

WITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON OF TOACT

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DEFICE OF CHEMICAL SAFETY 1 MD POLLUTION PREVENTION

MAY 29 2014

Ms. Tammy Zimmer Bayer CropScience LP Biologics 1540 Drew Avenue Davis, CA 95618

Subject:

Serenade® ASO EPA Registration No. 264-1152 Fast Track Label Amendment of December 11, 2013 Label Updated May 29, 2014 Decision No. 487366

Dear Ms. Zimmer:

The Agency has reviewed your request to amend the subject product registration, which included the following change to the product label:

* new sublabel A text prohibiting certain uses in the State of California

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) section 3(c)(5), is acceptable provided that you:

- Submit and/or cite all data required for registration/registration review of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- Submit two (2) copies of your final printed labeling before you release the product for shipment.
 Refer to the A-79 enclosure for a further description of a final printed label.

Your release or shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Enclosures (2)

Sincerely,

Kimberly Nesci, Chief Microbial Pesticides Branch Biopesticides and Pollution Prevention Division (7511P)

SERENADE® ASO

[Alternate Brand Names: Serenade® Biofungicide, Serenade® Soil, Serenade® Garden Disease Control Concentrate, [Serenade® Garden Disease Control Ready to Spray]] [Alternate Names for Turf Label when sold for hose-end sprayers:] [Serenade® Garden Lawn Disease Control - Ready to Spray], [Serenade® Garden Turf Disease Control - Ready to Spray], [Serenade® Garden Lawn Disease Control], [Serenade® Garden Turf Disease Control], [Serenade® Garden Disease Control for Lawns - Ready to Spray], [Serenade® Garden Disease Control for Turf - Ready to Sprav] Sub-label A: Agricultural/Commercial Use Sub-label B: Seed Treatment Sub-label C: Residential Use (Home and Garden Use) ACTIVE INGREDIENT: QST 713 strain of Bacillus subtilis OTHER INGREDIENTS98.66%

EPA Registration No. 264-1152

EPA Est. No.:

KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577 For <u>PRODUCT USE</u> Information Call 1-866-99BAYER (1-866-992-2937)

[Note: All text in brackets is optional language for the final printed container label.]

Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709

ACCEPTED

MAY 29 2014

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 264 - 1152

SERENADE[®] ASO

AN AQUEOUS SUSPENSION BIOFUNGICIDE

SUB-LABEL A

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For Agricultural/Commercial Use

ACCEPTED

Under the Peperal Insecurity Forsy Car and Rodenty de Act, 15 amerika in the pepticule registered arby EPA Real No

SERENADE[®] ASO

[Alternate Brand Names: Serenade[®] Biofungicide, Serenade[®] Soil] [An Aqueous Suspension Biofungicide]

[Optional/Alternate Statement: "NOP Logo: For Organic Production"]

[Optional/Alternate Statement: "NOP Logo: Can be Used for Organic Production"]

[Use Indoors and Outdoors]

[use in field applications, greenhouses, glasshouses, nurseries, shadehouses, landscapes,

interiorscapes, seedling production sites, And forest seedling production sites]

[Use in Tank Mixes or Rotational alternating spray programs with other crop protection products] [use in resistance management programs]

[Use ground, aerial, chemigation and hand application equipment] [For Agricultural Use]

[For use on Ornamentals, Trees, Shrubs, Turf, lawns, sod, golf courses (greens, tees, fairways and roughs), Seedlings, And Conifers]

[Use In Production of Conifers For Reforestation]

*Contains a minimum of 1 x 10⁹ cfu/g EPA Registration No. 264-1152

KEEP OUT OF REACH OF CHILDREN

EPA Est. No.:

CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577 For <u>PRODUCT USE</u> Information Call 1-866-99BAYER (1-866-992-2937)

1	FIRST AID
IF INHALED:	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

[Reference Statement for Booklets: For ADDITIONAL PRECAUTIONARY STATEMENTS and DIRECTIONS FOR USE: See Inside Booklet. See FIRST AID STATEMENT on the back panel.] [USE OF PRODUCT INDICATES ACCEPTANCE OF "CONIDTIONS FOR SALE AND WARRANTY"]

Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Harmful if inhaled. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

The PPE requirements below apply to both <u>Worker Protection Standard (WPS)</u> uses (in general, agricultural-plant uses are covered by the Worker Protection Standard (40 CFR Part 170)) and <u>Non-WPS</u> uses.

Applicators and other handlers must wear:

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

Mixers/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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

[OPTIONAL: ENGINEERING CONTROLS].

[OPTIONAL STATEMENT: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets 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.]

[IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.]

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift or run-off from treated areas.

EMERGENCY INFORMATION

For emergencies such as leaks or spills, call 24-hour, toll-free BAYER hotline at 1-800-334-7577.

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 State or Tribal agency responsible for pesticide regulation. [For use only as described on this label. Not for isolation or deformulation. Do not culture.] and the second of the second second

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR; Part 170. This Standard contains requirements for the protection of agricultural workers on farms. forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, 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
 waterproof gloves
 shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

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

and the second [Post-harvest applications:]

Post-harvest treatment of harvested agricultural plants does not fall within the scope of the WPS. An agricultural plant is considered harvested when 1) a desirable portion of the agricultural plant (seed, fruit, flower, stem, foliage, or roots) is detached from its parent or 2) a whole agricultural plant is separated from its growth media (soil, water, or other media).

Keep unprotected persons from handling portions of harvested agricultural plants that have been treated until sprays have dried.

[Commercial treatment of plants that are in ornamental gardens, parks, golf courses, and public or residential turf and grounds, and that are intended only for aesthetic purposes or climatic modification.]

Keep unprotected persons out of treated areas until sprays have dried.

· · · · · BASIC USE INFORMATION

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Serenade® ASO is a broad spectrum, preventative product for the control or suppression of many important plant diseases. (Apply Serenade ASO as a foliar spray alone, in alternating spray programs or in tank mixes with other registered crop protection products.] [Apply Serenade ASO as a soil drench alone or in tank mixes with other registered crop protection products.] When conditions are conducive to heavy disease pressure, use Serenade ASO in a rotational program with other registered fungicides. Apply Serenade ASO with spray equipment commonly used for making ground for aeriall applications and irrigation systems commonly used for chemigation. Heavy rainfall or irrigation shortly after application may require retreatment. •

[OPTIONAL STATEMENTS: Serenade ASO is most effectively used in a preventive disease management program. For improved performance, use Serenade ASO in a tank-mix or rotational program with other registered fungicides. When using Serenade ASO alone for the first time, use a rate of 4 qt Serenade ASO per acre. Increase the application rate and/or decrease spray intervals of Serenade ASO according to the application instructions depending upon disease pressure. [To enhance performance, consider adding a surfactant, known to be safe to the target crop, to the spray tank to improve penetration and coverage of above-ground portions of the plant.]

INTEGRATED PEST MANAGEMENT (IPM)

Integrate Serenade ASO into an overall disease and pest management strategy whenever fungicide use is necessary. Follow practices known to reduce disease development. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.

Be sure use of this product conforms to resistance management strategies, which may include rotating and/or tank mixing with other products with different modes of action.

USE RATE DETERMINATION

Carefully read and follow all label directions, use rates and restrictions. Application of Serenade ASO prior to or in the early stages of disease development provides the best control or suppression of the targeted plant disease. Use the stated maximum label rates and shorter spray intervals for conditions conducive to threatening or rapid disease development. [For proper application, determine the number of acres to be treated, the label use rate and select appropriate gallonage to give good canopy penetration and coverage of plant parts to be protected.] Prepare only the amount of spray solution required to treat the measured acreage. Accurate spray [alternate: chemigation] equipment calibration is essential prior to use.

PREHARVEST INTERVAL

Serenade ASO can be applied up to and on the day of harvest.

APPLICATION INSTRUCTIONS

SPRAY DRIFT: Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower/treatment coordinator are responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they should be observed.

GROUND: This product can be applied by commonly used ground equipment, such as hose-end, pressurized, greenhouse and hand-held sprayers. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration. Maintain agitation during mixing and application to assure uniform product suspension. Thorough coverage of all foliage [alternate statement for soil uses: soil surface] is essential for effective disease control or suppression. Use the application rate, indicated for the appropriate crop in the Application Rate tables of this label, in sufficient water to achieve thorough coverage. Overall, to achieve good coverage, use proper spray pressure, gallonage per acre, nozzles, nozzle spacing and ground speed.

