



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

December 23, 2019

Danielle Larochelle
Regulatory Manager
AGT Division
Nufarm Americas Inc.
4020 Aerial Center Parkway, Suite 101
Morrisville, NC 27560

Subject: Registration Review Label Mitigation for Metalaxyl
Product Name: ULTRA FLOURISH II 4 SC FUNGICIDE
EPA Registration Number: 55146-109
Application Dates: July 6, 2018
Decision Numbers: 557991

Dear Ms. Larochelle:

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

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Darius Stanton by phone at 703-347-0433, or via email at Stanton.darius@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Linda Arrington', with a stylized flourish at the end.

Linda Arrington, Branch Chief
Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

Enclosure

METALAXYL

GROUP

4

FUNGICIDE

ULTRA FLOURISH® II 4 SC

FUNGICIDE

ACCEPTED

Dec 23, 2019

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under

EPA Reg. No. 55146-109

ACTIVE INGREDIENT:

Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl) alanine methyl ester 44.08%

OTHER INGREDIENTS: 55.92%**TOTAL:** 100.00%

Contains 4.0 pounds metalaxyl per gallon (420 grams per liter)

KEEP OUT OF REACH OF CHILDREN**CAUTION / PRECAUCIÓN**Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)**SEE INSIDE BOOKLET FOR FIRST AID AND PRECAUTIONARY STATEMENTS**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 55146-109

EPA EST. NO. _____

Manufactured For
NUFARM AMERICAS INC.
AGT DIVISION
11901 S. Austin Avenue
Alsip, IL 60803

NET CONTENTS: _____ Gallons (_____ L)

[Designation as "NONREFILLABLE" or "REFILLABLE" for containers > 5 GAL]

[Grow a better tomorrow.]

FIRST AID	
IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 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 to 20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION / PRECAUCIÓN

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes and socks
- Waterproof gloves

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

Engineering Controls Statement

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

USER SAFETY RECOMMENDATIONS
Users Should: <ul style="list-style-type: none"> • Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. • Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables

are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (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, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 48 hours.

Exception: If the product is soil-injected or soil-incorporated, the WPS, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, shoes plus socks, and waterproof gloves, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow others to enter the treated area until sprays have dried.

PRODUCT INFORMATION

This product is a systemic fungicide for use on selected crops to control certain disease caused by members of the Oomycete class of fungi. Other fungicides must be used to control diseases caused by other classes of fungi.

Where rate ranges are specified on this label, use the higher rate when heavy disease pressure is expected and the lower rate when disease pressure is expected to be light unless otherwise noted.

Under conditions of severe disease pressure when more than the label specified number of applications of this product may be required, make additional fungicide treatments with other fungicides registered for the crop/disease found on this label.

USE RESTRICTIONS

- This product is not to be used in foliar applications unless specified on this label or in solutions to dip plants. This product is for field use only and may not be used on transplant trays, greenhouses, lath houses, float houses, hydroponic production, or in bedding plant structures.
- Maximum usage when applying both metalaxyl- and mefenoxam-containing products to the same crops within the same season: Do not apply more than the maximum yearly total application rate for the active ingredient as stated on the label of the product containing the lowest yearly total on that crop.

ROTATION (PLANTBACK) RESTRICTIONS

Do not plant any crop that is not registered for use with metalaxyl in metalaxyl-treated soil for a period of 12 months unless a shorter interval is specified on the following list.

ROTATIONAL CROP	PLANTING TIME FROM LAST APPLICATION (Days)
Alfalfa (including birdsfoot trefoil), Artichoke (Globe) Asparagus, Avocados	0
Brassica (Cole Crops) Leafy Vegetables	
Bushberry Subgroup 13-07B	
Caneberry Subgroup 13-07A	
Clover, Cole Crops, Cotton.	
Corn	
Cucurbit Vegetables	
Fruiting Vegetables (Except Cucurbits)	
Ginseng, Grapes	
Grass, Forage, Fodder and Hay	
Herbs (fresh and dried)	
Hops	
Leafy Vegetables except Brassica	
Legume Vegetables (succulent and dried)	
Onions (dry bulb and green)	
Peanuts, Pineapples	
Root and Tuber Vegetables	
Soybeans, Strawberries,	
Sunflower	
Tobacco	
Tropical Fruit	
Any other crops specified on this label	
Cereal Grains (other than Corn)	14
Crops Not Intended for Food or Feed	0
All Other Crops Intended for Food or Feed	12 months

Replanting

If replanting is necessary, additional applications of this product may be made, provided that the total amount of metalaxyl applied does not exceed the maximum annual application rate allowed for the specific crop.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, Ultra Flourish II 4 SC Fungicide contains metalaxyl, a Group 4 fungicide. Any fungal population may contain individuals naturally resistant to Ultra Flourish II 4 SC Fungicide and other Group 4 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

The following steps may delay the development of fungicide resistance:

- ◆ Rotate the use of this product or other Group 4 fungicides within a growing season sequence with different groups that control the same pathogens.
- ◆ Use tank mixtures with fungicides from a different group that are effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- ◆ Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- ◆ Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.

- ♦ Monitor treated fungal populations for resistance development.
- ♦ Contact your local extension specialist or certified crop advisor for any additional pesticide resistance management and/or IPM recommendations for specific crops and pathogens.
- ♦ For further information or to report suspected resistance, contact Nufarm Americas Inc. at (855) 280-6609. You can also contact your pesticide distributor or university extension specialist to report resistance.

SPRAY DRIFT ADVISORIES

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size - Ground Boom

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

Controlling Droplet Size - Aircraft

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

BOOM HEIGHT - Ground Boom

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

RELEASE HEIGHT- Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

MIXING PROCEDURES

Add 1/4 to 1/2 of the required amount of water to the spray tank, add the proper amount of this product, then add the rest of the water. When tank mixing other products with this product, follow the proper sequence of adding products to the spray tank. Wettable powders (WP) and water dispersible granules (WDG) should be added to the water in the tank first, followed by flowable formulations (SC), such as this product, with emulsifiable concentrates (EC), added last. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

It is the pesticide user's responsibility to ensure that all products included in the tank mix are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

This product is generally compatible with most commonly used WPs, SCs, and ECs. To ensure compatibility of this product with other products, pour the products into a small container of water in the correct proportions. After thorough mixing, let stand for 5 minutes. If the combination remains mixed, or can be re-mixed readily, the mixture is compatible.

PRODUCT APPLICATION INSTRUCTIONS

Apply this product by ground or air in sufficient water or liquid fertilizer to provide uniform coverage of the soil surface. Apply in a minimum of 20 gallons per acre for ground applications and 5 gallons per acre by air. Refer to the Crop Specific Directions for use instructions.

For banded applications, the area actually is the area covered by the band, not total cropland area planted. Some row-crop use directions are based on treating in-the-row and these rates generally are specified as amounts (fluid ounces) of product per certain row length (often 1,000 feet). Others express rates as amount per treated acre, which means the total area treated with the pesticide. If rates are expressed as amount per treated acre and banded applications are used, the amount of pesticide used per acre will be proportionately less. The following formula can be used to calculate the amount of this product needed per acre of crop when banded applications are made.

$$\frac{\text{Band width in inches}}{\text{Row spacing in inches}} \times \text{Broadcast rate per acre} = \text{Amount needed per acre of field}$$

APPLICATION THROUGH IRRIGATION SYSTEMS

This product, alone or in combination with other pesticides, which are registered for application through irrigation systems, may be applied through irrigation systems. Apply this product only through center pivot, solid set, hand move, moving wheel, micro-sprinkler, pressurized drench (flood) or drip (trickle), micro-irrigation such as a spaghetti-tube or individual tube irrigation, hand-held calibrated irrigation equipment such as the hand-held wand with injector, calibrated overhead watering booms, ebb and flow or bench flooding sub-irrigation systems. 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. Do not connect an irrigation system (including greenhouse systems) used for pesticide applications 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 supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. If you have any questions about calibration, you should contact the State Extension Service specialists, equipment manufacturers or other experts.

This product must be applied on the schedule specified in the specific crop use recommendations, not according to the irrigation schedule. With the exception of citrus, this product has not been sufficiently tested when applied through irrigation systems to assure consistent product performance for all labeled uses. The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler or drip irrigation equipment. Users must check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler or drip irrigation equipment.

NOTE: Do not inject this product at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 10 parts water to 1 part this product in the mix tank. This product is corrosive to

many seal materials. Leather seals are best. EPDM or silicone rubber seals can be used, but should be replaced once a year. Do not use Viton, Buna-N, Neoprene or PVC seals.

