

83472-1

05/17/2007

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May 17, 2007

Ms. Kimberly Hensley
Regulatory Specialist
Environmental Solutions Group, LLC
1415 L Street, Suite 460
Sacramento, CA 95814

Subject: Notification to correct redundant and inaccurate statements
Product: Fungi-Phite™
EPA# 83472-1
Letter dated April 25, 2007

Dear Ms. Hensley:

The Biopesticides and Pollution Prevention Division is in receipt of the above dated application. A preliminary screen of this request has been conducted for its applicability under PRN 98-10 and it has been determined that the action requested falls within the scope of PR 98-10. Our records have been duly noted, and the label submitted with this application has been stamped Notification received, but not reviewed and will be placed accordingly in our records.

Questions concerning this action should be directed to Mr. Andrew Bryceland at 703-305-6928 or email at Bryceland.andrew@epa.gov.

Sincerely,

Linda Hollis

Linda Hollis, Chief
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division

CONCURRENCES

SYMBOL	▶ 7511 P						
SURNAME	▶ Hollis						
DATE	▶ 5/17/07						

ENVIRONMENTAL SOLUTIONS GROUP, LLC

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1415 L STREET, SUITE 460
SACRAMENTO, CALIFORNIA 95814 2823
TELEPHONE (916) 443-2793
FACSIMILE (916) 443-3071

KIMBERLY HENSLEY
REGULATORY SPECIALIST
E-Mail: khensley@csgllc.net

April 25, 2007

Cheryl Greene
Office of Prevention, Pesticides and Toxic Substances
Office of Pesticide Programs, BPPD (7504P)

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

EPA #
83472-1

73771-CA-1

Re: Notification of changes to the Fungi-Phite Master Label 83472-1-ZB and the Fungi-Phite AG Label 83472-1-AA in order to correct a redundant statement and an inaccuracy.

Dear Cheryl:

On behalf of my client, Plant Protectants, LLC, I am filing this Notification to correct a redundant statement and also to correct an inaccurate/unnecessary statement.

The following are the proposed changes to be made to the label:

The phrase "**(Except Brassica Vegetables)**" as it appears in the LEGUME CROPS section will be removed as the statement is meaningless, Legume crops do not include Brassicas, thus making it an inaccurate/unnecessary statement.

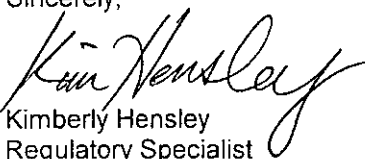
The listing of "**Eggplant**" as it appears under MISCELLANEOUS FOOD CROPS, will be removed as it is already listed under Fruiting Vegetable Crops, where it belongs, thus being a redundant statement.

Attached you should find the following documents to explain and support the Notification:

- A copy of the US EPA Notification Form (8570-1) for each product label
- 1 copy of each of the labels with the proposed changes highlighted
- 3 copies of each of the final printed labels (with corrections already made)

Please don't hesitate to contact me at 916.443.2793 if you have any questions.

Sincerely,


Kimberly Hensley
Regulatory Specialist



Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060

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	United States Environmental Protection Agency Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number S810419
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Application for Pesticide - Section I

1. Company/Product Number 73771-CA-1/83472-1	2. EPA Product Manager Cheryl Greene	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Plant Protectants, LLC/Fungi-Phite AG	PM#	
5. Name and Address of Applicant (Include ZIP Code) Plant Protectants, LLC 35801 Road 132 Visalia, CA 93292 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name <u>NOTIFICATION</u>	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Reviewed By: CP - 5/19/07

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Removal of "(Except Brassica Vegetables)" from the Legume Crops section and removal of "Eggplant" from the Miscellaneous Food Crops section.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container	If "Yes" Package wgt No. per container		
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/>	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph Paper glued <input type="checkbox"/> Other _____ <input type="checkbox"/> Stenciled					

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Kim Hensley	Title Regulatory Specialist	Telephone No. (Include Area Code) 916.443.2793
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Regulatory Specialist	
4. Typed Name Kim Hensley	5. Date April 25, 2007	

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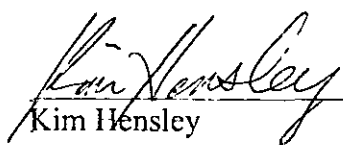
ENVIRONMENTAL SOLUTIONS GROUP, LLC

1415 L STREET, SUITE 460
SACRAMENTO, CALIFORNIA 95814 2823
TELEPHONE (916) 443-2793
FACSIMILE (916) 443-3071

KIMBERLY HENSLEY
REGULATORY SPECIALIST
E-Mail: khensley@esgllc.net

Certification Statement

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to the EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.



Kim Hensley
Regulatory Specialist
Environmental Solutions Group, LLC

4-25-07

Date

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FUNGI-PHITE™ AG

A Systemic Fungicide for the Suppression and Control of
Phytophthora, Pythium and Downy Mildew

ACTIVE INGREDIENTS:	Mono- and dimethylsalts of Phosphorous Acid	45.5
OTHER INGREDIENTS:		54.5
	TOTAL:	100.0

NOTIFICATION
Date Received: 5/16/07
Reviewed By: [Signature]

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See Back [Side] Panel for Precautionary Statements

FIRST AID	
If in eyes	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the International Poison Center at 1-888-740-8712 for emergency medical treatment information.	

EPA Reg No. 83472-1

EPA Est No. 73771-CA-1

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Harmful if absorbed through skin. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- a) long-sleeved shirt and long pants
- b) waterproof gloves
- c) shoes plus socks
- d) protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

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 in sale.

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 (WPS) 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, notifications, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 4 hours.

For early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil, or water, wear coveralls, waterproof gloves, shoes, and socks, and protective eyewear.

ENVIRONMENTAL HAZARDS

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 residue.

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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 (WPS), 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, notifications, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry in to treated areas during the REI of 4 hours.

For early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil, or water, wear coveralls, waterproof gloves, shoes, and socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of the 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.

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, hand move, fanjet or micro-sprinkler, or drip (trickle). 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.

DRIP (TRICKLE) 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.

System 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.

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.

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.

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.

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 dormant or heat or moisture stressed. To avoid undesirable copper phytotoxicity, do not make foliar applications to plants treated with copper-based compounds at less than 20 day intervals, unless instructed to do so by your crop consultant. Allow foliage to dry completely after application. Do not apply when conditions favor wet tissue 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.

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AGRICULTURAL USE INSTRUCTIONS

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GENERAL APPLICATION INSTRUCTIONS

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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 dormant or heat or moisture stressed. To avoid undesirable copper phytotoxicity, do not make foliar applications to plants treated with copper-based compounds at less than 20 day intervals unless instructed to do so by your crop consultant. Allow foliage to dry completely after application. Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).

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4. Continue agitation when applying.

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.