AERIAL: This product can be applied by aerial application. Refer to the Aerial Drift Reduction Information section of this label for additional directions and precautions. Use the application rate, indicated for the appropriate crop in the Application Rate tables of this label, in sufficient water to achieve thorough coverage, typically between 3 - 20 gallons of water per acre depending upon the crop. Three gallons of water per acre is the minimum.

CHEMIGATION: This product can be applied through sprinkler (center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set, or hand move) or drip-type irrigation systems. Refer to the Chemigation Directions for Use section of this label for additional directions and precautions. Maintain agitation during mixing and application to assure uniform product suspension. Use the application rate, indicated for the appropriate crop in the Application Rate tables of this label, in sufficient water to achieve through

coverage.

MIXING INSTRUCTIONS

MIXING: Serenade ASO must be diluted with water. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of Serenade ASO to the tank. Finish filling the tank to the necessary volume to obtain the proper spray concentration. It is critical that the spray solution be agitated during mixing and application to assure a uniform suspension. Do not allow spray mixture to stand overnight or for prolonged periods. [Optional Statement: Maintain a spray solution pH between 4.5 and 8.5.]

Serenade ASO may be tank mixed with other registered pesticides to enhance plant disease control or suppression. This product cannot be mixed with any product with a prohibition against such mixing. When tank mixing Serenade ASO with other registered pesticides, always read, and follow all use directions, restrictions, and precautions of both Serenade ASO and the tank-mix partner(s). Use of the resulting tank mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates.

COMPATIBILITY: Do not combine Serenade ASO in the spray tank with pesticides, surfactants or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions.

Serenade ASO is compatible with many commonly used pesticides, fertilizers, adjuvants and surfactants but has <u>not</u> been fully evaluated with all of these. To ensure compatibility of tank-mix combinations, evaluate them prior to use as follows: Using a suitable container, add proportional amounts of product to water. Add wettable powders first, followed by water dispersible granules, then by liquid flowables and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the combination stays mixed or can be remixed, it is physically compatible. Test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application. [OPTIONAL STATEMENT; Do not use with penetrant-type adjuvants.]

ADDITIVES: Serenade ASO is compatible with a wide range of additives. Since the product is primarily a protectant, thorough coverage of all above-ground plant parts is required for effective product performance. To improve plant surface coverage, add a nonphytotoxic [adjuvant] [surfactant] to spray tank.

CHEMIGATION DIRECTIONS FOR USE

Basic Requirements:

- Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move) or drip-type irrigation systems. Do not apply this product through any other type of irrigation system.
- 2) Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.
- Ensure that the irrigation system used is properly calibrated. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 4) Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5) A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make any necessary adjustments should the need arise.

Requirements for Chemigation Systems Connected to Public Water Systems:

- 1) Public water supply means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4) 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.
- 5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.
- 8) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause Serenade ASO to lose effectiveness or strength.
- 9) Do not combine Serenade ASO with pesticides, surfactants or fertilizers for application through chemigation equipment unless prior experience has shown the combination physically compatible, effective and non-injurious under conditions of use. Serenade ASO has <u>not</u> been fully evaluated for compatibility with all of these. Conduct a spray compatibility test if mixture with other pesticides, surfactants or fertilizers is planned.
- 10) Maintain agitation in the pesticide supply tank.
- 11) Apply Serenade ASO during the last half of the water application.
- 12) Dilute Serenade ASO in enough water to be able to draw through system for the last half of the water application.

Sprinkler Chemidation Requirements: 201

- 1) The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check value to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either and a second automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. 1. 1. 1
- 5) The inrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7) Do not apply when, wind speed favors drift beyond the area intended for treatment.
- 8) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause Serenade ASO to lose effectiveness or strength.
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Charles In March Store e de la com Mar . Brette o Center Pivöt, Lateral Move, End Tow, and Traveler Irrigation Equipment (Use only with electric or oil hydraulic drive systems that provide a uniform water distribution):

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- Determine size of area to be treated a set of an and the set of th
- Determine the time required to apply no more than 1/4 inch of water (6,750 gallons water per acre) over the area to be treated when the system and injection, equipment are operated at normal pressures specified by the equipment manufacturer. Run system at 80 to 95% of manufacturer's rated capacity is the other set of a set of the set of
- Using only water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Serenade ASO fungicide required to treat area.
- Add required amount of Serenade ASO fungicide and sufficient water to meet the injection time requirements of the solution tank. and the second second
- Maintain constant solution tank agitation during the injection period.

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Stop injection equipment after treatment is completed. Continue to operate the system until Serenade ASO fungicide solution has cleared the sprinkler head. and the second

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Solid Set, Side (Wheel) Roll, and Hand Move Irrigation Equipment:

- Determine acreage covered by sprinkler. ٠٠
- Fill injector solution tank with water and adjust flowarate to use contents over a 10- to 30-minute **8** 8 والمراجع والمعالية المحاجة المحاجة والمحاجة interval. ÷ . 10.5
- Determine the amount of Serenade ASO fungicide required to treat area.
- Add the required amount of Serenade ASO fungicide into the same quantity of water used to calibrate the injection equipment. Second a second second
- Maintain constant solution tank agitation during the injection period.
- Operate system at normal pressures specified by the manufacturer of the injection equipment and used for the time interval established during calibration.
- Inject Serenade ASO fungicide at the end of the irrigation cycle or as a separate application to in the second maximize foliar fungicide retention.
- Stop injection equipment after treatment is completed. Continue to operate the system until Serenade ASO fungicide solution has cleared the last sprinkler head.

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Drip Chemigation Requirements:

1) The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

- The pesticide injection pipeline must contain a functional, automatic, guick-closing check valve to 2) prevent the flow of fluid back toward the injection pump. 3) The pesticide injection pipeline must also contain a functional, normally closed, solehold-operated
- valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. 化学校 静 品牌 网络花花花 计公式分词 建金属
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump); effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. المجريمة العصرين المتهارين 13 M - 1986 1987 194
- 7) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause Serenade ASO to lose effectiveness or strength. Tragate de laster activeness de laster de la strength de la str
- 8) Do not combine Serenade ASO with pesticides, surfactants or fertilizers for application through chemication equipment unless prior experience has shown the combination physically compatible, effective and non-injurious under conditions of use. Serenade ASO has not been fully evaluated for compatibility with all of these. Conduct a spray compatibility test if mixture-with other pesticides, surfactants or fertilizers is planned. and the second second
- 9) Maintain agitation in the pesticide supply tank.
- . . Section of the section of the 10) Apply Serenade ASO during the last half of the water application.
- 11) Dilute Serenade ASO in enough water to be able to draw through system for the last half of the water application.

AERIAL DRIFT REDUCTION INFORMATION

BASIC: Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower/treatment coordinator are responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed.

INFORMATION ON DROPLET SIZE: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets will reduce drift potential but will not prevent drift if applications are made improperly of under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

CONTROLLING DROPLET SIZE: <u>Volume</u> - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. <u>Pressure</u> - Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types, lower pressure produces larger droplets. When high flow rates are needed, use higher flow rate nozzles instead of increasing pressure. <u>Number of Nozzles</u> - Use the minimum number of nozzles that provide uniform coverage. <u>Nozzle</u> <u>Orientation</u> - Orienting nozzles, so that the spray is released parallel to the airstream; produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential. <u>Nozzle Type</u> - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles that are oriented straight back produce the largest droplets and the lowest drift. Use medium or coarser spray according to the ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles.

BOOM WIDTH: For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade.

APPLICATION HEIGHT: Do not release spray at a height greater than 10 feet above the top of the ground of the crop canopy unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above ground or canopy.

SWATH ADJUSTMENT: Use upwind swath displacement. When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

WIND: Apply only when wind speed is 3 - 10 miles per hour as measured by an anemometer. Drift potential is lowest between wind speeds of 3 - 10 miles per hour. Many factors, however, including droplet size and equipment type, determine drift potential at any given speed. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS: Do not apply during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light, variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified 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.