Chemigation Systems Connected to Public Water Systems: *Note: Manufacturer does not encourage connecting chemigation systems to public water supplies. The following information is provided for users who have diligently considered all other application and water supply options before electing to make such a connection.*

Public water system means a system for the provision of public piped water for human consumption, if such a system has at least 15 service connections, or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional reduced-pressure zone backflow preventer (RPZ) or the functional equivalent in the water supply line, upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public supply system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The 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 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 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.

Center Irrigation Equipment

Use only with drive systems which provide uniform water distribution. Determine the size of the area to be treated. Determine the time required to apply 1/2 to 1 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures recommended by the equipment manufacturer. Run the system at 80 to 95% of the manufacturer's rated capacity. Using water, determine the injection pump output when operated at normal line pressure. Determine the amount this product required to treat the area covered by the irrigation system. Add the required amount of this product and sufficient water to the solution (mix) tank to meet the injection time requirements. Maintain constant solution tank agitation during the injection period. Continue to operate the system until all of the this product solution has cleared the most distant sprinkler head.

Solid Set, Hand Move, And Moving Wheel Irrigation Equipment

Determine the acreage covered by the sprinklers. Fill injector solution tank with water and adjust flow rate to use the contents over a 20 to 30 minute interval. Determine the amount of this product required to treat the area covered by the irrigation system. Add the required amount of this product into the same quantity of water used to calibrate the injection period. Operate the system at the same pressure and time interval established during the calibration. Inject this product at the end of the irrigation cycle in 1/2 to 1 inch of water or as separate application to maximize the effectiveness of the fungicide. Stop injection equipment after treatment is completed. Continue to operate the system until all of the this product solution has cleared the last sprinkler head.

Micro Sprinkler, Drip Irrigation Systems, Overhead Watering Booms

Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters in the system are putting out the same amount of water. Only pressure injection or venturi equipment is recommended. Determine the area to be treated in each irrigation run. Measure the output of each of the emitters or drip tubes closest to and farthest from the injector site. For calibration, substitute a concentrated detergent (such as Wisk) or a soluble fertilizer for the this product in the injector tank. The detergent will bubble as it leaves the emitters. The time period over which bubbles occur should be checked for both the closest and farthest emitters. If these times are not within 2 minutes of each other, adjust the dilution ratio and/or the injection rate. If a soluble fertilizer is used, measure the time intervals with a salt bridge. If a drip system is being calibrated, substitute soluble fertilizer for the this product in the injector and measure the time intervals with a salt bridge. (Step by step instructions) Before starting to calibrate, operate the system until all the emitters are putting out equal flow

rates or until the system is operating at full pressure. Make up an indicator solution of detergent or fertilizer, using the same ratio to be used when mixing this product. Set the injector to apply the indicator solution at the injection rate to be used in the actual product application. Attach a 5 inch length of flexible tubing over the emitter closest to the injection point, another length over the emitter farthest away. Both emitters should be monitored to determine the time intervals that the indicator solutions are observed. Begin injecting the indicator solution. Direct the flow from the tubes at the emitters into a small container. Begin timing when the indicator solution is first detected, stop timing when the indicator solutions are no longer detected. If the period of detection of the indicator solution between the 2 emitters is within 2 minutes of each other, comparable coverage will be obtained. If they are not, make adjustments by increasing the dilution ratio, using more water per part of this product, or adjust the injector to a slower flow rate. Once the system is calibrated, dilute the needed amount of this product with water using a minimum of 10 part of water to 1 part this product. Do not begin to inject this product into the system until all emitters are producing equal flow rates, or until the system is at full pressure. Inject this product into the system at the end of the irrigation set in 1/2 to 1 inch of irrigation water.

CROPS SPECIFIC DIRECTIONS

ALFALFA (Including birdsfoot trefoil)		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.) Root Rot (<i>Phytophthora</i> spp.)	0.5 to 1	<p>Stand Establishment: Apply as a broadcast surface spray at planting in a minimum of 20 gallons of water. If inter-seeding alfalfa into existing stands for renovation, apply 0.5 pint per acre as a broadcast spray at planting in a minimum of 20 gallons of water.</p> <p>If alfalfa seed was previously treated with a metalaxyl or mefenoxam seed treatment product, use this product at 0.5 pint per acre at planting.</p> <p>Use the higher rate (1 pint per acre) in areas where disease pressure is expected to be heavy.</p>
<ul style="list-style-type: none"> ♦ Do not feed green forage or cut hay for 60 days following application. ♦ Do not apply more than 1 pint of product (0.5 lb metalaxyl) per acre per year. 		

APPLES (Bearing and Nonbearing Trees)			
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS	
Crown Rot Collar Rot Root Rot (<i>Phytophthora</i> spp.)	1 Gallon (3 fl oz/1,000 ft ²)	Soil Spray (Broadcast or Banded): Apply as a broadcast spray in sufficient water to obtain thorough coverage. Treated area is based on the area under the tree canopy or the area of the sprayed row. Soil surface sprays of this product will not be effective until, the fungicide is moved into the root zone by rainfall or irrigation. Applications should be made in early spring before growth starts and in the fall after harvest but before the ground freezes.	
	1	Drench: Mix in 100 gallons of water. Apply around the trunk of each tree. Applications should be made in early spring before growth starts and in the fall after harvest but before the ground freezes. On new plantings, delay the first application until 2 weeks after planting.	
		Trunk Diameter 12 Inches Above Soil Line	Pints of Diluted Mixture Per Tree
		<1 1 to 3 3 to 5 >5	1 2 3 4
<ul style="list-style-type: none">◆ Do not dip roots of trees in or spray bare roots with solutions containing this product.◆ Use of this product will aid in control when used in conjunction with good cultural practices and root stocks that are not tolerant to the disease.◆ Applications of this product should be made before symptoms appear especially in areas of the orchard favorable for disease development. This product will not revitalize trees showing moderate to severe disease symptoms.◆ Do not graze or feed cover crops in treated orchards.◆ Do not apply more than 2 gallons of product (8 lb metalaxyl) per acre per year.			

ASPARAGUS		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Crown Rot Spear Rot (<i>Phytophthora</i> spp.)	2	<p>Apply as a broadcast spray in a minimum of 10 gallons of water over the beds.</p> <p>Cutting Beds: Apply 30 to 60 days before first cutting. For additional control, make another application just before the beginning of harvest.</p> <p>New Plantings: Apply after planting seedlings or after covering one year old crowns.</p>
<ul style="list-style-type: none"> ♦ Do not apply this product within one day of harvest (PHI=1 day). ♦ Do not apply more than 4 pints of product (2 lb metalaxyl) per acre per year. 		

AVOCADOS			
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS	
Root Rot (<i>Phytophthora</i> spp.)	0.5 fl oz	Sleeve Drench: Mix with 18 gallons of water. At the time of transplanting, drench the roots inside the sleeve with 1 quart of diluted mixture per tree. The sleeve drench will not replace the soil surface applications for long-term control of root rot.	
	1 to 2 fl oz per 1,000 gallons (3.75 - 7.5 ppm ai)	Drip Irrigation: Apply the specified amount of product, as per the table below, to the soil directly under the drip emitter at each tree. If there is more than one emitter per tree, distribute the total amount of product needed among the emitters.	
		Injection (Sprinkler or Drip Irrigation): Inject this product into the irrigation water at each irrigation. If this product is not applied at each irrigation, use the table below to determine how much product should be injected into the irrigation water. If this product is to be used more frequently than every 3 months, adjust the rates so that no more than the specified amount is applied during each 3 month period.	
		Diameter of Tree Canopy (Feet)	Amount of Product per 10 Trees per 3 Months (fl oz)
		2 5 10 15 or wider	0.25 – 0.5 1.5 – 3 6.5 – 13 14.5 - 29
<ul style="list-style-type: none">♦ For best results, use this product as soon as soil tests indicate the presence of <i>Phytophthora</i>.♦ For new plantings, the use of <i>Phytophthora</i>-resistant rootstocks with this product is recommended..♦ Mature trees in moderate to advanced stages of decline cannot be cured with this product.♦ Do not apply more than 3 gallons of product (12 lb metalaxyl) per acre per year.♦ Do not make an application within 28 days of harvest (PHI=28 days).			

BLUEBERRIES		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Root Rot (<i>Phytophthora</i> spp.)	0.5 pint per 1,000 linear feet (7.25 pints per acre broadcast basis)	Established Plantings: Apply in a 3-foot band over the row before plant growth starts in the spring. One additional application may be made to coincide with a period favorable for rot.
	1 Gallon	New Plantings: Apply as a broadcast spray to the soil at or after the time of planting. One or 2 additional applications should be made to coincide with periods of most favorable for root rot development. For banded applications, an 18 inch band over the row. Use the formula in the Product Application Instructions section of the label to calculate the amount needed per acre..
<ul style="list-style-type: none"> ♦ Use this product in conjunction with good cultural practices to minimize disease problems. ♦ This product will not revitalize plants showing moderate to severe root rot symptoms. ♦ This product may be applied on the day of harvest (PHI=0 days). ♦ Do not apply more than 14.4 pints (7.2 lb metalaxyl) of product per acre per year. 		