AVOCADO

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora citricola</i> (Canker)	Trunk Spray	Mix 1-2 quarts (1-2 L) in 5 gallons (20 L) of water.	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.
<i>Phytophthora cinnamomi</i> (Root Rot)	Foliar Spray	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Apply up to 4 applications per year at 4-8 week intervals at the start of the growing season.
	Aerial:		
	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 one time in the Spring, Summer and Fall.
	Trunk Injection	Mix a 15% w/v solution (20 fl oz/gallon or 150 ml/liter).	Inject (according to injection equipment instructions) 0.5 fl oz (15 ml) into the tree trunk per yard (or meter) of canopy width at the drip line, utilizing multiple injection holes (i.e., a tree with 6 yards (or meters) of canopy diameter will require 6 injections x 0.5 fl oz (15 ml) per injection hole). Curative: Inject 2 times per year in the Spring and Fall. Preventative: Inject 1 time in the Spring.
Downy Mildew	Foliar Spray Ground:	Apply 1.5 quarts/acre (3.5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	Apply at the first onset of the disease.

BANANA (Except California)

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Suppression** of Root Rot Complex and Sigatoka	Foliar Spray Aerial:	Apply 0.5-2 quarts/acre (1-5 L/ha). At the low rate, use 3 gallons/acre (20 L/ha) of water and at the high rate, use 12 gallons/acre (100 L/ha) of water.	Apply every 4 weeks as needed.
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 15 gallons/acre (150 L/ha) of water.	
	Trunk Injection	Mix a 3.75% w/v solution (1.5 quarts/10 gallons of water or 3 L/100 L of water).	Inject 40 ml of the diluted product (according to injection equipment instructions) into the pseudostem, 1-1.5 m above the ground, at the onset of flowering every crop cycle (i.e., once or twice injection holes).
	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 Disease	Foliar Spray of Bunches:	Mix a 0.3% w/v spray solution (4 to 02.10 gallons of water or 300 ml of water).	Apply a full cover spray to the fruit bunches when the flower stalks are fully expanded. Reapply 4 weeks later.

BERRY CROPS such as:

Blackberry, Bingberry, Black Satin Berry, Boysenberry, Cherokee Blackberry, Blueberry, Chesterberry, Cheyenne Blackberry, Coryberry, Darrowberry, Dewberry, Dirksen Thornless Berry, Elderberry, Himalayaberry, Hullberry, Lavacaberry, Loganberry, Lowberry, Lucretiaberry, Mammoth Blackberry, Marionberry, Nectarberry, Olallieberry, Oregon Evergreen Berry, Mulberry, Huckleberry, Cranberry, Youngberry, and Raspberry.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp. Suppression** of Septoria and Anthracnose Disease Complexes (except California)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	Disease Prevention/Low Pressure Program**: Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program**: Apply higher rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle.
	Root Dip	Mix a 2.5% w/v solution (1.5 quarts/10 gallons of water or 2.5 L/100 L of water).	Apply as pre-plant dip to the roots for 10-15 minutes. Plant within 48 hours after dipping. Mix a fresh solution daily.
	Chemigation Overhead: Low Volume:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water. 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 Disease Programs* as stated above. Do not apply more than 4 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure**: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure**: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	

BULB VEGETABLE CROPS, such as:

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

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp. Suppression** of Bacterial Diseases (except California)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program**: Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program**: Apply higher rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	Apply with normal irrigation schedule. Follow Disease Programs* as stated above. Do not apply more than 4 times per crop cycle.

	Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 20 gallons/acre (750 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-3 L/ha) in a minimum of 100 gallons/acre (350 L/ha) of water.	

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BULB VEGETABLE CROPS, such as:

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

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp Suppression** of Bacterial Diseases (except <i>Californica</i>)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (75 L/ha) of water.	Begin applications after plants are established and conditions favor disease development. Disease Prevention/Low Pressure Program*: Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (75 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

BRASSICA CROPS, such as:

Broccoli, Broccoli Raab (Rapini), Brussels Sprouts, Cabbage, Chinese Broccoli (Gai Lan), Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Ga Choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizunna, Mustard Greens, Mustard Spinach and Rape Greens.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp Suppression** of Bacterial Diseases (except <i>Californica</i>)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (75 L/ha) of water.	Begin applications after plants are established and conditions favor disease development. Disease Prevention/Low Pressure Program*: Apply lower rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (75 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-3 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

CEREAL GRAINS, FORAGE AND FIBER CROPS, such as:
 Alfalfa, Barley, Buckwheat, Clover (all types), Corn (all types), Cotton, Hay, Kudzu, Lespedeza, Lupin, Millet, Oats, Popcorn, Rice, Rye, Sainfoin, Sorghum, Teosinte, Trefoil, Triticale, Vetch, Wheat and Wild Rice.

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp Suppression** of Fusarium, Rhizoctonia, and Head Diseases (except California)	Foliar Spray Aerial:	Apply 0.5-1.5 quarts/acre (1-3.5 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. Disease Prevention/Low Pressure Program: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program: Apply higher rate at 2-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Chemigation Overhead: Low Volume:	Apply 2-4 quarts/acre (5-9 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.	
Downy Mildew	Foliar Spray Aerial:	Apply 0.5-1.5 quarts/acre (1-3.5 L/ha) in a minimum of 15 gallons/acre (140 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	

CITRUS CROPS, such as:

Calamondin, Citrus Citron, Citrus Hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Orange (Sour), Orange (Sweet), Pummelo and Satsuma Mandarin.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora sp	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.	
Suppression** of Pre-Harvest Blue and Green Mold (except California)	Trunk and Scaffold Branches Spray	Mix 1-2 quarts (1-2 L) in 5 gallons (20 L) of water.	Use higher rate 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.
	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.

CUCURBIT CROPS, such as:

Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (edible), Momordica spp. (Balsam Apple, Balsam Pear, Bitter Melon, Chinese Cucumber), Muskmelon, Pumpkin, Summer and Winter Squash and Watermelon.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program: Apply lower rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead: Low Volume:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water. 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 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

CUCURBIT CROPS, such as:

Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (edible), Momordica spp. (Balsam Apple, Balsam Pear, Bitter Melon, Chinese Cucumber), Muskmelon, Pumpkin, Summer and Winter Squash and Watermelon.

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp.	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

FRUITING VEGETABLE CROPS (Except Cucurbits), such as:

Pepino Pepper (Bell, Chill, Cooking, Pimento, Sweet), Tomatillo, Tomato and Egg Plant.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp. Suppression** of Bacterial Diseases (except C. blight)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	
	Ground:	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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

GRAPES

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp.	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 15 gallons/acre (140 L/ha) of water.	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.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 50 gallons/acre (470 L/ha) of water.	
	Chemigation Low Volume:	Apply 2 quarts/acre (15 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 15 gallons/acre (140 L/ha) of water.	Begin applications at bud break with additional applications made throughout the season. Use higher rates and volumes based on disease severity and density of canopy. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 50 gallons/acre (470 L/ha) of water.	