SENSITIVE AREAS: The pesticide should only be applied when the potential for drift to adjacent, sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas). Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

IMPORTANT: READ CONDITIONS FOR SALE AND WARRANTY BEFORE USE

FOR USE AS A FOLIAR SPRAY ON SELECT AGRICULTURAL FIELD CROPS AND SELECT AGRICULTURAL GREENHOUSE CROPS

Serenade ASO has a 0-Day PreHarvest Interval for all crops contained on this label. Under moderate to severe disease pressure, for improved performance, increase rates and reduce spray intervals as stated or use Serenade ASO in a tank-mix or rotational program with other registered fungicides.

	Application Rates of Serenade ASO for Selected Field Crops				
Crops	Disease	Rate (qt/acre)	Application Instructions		
Artichoke	Powdery Mildew Leveillula taurica Erysiphe cichoracearum Gray Mold Botrytis spp. Bacterial Crown Rot Erwinia chrysanthemi	1 - 6	Begin applications when conditions are conducive to disease development. Repeat on 7- to 10- day intervals or as needed. Serenade ASO may be applied up to and on the day of harvest.		
Asparagus	Rust Puccinia asparagi Botrytis Blight Botrytis cinerea	1-6	Begin applications soon after emergence and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. Serenade ASO may be applied up to and on the day of harvest.		

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Crops	Disease	Rate (qt/acre)	Application Instructions
Berries Blueberry Blackberry Raspberry Loganberry Huckleberry Cranberry Gooseberry Elderberry Currant and other berry crops	Colletotrichum acutatum Botrytis Blight Botrytis cinerea. Leaf Rust Pucciniastrum vaccinii Powdery Mildew Microsphaera alni Sooty Mold Misc. fungi Alternaria Fruit Rot [*] Alternaria tenuissima Bacterial Canker Pseudomonas spp. Downy Mildew Peronospora sparsa Phomopsis Phomopsis vaccinii [*Not For Use in	1-6	 Mummy Berry - For control, begin applications at the bud break stage of development and repeat on 7- to 10-day intervals or as needed. Bacterial Canker - Apply before fall rains and again during dormancy before spring growth. Apply throughout the growing season prior to disease development and repeat on 2- to 10-day intervals or as needed. Alternaria and Anthracnose Fruit Rot - Begin applications at the first sign of disease or when conditions become conducive for disease development. Repeat on 7- to 10-day intervals or as needed. For all other diseases - Begin applications prior to disease development and repeat on 2- to 10-day intervals or as needed. For all other diseases - Begin applications prior to disease development and repeat on 2- to 10-day intervals or as needed. For improved performance of Serenade ASO, add a surfactant to the spray tank to enhance coverage. Cranberries - Make applications to non-flooded fields only. Serenade ASO may be applied up to and on the
	California]		day of harvest.

16/86

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Crops	Disease	Rate	Application Instructions
		(qt/acre)	
	Din Dot Common	<u> </u>	
Brassica	Pin Rot Complex	1-6	Pin Rot - For suppression, begin applications
Leafy	Alternaria/Xanthomonas	1-0	when environmental conditions are conducive to
Vegetables	Bacterial Leaf Spot	· ·	disease development and repeat on 2- to 10-day
(Cole Crops)	Pseudomonas syringae Bacterial Soft Rot		intervals or as needed. For improved
Drocodi	Erwinia / Pseudomonas		performance, use Serenade ASO in a tank-mix or
Broccoli Cabbage	Black Rot		rotational program with other registered fungicides for Pin Rot control.
Cauliflower	Xanthomonas		
Brussels	campestris		For all other diseases - Begin applications soon
Sprouts	Xanthomonas Leaf		after emergence or transplant and when
Collards	Spot	1. ·	conditions are conducive to disease development.
Kale	Xanthomonas		Repeat on 3- to 10-day intervals or as needed.
Mustard	campestris		Repeat on 3- to to-day intervals of as needed.
Greens	Alternaria Leaf Spot	1	
Kohlrabi	Alternaria spp.		
and other	Anthracnose) ·	
brassica leafy	Colletotrichum	•	
vegetables	higginsianum	· ·	
Vegetables	Cercospora Leaf Spot		
	Cercospora		
:	brassicicola		
	Downy Mildew		
	Peronospora parasitica	÷ *	•
	Peronospora spp.		
	Powdery Mildew	· · ·	d
	Erysiphe polygoni		
	Southern Blight		
	Sclerotium rolfsii		
Bulb	Botrytis Neck Rot		Begin applications when environmental conditions
Vegetables	Botrytis spp.	1-6	are conducive to disease development and repeat
	Botrytis Leaf Blight		on 7- to 10-day intervals or as needed.
Onion	Botrytis squamosa		
Garlic	Onion Purple Blotch		Apply sufficient water to provide complete
Shallots	Alternaria porri		coverage of plants. When conditions are
and other	Onion Downy Mildew		conducive to rapid disease development, use
bulb	Peronospora destructor		Serenade ASO in a rotational program with other
vegetables	Downy Mildew		registered fungicides.
(including	Peronospora spp.		
those grown	Powdery Mildew		· ·
for seed	Erysiphe spp.		
production)	White Rot		
	Sclerotium cepivorum		
	Rust		For suppression, begin applications when
	Puccinia porri	1-6	conditions are conducive to disease development
	·		and repeat on 7- to 10-day intervals or as needed.
			For improved performance, use Serenade ASO in
			a tank-mix or rotational program with other
			registered fungicides for Rust control.

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Crops	Disease	Rate (qt/acre)	Application Instructions
Cereal	Powdery Mildew		Begin applications when environmental conditions
Grains	Erysiphe graminis	1-6	and plant stage are conducive to disease
sitter of an	Rust	· 1. 1. 1. 1. 1.	development. Repeat on 7- to 10-day intervals or
Barley	Puccinia spp	1	as needed. Use the stated higher rates and
Corn	Blast	5 3 A 1 3 1	shorter application intervals under heavy disease
Millets	Pyricularia oryzae	S. S. C.	pressure.
Oat	Sheath Spot		
Rice	Rhizoctonia oryzae		
Rye	Sheath Blight	5 4 J	
Sorghum	Thanatephorus	<i>u</i> , , ,	
Triticale	cucumens		
Wheat	(Anamorph:		
and other	Rhizoctonia solani)	to a second	
cereal grain	Thanatephorus kernel	a ser a s	
crops			
	Smut		
*	Tilletia barclayana	19 9 8 8 B	
	Bacterial Blight and	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
\$	Streak		
an Ang ang tang ang	Xanthomonas spp.	1 1 1 1 K	
	Stem Rot		
	Sclerotium oryzae	hay in the second	
	Magnaporthe spp.		· ·
Earland an air ann an Air	Brown Rot, Leaf Spots		
	and Smuts		
	Cercospora spp.	-	
	Entyloma spp.	•	
	Dreschlera spp.		
n Ny sanàna minana amin'ny sanana amin'ny sanana amin'ny sanana amin'ny sanana amin'ny sanana amin'ny sanana amin'	Cochliobolus spp.		
a an	Ceratobasidium spp.		
د این از می این از ا مرابع	I ceratobasioium spp.	ي د مطلقته ميد.	

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18/ /86

Crops	Disease	Rate (qt/acre)	Application Instructions
Citrus Fruit Orange Grapefruit Lemon Tangerine Tangelo Pummelo and other citrus fruit	Greasy Spot Mycosphaerella citri- Post Bloom Fruit Drop Colletotrichum acutátum Scab Elsinoe fawcetti Melanose Diaporthe citri Alternaria Leaf Spot Alternaria alternate Bacterial Blast Pseudomonas syringae	1-6	Greasy Spot - For suppression, begin applications at first new foliar flush, and repeat with subsequent new flushes. When conditions are conducive to rapid disease development, Serenade ASO must be used in a tank-mix program with other registered products, such as spray oil or copper-based fungicides, at labeled rates. Post Bloom Fruit Drop - For suppression, begin applications at early bloom and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. Utilize the shorter spray interval between applications if warm, wet conditions persist. Citrus Scab - For suppression, begin applications at first new foliar flush and repeat at petal fall and at ½
			inch diameter fruit. Melanose – For suppression, begin applications at petal fall and repeat on 14- to 21-day intervals until fruit becomes resistant. Alternaria Leaf Spot – Begin applications when environmental conditions and plant stage are conducive to disease development. Repeat on 7- to 10-day intervals or as needed.
			Bacterial Blast - Begin applications when environmental conditions are conducive to disease development. Repeat on 3- to 10-day intervals or as needed. For improved performance on Post Bloom Fruit Drop, Scab and Melanose, use Serenade ASO in a tank- mix or rotational program with other registered
Coffee	Coffee Berry Disease Colletotrichum coffeanum Bacterial Blight Pseudomonas syringae	1 - 6	fungicides. Begin applications when environmental conditions are conducive to disease development. Continue applications on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure. For improved performance, use Serenade ASO in a tank-mix or rotational program with other registered fungicides.