CITRUS		
Including Citrus citron, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Orange, Tangelo, Tangerine and Hybrids of These		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Brown Rot Citrus Foot Rot Root Rot Trunk Canker (<i>Phytophthora</i> spp.)	NURSERIES (AZ, CA, FL, and PR only): Make first applications at the time of planting. Make repeat applications at 3 month intervals during the period when trees are actively growing. For banded applications, use a band wide enough to cover the root systems of the plants. Do not apply solutions of this product to bare roots.	
	2 to 3 fl oz	Soil Drench: Apply per 100 gallons of water as a drench over the row at a rate of 100 to 250 gallons per 1,000 feet of row. The width of the drench treatment should be wide enough to cover the root systems of the plants. Follow with 0.5 to 1 inch irrigation over the treated area.
	2 to 4 quarts	Soil Surface Spray: Apply per treated acre in a broadcast or banded surface spray to seedbeds, liners, or bedded stock in sufficient water to obtain thorough coverage. If applications are banded, the treated area should be wide enough to cover the root systems of the plants. Follow with 0.5 to 1 inch irrigation over the treated area.
	RESETS or NEW PLANTING (AZ, CA, FL, and PR only): Make the first application to citrus resets or new planting at time of transplanting. Make up to 3 additional applications per year at 3 month intervals or when root growth flushes occur.	
	2 to 3 fl oz	Water Ring Drench: Mix per 100 gallons of water. Apply 5 gallons of the mix around the base of each tree within the watering ring.
	2 to 4 quarts	Soil Surface Spray (AZ and CA only): Apply in sufficient water to obtain uniform coverage of the soil surface. Apply spray to the soil surface beneath the tree canopy or apply through irrigation water. If natural rainfall is not expected within 3 days of the soil surface application, irrigate with 0.5 to 1 inch water over the treated area.

	2 quarts	Soil Surface Spray (FL and PR only): Apply under the canopy of the tree. Applications may be made through low volume irrigations systems at the rate of 1 pint per grove acre for trees less than 5 years old. Two or three applications per year may be made on a spring + summer, summer + fall or spring + summer + fall schedule.	
	ESTABLISHED PLANTING		
	1 to 4 quarts	Soil Application (FL and PR only): Apply 1 quart per treated acre to groves that have a Phytophthora propagule count of 10 to 20 per cubic centimeter of soil as a feeder root rot disease maintenance treatment. Applications may be made through low volume irrigation for trees 5 years or older at the rate of 1 pint per grove acre. Two or 3 applications per year may be made on a spring +summer, summer + fall or spring + summer + fall schedule. For groves with extremely high propagule counts (above 20 per cc of soil), apply 2 quarts per treated acre (make 2 to 3 applications at this dos-age per year) to reduce the population.	
	1 to 4 quarts	Soil Surface Spray (AZ and CA only): For best results begin applications during the spring root flush period. One or two additional applications per year can be made at 3 month intervals to coincide with flushes of root growth. Use the table below to determine the proper rate based on the size and the number of applications per year. For applications based on broadcast rates, use 2 to 4 quarts of product per acre when 3 applications are planned and 6 quarts per acre when 2 applications are planned. Apply sufficient water to provide uniform coverage or apply through irrigation water.	
		Diameter of Tree Canopy (Feet)	Fluid Ounces of Product per Ten Trees
2 Applications per year			3 Applications per year
5			0.75
10	3.8		2.5
	15	7.5	5
	20	15	10
Gummosis	2 quarts	Trunk Spray (AZ and CA only): Mix in 3 gallons of water and spray the surface of the trunks using enough spray to thoroughly wet the cankers. Apply up to 3 times per year.	
	1 quart	Trunk Spray (FL only): Mix in 3 gallons of water and spray the surface of the trunks using enough spray to thoroughly wet the cankers. Apply up to 3 times per year.	
<ul style="list-style-type: none">◆ Use this product in combination with good resistant varieties and cultural practices.◆ Do not use on highly susceptible sweet orange rootstock in Florida.◆ Do not apply more than 3 gallons of product (12 lb metalaxyl) per acre per year.◆ Do not use this product for disease control in greenhouse citrus nursery stock intended for commercial fruit production.◆ When nematodes are a problem, best results can be achieved if an effective EPA-registered nematicide is used in combination or in sequence with this product.◆ Do not make trunk and soil applications to the same tree.			

CLOVER		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.) Root Rot (<i>Phytophthora</i> spp.)	0.5 to 1	Soil Spray (broadcast): Apply as a broadcast surface spray at planting in a minimum of 20 gallons of water. If seed was previously treated with a metalaxyl or mefenoxam seed treatment product, use the 0.5 pt/A rate at planting.
<ul style="list-style-type: none"> ◆ Do not feed green forage or cut hay for 90 days following application (PHI=90 days). ◆ Do not apply more than 1 pint of product (0.5 lb metalaxyl) per acre per year. 		

COLE CROPS Including: Broccoli; Broccoli, Chinese (gai lon); Cabbage; Cabbage, Chinese (bok choy and napa); Cauliflower; Kohlrabi		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.) Basal Stem Rot (<i>Phytophthora</i> spp.)	2 to 4	<p>Preplant Incorporated Application: Apply as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate into the top 2 inches of soil. For control of <i>Pythium</i> damping-off only use 0.5 to 1 pint per acre. For banded applications, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used.</p> <p>Surface Application: Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7 inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used. If natural rainfall is not expected before the seeds start germinating, this product should be incorporated mechanically before planting or be moved into the seed zone after planting with 0.5 to 1 inch irrigation.</p>
<ul style="list-style-type: none"> ◆ Do not use this product for disease control in greenhouse crops or field grown vegetable bedding plants. ◆ Do not dip plants in solutions containing this product or crop injury may occur. ◆ Do not use this product as a transplant water treatment. ◆ This product may be tank-mixed with a compound to control club root (<i>Plasmodiophora brassicae</i>) or wirestem/blackrot. ◆ Do not apply for downy mildew if the disease is already established. ◆ Do not apply within 7 days of harvest (PHI=7 days). ◆ Do not apply more than 4 pints (2 lb metalaxyl) per acre per year for soil applications and 2 pints (1 lb metalaxyl) per acre per year as a foliar spray. 		

COTTON		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Seed and Root Rots (<i>Pythium</i> spp.)	0.15 to 0.30 fl oz / 1,000 row feet	In-furrow: Apply per 13,000 linear feet of row (0.15 to 0.30 fluid ounces per 1,000 linear feet) in 5 to 15 gallons of water or liquid fertilizer at planting. Mount the spray nozzle so the spray is directed into the furrow over the seed just before the seeds are covered.
<i>Pythium</i> and <i>Rhizoctonia</i>		When <i>Rhizoctonia</i> is present apply this product in combination with a product labeled for the control of that pest.
Seedling Diseases Seed Rots (<i>Phytophthora</i> spp.)	0.15 to 0.30 fl oz / 1,000 row feet	At Planting: Apply an in-furrow spray per 13,000 linear feet of row (0.15 to 0.3 fluid ounces per 1,000 linear feet) in 5 to 15 gallons of water or liquid fertilizer. Mount spray nozzles so the spray is directed into the furrow over the seed and adjacent soils just before the seeds are covered. This product may be combined with other labeled fungicides to provide broader control than the pests noted.
<ul style="list-style-type: none"> ♦ When this product is applied with any other product, observe the most restrictive precautions and restrictions that appear on either of the products' label. ♦ Do not apply more than 7.8 fl oz of product (0.24 lb metalaxyl) per acre per year. 		

CRANBERRIES		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Phytophthora Root Rot (<i>Phytophthora</i> spp.)	2 to 3.5	Soil Spray (Broadcast): Apply 3 times by ground or chemigation equipment. Make the first application in the fall after harvest. Make the second application in the spring followed by a third application up to but not later than 45 days before harvest.
<ul style="list-style-type: none"> ♦ Do not apply this product to cranberries by air. ♦ Do not apply within 45 days of harvest (PHI=45 days). ♦ Do not apply more than 10.5 pints of product (5.25 lb metalaxyl) per acre per year. 		