HERB AND SPICE CROPS, such as:

Allspice, Angelica, Anise, Annatto, Balm, Basil, Borage, Burnet, Camomile, Caper Buds, Caraway, Cardamom, Cassia (bark and buds), Catnip, Celery Seed, Chervil, Chive, Cinnamon, Clary, Clove, Cocoa, Coriander, Costmary, Cilantro, Cumin, Curry, Dill, Fennel, Fenugreek, Grains of Paradise, Horehound, Hyssop, Juniper Berry, Lavender, Lemongrass, Lovage, Mace, Marigold, Marjoram, Mint, Mustard, Nasturtium, Nutmeg, Parsley, Pennyroyal, Pepper, Poppy seed, Rosemary, Rue, Saffron, Sage, Savory, Sweet Bay, Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff and Wormwood.

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp Suppression** of Fusarium and Rhizoctonia (except California)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program* Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program* Apply higher rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 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.	
	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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure* Apply lower rate at the first onset of the disease. Repeat applications at 2-4 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure* Apply higher rate at the first onset of the disease. Repeat applications at 2-4 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

HOPS (Except California)

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Make applications during favorable disease development conditions 1) when shoots are 6-12 inches high, 2) after training when vines are 6-6 feet tall, 3) about 3 weeks after the second application, and 4) during bloom.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 25 gallons/acre (235 L/ha) of water.	

LEAFY VEGETABLE CROPS (Except Brassica Vegetables), such as:

Amaranth, Arugula (Roquette), Cardoon, Celery, Celery (Chinese), Celtuce, Chervil, Chrysanthemum (Edible Leaved, Garland), Corn Salad, Cress (Garden, Upland), Dandelion, Dock (Sorrel), Endive (Escarole), Fennel (Florence), Lettuce (Head and Leaf), Orach, Parsley, Purslane (Garden and Winter), Radicchio (Red Chicory), Rhubarb, Spinach, Spinach (New Zealand and Vine) and Swiss Chard.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program* Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/Higher Pressure Program* Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	
	Low Volume:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	Apply with normal irrigation schedule. Follow Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 L/ha)	Low Disease Pressure* Apply lower rate at the first onset of the disease.

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LEAFY VEGETABLE CROPS (Except Brassica Vegetables), such as:
 Amaranth, Arugula (Roquette), Cardoon, Celery, Celery (Chinese), Celtuce, Chervil, Chrysanthemum (Edible Leaved, Garland), Corn Salad, Cress (Garden, Upland), Dandelion, Dock (Sorrel), Endive (Escarole), Fennel (Florence), Lettuce (Head and Leaf), Orach, Parsley, Purslane (Garden and Winter), Radicchio (Red Chicory), Rhubarb, Spinach, Spinach (New Zealand and Vine) and Swiss Chard.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/Higher Pressure Program: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead: Low Volume:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water. Apply 1-2 quarts/acre (2-5 L/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 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure: Apply lower rate at the first onset of the disease. Repeat applications at 2-4 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

LEGUME CROPS (Except Brassica Vegetables), such as:
 Legume Vegetables (succulent or dried), Bean (Lupins, all), Bean (Field, Kidney, Lima, Navy, Pinto, Runner, Snap, Tepary, and Wax), Bean (Adzuki, Asparagus, Blackeyed, Catjang, Chinese Longbean, Cowpea, Crowder Pea, Moth, Mung, Rice, Southern Pea, Urd, Yardlong), Broad Bean (Fava), Chickpea (Garbanzo), Guar, Jackbean, Lablab Bean, Lentil, Pea (Dwarf, Edible-Pod, English, Field, Garden, Green, Snow, Sugar Snap), Pigeon Pea, Soybean and Sword Bean.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp Suppression** of Powdery Mildew, <i>Fusarium</i> and <i>Rhizoctonia</i> (except <i>Colletotrichum</i>)	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	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 2-3 quarts/acre (5-3 L/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 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure: Apply lower rate at the first onset of the disease. Repeat applications at 2-4 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

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MISCELLANEOUS FOOD CROPS, such as:

Asparagus, Cacao, Coconut, Coffee, Corn (all types), Eggplant, Guava, Okra, Papaya, Persimmons, Purslane and Sugarcane.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp Suppression** of Bacterial and Leaf Diseases (except California)	Foliar Spray Aerial	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 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 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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
<i>Phytophthora</i> sp Pruning Wound and Trunk Canker	Trunk Spray	Mix 1-3 quarts with 5 gallons of water (3-5 L with 50 L water.)	Use higher rate when lesions are present. Grow wounds with 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.
Downy Mildew	Foliar Spray Aerial	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

OIL CROPS, such as:

Canola (Oil Seed Rape), Cotton, Safflower, Sunflower, Corn, Palm Oil and Betel Nut.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp Suppression** of Bacterial and Foliar Diseases (except California)	Foliar Spray Aerial	Apply 0.5-1 quart/acre (1-2 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Root Dip	Mix a 0.5% v/v solution (2.3 fl oz 1 gallon of water or 5 ml L of water)	Apply as pre-plant dip to the roots for 15-30 minutes. 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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

PINEAPPLE (Except California)

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> sp (Heart Rot and Root Rot)	Dip	Mix a 0.25% v/v solution (1 quart 100 gallons of water or 1 L/400 L of water)	For established plantings, apply 1.5 quart/acre per 200 gallons (4 L/ha in 200 L) of spray mixture.

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	Root Dip	Mix a 0.5% w/v solution (2.3 fl oz/1 gallon of water or 5 mL of water).	Apply as pre-plant dip to the roots for 15-30 minutes. 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 Disease Programs ** 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 (2-7 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure *: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	High Disease Pressure *: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

PINEAPPLE (Except California)

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> sp (Heart Rot and Root Rot)	Dip	Mix a 0.25% w/v solution (1 quart/100 gallons of water or 1 L/400 L of water).	For established plantings, apply 1.5 quarts/acre per 1,000 gallons (4 L/ha in 2000 L) of spray mixture beginning when conditions are favorable for disease development and when such conditions are anticipated. Continue applications at 3 month intervals.
	Foliar Spray Aerial:	Apply 1.5 quarts/acre (3.5 L/ha) in a minimum of 15 gallons (140 L/ha) of water.	Preventative: Apply every 4-6 months. Curative: Apply every 3-6 months.
	Ground:	Apply 1.5 quarts/acre (3.5 L/ha) in a minimum of 200 gallons/acre (1,870 L/ha) of water.	
	Chemigation Low Volume:	Apply 1.5 quarts/acre (3.5 L/ha) in a minimum of 500 gallons/acre (4,650 L/ha) of water.	Apply 4 times per year during the Spring, Summer and Fall.

POME FRUIT CROPS, such as:

Apple, Crabapple, Loquat, Mayhaw, Pear, Asian Pear and Quince.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp	Foliar Spray Aerial:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Begin application after plants are established and from first leaf flush when conditions favor disease development. Disease Prevention/Low Pressure Program *: Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program *: Apply higher rate at 1-3 week intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Suppression** of Fire Blight, Blister Spot, Blue and Green Mold, Alternaria Blotch and Pear Black Spot (except California)	Chemigation Overhead:	Apply 2-3 quarts/acre (5-7 L/ha) in a minimum of 1,000 gallons (9,350 L/ha) of water.
Low Volume:		Apply 2-4 quarts (5-9 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
Canker and Root Rot (except California)	Trunk Spray	Mix 1-2 quarts (1-2 L) in 5 gallons (20 L) of water.	Use higher rate 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.
Downy Mildew	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure *: 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.
Powdery Mildew (except California)	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	High Disease Pressure *: 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.