Crops	Disease		Application Instructions
الله . الا المحمد ا		(qt/acre)	
Corn	Common Rust		Begin applications when environmental conditions
	Puccinia sorghi	1-6	are conducive to disease development. Continue
Sweet Corn	Northern Leaf Blight		applications on 7- to 10-day intervals or as
Popcorn	Exserohilum turcicum	· · · ·	needed. Use the stated higher rates and shorte
Seed Corn	Helminthosponum	2 ⁻¹	application intervals under heavy disease
Silage Corn	turcicum		pressure.
Field Corn	Southern Leaf Blight		
	Bipolans maydis		
14.17	Helminthosporium	Sec. 2.	
jiri wabitiri 5≩ 1. antari intera	maydis		
	Cochliobolus	` ·	
	heteröstrophus	:	
the structure of	necelositophus		
	White Mold[*]	· · · · · · · · · · · · · · · · · · ·	For suppression of Maite Meld, heatin continuition
Nongrass Animal		1.6	For suppression of White Mold, begin application
Feeds [*]	(Sclerotinia Stem Rot)	r - 0	soon after emergence or transplant and when
an Contract States and the states of the	Sclerotinia		conditions are conducive to disease development
(Forage,	sclerotiorum		Repeat on 7- to 10-day intervals or as needed.
Fodder,			
Straw, and	[*Not For ⊎se in California]		
Olimination		1.	
Clover Alfalfa			
and other	e el la de la Productione	10.54	
nongrāss	الارد. بریگه از این المحفظ الارد. رو	t service and the	
animal feed	and a second	etta anti-	
crops			
(including	 A 4x818 sectors of the sector sectors and the sector sectors of the sector sector s		
those grown	المراجع المراجع المراجع المراجع		
for seed			
production)		r - y	and a second second Second second
			Desin emplications active flag
Cucurbit	Powdery Mildew	1-6	Begin applications soon after emergence of
Végétables	Erysiphe spp.	, ·l - 0 , .	transplant and when conditions are conducive to
Current and	Sphaerotheca spp		disease development. Repeat on 7- to 10-day
Cucumber	Gummy Stem Blight		intervals or as needed. When environmenta
Cantaloupe	Didymella bryoniae Phoma		conditions and plant stage are conducive to rapic disease development, use Serenade ASO in a
Muskmelon	Cucurbitacearum		rotational program with other registered fungicides
Squash Watermelon	Angular Leaf Spot		
and other	Anthracnose	1. Sec. 1. Sec	
cucurbit	Colletotrichum	territe and a	
vogotobilos	lagenarium	an an the	
vegetables		ч. т. _с .	
	Downy Mildew		
a constant and a second	Pseudoperonospora	241 1	
•	cubensis Restarial Emit Platah		· · ·
·	Bacterial Fruit Blotch		
	Acidovorax avenae		

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Crops	Disease	Rate	Application Instructions
Ciops	Disease	(qt/acre)	
		(424010)	and the second
Fruiting	Bacterial Spot		Begin applications soon after emergence or
Vegetäbles	Xanthomonas spp.	.1-6	transplant and when environmental conditions
· · · ·		5 A A	are conducive to disease development
Pepper	Target Spot		Continue applications on 2- to 7-day intervals or
Tomato	Corynespora cassiicola 🧸	· · · .	as needed. When conditions are conducive to
 Eggplant 			rapid disease development, for improved control,
Ground Cherry			use Serenade ASO in a tank-mix program with
Tomatillo		i i	copper-based bactericides, registered for control
Okra and			of Bacterial and Target Spot, at labeled rates.
other fruiting	Bacterial Speck		Begin applications soon after emergence or
vegetables	Pseudomonas syringae	1-6	transplant and when environmental conditions
	pv. tomato		are conducive to disease development.
*			Continue applications on 2- to 7-day intervals or
		· ·	as needed. Use the stated higher rates when
			conditions are conducive to rapid disease
· .		I	development.
	Early Blight		For suppression, begin applications when plants
	Alternaria solani	1-6,	are 4 to 6 inches high. Repeat applications on 5-
	Anemana Solam		to 7-day intervals or as needed. For improved
	Late Blight		performance, use Serenade ASO in a tank-mix
: .	Phytophthora infestans	<u>, </u> ,	or rotational program with other registered
	- nytophtnora mestans		fungicides. Use the stated shorter spray intervals
:			under conditions conducive to rapid disease.
			development.
	Powdery Mildew		For suppression, begin applications soon after
	Leveillula taurica	1-6	emergence or transplant and continue on 7- to
		1-0.	10-day intervals or as needed. For improved
	Oidiopsis taurica	· ·	
	Erysiphe spp.		performance, use Serenade ASO in a tank-mix
	Sphaerotheca spp.		or rotational program with other registered
	Downy Mildew		fungicides.
	Pseudoperonospora	· · · · ·	
	cubensis.		
	Buck-Eye Rot		Begin applications soon after emergence or
· · · ·	Phytophthora parasitica	· 1 - 6	transplant and continue on 7- to 10-day intervals
1	Anthracnose	· · ·	or as needed. For improved performance of
,	Colletotrichum candidum		Serenade ASO, add a surfactant to the spray
· .	•		tank to enhance coverage
	Bacterial Canker		Begin applications when environmental
	Clavibacter	1-6	conditions are conducive to disease
	michiganensis		development. Repeat on 7- to 10-day intervals
			or as needed.
	Gray Mold		Begin applications soon after emergence or
	Botrytis cinerea	1-6	transplant and repeat on 7- to 10-day intervals or
	Louyus omered	1 - 0	as needed.
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Crops	Disease	Rate (qt/acre)	Application Instructions
Grape	Gray Mold Botrytis cinerea Sour Rot [a complex of pathogens:	1 - 6	Begin applications at bloom, before bunch closure, at verasion and preharvest. Apply in sufficient water to provide full coverage.
	Aspergillus niger, Alternaria tenuis, Botrytis cinerea, Cladosporium		Serenade ASO may be applied up to and on the day of harvest.
ر بر ۲۰۰۰ میں	herbarum, Rhizopus arrhizus, Pénicillium spp., and others]		
	Powdery Mildew Uncinula necator	1 - 6	Begin applications when new shoots are $\frac{1}{2}$ to $1\frac{1}{2}$ inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long and then at 7- to 10-day intervals until
			disease conditions no longer exist. Use the stated high rates and shorter intervals when conditions are conducive to rapid disease development. Apply in sufficient water to provide thorough coverage.
	Downy Mildew Plasmopara viticola	1-6	For suppression, apply at 10-inch shoot, then at 7- to 10-day intervals until bunch closure (berry touch). For improved performance, use Serenade ASO in a tank-mix or rotational
			program with other registered fungicides for Downy Mildew control.
• • • • • • • • • • • • • • • • • • • •	Phomopsis Phomopsis viticola	1 -,6	Begin applications when shoots are ½ to 1 inches long and repeat when shoots are 6 to 8 inches long.
	Black Rot Guignardia bidwellii	. 1 - 6	Begin applications when shoots are 4 to 6 inches in length and repeat on 7- to 10-day intervals throughout the season until the berries start to change color.
	Eutypa Eutypa lata	2 – 5% v/v*	Apply solution to pruning wounds. Sanitation is critical. All wood from infected plants must be removed from the vineyard and destroyed (either buried or burned).

*2-5% v/v rate (Serenade ASO to water) for this use only.

