <i>Botrytis</i> ) and Blue Mold ( <i>Penicillium spp.</i> )	Apply 1 gallon SYSSTEM-CAL BLUE per 100 gallons of water. Use approximately 100 gallons of diluted solution per 30 bins# of fruit.	Ensure complete and even coverage. Replace solution every 30 bins of fruit.
Bananas	Suppression** of Crown Rot ( <i>Fusarium spp.</i> ), Anthracnose ( <i>Colletotrichum spp.</i> ) Speckle, Freckle and Finger Rot	Dehanding Tank: Apply 2-3 gallons SYSSTEM-CAL BLUE per 200 gallons of water. Replenish every 2 days.  Fungicide Application: Apply as a spray mix with other fungicides at 1-2 pints SYSSTEM-CAL BLUE per 25 gallons of water.	Apply to dehanding fruit after fruit has passed through the de-latexing tank. Apply as a part of the post-harvest fungicide treatment.
Mangos, Papayas, Lychee, Carambola, and Guava	Suppression** of Anthracnose <i>spp.</i> , Black Spot, Chocolate Spot, <i>Cercospora</i> , <i>Alternaria</i> , <i>Botryodiplodia</i> , <i>Phomopsis</i> , <i>Cladosporium</i>	Fruit Dip: Make up a 2% v/v solution of SYSSTEM-CAL BLUE in water. Use one gallon of the diluted mix per 4,000 lbs. of fruit.	Ensure complete and even coverage. Apply with other fungicides in hot or cold water.

Carrots	<i>Suppression**</i> of Cavity Spot, Fusarium Rot, Phytophthora Rot, Grey Mold ( <i>Botrytis cineria</i> ) Crown Rot and Black Rot	Apply 3 pints SYSSTEM-CAL BLUE per 75 gallons of water. Use one gallon of the diluted mix per 6,000 lbs. of carrots.	Immerse carrots for 5-10 seconds prior to storage. Replace solution when it appears dirty.
---------	--	--	--

[\*Not registered for use in CA unless accompanied by supplemental labeling]

#Note: Average Bin Weight = 800 lbs or 30 bins weigh 12 Tons

**[\*]For use on Cut Flowers, Roses and Chrysanthemums**

CROP	DISEASE	APPLICATION RATE	APPLICATION PROGRAM
Roses, Chrysanthemums, Carnations and Other Cut flowers	For the <i>Suppression**</i> of post-harvest storage rots, including Botrytis, Anthracnose, vascular wilts and soft rots	Apply 0.5-1.5 pints SYSSTEM-CAL BLUE per 100 gallons in the hydrating solution.  Use the lower rate (0.5 pints/100 gallons when low pest pressure is present. Use the higher rate (1.5 pints/100 gallons when high pest pressure is present	Ensure complete and even coverage of cut flower stems when immersing. Do not immerse the flower heads.

[\*Not registered for use in CA unless accompanied by supplemental labeling]

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:**

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**Nonrefillable Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Refillable Container:** Refillable container. Refill this container with SYSTEM-CAL BLUE 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 CHEMICAL EMERGENCY ONLY (SPILL, LEAK, OR FIRE), CALL [CHEMTREC AT 1-800-424-9300].]**

#### **LIMITED WARRANTY AND DISCLAIMER**

It is the manufacturer's intention that this product is to be used in accordance with the Directions for Use as stated on this label. The use of this product being beyond control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such use or the results to be obtained if not used in accordance with printed directions and established safe practice. To the fullest extent permitted by law, the buyer's exclusive remedy and manufacturer's or seller's exclusive liability for any and all claims, losses, damages or injuries resulting from the use or handling of this product, whether or not based in contract, negligence, strict liability in tort or otherwise, shall be limited, at the manufacturer's option, to replacement of, or the repayment of the purchase price for, the quantity of product with respect to which damages are claimed.

Manufactured by: Agro-K Corporation, 8030 Main Street, Minneapolis, MN 55432

[Label version/date: 3/2023.07.06]