POTATOES

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Suppression** of Late Blight	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program* : Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program* : Apply higher rate at 2-3 week intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 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 beginning at the 4-6 true leaf stage. Follow Disease Programs* 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 20% w/v solution (0.4 quart/2 quarts of water or 0.4 L/2 L of water). Treat 2 tons of tubers with 1 gallon of solution.	Treat seed pieces with a full coverage spray.
Downy Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure* : 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. High Disease Pressure* : 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.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 50 gallons/acre (470 L/ha) of water.	

ROOT AND TUBER VEGETABLE CROPS, such as:

Arracacha, Arrowroot, Artichoke (all types), Beet (all types), Burdock, Canna, Carrot, Cassava, Celeriac, Chayote, Chervil (turnip-rooted), Chicory, Chufa, Cinchoca, Dasheen, Ginger, Ginseng, Horseradish, Leren, Parsley (turnip-rooted), Parsnip, Radish (all types), Rutabaga, Salsify (all types), Skirret, Sweet Potato, Tanier, Turmeric, Turnip, Yam (all types).

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp Suppression** of Foliar and Bacterial Diseases (except California)	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program* : Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program* : Apply higher rate at 2-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Root Dip:	Mix a 0.5% w/v solution (2 quarts/100 gallons of water or 0.5 L/100 L of water).	Apply as pre-plant dip to the roots for 10-15 minutes. Plant within 48 hours after dipping. Mix a fresh solution daily.
	Chemigation Overhead:	Apply 2-3 quarts/acre (5-9 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	Apply with normal irrigation schedule beginning at the 4-6 true leaf stage. Follow Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
	Low Volume:	Apply 2-4 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 (2-7 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure* : Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure* : Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

STONE FRUIT CROPS, such as:

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

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp (Root Rot, Cellular Rot, Bacterial Spot and Foot Rot) Suppression** of Bacterial Diseases, including Fire Blight (except California)	Foliar Spray Aerial:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Begin application after plants are established and from first leaf flush when conditions favor disease development. Disease Prevention/Low Pressure Program* : Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program* : Apply higher rate at 2-3 week intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Root Dip:	Mix a 0.25% w/v solution (1	Apply as pre-plant dip to the roots for 10-15 minutes.

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	Overhead:	Apply 2-3 quarts/acre (5-9 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	Apply this mixture at regular intervals beginning on the 4-6 true leaf stage. Follow Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
	Low Volume:	Apply 2-4 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 (2-7 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

STONE FRUIT CROPS, such as:
Apricot, Cherry, Nectarine, Peach, Plum, Plumcot and Prune.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp (Root Rot, Collar Rot, Bacterial Spot and Foot Rot) Suppression** of Eucalypt Diseases, including Fire Blight (except California)	Foliar Spray Aerial:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Begin application after plants are established and from first leaf flush when conditions favor disease development. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 2-3 week intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Root Dip	Mix a 0.25% v/v solution (1 quart/100 gallons of water or 0.25 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.	
	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 Disease Programs* as stated above. Do not apply more than 4 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure*: 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.
Powdery Mildew (except California)	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	High Disease Pressure*: 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.

STRAWBERRY

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp (Red Stele, Leather Rot and Root Rot)	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons (190 L/ha) of water.	Begin application 2-3 weeks after planting and repeat on a 30-60 day interval when conditions favor disease development. Perennial planting: Start Spring applications when the plants start active growth. Repeat application at 30-60 day intervals if disease conditions persist or reoccur. 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 8 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 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.	
	Low Volume:	Apply 2-4 quarts/acre (5-9 L/ha) in a minimum of 100 gallons/acre (950 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.
<i>Phytophthora</i> sp (except California)	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 15-30 minutes. Plant within 48 hours. Mix a fresh solution daily.
<i>Phytophthora cactorum</i> (Leather Rot)	Foliar Spray Aerial:	Apply 1-2 quarts (2-5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Start applications at 10% bloom and early fruit set. Continue applications on a 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.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 50 gallons/acre (470 L/ha) of water.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

TOBACCO (Except California)

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp Blue Mold Black Shank and Root Rot Declines	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program: Apply lower rate at 4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program: Apply higher rate at 4 week intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	Apply with normal irrigation schedule. Follow Disease Program 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.	

KIWI, OLIVES AND TREE NUT CROPS, such as:

Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hazelnuts, Hickory Nut, Macadamia Nut, Pecan, Pistachio, and Walnut.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program: Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program: Apply higher rate at 2-3 week intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-5 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 10-15 minutes. 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 (5-8 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	Apply with normal irrigation schedule. Follow Disease Program as stated above. Do not apply more than 6 times per crop cycle.
Phytophthora Spunge Pruning Wound and Trunk Canker	Trunk Spray	Mix 1-3 quarts (1-2 L) in 5 gallons (20 L) of water.	Use higher rate when lesions are present. Clean wound sites 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.
Downy Mildew	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure: 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. High Disease Pressure: 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.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	

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

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

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

	Ground:	(180 L/h) or water. Apply 1-2 quart/acre (2-5 L/h) in a minimum of 100 g/h (1950 L/h) of water.	Apply 4 times per crop cycle. High Disease Pressure: 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.
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*Check with your local Extension Agent or Crop Consultant if you are unsure about disease prevention, control or severity/pressure.

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

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

WARRANTY STATEMENT

Plant Protectants, LLC warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes set forth on the label when used according to directions under normal use conditions. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. This warranty does not extend to the handling or use of this product contrary to label instructions or under abnormal conditions not reasonably foreseeable to seller and to the fullest extent permitted by state law, buyer assumes all risk of any such use.

[Label version 11-31-06]

Net Contents _____ gallons

Manufactured by:

Plant Protectants, LLC

35801 Road 132 -Visalia CA 93292

FUNGI-PHITE™

A Systemic Fungicide for the Suppression and Control of
Phytophthora, Pythium and Downy Mildew

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ACTIVE INGREDIENTS:
 Mono- and di-potassium salts of Phosphoric Acid.....45.5%

OTHER INGREDIENTS:.....54.5%

TOTAL:.....100.0%

Not reviewed
NOTIFICATION
 Date Received: 5/17/09
 Reviewed By: CP
 OUT OF REACH OF CHILDREN
 CAUTION
 See Back [Side] Panel for Precautionary Statements

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the International Poison Center at 1-888-740-8712 for emergency medical treatment information.</p>	

EPA Reg No. 83472-1

EPA Est No. 73771-CA-1

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Harmful if absorbed through skin. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- a) long-sleeved shirt and long pants
- b) waterproof gloves
- c) shoes plus socks
- d) protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

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 rinseate.