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Crops Disease Rate **Application Instructions** (qt/acre) Herbs/ Bacterial Blight Begin applications when environmental Pseudomonas syringae 1 - 6 conditions are conducive disease Spices to Anthracnose development. Repeat on 7= to 10-day intervals or Colletotrichum spp. as needed. Alternaria Leaf Blight Alternaria spp. Bötrytis Botrytis spp. Powdery Mildew Mix 1- 6 qt of Serenade ASO per 100 gallons of Hop Sphaerotheca macularis 1 - 6Use the stated higher rates when water Qt/100 moderate to high disease pressure is present or gal spray **Downy Mildew** expected. Begin applications when Peronospora spp. volume environmental conditions are conducive to rapid disease development. Continue sprays at 7-day intervals or as needed. Coverage will vary with the size of the vines and the type of spray equipment. Apply adequate spray volume to achieve complete spray coverage. Maximum spray volume is 400 gallons per acre. Minimum spray volume for hop growth stages are as follows: Emergence to training. Apply by ground equipment using a minimum spray volume of 20 gallons per acre. Training to wire: Apply by ground equipment using a minimum spray volume of 50 gallons per acre. Wire touch through harvest: Apply by ground equipment using a minimum spray volume of 100 gallons per acre. Consider higher water volumes to achieve thorough coverage after side arms develóp.

Crops	Disease	Rate (qt/acre)	Application Instructions
Leafy Vegetables Lettuce Celery Spinach Parsley	Downy Mildew Bramia lactucae Peronospora spp. Powdery Mildew Ery siphe cichoracearum	1-6	Pink Rot – Begin applications approximately 8 weeks before harvest and repeat on 14-day intervals. Apply Serenade ASO as a directed spray in sufficient water to ensure thorough coverage of the base of the plants and the surrounding soil surface. After applications, light irrigation will better incorporate Serenade ASO
Radicchio and other leafy vegetables (including those grown for seed production)	White Rust [*] Albugo occidentalis Pink Rot Sclerotiñia sclerotiorum Anthracriose Colletotrichum spp.		into the soil and may improve disease control. Downy Mildew / Powdery Mildew / White Rust - For suppression, begin applications when conditions are conducive to disease development and repeat on 2- to 10-day intervals or as needed. For improved performance, use Serenade ASO in a tank-mix or rotational program with other registered fungicides for White Rust, Downy
teritak (j. s. 1925) San San San San San San Sanja Sanja San Sanja Sanja San Sanja San San	Bacterial Leaf Spot Xanthomonas campestris pv. vitians Bacterial Blight Xanthomonas Campestris		Mildew and Powdery Mildew control. Anthrachose – For suppression, begin applications prior to disease development when environmental conditions and plant stage are conducive to rapid disease development. Repeat on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure.
	["Not For Use in California]		Bacterial Blight / Bacterial Leaf Spot- Begin applications when environmental conditions are conducive to disease development. Repeat on 2- to 10-day intervals or as needed.

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Crops	Disease	Rate (qt/acre)	Application Instructions
Leafy Vegetables Lettuce Celery Spinach Parsley Radicchio and other leafy vegetables (including those grown for seed	Sclerotinia Head and Leaf Drop <i>Sclerotinia</i> spp.	1 - 6	For control of early Sclerotinia Head and Leaf Drop: Apply at planting or immediately following planting but prior to crop emergence as a 4- to 6- inch seed line treatment. Within 7 days of thinning, make a second application as a directed spray with multiple nozzles per each seed line in sufficient water to ensure thorough coverage of lower plant leaves and surrounding soil surface. Repeat applications on 10- to 14-day intervals if conditions for disease development persist. Use the stated higher rates under conditions conducive to moderate to severe disease pressure. After applications, light irrigation will better incorporate Serenade ASO into the soil and
production)			May improve disease control. OR For control of Sclerotinia Head and Leaf Drop: Within 7 days of thinning or transplanting, apply as a directed spray with multiple nozzles per each seed line in sufficient water to ensure thorough coverage of lower plant leaves and surrounding soil surface. Repeat applications on 10- to 14-day intervals if conditions for disease development persist. Use the stated higher rates under conditions conducive to moderate to severe disease pressure. After applications, light irrigation will better incorporate Serenade ASO into the soil and may improve disease control.

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25/ /86

Crops	Disease	Rate (qt/acre)	Application Instructions
Legumes	Rušt		For suppression, begin applications soon after
Vegetables	Uromyces	1-6	emergence or transplant and when conditions are
(Succulent	appendiculatus		conductive to disease development. Repeat on 7-
or Dried)		i and in the second sec	to 10-day intervals or as needed. For improved
			performance, use Serenade ASO in a tank-mix or
Beans			rotational program with other registered fungicides
Green Beans	الوائد الحدوثية ا	and the second	for Rust control.
Snap Beans	Rust		Begin applications when environmental conditions
Shell Beans	Pućcinia spp.	1 - 6 \	and plant stage are conducive to disease
Soybeans	Bacterial Pustule	Pro aller and a second	development. Repeat on 7- to 10-day intervals or
Dry Beans	Xanthomonas spp.	ting takan sa	as needed. Use the stated higher rates and
Garbanzo			shorter application intervals under heavy disease
Beans	Powdery Mildew		pressure.
Lima Beans	Erysiphe spp.		
Peas	Downy Mildew	5	
Chick Peas	Peronospora		May Device and the second second
Split Peas	manshurica	•	
Lentils	Asian Soybean Rust		Use as part of a program with other fungicides
and other	Phakospora pachyrhizi	1-6	that are labeled for Asian Soybean Rust. Begin
legume	r nanospora paony, mzi		applications when environmental conditions are
vegetables	•		conducive to disease development. Continue at
(including			7- to 14-day intervals or as needed. Use the
those grown		ţ	stated higher rates and shorter application
for seed or oil			intervals under heavy disease pressure.
production)	Damping-Off [*]	44.9-39	Begin, applications soon after emergence or
) talifa 🛛 🔬	Aphanomyces spp.	1-6	transplant and when conditions are conducive to
4 M 2	Aphanomyces spp.	*	disease development. Repeat on 7- to 10-day
	[*Not For Use in		intervals or as needed.
يدرين العاقية المرج	California]		
1-5-5	Camorina1		
	White Mold		Begin applications soon after emergence or
같이 가지 않는 것이다. 같이	(Sclerotinia Stem Rot)	1 - 6	transplant and when conditions are conducive to
机械的现象	Sclerotinia sclerotiorum	Ŭ	disease development. Repeat on 7- to 10-day
	Goigiounia Goiciouolum		intervals or as needed. When conditions are
	Gray Mold (Botrytis		conducive to rapid disease development, use
	Blight)		Serenade ASO in a rotational program with other
	Botrytis spp.		registered fungicides.
Mint	Rust		Begin applications soon after emergence and
and other	Puccinia menthae	1-6	when conditions are conducive to disease
herbs/spices	Powdery Mildew		development. Repeat on 7- to 10-day intervals or
	Erysiphe spp.		as needed. Use the stated higher rates and
	Downy Mildew		shorter application intervals under heavy disease
	Peronospora spp.		pressure.
<u> </u>	r eronospora spp.	L.,	Proodulo.

26/

Crops	Disease	Ratë (qt/acre)	Application Instructions
Oilseed Crops [*]	Bacterial Speck[*] Pseudomonas syringe pv. glycinea	1 - 6	Begin applications soon after emergence and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals.
Canola Castor Cotton	Brown Spot[*] Septoria glycines Pod and Stem Blight[*]		or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure.
Flax Rapeseed Safflower Sesame	Diaporthe phaseolorum var. sojae Phomopsis longicolla Downy Mildew[*]	:	For suppression of White Mold, begin applications at the first sign of disease or when conditions become conducive for disease
Sunflower and other oilseed crops	Peronospora manshurica Rust[*] Albugo spp.		development. Repeat on 7- to 10-day intervals or as needed.
(including those grown for seed or oil	Puccinia spp. White Mold [*] (Sclerotinia Stem Rot)		
production)	Sclerotinia sclerotiorum Bacterial Pustule[*] Xanthomonas spp.		
	[*Not For Use in California]		
Olive (including those grown	Olive Knot Pseudomonas savastanoi	1 - 6	Apply before fall rains and again during dormancy before spring growth. Under conditions conducive to heavy disease
for oil production)	Leaf Spot Cercospora cladosporioides	. * 	pressure, for improved control, use Serenade ASO in a tank-mix or rotational program with a copper-based bactericide registered for control of Leaf Spot and Olive Knot, In cool, wet areas,
			apply preventive treatments to olive trees after harvest but before winter rains begin and again in spring if wet, rainy weather persists.