CUCURBIT VEGETABLES

Including: Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (edible), *Momordica* spp. (Balsam Pear, Bitter Melon), Muskmelon (Casaba; Crenshaw, Honeydew, Honey Balls, Mango Melon, Persian), Pumpkin, Summer Squash, Winter Squash, Watermelon, all hybrids and varieties of these

DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Damping-off Cottony Leak (<i>Pythium</i> spp.)	2 to 4	Pre-plant Incorporated Application: Apply as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used.
Root Rot (<i>Pythium</i> spp.)	0.5 to 0.8	Surface Application: Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount this product needed per acre for the band width actually used. If natural rainfall is not expected before the seeds start germinating, this product should be incorporated mechanically before planting or be moved into the seed zone after planting with 0.5 to 1 inch sprinkler irrigation.
<ul style="list-style-type: none"> ♦ Do not use this product for disease control in greenhouse crops or on field-grown vegetable bedding plants. ♦ Do not dip plants in solutions containing this product or crop injury may occur. ♦ Do not apply within 5 days of harvest (PHI=5 days). ♦ Do not exceed 4 pints of product (2 lb metalaxyl) per acre per year for soil applications and the equivalent of 1 lb metalaxyl per acre per year from any foliar-applied metalaxyl product. 		

DECIDUOUS NONBEARING FRUIT AND NUT TREES IN ORCHARDS

DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Crown Rot Collar Rot Root Rot (<i>Phytophthora</i> spp.)	1 Gallon	<p>New Plantings: Apply in sufficient water to obtain uniform coverage of the soil under the canopy of the trees. Make first application at time of planting. Additional applications should be made at 3-month intervals during the time when conditions are favorable for disease development. For established plantings, make the first application in the spring before growth starts.</p> <p>For banded applications, use the formula in the Product Application Information section of this label to calculate the amount of this product needed per acre. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p>

DECIDUOUS NONBEARING FRUIT AND NUT TREES IN ORCHARDS

- ♦ Use this product in conjunction with good cultural practices and tolerant rootstocks to minimize disease problems.
- ♦ Applications should be made before symptoms appear, especially in areas favorable for disease development. This product will not revitalize trees showing moderate to severe disease symptoms.
- ♦ Do not apply to plantings that will bear harvestable fruit within 12 months of the last application.
- ♦ To avoid injury, do not use this product as a dip or spray to tree roots. Do not concentrate it around the tree trunk.
- ♦ Do not apply to trees under stress.
- ♦ For intense plantings (2 to 3 times the normal planting rate), make applications on a per area basis. Do not calculate the amount of this product on a per tree basis.
- ♦ In California, do not apply this product to newly planted trees within 90 days of planting.
- ♦ Do not apply more than 3 gallons of this product (12 lb metalaxyl) per acre per year.

GINSENG

DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Phytophthora Root Rot (<i>Phytophthora cactorum</i>)	1.5	Drench: Apply in 100 to 400 gallons of water uniformly to the soil surface in the spring before the plants begin growing.
<ul style="list-style-type: none"> ♦ Do not make more than 1 application per year. ♦ Do not apply more than 1.5 pints of product (0.75 lb metalaxyl) per acre per year. 		

GRASSES, FORAGE, FODDER, HAY*

*Any grass, Graminae family (either green or cured), except the following. Do not apply to sugarcane; to any of the following that will be fed or grazed by livestock: barley, buckwheat, corn, millet (pearl or proso), oats, popcorn, rice, rye, sorghum, teosinte, triticale, wheat, or wild rice; or to any enclosed pasture grasses or grasses grown for hay or silage such as bermudagrass, bluegrass, bromegrass, or fescue

DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Seeding Diseases (<i>Pythium</i> spp.)	2	Stand Establishment: Apply as a broadcast surface spray at planting in a minimum of 20 gallons of water. Use 0.5 to 1 pints per acre if grass seed was previously treated with a metalaxyl or mefenoxam seed treatment product. Use the higher rate per acre in areas where there is a history of <i>Pythium</i> disease.
<ul style="list-style-type: none"> ♦ Do not apply to range grasses. ♦ Do not graze, feed green forage, or cut for hay within 60 days of last application. ♦ Do not apply more than 2 pints of product (1 lb metalaxyl) per acre per year. 		

HOPS		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Downy Mildew (<i>Pseudoperonospora humuli</i>)	1	Soil Drench: Apply in a minimum of 20 gallons of water or liquid fertilizer to the soil surface over the crowns after pruning, but before training. Early application before shoots are 6 inches long is preferable.
		Foliar Spray: When primary infection (spikes) persists after a soil drench treatment and/or there is the first evidence of secondary (foliar) infection, apply this product in combination with a contact copper fungicide.
<ul style="list-style-type: none">◆ Do not make more than 3 applications per season.◆ Do not make the last application within 45 days of harvest (PHI=45 days).◆ Do not apply foliar sprays of this product without a copper fungicide registered for use on hops.◆ Do not apply more than 1 pint of product (0.5 lb metalaxyl) per acre per year for soil application and 2 pints (1 lb metalaxyl) per acre per year for foliar applications.		

LEAFY VEGETABLES Including Celery, Cress (upland), Endive (Escarole), Florence Fennel (finocchio), Parsley, Rhubarb, Spinach, Swiss Chard		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.)	2 to 4	Preplant Incorporated Applications: Apply as a soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 inches of soil. For banded applications, a minimum of a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used.
		Surface Application: Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a minimum of a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used. If natural rainfall is not expected before the seeds start germinating, This product should be incorporated mechanically before planting or be moved into the seed zone after planting with 0.5 to 1 inch sprinkler irrigation.

LEAFY VEGETABLES

Including Celery, Cress (upland), Endive (Escarole), Florence Fennel (finocchio), Parsley, Rhubarb, Spinach, Swiss Chard

- ◆ The additional applications of this product noted above and made after each cutting by shanking the fungicide into the beds along with liquid fertilizer provide continuing control of white rust. However white rust can only be controlled in a preventative disease control program that begins with an application of this product to the soil at planting. If this product is not used at planting, do not use this product at any other time throughout the season. Do not apply this product in foliar applications or in situations where white rust infections are already established. The use of this product in curative applications greatly increases the risk of the fungus developing insensitivity to metalaxyl/mefenoxam. The development of insensitivity will destroy the effectiveness of this product in controlling white rust.
- ◆ Do not apply within 7 days of harvest (PHI=7 days).
- ◆ Do not use this product for disease control in greenhouse crops.
- ◆ Do not exceed 4 pints of this product (2 lb metalaxyl) per year soil-applied and the equivalent of 0.5 lb metalaxyl per year from any foliar-applied metalaxyl product.
- ◆ Do not exceed a total of 2.8 lb metalaxyl per acre per year from all metalaxyl-containing products.
- ◆ Do not apply this product in fields where downy mildew is already established.
- ◆ Do not use this product as a transplant water treatment.

LEGUME VEGETABLES (Succulent or Dried)

Including Bean (*Lupinus* spp.) (grain, lupin, sweet lupin, white lupin, white sweet lupin), Bean (*Phaseolus* spp.) (field, kidney, lima, navy, pinto, runner, snap, wax), Bean (*Vigna* spp.) (blackeyed pea, catjang, cowpea, crowder pea, mung, southern pea), Broad Bean (fava bean), Chickpea (garbanzo bean), Lentil, Pea (*Pisum* spp.) (field, garden, sugar snap), Soybean (immature seed)

(Also see Soybean section for specific use directions)

DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Damping-off Root Rot (<i>Pythium</i> spp.)	1 to 2	Preplant Incorporation Application: Apply as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 inches of soil. For banded application, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used. Surface Application: Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used.

- ◆ Do not use this product for disease control in greenhouse or field grown vegetable bedding plants.
- ◆ To control Rhizoctonia root and stem rot or white mold (*Sclerotinia sclerotiorum*) in snap and dry beans, this product may be tank mixed with a product labeled for the control of that disease.
- ◆ Do not apply more than 2 pints of product (1 lb metalaxyl) per acre per year.

ONIONS, Including Dry Bulb: Garlic; Onion (dry bulb); Shallot (dry bulb) Green: Green eschalot; Green onion; Green shallot; Japanese bunching onion; Leek; Scallion; Spring onion Onions Grown for Seed		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.)	1 to 2	Preplant Incorporated: Apply as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 inches of soil. For banded application, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used.
		Surface Application: Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used. If natural rainfall is not expected before the seeds start germinating, this product should be incorporated mechanically before planting or be moved to the seed zone after planting with 0.5 to 1-inch sprinkler irrigation.
<ul style="list-style-type: none">◆ Do not use this product for disease control in greenhouse or field-grown vegetable bedding plants.◆ For bulb onions: Do not exceed 4 pints of product (2 lb metalaxyl) per acre per year for soil applications and the equivalent of 1 lb metalaxyl per acre per year from any foliar-applied metalaxyl product.◆ For green onions: Do not exceed 4 pints of product (2 lb metalaxyl) per acre per year for soil applications and the equivalent of 0.6 lb metalaxyl per acre per year from any foliar-applied metalaxyl product..		