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 (WPS), 40 CFR part 17C. 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, notifications, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry in to treated areas during the REI of 4 hours.

For early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil, or water, wear coveralls, waterproof gloves, shoes and socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

or gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

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.

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 (WPS), 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, notifications, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry in to treated areas during the REI of 4 hours.

For early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil, or water, wear coveralls, waterproof gloves, shoes and socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of the 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.

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, hand move, fanjet or micro-sprinkler; or drip (trickle). 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.

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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.

DRIP (TRICKLE) 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.

System 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.

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.

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.

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.

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 dormant or heat or moisture stressed. To avoid undesirable copper phytotoxicity, do not make foliar applications to plants treated with copper-based compounds at less than 20 day intervals unless instructed to do so by your crop consultant. Allow foliage to dry completely after application. Do not apply when conditions favor wet tissue 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.

AGRICULTURAL USE INSTRUCTIONS

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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 dormant or heat or moisture stressed. To avoid undesirable copper phytotoxicity, do not make foliar applications to plants treated with copper-based compounds at less than 20 day intervals unless instructed to do so by your crop consultant. Allow foliage to dry completely after application. Do not apply when conditions favor wet tissue 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.

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.

AVOCADO

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora citricola</i> (Canker)	Trunk Spray	Mix 1-2 quarts (1-2 L) in 5 gallons (20 L) of water.	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.
<i>Phytophthora cinnamomi</i> (Root Rot)	Foliar Spray	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water	Apply up to 4 applications per year at 4-8 week intervals at the start of the growing season.
	Aerial:		
	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 one time in the Spring, Summer and Fall.
	Trunk Injection	Mix a 15% w/v solution (20 fl oz/gallon or 150 mL/liter).	Inject (according to injection equipment instructions) 0.5 fl oz (15 ml) into the tree trunk per yard (or meter) of canopy width at the drip line, utilizing multiple injection holes (i.e. a tree with 6 yards (or meters) of canopy diameter will require 6 injections via 6 separate injection holes). Curative: Inject 2 times per year in the Spring and Fall. Preventative: Inject 1 time in the Spring.
Downy Mildew	Foliar Spray Ground:	Apply 1.5 quarts/acre (3.5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	Apply at the first onset of the disease.

BANANA (Except California)

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM	
Suppression** of Root Rot Complex and Sigatoka	Foliar Spray Aerial:	Apply 0.5-2 quarts/acre (1-5 L/ha). At the low rate, use 3 gallons/acre (25 L/ha) of water and at the high rate, use 12 gallons/acre (100 L/ha) of water.	Apply every 4 weeks as needed.	
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 15 gallons/acre (150 L/ha) of water.		
	Trunk injection	Mix a 3.75% w/v solution (1.5 quarts/10 gallons of water or 3 L/100 L of water)		Inject 40 ml of the diluted product (according to injection equipment instructions) into the pseudostem, 1-1.5 m above the ground, at the onset of flowering every crop cycle (use one or two injection holes)
	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 Disease	Foliar Spray of Bunches	Mix a 0.3% w/v spray solution (4.6 oz/10 gallons of water or 300 mL of water).	Apply a full cover spray to the fruit bunches when the flower riches is fully expanded. Reapply 4 weeks later.	

BERRY CROPS such as:

Blackberry, Bingberry, Black Satin Berry, Boysenberry, Cherokee Blackberry, Blueberry, Chesterberry, Cheyenne Blackberry, Coryberry, Darrowberry, Dewberry, Dirksen Thornless Berry, Elderberry, Himalayaberry, Hullberry, Lavacaberry, Loganberry, Lowberry, Lucretiaberry, Mammoth Blackberry, Marionberry, Nectarberry, Olallieberry, Oregon Evergreen Berry, Mulberry, Huckleberry, Cranberry, Youngberry, and Raspberry.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM	
Phytophthora and Pythium sp Suppression** of Septoria and Anthracnose Disease Complexes (except California)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 20 gallons/acre (180 L/ha) of water.	Begin applications in the Spring after bud break (1-3 inches of new growth) and when conditions favor disease development Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle Disease Control/High Pressure Program*: Apply higher rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle	
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water		
	Root Dip	Mix a 2.50% w/v solution (1.5 quarts/10 gallons of water or 2.5 L/100 L of water)		Apply as pre-plant dip to the roots for 10-15 minutes. Plant within 48 hours after dipping. Mix a fresh solution daily.
	Chemigation Overhead: Low Volume:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water 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 Disease Programs* as stated above. Do not apply more than 4 times per crop cycle
Downy Mildew	Foliar Spray Aerial: Ground:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 20 gallons/acre (180 L/ha) of water Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.	

BULB VEGETABLE CROPS, such as:

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

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp Suppression** of Bacterial Diseases (except California)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle Disease Control/High Pressure Program*: Apply higher rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle
	Ground:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 30 gallons/acre (263 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	

Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	

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BULB VEGETABLE CROPS, such as:

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

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora and Pythium</i> sp Suppression** of Bacterial Diseases (except California)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	Apply with normal irrigation schedule. Follow Disease Programs* 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 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

BRASSICA CROPS, such as:

Broccoli, Broccoli Raab (Rapini), Brussels Sprouts, Cabbage, Chinese Broccoli (Gai Lan), Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Ga Choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizunna, Mustard Greens, Mustard Spinach and Rape Greens.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora and Pythium</i> sp Suppression** of Bacterial Diseases (except California)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	Apply with normal irrigation schedule. Follow Disease Programs* 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 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

CEREAL GRAINS, FORAGE AND FIBER CROPS, such as:

Alfalfa, Barley, Buckwheat, Clover (all types), Corn (all types), Cotton, Hay, Kudzu, Lespedeza, Lupin, Millet, Oats, Popcorn, Rice, Rye, Sainfoin, Sorghum, Teosinte, Trefoil, Triticale, Vetch, Wheat and Wild Rice.

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp Suppression** of Fusarium, Rhizoctonia and Head Diseases (except California)	Foliar Spray Aerial:	Apply 0.5-1.5 quarts/acre (1-3.5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 2-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Chemigation Overhead:	Apply 2-4 quarts/acre (5-9 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	Apply with normal irrigation schedule. Follow Disease Programs* 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 0.5-1.5 quarts/acre (1-3.5 L/ha) in a minimum of 15 gallons/acre (140 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	

CITRUS CROPS, such as:

Calamondin, Citrus Citron, Citrus Hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Orange (Sour), Orange (Sweet), Pummelo and Satsuma Mandarin.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora sp	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 APPLICATION PROGRAM as stated above. Do not apply more than 4 times per crop cycle.
	Trunk and Scaffold Branches Spray:	Mix 1-2 quarts (1-2 L) in 5 gallons (20 L) of water.	Use higher rate 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 (except California)	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.