Crops	Diséase	Rate (qt/acre)	Application Instructions
(including those grown for oil	Early Leaf Spot Cercospora spp Cercospora arachidicola	1-6	Begin applications when environmental conditions are conducive to disease development. Repeat applications on 14-day intervals or as needed.
	Late Leaf Spot Cercosporidium personatum Rust Puccinia arachidis White Mold		For improved control of Leaf Spot diseases, use Serenade ASO in a tank-mix program with copper-based fungicides registered for control of Peanut Leaf Spot diseases. Peanut hay may be fed to livestock.
	Wéb Blotch Rhôma arachidicola		
Apple Crabapple Pear Quince Mavhaw			For suppression, begin applications at 1 – 5% bloom and repeat as needed to protect open, untreated blossoms when conditions favoring disease development are likely to occur. For maximum control, use Serenade ASO prior to and as close as possible to Fire Blight infection events. During periods of rapid bloom development and frequent infection periods, use 2- to 7-day spray intervals. After petal fall, continue applications on 7-day intervals while environmental conditions favor disease development. Apply in sufficient water to provide full coverage. For improved performance, use Serenade ASO in a rotational program with antibiotics registered for Fire Blight control, such as oxytetracycline or streptomycin.
			Proper orchard cultural practices are essential to eliminate Fire Blight-infected tissue from the orchard to assure good performance of any crop protection product. Care must be taken to remove and destroy dead and diseased wood from the orchard prior to and during the growing season. Use of Serenade ASO alone has not been shown to affect fruit finish. Use caution when selecting spray adjuvants. Select only those adjuvants, which through prior experience, do not affect fruit finish when combined with Serenade ASO.

Crops	Disease	Rate	Application Instructions
	Discuss	(qt/acre)	
	0.11	(1)	
Pome Fruit	Scab	·	For suppression, begin applications at green
	Venturia spp.	1-6	tip or when environmental conditions become;
Apple	· · · · ·		favorable for primary Scab development and
Crabapple	and the second sec	· .	repeat on 7- to 10-day intervals or as needed.
Pear		1	For improved performance, use Serenade
quince			ASO in a tank-mix or rotational program with
Mayhaw			other registered fungicides for Scab control.
and other	Brooks Spot [*]		For control of Brooks Spot, Cedar Apple Rust,
pome fruit	Mycosphaerella pomi	1-6	Flyspeck, Sooty Blotch, Bot Rot, Bitter Rot
1	Cedar Apple Rust [*]	l	and Bull's Eye Rot: Begin applications pre-
	Gymnosporangium `		bloom when environmental conditions are
ŀ	juniperi-virginianae	[.	conducive to disease development. Repeat
l.	Flyspeck [*]		applications at 7- to 14-day intervals or as
	Schizothyrium pomi		needed. Apply in sufficient spray volume to
	Sooty Blotch [*]		ensure thorough coverage. Use the stated
	Gloeodes pomigéna	1	higher application rates and shorter spray
· · ·	Bot Rot [*]		intervals when conditions are conducive to
	Botryosphaeria dothidea	· ·	rapid disease development or heavy disease
and the second second	Bitter Rot [*]		pressure. For improved performance of,
n (a. 1.)	Colletotrichum spp.	· ·	Serenade ASO, add a surfactant, known to
۰	Bull's Eye Rot [*]	1	be safe to the target crop, to the spray tank to
	Neofabraea spp.	· ·	enhance coverage and wetting of plant.
		· ·	surfaces. Serenade ASO may be applied up
	[*Not For Use in		to and on the day of harvest (0-day PHI).
· ·	California]		
	and the second		
tin an thatair	Powdery Mildew		Begin applications at tight cluster, or sooner,
h	Podosphaera leucotricha	. 1-6	if conditions are conducive to disease
			development. Repeat applications through
	e	1	the second cover spray on 7- to 10-day
r.			intervals. Additional sprays beyond second
			cover may be needed on susceptible varieties
	-		or when environmental conditions are
ka k			conducive to rapid disease dévelopment.
		4	Use the stated higher label rates and shorter
· ·			spray intervals when conditions are
		· ·	conducive to rapid disease development.
Pomegranate	Heart Rot	1-6	Begin applications at first sign of infection or
i oniegranate	Alternaria spp.	1-0	when conditions are conducive for infection.
	And app.		Repeat applications at 7- to 14-day intervals

e Repeat applications at 7- to 14-day intervals or as needed. Use the stated shorter spray intervals and higher rates once infections become established. Tank mix or alternate

with other fungicides for control and disease

resistance management.

28/ 86

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Crops	Disease		Application Instructions
	د. الاین میشود به می در میشود این مانور به از مراجع میشود. الاین میشود میشود این میشود این مانور به از میشود م	(qt/ācrē)	e an ann an Anna an An An Anna an Anna
Root and	Black Rot/	12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Begin applications soon after emergence or
Tuber	Black Crown Rot		transplant and when conditions are conducive
		1-0	
Vegetables	Alternaria spp.	÷ .	to disease development. Repeat on 7- to 10-
1.10	Alternaria Leaf Blight		day intervals or as needed. Use the stated
Carrot	Alternaria dauci		higher rates and shorter intervals when
Potato	Bacterial Leaf Spot	χ^{\pm}	conditions are conducive to rapid disease
Sweet Potato	Xanthomonas	· -	development. Apply in sufficient water to
Cassava	campestris pv. carotae	4. +	provide thorough coverage.
Beets			and a second
Ginger	Bacterial Leaf Blight		Begin applications soon after emergence or
Horseradish	Xanthomonas	1-6	transplant and when conditions are conducive
Radish	campestris	ç. e	to disease development. Repeat on 7- to 10-
Ginseng	Downy Mildew		day intervals or as néeded.
Turnip	Peronospora spp.		n an
and other root	Powdery Mildew		For suppression of White Mold, begin
and tuber	Ēryšiphē spp.		applications soon after emergence or
vegetables	White Mold		transplant and when conditions are conducive
(including	Sclerotinia sclerotiorum		to disease development. Repeat on 7- to 10-
those grown	Gray Mold	х.,	day intervals or as needed.
for seed	Botrytis spp	. 1 2+ 1	day intervais of as needed.
production)	A DOMYINS SOP	121. X177	n an
production	Aerial Stem Rot [*]		For suppression, begin applications at the first
	Envinia carotovora	1-6	sign of disease or when conditions become
】[galach: #1993]	and the second second		conducive for disease development. Repeat
find a constraint for the	[Not For Use in		on 7- to 10-day intervals or as needed.
a tooratis and a	California]	٤	· · ·
and and the second s Second second	the part of the state of the st		have the second s
đ đ	Early Blight	4	For suppression, begin applications soon after
	Alternaria solani	1-6	emergence and when conditions are
			conducive to disease development. Repeat on
general de l'argun. Cherego de l'esperant	Late Blight		5- to 7-day intervals or as needed. For
	Phytophthora infestans,	É.	improved performance, use Serenade ASO in
	an a	L ·	a tank-mix or rotational program with other
			registered fungicides for Early and Late Blight
	a state the state		control.
Roses, Field	Powdery Mildew	3.5	Begin applications when environmental
	Sphaerotheca spp.	1-6	conditions and plant stage are conducive to
	chuderonicod shh		disease development. Continue applications
i i i i i i i i i i i i i i i i i i i	Rust	3 (1	on 7- to 14-day intervals or as needed. Use
	Puccinia spp.	· · ·	the stated higher rates and shorter application
	ruccima spp.	5.	intervals under heavy disease pressure.
n and in the definition of the second se	منتقد باد با استثمال بندها المأسلين بالي والإخراريم الراجم ال		linicivais ulluci neavy ulsease piessure.
	방문하는 것은 것을 가지고 있는 것을 가지고 있다. 같은 것은 것은 것을 가지고 있는 것을 하는 것을 알려요. 같은 것은 것은 것은 것은 것은 것을 것을 알려요. 것은 것은 것은 것을 같은 것을 알려요. 것은 것은 것은 것을 같은 것을 알려요. 것은 것을 것을 갖추고 있는 것을 알려요. 것은 것을 알려요. 것	-	
1	المراجع المراجع التي من المراجع المراجع المراجع المراجع المراجع مستخلف المراجع ا	s	
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Crops	Disease	Rate (qt/acre)	Application Instructions
Stone Fruit	Anthracnose	<u> </u>	Brown Rot Blossom Blight - Begin applications at
otone i un	Colletotrichum spp.	1-6	early bloom and repeat through petal fall on 7-day
Andiont	Concronnendin spp.	1 - 0	intervals or as needed.
Apricot	Danneläur, Mölleläur		
Cherry	Powdery Mildew		Scab - Begin applications at petal fall and repeat
Nectarine	Sphaerotheca pannosa		on 7- to 10-day intervals or as needed.
Peach	Podosphaera		
Plum	clandestine	*	Bacterial Canker - Apply post harvest before fall
Prune	Podosphaera spp.		rains and again during dormancy before spring
and other			growth.
stone fruit	Rusty Spot		
crops	Podosphaera leucotricha		Powdery Mildew - For suppression, begin
			applications at popcorn stage and repeat on 7-day
	Bacterial Canker		intervals or as needed.
•			
	Pseudomonas spp.		Bacterial Leaf Spot / Bacterial Spot - Begin
			applications at bud break and continue on 7- to 14-
	Alternaria Spot / Fruit Rot		day schedule or as needed until harvest. During
·.	Alternaria alternata	·* .	periods of rapid disease development and frequent
14 A.			infection periods, use Serenade ASO in a program
	Scab		with other registered antibiotics and/or copper
	Cladosporium		bactericides. For improved performance of
	carpophilum		Serenade ASO, add a surfactant to the spray tank
			to enhance coverage.
·	Brown Rot Blossom		
	Blight		Anthracnose and Fruit Brown Rot - For
			suppression, begin applications prior to disease
	Monilinia laxa		development when environmental conditions and
			plant stage are conducive to rapid disease
and the second second	Fruit Brown Rot		development. Repeat on 7- to 10-day intervals or
- ·	Monilinia fructicola	•	as needed.
•			Con all athen distant on the state of the strength of the
	Gray Mold		For all other diseases – Begin applications prior to
•	Botrytis cinerea		disease development when environmental
		•	conditions and plant stage are conducive to rapid
	Shot Hole		disease development. Repeat on 7- to 10-day intervals or as needed.
	Wilsonomyces		
,	carpophilus	·	For all diseases:
۰	Xanthomonas pruni	la se	Use the stated higher rates and shorter application
		•	
	Blumeriella jaapii		intervals under heavy disease pressure. For improved performance, use Serenade ASO in a
	Cercospora spp.		tank-mix or rotational program with other
· ·			registered fungicides.
	Bacterial Leaf Spot /	с. С. 7	
	Bacterial Spot [*]	•	Post-harvest disease protection - To aid in the
	Xanthomonas arboricola		control of post-harvest infections of <i>Botrytis</i> and
	j l		Monilinia, apply Serenade ASO prior to harvest
	[*Not For Use in		with sufficient water to thoroughly cover fruit.
	California]		Apply on a 7-day schedule or as needed up until
	· · ·		the time of harvest.
· ,			
	I I		Serenade ASO may be applied up to and on the
	1 1		day of harvest.