PAPAYA (Hawaii Only)			
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS	
Phytophthora Root Rot (<i>Phytophthora</i> spp.)	3.5 to 7.0	In Field, New Planting: Make first application at the time of transplanting to the field or within 1 week of transplanting. Apply as a soil surface spray in sufficient water to obtain thorough coverage of the soil under the canopy of trees. After application, immediately irrigate with 1/8 to 1/4 inch of water. Repeat in 2 to 4 weeks if conditions are favorable for disease. Use table below as a guide for treating individual trees.	
		Diameter of Tree Canopy (Feet)	Fluid Ounces per 10 Trees
		3	0.1 – 0.2
		4	0.2 – 0.4
		6	0.5 – 0.75
		8	0.63 – 1.25
<ul style="list-style-type: none">◆ Do not make more than 2 applications per year in the fields to newly transplanted stock.◆ Do not apply within 3 months of harvest (PHI=3 days).◆ Do not apply more than 14 pints of product (7 lb metalaxyl) per acre per year.			

PEANUTS		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Seedling and pod diseases (<i>Pythium</i> spp.)	0.5	Seedling Disease: Apply as an application to the seed in-furrow or in a 7-inch band at the time of planting. For in-furrow applications, position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly with the spray solution or crop injury may occur.
	1 to 2	Pod Rot: Apply at early pod set or pegging through overhead irrigation systems. See the Product Application Instructions section of this label for further instructions about applications through irrigation systems.
<ul style="list-style-type: none"> ◆ Where pathogens other than <i>Pythium</i> spp. are present, use fungicides that control those diseases in combination with this product. ◆ Where the predominant pod rot pathogens are <i>Pythium</i> spp. and <i>Rhizoctonia</i> spp. use this product at 1 to 2 pints per acre tank mixed with a product labeled for the control of <i>Rhizoctonia</i> spp. ◆ Do not apply more than 2.5 pints of product (1.25 lb metalaxyl) per acre per year. 		

PEPPER AND EGGPLANT		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.) Crown Rot (<i>Phytophthora capsici</i>)	2	To control crown rot, apply before the plants are infected to obtain satisfactory control.
		Soil Spray: Apply at the time of planting in sufficient water or liquid fertilizer to provide uniform coverage. For direct-seeded peppers, apply pre-plant prior to emergence. If rainfall is not expected before the plants begin growth, this product should be incorporated mechanically before planting or be moved into the root zone after planting with 0.5 to 1 inch of sprinkler irrigation water. For banded applications use a 12- to 16-inch band. A total of 2 supplemental post-directed applications may be made at 30-day intervals. Use sufficient mechanical or bypass agitation to keep this product mixed with the water or fertilizer. The spray should be directed at the base of the plants and cover 6 to 8 inches of soil on either side of the plants. Such applications must be incorporated mechanically or by sprinkler irrigation to move this product into the root zone.
		Shanked: This product may be applied with liquid fertilizer shanked in as a band treatment to either side of the plant. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used. If this product is injected into the beds with liquid fertilizer, base calculations on a 7-inch band.

PEPPER AND EGGPLANT

- ◆ This product may cause some yellowing of the pepper leaves.
- ◆ Plants already infected with *Phytophthora* cannot be cured with this product.
- ◆ The foliar blight phase of *Phytophthora* cannot be controlled with foliar applications of this product.
- ◆ Do not use this product for disease control in greenhouses or field-grown vegetable bedding plants.
- ◆ In areas where there is a history of late *Phytophthora* infections, an application of another EPA registered fungicide labeled for *Phytophthora* control is recommended 17 to 21 days following the last application of this product.
- ◆ Do not apply within 7 days of harvest (PHI=7 days).
- ◆ Do not apply more than 6 pints of product (3 lb metalaxyl) per acre per year for soil applications and the equivalent of 1 lb metalaxyl per acre per year from any foliar-applied metalaxyl product.

PINEAPPLE

DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Heart Rot Disease (<i>Phytophthora</i> spp.)	1 to 2 per 100 gallons	Crown Dip: Apply as a crown dip before planting. The amount of dip solution per acre will depend on crown size, planting density, and dipping techniques. Use 75 to 100 gallons of mixture per acre.
<ul style="list-style-type: none"> ◆ If there is a crop failure within 1 year of planting treated crowns, do not harvest plant material for animal feed. ◆ Apply only once as a crown dip treatment before treatment. 		

POTATOES

DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Pythium Leak (<i>Pythium</i> spp.) Pink Rot (<i>Phytophthora erythroseptica</i>) Seedling Disease (<i>Pythium</i> spp.)	0.84 fl oz / 1,000 row feet	In-Furrow: Apply to row on a 6- to 8-inch band at planting in a minimum of 3 gallons of water per acre. Make application directly over the seed pieces prior to row closure. You may need to follow this in-furrow application with a foliar applied fungicide at tuber initiation: <ul style="list-style-type: none"> • When conditions are conducive to disease development. • When variety planted is susceptible or moderately susceptible (pink rot/<i>Pythium</i> leak). • In areas with a long growing season. This product may be impregnated on dry fertilizer or applied in combination with liquid fertilizers.
<ul style="list-style-type: none"> ◆ Do not apply this product within 14 days of harvest (PHI=14 days). ◆ Do not use the “dribble” application method. ◆ Apply mixture through pumping systems only. ◆ To avoid development of insensitivity in the pathogen population, do not apply this product or one similar in chemistry to potatoes beyond the at-planting growth stage. ◆ Do not use Ultra Flourish II 4 SC Fungicide for disease control in greenhouse or field-grown vegetable bedding plants. ◆ Do not exceed 1.37 pints of product (0.69 lb metalaxyl) per acre per year for soil application and the equivalent of 0.8 lb metalaxyl from any foliar-applied metalaxyl product. 		

RASPBERRIES		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Phytophthora Root Rot (<i>Phytophthora</i> spp.)	0.5 / 1,000 row feet	Apply to the soil surface in a 3-foot band over the row. Make 1 application in the spring and another in the fall after harvest.
<ul style="list-style-type: none"> ◆ This product may be applied on the day of harvest (PHI=0 days). ◆ Do not apply more than 14.4 pints of product (7.2 lb metalaxyl) per acre per year. 		

ROOT AND TUBER VEGETABLES		
Artichoke (Jerusalem); Beet; Beet, sugar (see Sugar Beet section); Cassava (bitter and sweet); Carrots; Chicory, Dasheen (taro); Ginger; Ginseng (see Ginseng section); Horseradish; Parsnip; Potato (see Potato section); Radish; Rutabaga; Salsify; Sweet potato; Tanier (cocoyam); Turnip; Yam (true)		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
<i>Pythium</i> spp. <i>Phytophthora</i> spp.	2 to 4	Preplant Incorporated Applications: Apply as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per dose for the band width actually used. Surface Application: Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used. If natural rainfall is not expected before the seeds start germinating, this product should be incorporated mechanically before planting or be moved into the seed zone after planting with 0.5 to 1 inch sprinkler irrigation.
<ul style="list-style-type: none">◆ Do not use this product for disease control in greenhouse or field-grown vegetable bedding plants.◆ Do not exceed 4 pints of product (2 lb metalaxyl) per acre per year for soil applications.		

SOYBEANS		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Phytophthora Root and Stem Rot (<i>Phytophthora megasprema</i>)	0.15 to 0.55 fl oz per 1,000 row feet	In-Furrow: Apply in-furrow with water or liquid fertilizer at planting. Position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly with the spray solution or crop injury may occur. Use the higher rate for full season control.
Pythium Damping-off (<i>Pythium</i> spp.)	0.75 to 2.5	Soil Spray: For full season control, apply 2.5 pints per treated acre in sufficient water or liquid fertilizer to provide uniform coverage at the time of planting. For banded applications, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of product needed per acre for the band width actually used. For early- to mid-season control, apply 0.75 to 1.5 pints per acre.
<ul style="list-style-type: none"> ♦ This product is specific for <i>Pythium</i> and <i>Phytophthora</i> and will not control other diseases that may attack soybeans. ♦ Under heavy late season <i>Phytophthora</i> pressure, this product may not provide complete control. ♦ Use the higher rate in areas with a history of heavy <i>Phytophthora</i> damage. ♦ For best results, use soybean varieties that have some degree of resistance to the species of <i>Phytophthora</i> present in the field. ♦ Do not apply more than 2.5 pints of product (1.25 lb metalaxyl) per acre per year. 		