CUCURBIT CROPS, such as:

Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (edible), Momordica spp. (Balsam Apple, Balsam Pear, Bitter Melon, Chinese Cucumber), Muskmelon, Pumpkin, Summer and Winter Squash and Watermelon.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	Apply with normal irrigation schedule. Follow Disease Programs* 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 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

CUCURBIT CROPS, such as:

Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (edible), Momordica spp. (Balsam Apple, Balsam Pear, Bitter Melon, Chinese Cucumber), Muskmelon, Pumpkin, Summer and Winter Squash and Watermelon.

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora and Pythium</i> sp	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

FRUITING VEGETABLE CROPS (Except Cucurbits), such as:

Pepino, Pepper (Bell, Chili, Cooking, Pimento, Sweet), Tomatillo, Tomato and Egg Plant.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora and Pythium</i> sp Suppression** of Bacterial Diseases (except California)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	
	Ground:	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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

GRAPES

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora and Pythium</i> sp	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 15 gallons/acre (140 L/ha) of water.	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.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 50 gallons/acre (470 L/ha) of water.	
	Chemigation Low Volume:	Apply 2 quarts/acre (5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 15 gallons/acre (140 L/ha) of water.	Begin applications at bud break with additional applications made throughout the season. Use higher rates and volumes based on disease severity and density of canopy. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 50 gallons/acre (470 L/ha) of water.	

HERB AND SPICE CROPS, such as:

Allspice, Angelica, Anise, Annatto, Balm, Basil, Borage, Burnet, Camomile, Capers Buds, Caraway, Cardamom, Cassia (bark and buds), Catnip, Celery Seed, Chervil, Chive, Cinnamon, Clary, Clove, Cocoa, Coriander, Costmary, Cilantro, Cumin, Curry, Dill, Fennel, Fenugreek, Grains of Paradise, Horehound, Hyssop, Juniper Berry, Lavender, Lemongrass, Lovage, Mace, Marigold, Marjoram, Mint, Mustard, Nasturtium, Nutmeg, Parsley, Pennyroyal, Pepper, Poppy seed, Rosemary, Rue, Saffron, Sage, Savory, Sweet Bay, Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff and Wormwood.

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora and Pythium sp</i> Suppression** of <i>Fusarium and Rhizoctonia</i> (except California)	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	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 2-3 quarts/acre (5-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 2-4 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 2-4 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

HOPS (Except California)

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Make applications during favorable disease development conditions 1) when shoots are 6-12 inches high; 2) after training when vines are 5-6 feet tall; 3) about 3 weeks after the second application; and 4) during bloom.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 25 gallons/acre (235 L/ha) of water.	

LEAFY VEGETABLE CROPS (Except Brassica Vegetables), such as:

Amaranth, Arugula (Rocket), Cardoon, Celery, Celery (Chinese), Celtuce, Chervil, Chrysanthemum (Edible Leaved, Garland), Corn Salad, Cress (Garden, Upland), Dandelion, Dock (Sorrel), Endive (Escarole), Fennel (Florence), Lettuce (Head and Leaf), Orach, Parsley, Purslane (Garden and Winter), Radicchio (Red Chicory), Rhubarb, Spinach, Spinach (New Zealand and Vine) and Swiss Chard.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora and Pythium sp</i>	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/Higher Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead: Low Volume:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water. Apply 1-2 quarts/acre (2-5 L/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 L/ha)	Low Disease Pressure*: Apply lower rate at the first onset of the disease.

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LEAFY VEGETABLE CROPS (Except Brassica Vegetables), such as:
 Amaranth, Arugula (Roquette), Cardoon, Celery, Celery (Chinese), Celtuce, Chervil, Chrysanthemum (Edible Leaved, Garland), Corn Salad, Cress (Garden, Upland), Dandelion, Dock (Sorrel), Endive (Escarole), Fennel (Florence), Lettuce (Head and Leaf), Orach, Parsley, Purslane (Garden and Winter), Radicchio (Red Chicory), Rhubarb, Spinach, Spinach (New Zealand and Vine) and Swiss Chard.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora and Pythium</i> sp	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-3 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/Higher Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Chemigation Overhead: Low Volume:	Apply 1-2 quarts/acre (2-3 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water. Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	Apply with normal irrigation schedule. Follow Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 2-4 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

LEGUME CROPS such as:
 Legume Vegetables (succulent or dried), Bean (Lupins, all), Bean (Field, Kidney, Lima, Navy, Pinto, Runner, Snap, Tepary, and Wax), Bean (Adzuki, Asparagus, Blackeyed, Catjang, Chinese Longbean, Cowpea, Crowder Pea, Moth, Mung, Rice, Southern Pea, Urd, Yardlong), Broad Bean (Fava), Chickpea (Garbanzo), Guar, Jackbean, Lablab Bean, Lentil, Pea (Dwarf, Edible-Pod, English, Field, Garden, Green, Snow, Sugar Snap), Pigeon Pea, Soybean and Sword Bean.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora and Pythium</i> sp Suppression** of Powdery Mildew, <i>Fusarium</i> and <i>Rhizoctonia</i> (except Califorma)	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 2-4 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM	
Phytophthora and Pythium sp Suppression** of Bacterial and Leaf Diseases (except California)	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.	
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 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: 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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Phytophthora sp Pruning Wound and Trunk Canker	Trunk Spray	Mix 1-2 quarts with 5 gallons of water (3-5 L with 50 L water.)	Use higher rate when lesions are present. Clean wound sites 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.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.	
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.		

OIL CROPS, such as:

Canola (Oil Seed Rape), Cotton, Safflower, Sunflower, Corn, Palm Oil and Betel Nut.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM	
Phytophthora and Pythium sp Suppression** of Bacterial and Foliar Diseases (except California)	Foliar Spray Aerial:	Apply 0.5-1 quart/acre (1-2 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 6 times per crop cycle.	
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.		
	Root Dip	Mix a 0.5% v/v solution (2/3 fl oz/1 gallon of water or 5 mL/L of water)		Apply as pre-plant dip to the roots for 15-30 minutes. 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 Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.	
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.		

PINEAPPLE (Except California)

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora sp (Heart Rot and Root Rot)	Dip	Mix a 0.25% v/v solution (1 quart/100 gallons of water or 1 L/400 L of water).	For established plantings, apply 1.5 quarts/acre per 200 gallons (4 L/ha in 2000 L) of spray mixture beginning when conditions are favorable for disease.

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	Root Dip	Mix a 0.5% v/v solution (2/3 fl oz/1 gallon of water or 5 mL of water)	Apply as pre-plant dip to the roots for 15-30 minutes. 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 schedules. Follow Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
Downy Mildew	Foliar Spray Aerial: Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water. Apply 1-3 quarts/acre (2-7 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 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

PINEAPPLE (Except California)

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> sp (Heart Rot and Root Rot)	Dip	Mix a 0.25% v/v solution (1 quart/100 gallons of water or 1 L/400 L of water).	For established plantings, apply 1.5 quarts/acre per 200 gallons (4 L/ha in 2000 L) of spray mixture beginning when conditions are favorable for disease development and when such conditions are anticipated. Continue applications at 3 month intervals.
	Foliar Spray Aerial: Ground:	Apply 1.5 quarts/acre (3.5 L/ha) in a minimum of 15 gallons (140 L/ha) of water. Apply 1.5 quarts/acre (3.5 L/ha) in a minimum of 200 gallons/acre (1,870 L/ha) of water.	Preventative: Apply every 4-6 months. Curative: Apply every 3-6 months.
	Chemigation Low Volume:	Apply 1.5 quarts/acre (3.5 L/ha) in a minimum of 500 gallons/acre (4,650 L/ha) of water.	Apply 4 times per year during the Spring, Summer and Fall.