Crops	Disease	Rate (qt/acre)	Application Instructions
Strawberry	Powdery Mildew		Botrytis / Powdery Mildew - For suppression;
	Sphäerotheca macularis Erysiphe spp.	1-6	begin applications at or before flowering and repeat on 7- to 10-day intervals or as needed
the second second	Liysipile spp.		through harvest Use the stated higher rates
	Anthracnose		and shorter application intervals under heavy
	Colletotrichum acutatum	1.	disease pressure. For improved performance,
12 19月1日 - 1月二日の登録	n de station d'anne de la company de la c		use Serenade ASO in a tank-mix or rotational
	Botrytis Botrytis cinerea	· •	program with other registered fungicides for Powdery Mildew and Botrytis control.
	Gray Mold. Botrytis spp.		Anthracnose – Begin applications prior to disease development and repeat on 7- to 10-
	Bouyus shp.		day intervals or as needed. Use the stated
	Angular Leaf Spot		higher rates and shorter application intervals
	Xanthomonas fragariae	-	under heavy disease pressure. For improved
ng n	ಕ್ಷಾರಿಗಳು ಫ್ರೌಕರ್ಗಳು ಎಂದು ಗೇಂಡ್ ಕ್ರಾ ಕ್ರೌಕರ್ ಕ್ರಾರ್ಟ್ ಎಂದು ನಿರ್ದೇಶಕ್ಕೆ	. 7	performance, use Serenade ASO in a tank-
	n an an Anna an Anna Anna Anna Anna Ann	1	mix or rotational program with other registered fungicides. Thorough coverage is essential.
		::	
			Angular Leaf Spot - Begin applications when
in a sector de la sector		· · ·	environmental conditions are conducive to
n i sa na ngina na ing K			disease development Continue applications
·.			on 3- to 10-day intervals of as needed. Use stated higher rates and shorter application
	No		intervals under heavy disease pressureFor
الار معروب المراجع والمراجع المراجع ال المراجع المراجع			improved performance, use Serenade ASO in
a sa ang ang ang ang ang ang ang ang ang an			a tank-mix or rotational program with other
			registered fungicides. Thorough coverage is essential.
		•	
•		- C	Serenade ASO may be applied up to and on
		<u></u>	the day of harvest.
Sugar Beets	Powdery Mildew Erysiphe betae	1-6	Begin applications when environmental conditions are conducive to disease
	Erysiphe polygoni	, , - 0	development. Continue applications on 7- to
and a second	Leaf Spot		10-day intervals or as needed. Use the stated
	Cercospora beticola	· ·	higher rates and shorter application intervals
د. مربع محمد محمد م	Ramularia		under heavy disease pressure.
	, <i>Ramularia</i> spp. Rust		
ارائی ایجانیا	Uromyces betae		
Tobacco	Blue Mold	,	Begin applications when conditions are
	Peronospora hyoscyami	[.] 1 - 6	conducive to disease development. Continue
			applications on 7- to 10-day intervals or as
(1)。 1)期,這些標本(4)的影	1	san ni	needed.
المحمد معجوب معاد المعتقة المعاد المراجع . والمعاد العالي المعاد المحمد المحمد المحمد . والمعاد العالي المحمد المحمد .	<u>ى ئىيە ئىيارىمە بەرمە</u> مەكەرلىكى بىرىكىيە مەكەرىمە تەرىپىرىكى يەكەر يەكەر تەرىپىرى 1995 - يەكەر يەكەر بىرىكى ئەكەر يېڭى ئەكەر يەكەر يە 1995 - يەكەر يە		n version and a second seco
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Crops	Disease	Rate	Application Instructions
		(qt/acre)	· · · · · · · · · · · · · · · · · · ·
Tree Nuts	Walnut Blight	्व •	Walnut Blight - Begin applications no later
	Xanthomonas	1-6	than pistillate bloom and repeat on 3- to 10-
Almond	campestris	•	day intervals or as needed. Apply in advance
Pistachio	Alternaria Leaf Spot		of rain for maximum protection. Under
Pecan	Alternaria alternata		conditions conducive to heavy disease
Walnut	Anthracnose		pressure, for improved control, use Serenade
Filberts	Colletotrichum acutatum	· ·	ASO in a tank-mix or rotational program with
Chestnut	Bacterial Canker		a copper-based bactericide registered for
Cashew	Pseudomonas syringae		control of Walnut Blight.
Beechnut	Scab		
Butternut	Cladosporium		Anthracnose, Shot Hole and Brown Rot - For
Macadamia	carpophilum		suppression, begin applications prior to
and other tree	Botryosphaeria Blight		disease development and repeat on 7- to 10-
nuts	Botryosphaeria dothidea		day intervals or as needed.
	Shot Hole		
	Wilsonomyces		For all other diseases - Begin applications
	carpophilus		prior to disease development and repeat on
•	Xanthomonas pruni		7- to 10-day intervals or as needed. Use the
	Blumeriella gaapi		stated higher rates and shorter application
	Cercospora spp.		intervals under heavy disease pressure. For
	Brown Rot		improved performance, use Serenade ASO
,	<i>Monilinia</i> spp.		in a tank-mix or rotational program with other
	Pecan Scab	•	registered fungicides.
	Cladosporium		
	caryigenum	44	
Avocado	Anthracnose		Begin applications at budbreak and repeat
Mango	Colletotrichum	1-6	on 14- to 21-day intervals or as needed
mango	gloeosporioides		through harvest.
	Colletotrichum ananas		through harvest.
	Scab		
	Sphaceloma perseae		
·	Sphaceloma mangiferae	1	and the second
	Sphaceloma spp.		
		÷	
	Bacterial Canker		Begin applications when environmental
	Xanthomonas campestris	1-6	conditions are conducive to disease
	. : : .		development. Repeat on 7- to 10-day
			intervals or as needed
Papaya	Anthracnose		Begin applications at flowering and repeat on
	Colletotrichum	1 - 6	14- to 21-day intervals or as needed through
	gloeosporioides		harvest.
and the second	Colletotrichum ananas		
	a and a second	,	
· .	Bacterial Canker		\tilde{P}
	Erwinia spp.		<u> </u>
Pineapple	Anthracnose	а	Begin applications at flowering and repeat on
	Colletotrichum	1-6	14- to 21-day intervals or as needed through
	gloeosporioides		harvest.
	Colletotrichum ananas		
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Crops	Disease	Rate (qt/acre)	Application Instructions
Bananas	Sigatoka	un d'alla i i	Begin applications when leaves first ap
Plantains	Mycosphaerella	1 - 6	and repeat on 7- to 21-day intervals
n te tradit se tradit de la tradit En la tradit de la tr	fijiensis	• •	needed. Apply in sufficient water to c thorough coverage of follage. For imp
	and a second	e e e e e e e e e e e e e e e e e e e	disease control, Serenade ASO may be mixed with oil or other fungicides, regis
			for control of Sigatoka, at labeled
· · · ·			When conditions are conducive to disease development and/or heavy dis
 A standard stan Standard standard stand Standard standard stan Standard			pressure, use the stated higher applic
		· ·	rates and rotational spray programs other fungicides registered for contr
			Sigatoka.
	Botrytis Fruit Rot	5	Begin applications at early bloom and re
	Botrytis cinerea	1-6	on 7- to 10-day intervals or as nee
	Bacterial Blight Pseudomonas vindiflava		Serenade ASO may be applied up to an the day of harvest.
· 新教堂 · · · · · · · · · · · · · · · · · · ·	Pseudomonas syringae		
	Sclerotinia Sclerotinia sclerotiorum		and the first second second
Watercress	Cercospora Leaf Spot		Begin applications when conditions
	Čercospora spp.	1 – 6	conducive to disease develop Continue applications on 7- to 10
		11. 	intervals or as needed.
Grass Seed Production	Powdery Mildew [*]	1-6	Begin applications when environm conditions and plant stage are conduct
Crops [*]	Rust [1]		
Crops [*] Bluegrass	Puccinia spp.		day intervals or as needed. Use the s higher rates and shorter application inte
Crops.[*] Bluegrass Ryegrass	Puccinia spp.		day intervals or as needed. Use the s
Crops,[*] Bluegrass Ryegrass Fescue Orchardgrass	Puccinia spp.		day intervals or as needed. Use the s higher rates and shorter application inte
Crops [7] Bluegrass Ryegrass Fescue Orchardgrass and other	Puccinia spp.		day intervals or as needed. Use the s higher rates and shorter application inte
Crops/[*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed	Puccinia spp.		day intervals or as needed. Use the s higher rates and shorter application inte
Crops,[*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	Puccinia spp.		day intervals or as needed. Use the s higher rates and shorter application inte
Crops,[*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed	Puccinia spp.		day intervals or as needed. Use the s higher rates and shorter application inte
Crops,[*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	<i>Puccinia</i> spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops [*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	<i>Puccinia</i> spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops,["] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	Puccinia spp. [*Not For Use in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops [*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	<i>Puccinia</i> spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops [*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	<i>Puccinia</i> spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops [*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	Puccinia spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops,[*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	Puccinia spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops/[1] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	Puccinia spp. [*Not For ⊎se in California]		disease development. Repeat on 7- to day intervals or as needed. Use the s higher rates and shorter application inter under heavy disease pressure.
Crops/[1] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	Puccinia spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops/[1] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	Puccinia spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops,[*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	Puccinia spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops,[*] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	Puccinia spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte
Crops/[] Bluegrass Ryegrass Fescue Orchardgrass and other grass grown for seed production	Puccinia spp. [*Not For ⊎se in California]		day intervals or as needed. Use the s higher rates and shorter application inte