STONE FRUITS		
Including Apricot, Cherry (sweet and tart), Nectarine, Peach, Plum (Chickasaw, Damson, Japanese), Prune (fresh)		
ALMONDS		
WALNUTS		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Crown Rot Collar Rot Root Rot (<i>Phytophthora</i> spp.)	1 Gallon (3 fl oz / 1,000 ft ²)	Apply in sufficient water to obtain thorough coverage of the soil under the canopy of the trees. Sufficient surface area should be treated in nurseries to cover the root zone of the plants 2 weeks after planting (new plantings) or in the spring before plant growth (established plantings). Additional applications should be made at 2 to 3 month intervals depending on disease pressure. For intense plantings (2 to 3 times the normal planting rate) make applications on a per area basis.
<ul style="list-style-type: none"> ♦ Use this product in conjunction with good cultural practices and rootstocks that are most tolerant to the disease. ♦ Apply before symptoms appear. This product will not revitalize trees showing moderate to severe disease symptoms. ♦ Do not dip the roots of trees in the treatment solution, spray the roots, or concentrate the treatment around the tree trunks or injury may occur. ♦ Do not apply to trees under stress. ♦ For tree densities 2 to 3 times the normal density, make applications on a per acre basis. ♦ In California, do not apply this product to newly planted trees within 90 days of planting. ♦ Do not graze livestock in treated areas. ♦ Do not graze or feed cover crops grown in treated orchards. ♦ Do not exceed 3 gallons (12 lb metalaxyl) per acre per year. ♦ Do not make more than 3 applications per year. 		

STRAWBERRIES		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Red Stele (<i>Phytophthora fragariae</i>)	2	New Plantings: Apply in sufficient water to move the fungicide into the root zone of the plants. Make first application after transplanting. Make second application 30 days before the beginning of harvest or at fruit set. Apply the third application during the harvest season, depending on environmental conditions and disease pressure.
Vascular Collapse (<i>P. cactorum</i>)		Established Plantings: Apply in sufficient water to move the fungicide into the root zone of the plants. Make first application in the spring after the ground thaws and before first bloom. Make second application after harvest in the fall. For supplemental control of leather rot, make an application during the growing season at fruit set.
Leather Rot (<i>P. cactorum</i>)		
<ul style="list-style-type: none">♦ If applying through drip irrigation systems, use the same amount as would be applied in a band application to cover the root zone of the plants.♦ Do not apply more than 6 pints of product (3.0 lb metalaxyl) per acre per year.♦ For low annual rainfall areas, a surface application of this product needs to be moved into the root zone by rainfall, overhead irrigation, or mechanical incorporation.		

SUGAR BEETS		
<i>Pythium</i> spp.	2 to 4	Preplant Incorporated: Apply as a broadcast soil application in sufficient water or liquid fertilizer and incorporate in the top two inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of product needed per acre for the band width actually used.
		Surface Application: Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used. If natural rainfall is not expected before the seeds begin germinating, this product should be incorporated mechanically before planting or be moved into the seed zone after planting with 0.5 to 1 inch sprinkler irrigation.
♦ Do not apply more than 4 pints of product (2 lb metalaxyl) per acre per year.		

TOBACCO			
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS	
Damping-off (<i>Pythium</i> spp.)	1 to 2	Soil Broadcast: Apply as a preplant soil application before or at time of planting. Use higher application rate on broadleaf tobacco.	
Blue Mold (<i>Peronospora tabacina</i>)	1 to 2	<p>Field Planted Tobacco: Apply as a broadcast soil application prior to transplanting and incorporate in the top 2 to 4 inches of soil before forming beds. For flue-cured tobacco, use 1 to 2 pints per treated acre, depending on disease pressure and length of control desired. Under low disease pressure or for early season control, use 1 pint per treated acre. For burley and other tobacco types, use 1 quart per treated acre.</p> <p>For prolonged control make a supplemental application of 1 pint per acre of crop as a soil application at layby or the last cultivation. Position the nozzles so that the spray is deposited under the plants and is covered by soil by the cultivator. Do not make this application if more than 1 quart per acre of this product was applied prior to transplanting or if no product was applied prior to transplanting.</p> <p>No Till Tobacco: Apply to the field prior to transplanting. Apply as a pre-plant, broadcast or banded soil application. For banded applications, use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used. A supplemental layby application may be made 30 to 35 days after planting at 1 pint per acre. Do not make any layby application if more than 1 quart per acre of this product was applied at transplanting or if no product was applied at transplanting.</p>	
		<p>♦ For best control of blue mold use this product in the field plant bed and follow with an application in the field prior to transplanting. Do not use this product in transplant water or in foliar applications on field tobacco because of the potential for the development of insensitivity in the blue mold fungus, crop injury, or potential excessive residues in the crop.</p>	
Black Shank (<i>Phytophthora parasitica</i> var. <i>nicotianea</i>)	2 to 6	Use as a broadcast soil application prior to transplanting and incorporate in the top 2 to 4 inches of soil before forming beds. Apply this product using conventional ground application equipment in sufficient water or liquid/dry fertilizer to provide uniform coverage. Use the following table to determine the amount of this product needed per acre depending on the black shank severity.	
		Type of Tobacco	Disease Level in Field
		Flu-cured	Rate of Product per Acre
			Low to Moderate (< 6% disease)
		Burley and Other	High (> 6% disease)
			Low to Moderate (< 6% disease)
			High (> 6% disease)

	<p>*In FL and GA use 3 quarts per treated acre of this product in fields with heavy black shank levels (greater than 6%).</p> <p>For prolonged control of black shank in field planted tobacco, one of the following is recommended: (1) Make a preplant incorporated and a supplemental layby application (last cultivation). Apply the supplemental application at last cultivation at the rate of 1 to 2 pints per acre as a soil treatment. Position the nozzles so that the spray is deposited under the plants and is covered with soil by the cultivator. Do not make this application if more than 1 quart per acre of this product was applied at transplanting; or (2) Make a preplant incorporated plus 2 supplemental applications at first cultivation and last cultivation (layby).</p> <p>Apply this product at 1 quart per acre just prior to transplanting followed by a second application of 1 quart per acre at the first cultivation followed by a third application of 1 quart per acre at layby or the last cultivation.</p> <ul style="list-style-type: none"> ◆ For best results against black shank, use this product with tobacco varieties that have high resistance to black shank and use crop rotation. ◆ In fields where there is a history of severe black shank, use the highest rate and plant a variety that is resistant to the race of <i>Phytophthora</i> present in the field (Burley L8 hybrids are only resistant to <i>Phytophthora</i> Race O.). ◆ This product is not recommended or use in high black shank areas on highly susceptible flue-cured varieties. ◆ In PA – Do not use this product for black shank control ◆ Failure to adequately control nematodes in fields treated with this product may result in poor control of black shank.
<ul style="list-style-type: none"> ◆ Do not apply more than 6 pints of product (3 lb metalaxyl) per acre per year. ◆ Do not use this product for disease control in greenhouses. 	

TOMATO		
DISEASE	RATE (Pints per Acre unless stated otherwise)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.)	2 to 4	<p>Apply in sufficient water or liquid fertilizer to provide uniform coverage at the time of planting. If rainfall is not expected before the seeds start to germinate, this product should be incorporated mechanically before planting, during the planting operation, or be moved into the seed zone after planting with 0.5 to 1 inch sprinkler irrigation.</p> <p>For banded applications, a 7-inch band is recommended. Use the formula in the Product Application Instructions section of this label to calculate the amount of this product needed per acre for the band width actually used.</p>

Root and Fruit Rot (<i>Phytophthora</i> spp.) (<i>Pythium</i> spp.)	2	<p>To aid in the control of root and fruit rot, 1 to 2 additional applications may be made during the growing season.</p> <p>Apply beginning 4 to 6 weeks after planting. A second application of 2 pints may be made depending on the severity of the conditions for disease infection up to 4 weeks before harvest, but before the last irrigation.</p> <p>This product may be applied as a directed soil surface spray under the vines or it may be injected into the beds with liquid fertilizer. If less than the full bed is treated, use the formula in the Product Application Instructions section to determine the amount of this product needed per acre for the band width actually used. If product is injected into the beds with liquid fertilizer, base calculations on a 7-inch band.</p> <p>If soil surface sprays are used, this product must be incorporated into the soil with 0.5 to 1 inch of rainfall or sprinkler irrigation.</p>
<ul style="list-style-type: none"> ◆ Keep this product suspended in the fertilizer solution with bypass or mechanical agitation. Refer to the Product Application Instructions section for drip irrigation instructions. ◆ Do not use this product for disease control in greenhouse or field grown vegetable bedding plants. ◆ Do not use this product as a transplant water treatment. ◆ Do not exceed 6 pints of product (3 lb metalaxyl) per acre per year for soil applications and the equivalent of 1 lb metalaxyl per acre per year from any foliar-applied metalaxyl product. 		