POME FRUIT CROPS, such as:

Apple, Crabapple, Loquat, Mayhaw, Pear, Asian Pear and Quince.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp Suppression** of Fire Blight, Blister Spot, Blue and Green Mold, Alternaria Blotch and Pear Black Spot (except California)	Foliar Spray Aerial: Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water. Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	Begin application after plants are established and from first leaf flush when conditions favor disease development. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 1-3 week intervals. Do not apply more than 4 times per crop cycle.
	Chemigation Overhead: Low Volume:	Apply 2-3 quarts/acre (5-7 L/ha) in a minimum of 1,000 gallons (9,350 L/ha) of water. Apply 2-4 quarts (5-9 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	Apply with normal irrigation schedule. Follow Disease Programs* as stated above. Do not apply more than 6 times per crop cycle.
	Collar and Foot Rots (except California)	Trunk Spray	Mix 1-2 quarts (1-2 L) in 5 gallons (20 L) of water.
Downy Mildew Powdery Mildew (except California)	Foliar Spray Aerial: Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons/acre (180 L/ha) of water. Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	Low Disease Pressure*: 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. High Disease Pressure*: 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.

POTATOES

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Suppression** of Late Blight	Foliar Spray	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons/acre (180 L/ha) of water.	Begin application after plants are established and conditions favor disease development. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 2-3 week intervals. Do not apply more than 4 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-2 quarts/acre (2-5 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.	
	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 beginning at the 4-6 true leaf stage. Follow Disease Programs* as stated above. Do not apply more than 4 times per crop cycle.
	Seed Piece Spray	Mix a 20% v/v solution (0.4 quart/2 quarts of water or 0.4 L/2 L of water). Treat 2 tons of tubers with 1 gallon of solution.	Treat seed pieces with a full coverage spray.
Downy Mildew	Foliar Spray	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: 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. High Disease Pressure*: 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.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 50 gallons/acre (470 L/ha) of water.	

ROOT AND TUBER VEGETABLE CROPS, such as:

Arracacha, Arrowroot, Artichoke (all types), Beet (all types), Burdock, Canna, Carrot, Cassava, Celeriac, Chayote, Chenil (turnip-rooted), Chicory, Chufa, Cinchoca, Dasheen, Ginger, Ginseng, Horseradish, Leren, Parsley (turnip-rooted), Parsnip, Radish (all types), Rutabaga, Salsify (all types), Skirret, Sweet Potato, Tanier, Turmeric, Turnip, Yam (all types).

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp Suppression** of Foliar and Bacterial Diseases (except California)	Foliar Spray	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 2-3 week intervals. Do not apply more than 6 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	
	Root 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.	Apply with normal irrigation schedule beginning at the 4-6 true leaf stage. Follow Disease Programs* 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	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	

STONE FRUIT CROPS, such as:

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

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp (Root Rot, Collar Rot, Blister Spot and Foot Rot) Suppression** of Bacterial Diseases, including Fire Blight (except California)	Foliar Spray	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 20 gallons/acre (180 L/ha) of water.	Begin application after plants are established and from first leaf flush when conditions favor disease development. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 2-3 week intervals. Do not apply more than 4 times per crop cycle.
	Aerial:		
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Root Dip	Mix a 0.25% v/v solution (1	Apply as pre-plant dip to the roots for 10-15 minutes.

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	Overhead:	Apply 2-3 quarts/acre (2-7 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	the 4-6 true leaf stage. Follow Disease Programs* 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 (2-7 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 30 gallons/acre (280 L/ha) of water.	High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

STONE FRUIT CROPS, such as:

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

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp (Root Rot, Collar Rot, Blister Spot and Foot Rot) Suppression** of Bacterial Diseases, including Fire Blight (except California)	Foliar Spray Aerial:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Begin application after plants are established and from first leaf flush when conditions favor disease development. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 2-3 week intervals. Do not apply more than 4 times per crop cycle.
	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Root Dip	Mix a 0.25% v/v solution (1 quart/100 gallons of water or 0.25 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.	
	Low Volume:	Apply 2-4 quarts/acre (5-9 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	Apply as pre-plant dip to the roots for 10-15 minutes. Plant within 48 hours after dipping. Mix a fresh solution daily. Apply with normal irrigation schedule. Follow Disease Programs* as stated above. Do not apply more than 4 times per crop cycle.
Downy Mildew	Foliar Spray Aerial:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure*: 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.
Powdery Mildew (except California)	Ground:	Apply 1-3 quarts/acre (2-7 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	High Disease Pressure*: 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.

STRAWBERRY

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> sp (Red Stele, Leather Rot and Root Rot)	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons (190 L/ha) of water.	Begin application 2-3 weeks after planting and repeat on a 30-60 day interval when conditions favor disease development. Perennial planting: Start Spring applications when the plants start active growth. Repeat application at 30-60 day intervals if disease conditions persist or reoccur. 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.
	Ground:	Apply 1-2 quarts/acre (2-5 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.	
	Low Volume:	Apply 2-4 quarts/acre (5-9 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
<i>Phytophthora</i> sp (except California)	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 15-30 minutes. Plant within 48 hours. Mix a fresh solution daily.
<i>Phytophthora cactorum</i> (Leather Rot)	Foliar Spray Aerial:	Apply 1-2 quarts (2-5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Start applications at 10% bloom and early fruit set. Continue applications on a 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.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 50 gallons/acre (470 L/ha) of water.	
Downy Mildew	Foliar Spray Aerial:	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 50 gallons/acre (470 L/ha) of water.	High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle.

TOBACCO (Except California)

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DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp Blue Mold Black Shank and Root Declines	Foliar Spray Aerial	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 4 week intervals. Do not apply more than 4 times per crop cycle.
	Ground	Apply 1-2 quarts/ acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Chemigation Overhead	Apply 1-2 quarts/acre (2-5 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 Disease Program* as stated above. Do not apply more than 4 times per crop cycle.

KIWI, OLIVES AND TREE NUT CROPS, such as:

Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hazelnuts, Hickory Nut, Macadamia Nut, Pecan, Pistachio, and Walnut.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium sp	Foliar Spray Aerial	Apply 1-2 quarts/acre (2-5 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. Disease Prevention/Low Pressure Program*: Apply lower rate at 2-4 week intervals. Do not apply more than 4 times per crop cycle. Disease Control/High Pressure Program*: Apply higher rate at 2-3 week intervals. Do not apply more than 4 times per crop cycle.
	Ground	Apply 1-2 quarts/acre (2-5 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).	
	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.	
	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 Disease Program* as stated above. Do not apply more than 6 times per crop cycle.
Phytophthora Synchytrium Pruning Wound and Trunk Canker	Trunk Spray	Mix 1-2 quarts (1-2 L) in 5 gallons (20 L) of water.	Use higher rate when lesions are present. Clean wound sites 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.
Downy Mildew	Foliar Spray Aerial	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure*: 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 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	High Disease Pressure*: 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.

APPLICATION INSTRUCTIONS FOR ORNAMENTAL PLANTS, CONIFERS AND TURF

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. Use the higher rate when disease pressure is severe. 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 dormant or heat or moisture stressed. To avoid undesirable copper phytotoxicity, do not make foliar applications to plants treated with copper based compounds at less than 20 day intervals unless instructed to do so by your crop consultant. Allow foliage to dry completely after application. Do not apply when conditions favor wet tissue 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 products.
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.

COMPATIBILITY

This product is compatible with most products used in agriculture. However, crop sensitivity to these

	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	High Disease Pressure*: 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.
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APPLICATION INSTRUCTIONS FOR ORNAMENTAL PLANTS, CONIFERS AND TURF

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. Use the higher rate when disease pressure is severe. 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 dormant or heat or moisture stressed. To avoid undesirable copper phytotoxicity, do not make foliar applications to plants treated with copper based compounds at less than 20 day intervals unless instructed to do so by your crop consultant. Allow foliage to dry completely after application. Do not apply when conditions favor wet tissue 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 products.
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.

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 the performance of this product. 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.

ROSES

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora and Pythium Suppression** of Foliar Diseases (except California)	Foliar Spray Aerial	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 20 gallons/acre (190 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.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Soil Drench	Mix 1-2 quarts (1-2 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 ²) 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 60 ml/10 cm pot and 120 ml/15 cm pot).
	Soil Incorporation	Mix 4-16 fl oz/cubic yard (150-700 ml/m ³) 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.

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:

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Ornamental 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
Phytophthora and Pythium sp Suppression** of Foliar Diseases (except California)	Foliar Spray Aerial	Apply 1-1.5 quarts/acre (2-3.5 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Apply at 2-3 week intervals and repeat application 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. Apply 25 gallons of solution per 100 square feet. Irrigate to distribute solution through soil. Repeat as required. Limit to one application per month. Mix immediately before potting. If conditions are favorable for disease development, a foliar spray or soil drench application will enhance protection. Dip transplants into diluted mixture keeping roots submerged for 1 to 2 minutes. Plant within 48 hours. Make a fresh solution daily. Apply with normal irrigation schedule. Follow Foliar Spray APPLICATION PROGRAM as stated above. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Soil Drench	Mix 6-13 fl.oz. (180-390 L) in 100 gallons (380 L) of water.	
	Soil Incorporation	Mix 1-2 pints/cubic yard (600-1200 ml/m ³) of soil.	
	Root Dip	Mix a 0.25% v/v solution (1 quart/100 gallons of water or 1 L/400 L of water).	
	Chemigation Overhead	Apply 2 quarts/acre (5 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	
	Low Volume:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
Downy Mildew	Foliar Spray Aerial	Apply 0.5-1 quarts/acre (1-2 L/ha) in a minimum of 20 gallons/acre (190 L/ha) of water.	Low Disease Pressure*: Apply lower rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. High Disease Pressure*: Apply higher rate at the first onset of the disease. Repeat applications at 1-3 week intervals. Do not apply more than 6 times per crop cycle. Application amount depends upon plant type, maturity and application technique/method.
	Ground:	Apply 1-2.5 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	

CONIFERS IN COMMERCIAL NURSERIES, LANDSCAPE TREES, PLANTATIONS AND FORESTS, such as:

Christmas Tree Varieties, Firs, Spruces and Pines.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
Phytophthora Pythium sp (except California) Suppression** of Foliar Diseases (except California)	Foliar Spray Aerial	Apply 1-2 quarts/acre (2-5 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. Apply 0.25-0.5 pints/sq ft (4-8 L/m ²) 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.
	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
	Soil Drench	Mix 1-2 quarts (1-2 L) in 100 gallons (380 L) of water.	
Enhancement of Mycorrhization (except California)	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.
	Sudden Oak Death	Trunk Injection	Mix a 15% v/v solution (20 fl oz/gallon of water or 150 mL of water).

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CONIFERS IN COMMERCIAL NURSERIES, LANDSCAPE TREES, PLANTATIONS AND FORESTS,
such as:
Christmas Tree Varieties, Firs, Spruces and Pines.

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> <i>Pythium</i> sp (except California)	Foliar Spray Aerial:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 20 gallons/acre (190L/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.
Suppression** of Foliar Diseases (except California)	Ground:	Apply 1-2 quarts/acre (2-5 L/ha) in a minimum of 100 gallons/acre (950 L/ha) of water.	
Enhancement of Mycorrhization (except California)	Sod Drench	Mix 1-2 quarts (1-2 L) in 100 gallons (380 L) of water	Apply 0.25-0.5 pints/sq ft (4-8 L/m ²) 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.
Sudden Oak Death	Trunk Injection	Mix a 15% v/v solution (20 fl oz/gallon of water or 150 mL of water)	Inject (according to injection equipment instructions) 0.5 fl oz (15 ml) into the tree trunk per yard (or meter) of canopy width at the drip line, utilizing multiple injection holes (i.e. a tree with 6 yards (or meters) of canopy diameter will require 6 injections via 6 separate injection holes). Preventative: Inject one time in the Spring. Curative: Inject one time in the Spring and Fall.

TURF*, such as:**

Golf Course, Athletic Fields, Sod Farms, Residential, Amenity, Commercial, Municipal Lawns and Turf (Warm and Cool Season).

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Pythium</i> sp <i>Phytophthora</i> (except California)	Foliar Spray	Mix 3.5-5 fl oz (100-150 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 (4-8 L/100 m ²) as a light cover spray. Apply at a 2-4 week interval as needed. Do not mow or irrigate treated area until sprays have completely dried.

TURF TANK MIXTURES***

For suppression or control of summer stress diseases caused by a complex of *Pythium* sp and *Rhizoctonia* sp, tank mix this product with the active ingredient listed below for the sites listed and 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</i> sp and <i>Rhizoctonia</i> sp	Tank mix with one of the following: Mancozeb, Iprodione, Chlorothalonil or Thiophanate-methyl	Follow product label.	Follow the most restrictive product label

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

**Suppression: Fungi-Phite™ has suppressive properties on diseases caused by certain bacteria or fungi. When applying Fungi-Phite™ 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.

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

WARRANTY STATEMENT

Plant Protectants, LLC warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes set forth on the label when used according to directions under normal use conditions. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. This warranty does not extend to the handling or use of this product contrary to label instructions or under abnormal conditions not reasonably foreseeable to seller and to the fullest extent permitted by state law, buyer assumes all risk of any such use.

[Label version 11-22-06]

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Net Contents ____ gallons

Manufactured by:

Plant Protectants, LLC

35801 Road 132 -Visalia CA 93292