ORNAMENTALS

This product controls water mold, damping off, root rot, stem rot and crown rot diseases caused by *Pythium* spp. and *Phytophthora* spp. Use this product on container, bench, or bed-grown ornamentals in greenhouses or outdoor nurseries, for professional use on ornamentals grown for indoor and outdoor landscaping, and for control of fungal diseases of foliage, flowers and stems.

This product can be applied to the soil through irrigation systems, as a soil drench, as a soil surface spray, or as a soil incorporated mix prior to or at seeding or transplanting according to the guidelines below. When a rate range and application interval is noted, use the lower rates for the shortest application intervals listed and higher rates for longer application intervals. This product can be tank mixed with other ornamental fungicides, however, do not mix with other products unless prior use has proven compatibility.

For soil drench applications, use enough solution to wet the root zone of the plants. In general, 1 pint (16 fluid ounces) per square foot of this solution is sufficient for ornamentals growing in containers or benches with 4 inches of growth media or less. Containers or benches with growing media greater than 4 inches generally require 1.5 to 2 pints (24 to 32 fluid ounces) of solution per square foot. Where soil surface applications are made, irrigate with at least 1/2 inch of water if rainfall does not occur within seven days of the application.

Plant tolerance to this product has been shown to be acceptable on a wide variety of bedding, flowering, and foliage plants, as well as trees and shrubs. But due to the large number of species and varieties, neither the manufacturer nor the seller has determined whether or not this product can be used safely on all ornamental plants. Prior to any large-scale application on such plants, the user must determine the safety of this product by testing a small number of the type of plants to be treated at the specified rates and under the desired growing conditions. The user assumes all risks arising out of application to untested plants.

FOLIAGE PLANTS: Aglaonema, Aphelandra, Dieffenbachia, Peperomia, Philodendron*, Pothos**, Schefflera, Sedum, Sempervivum, Zygocactus

Rate Fluid Ounces (lb ai)	Use Instructions
0.25 to 0.62 (0.008 to 0.02)	<p>Drench: Mix with 100 gallons of water. Apply 1 pint of solution per square foot. For growth media depth greater than 4 inches, apply 1.5 to 2 pints of solution per square foot. Repeat applications at 2 to 3 month intervals, if necessary.</p> <p>* On Philodendron, use 0.5 to 1.0 fluid ounces per 100 gallons.</p> <p>**Precaution: To minimize the potential for injury to Pothos, do not use more than 0.38 fluid ounce per 100 gallons and do not apply more frequently than once every 3 months.</p>
0.12 to 0.25 (0.004 to 0.008)	<p>Soil Mix: Thoroughly mix with each cubic yard soil mixture.</p>
1.0 (0.03)	<p>Soil Surface Spray: Apply per 1,000 square feet to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of 1/2 inch of water if rainfall does not occur within 7 days.</p> <p>Repeat applications at 2 to 3 month intervals, if needed.</p>
<ul style="list-style-type: none"> ♦ Maximum single application rate: 2.5 fl oz/1,000 sq ft (0.08 lb ai/1,000 sq ft) or 0.85 gal/A (3.4 lb ai/A) ♦ Maximum annual application rate: 9 fl oz/1,000 sq ft (0.28 lb ai/1,000 sq ft) or 3.08 gal/A (12.3 lb ai/A) ♦ Minimum retreatment interval: 60 days 	

BEDDING PLANTS: Ageratum, Algerian Ivy, Artemisia, Aster, Begonia, Caladium, Carnation, Chrysanthemum, Coleus, Daisy, English Ivy*, Foxglove, Gaillardia, Geranium, Impatiens, Marigold, Pansy, Petunia, Phlox, Pinks, Primrose, Prostrate Rosemary, Salvia, Snapdragon, Verbena, Vinca, Zinnia

Rate Fluid Ounces (lb ai)	Use Instructions
0.12 to 0.25 (0.004 to 0.008)	<p>Drench at Seeding (Soil 2-3 inches deep): Mix with 100 gallons of water and apply 1 pint of solution per square foot.</p>
0.25 to 1.0 (0.015 to 0.03)	<p>Drench at Transplanting (Soil 2-3 inches deep): Mix with 100 gallons of water and apply 1 pint of solution per square foot. Repeat applications at 1 to 2 month intervals, if necessary. Do not apply rates of 0.75 to 1 fluid ounce per 100 gallons more often than once every 6 weeks.</p>
0.125 (0.004)	<p>Soil Mix at Seeding and at Transplanting: Thoroughly mix with each cubic yard of soil mixture.</p>
1.0 (0.03)	<p>Soil Surface Spray: Apply per 1,000 square feet to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of 1/2 inch of water if rainfall does not occur within 7 days.</p> <p>Repeat applications at 1 to 2 month intervals if needed.</p>
<p>* Do not apply to English Ivy more than once every 6 months.</p> <ul style="list-style-type: none"> • Maximum single application rate: 1.3 fl oz/1,000 sq ft (0.04 lb ai/1,000 sq ft) or 0.43 gal/A (1.7 lb ai/A) • Maximum annual application rate: 9 fl oz/1,000 sq ft (0.28 lb ai/1,000 sq ft) or 3.08 gal/A (12.3 lb ai/A) • Minimum retreatment interval: 30 days 	

FLOWERS: African violet, Anthurium, Baby's breath, Carnation, Chrysanthemum, Columbine, Delphinium, Easter lily*, Geranium, Gloxinia, Poinsettia, Rose

Rate Fluid Ounces (lb ai)	Use Instructions
0.2 to 1 (0.006 to 0.03)	Drench Mix: Mix with 100 gallons of water and apply 1 pint of solution per square foot. For growth media depth greater than 4 inches, apply 1.5 to 2 pints of solution per square foot. Repeat applications at 1 to 2 month intervals, if necessary. Do not apply rates of 0.75 to 1.0 fluid ounces per 100 gallons more often than every 6 weeks.
1 (0.03)	Soil Surface Spray Applications in the Landscape: Apply 1,000 square feet to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough distribution of the plant root zone. After application, irrigate with a minimum of a 1/2 inch of water if rainfall does not occur within 7 days. Repeat applications at 2 to 3 month intervals as needed.
<p>* Do not apply more than 0.5 fluid ounce (0.016 lb metalaxyl) per 100 gallons to Easter Lilies and only make a single application at the time of planting.</p> <ul style="list-style-type: none"> Maximum single application rate: 2.5 fl oz/1,000 sq ft (0.08 lb ai/1,000 sq ft) or 0.85 gal/A (3.4 lb ai/A) Maximum annual application rate: 9 fl oz/1,000 sq ft (0.28 lb ai/1,000 sq ft) or 3.08 gal/A (12.3 lb ai/A) Minimum retreatment interval: 30 days 	

AZALEAS AND RHODODENDRONS

Rate Fluid Ounces (lb ai)	Use Instructions
0.50 to 1.25 (0.016 to 0.04)	Soil Drench: Mix in 100 gallons of water. For media with a depth of less than 4 inches, apply at a volume of 1 pint per square foot. For media with a depth of 4 inches or more, apply at a volume of 1.5 to 2 pints per square foot. Repeat applications at 2 to 4 month intervals as needed.
0.60 to 1.25 (0.019 to 0.04)	Foliar Spray: Phytophthora shoot blight - Mix in 100 gallons of water and spray to runoff. Repeat at 2 to 3 month intervals as needed.
	Soil Surface Spray: Apply to the soil surface as broadcast or banded spray in sufficient water to obtain thorough coverage of the root zone. Irrigate with a minimum of 1/2 inch of water if rainfall does not occur within 7 days of application.
<ul style="list-style-type: none"> ◆ To minimize potential injury to azaleas do not apply rates greater than 1.25 fluid ounces (0.04 lb metalaxyl) per 100 gallons more than once every 3 months, and do not exceed a total of 2.5 fluid ounces (0.08 lb metalaxyl) in 6 months. Use only the lower rate for azalea variety "Coral Bell". ◆ Maximum single application rate: 3.1 fl oz/1,000 sq ft (0.1 lb ai/1,000 sq ft) or 1.06 gal/A (4.2 lb ai/A) ◆ Maximum application rate per year: 5 fl oz/1,000 sq ft (0.16 lb ai/1,000 sq ft) or 1.7 gal/A (6.8 lb ai/A) ◆ Minimum retreatment interval: 60 days 	

WOODY ORNAMENTALS OTHER THAN AZALEAS: *Aucuba japonica*, Arborvitae, Boxwood, Ceanothus, Cotoneaster, Dogwood, Ficus, "Halls" Honeysuckle, Ilex, *Juniperus* spp., Photinia, *Pieris japonica*, *Pinus* spp., Pittosporum, Rhododendron, White Cedar, White Pine, Yew

Rate Fluid Ounces (lb ai)	Use Instructions
0.5 to 2.0 (0.016 to 0.06)	Drench: Mix with 100 gallons of water and apply 1 pint of solution per square foot. For growth media depth greater than 4 inches, apply 1.5 to 2 pints of solution per square foot. Repeat applications at 2 to 3 month intervals, if necessary. Do not apply rates of 4 fluid ounces (0.125 lb ai) per 100 gallons more often than every 10 weeks.
1.0 to 2.5 (0.03 to 0.08)	Soil Surface Spray: Apply per 1,000 square feet to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of 1/2 inch of water if rainfall does not occur within 7 days. Repeat applications at 2 to 3 month intervals, if needed.
<ul style="list-style-type: none"> ◆ Do not apply to Euonymus or injury may occur. ◆ Maximum single application rate: 5 fl oz/1,000 sq ft (0.16 lb ai/1,000 sq ft) or 1.7 gal/A (6.8 lb ai/A) ◆ Maximum application rate per year: 9 fl oz/1,000 sq ft (0.28 lb ai/1,000 sq ft) or 3.08 gal/A (12.3 lb ai/A) ◆ Minimum retreatment interval: 60 days 	

INTERIORESCAPE AND INDIVIDUAL PLANT USE

In situations where water volumes used are much less than 100 gallons and the area to be treated is small, the following table provides the product rates to make small quantities of the solution. Refer to the plant type for the correct fluid ounces of product to use when utilizing this table.

Soil Drench: Apply enough solution to the soil surface to wet the root area of the plants.

Rate (Fluid Ounces per 100 Gallons)	Amount of Ultra Flourish II 4SC to add to water to make the following quantities			
	1 Gallon	5 Gallons	10 Gallons	25 Gallons
0.25	4 drops	18 drops	37 drops 0.75 ml	1.9 ml 3/8 tsp
0.5	7 drops	37 drops 0.75 ml	1.5 ml 1/3 tsp	3.7 ml 3/4 tsp
1.0	15 drops	75 drops 1.5 ml 1/3 tsp	3.0 ml 2/3 tsp	7.5 ml 1.5 tsp 1/2 Tbsp
2.0	30 drops	4.5 ml 1 tsp	6 ml 1 1/3 tsp	15 ml 3 tsp 1 Tbsp

CITRUS IN NURSERIES AND LANDSCAPES (NONBEARING)

For control of citrus foot rot, root rot and trunk canker caused by *Phytophthora* spp.: This product can be applied to non-bearing citrus grown in nurseries and landscape plantings. Applications should be made to the soil as a drench or as a banded spray, with initial applications made at the time of planting. Repeat applications can be made at three month intervals during periods of active growth.

Rate	Use Instructions
2 to 3 fl oz (0.06 to 0.09 lb ai)	Soil drench applications: Mix in 100 gallons of water. Apply as a drench over the row using a volume of 100 to 250 gallons per 1,000 feet of row. The width of the application should be wide enough to cover the root system of the plants.
1 gallon (4 lb ai)	Soil surface spray applications: Apply per acre of treated soil in a broadcast or banded surface spray to seedbeds, liners, or bedded stock in sufficient water to obtain thorough coverage. For banded treatments, the treated area should be wide enough to cover the root system of the plants. Application should be followed by a minimum of 1/2 inch of irrigation.
<p>Note: Do not use in greenhouse citrus nursery stock intended for commercial fruit production.</p> <p>Do not apply more than 9 fl oz (0.28 lb ai) per 1,000 sq ft or 3 gal (12.3 lb ai) per acre per year.</p>	

CONIFERS/CHRISTMAS TREES IN NURSERIES AND PLANTATIONS

Nurseries

For control of *Phytophthora* root rot in conifers.

	Rate (lb ai)	Use Instructions
Seedbeds and Plugs	1.25 pints (0.04)	Apply in a minimum of 50 gallons of water per acre in the spring and again in the fall.
2-0 Transplants	2.5 pints (0.08)	Apply in a minimum of 50 gallons of water per acre in the spring and again in the fall.
Do not apply more than 5 pt (2.5 lb ai) per acre per year.		

Plantations

This product will aid in the control of *Phytophthora* root rot when used in conjunction with good cultural practices, but will not overcome poor practices such as planting on flood prone or poor draining sites.

Apply 0.6 to 1.25 gallons of this product (2.4 to 5 lb ai) in a minimum of 50 gallons of water per acre as a directed soil spray. Do not apply to the foliage. Make applications in the early spring before active growth begins and again in the fall before the ground freezes. For best results, apply 1/2 to 1 inch of irrigation if rain does not occur within 3 days of application.

Do not apply more than 2.5 gallons (10 lb ai) per acre per year.

NONBEARING FRUIT AND NUT TREES

This product is effective in the control of *Pythium* root rot and *Phytophthora* root rot, crown rot and collar rot of nonbearing fruit and nut trees. Apply 3 fluid ounces (0.09 lb ai) of this product per 1,000 square feet in sufficient water to obtain thorough coverage of the soil underneath the canopy of the trees. Treat enough area to cover the root zones of the plants. Repeat applications may be made at 3 month intervals as needed during the growing season.

- ◆ Do not apply to trees that will bear harvestable fruit or nuts within 12 months of the last application.
- ◆ Do not apply more than 9 fluid ounces (0.28 lb ai) per 1,000 square feet or 3 gallons (12 lb ai) per acre of this product in any one year.

LAWNS AND TURF

This product is effective for the control of *Pythium* blight (cottony blight, grease spot, spot blight, root rot, crown rot) and damping off caused by *Pythium* spp.: This product is also effective in controlling yellow tuft (downy mildew) in bluegrass and downy mildew in St. Augustine grass.

This product can be applied to the turf through irrigation systems or as a surface spray. When a rate range and application interval is noted, use the lower rates for the shortest application intervals listed, and higher rates for longer application intervals. For broad spectrum disease control, this product can be tank mixed with other turf fungicides, however, do not mix with other products unless prior use has proven compatibility.

Site	Diseases	Rate (lb ai)	Use Instructions
Established Lawns and Turf	<i>Pythium</i> Blight Yellow Tuft Downy Mildew	0.5 to 1.0 fl oz (0.015 to 0.03 lb ai)	Apply in 1 to 5 gallons of water per 1,000 square feet as a preventative treatment. Retreat at 10 to 21 day intervals as needed. During conditions favorable to disease development, apply the 1 fluid ounce rate on a 14-day schedule.
Newly Seeded Lawns and Turf	<i>Pythium</i> Damping Off <i>Pythium</i> Blight Yellow Tuft Downy Mildew	0.5 to 1.0 fl oz (0.015 to 0.03 lb ai)	Apply in 1 to 5 gallons of water per 1000 square feet immediately after seeding and irrigate with 1/4 to 1/2 inch of water. During conditions favorable to disease development, retreat at 7 to 14 day intervals.
<ul style="list-style-type: none"> ◆ For long term control of <i>Pythium</i> in areas when using seed treated with the active ingredient contained in this product, make an application 7 to 10 days after seeding. ◆ To minimize the potential for resistance, it is recommended that no more than 3 applications of the active ingredient metalaxyl may be made per season. It is also recommended that fungicides of a different chemical class be applied in rotation between applications of this product. ◆ Do not apply more than 9 fl oz (0.28 lb ai) per 1,000 square feet or 3 gallons (12 lb ai) per acre. 			

STORAGE AND DISPOSAL

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

STORAGE: Store at temperatures above 40°F. Crystals may form at lower storage temperatures. If this occurs, place the product in a warm room (68°F or above) and roll or shake the container at frequent intervals until all crystals are dissolved.

PESTICIDE DISPOSAL: Open dumping is prohibited. Wastes resulting from the use of this product are acutely toxic. Improper disposal of unused pesticide, spray mixture or rinsate is a violation of federal law. Pesticide, spray mixture or rinsate that cannot be used according to the label instruction must be disposed of according to federal, state or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

CONTAINER HANDLING:

[Note to Reviewer: The following statement will be included on all Final Printed Labels bearing multiple Container Handling statements] **“NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this product's labeling for the applicable “Nonrefillable” or “Refillable” designation. Follow the container handling instructions below that apply to your container type/size.”

[Nonrefillable containers 5 gallons or less:] Nonrefillable Container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Plastic containers are also disposable by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[Nonrefillable containers larger than 5 gallons:] Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Plastic containers are also disposable by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[Refillable containers larger than 5 gallons:] Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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