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· · · · · · · · · ·	Application Rates of Serena	de ASO for	Selected Greenhouse Crops
Greenhouse	Disease	Rate	Application Instructions
Crops		(qt /100	
,0,0,0	the second s	gal spray	· · · · · · · · · · · · · · · · · · ·
		mix)	
Dissolation Loofu	Pin Rot Complex		Mix 1 - 6 qt of Serenade ASO in 100 gallons of
Brassica Leafy		1-6	
Vegetables	Alternaria/Xanthomonas	1-0	water. Apply dilute spray mix as a foliar treatment
(Cole Crops)	Bacterial Leaf Spot	1	to the point of run-off. For each treatment, apply
Destanti	Pseudomonas syringae Bacterial Soft Rot		no more than 6 qt of Serenade ASO per acre;
Broccoli	Erwinia / Pseudomonas		equivalent to 4.4 fl oz of Serenade ASO per 1000 ft ² .
Cabbage			1 IC ⁻ .
Cauliflower	Black Rot		Die Det Fer europeien bésie enstientiere
Brussels	Xanthomonas		Pin Rot - For suppression, begin applications
Sprouts	campestris		when environmental conditions in the greenhouse
Collards	Xanthomonas Leaf Spot		are conducive to disease development and repeat
Kale	Xanthomonas		on 3- to 10-day intervals or as needed. For
Mustard Greens	campestris		improved performance, use Serenade ASO in a
Kohlrabi and	Alternaria Leaf Spot	A	tank-mix or rotational program with other
other brassica	Alternaria spp.		registered fungicides for Pin-Rot control.
leafy vegetables	Anthracnose		
* •	Colletotrichum		For all other diseases - Begin applications soon
	higginsiaņum		after emergence or transplant and when
	Cercospora Leaf Spot		conditions in the greenhouse are conducive to
	Cercospora		disease development. Repeat on 7- to 10-day
	brassicicola	• •	intervals or as needed.
	Downy Mildew		
	Peronospora parasitica		and the second
	Peronospora spp.		
	Powdery Mildew		
· · · ·	Erysiphe polygoni		
	Southern Blight		and the second secon
· · · · · · · · · · · · · · · · · · ·	Sclerotium rolfsii		
Bulb	Botrytis Neck Rot	1-6	Mix 1 - 6 qt of Serenade ASO in 100 gallons of
Vegetables	Botrytis spp.		water. Apply dilute spray mix as a foliar treatment
	Botrytis Leaf Blight		to the point of run-off. For each treatment, apply
Onion -	Botrytis squamosa		no more than 6 qt of Serenade ASO per acre;
Garlic	Onion Purple Blotch		equivalent to 4.4, fl oz of Serenade ASO per 1000
Shallots and	Alternaria porri		ft ² .
other bulb	Onion Downy Mildew		
vegetables	Peronospora destructor		Begin applications when environmental conditions
regelaziee	Downy Mildew		in the greenhouse are conducive to disease
	Peronospora spp.		development and repeat on 7- to 10-day intervals
	Powdery Mildew		or as needed. When conditions in the greenhouse
	Erysiphe spp.		are conducive to rapid disease development, use:
	White Rot	· •	Serenade ASO in a rotational program with other
	Sclerotium cepivorum		registered fungicides. Thorough coverage is
	Scierolium cepivorum		essential.
	Rust		Mix 1 – 6 qt of Serenade ASO in 100 gallons of
	Puccinia porri	1-6	water. Apply dilute spray mix as a foliar treatment
	1		to the point of run-off. For each treatment, apply
			no more than 6 qt of Serenade ASO per acre;
			equivalent to 4.4 fl oz of Serenade ASO per 1000
			ft².
			For suppression, begin applications when
	,		conditions are conducive to disease development
			and repeat on 7- to 10-day intervals or as needed.
			For improved performance, use Serenade ASO in
			a tank-mix or rotational program with other
			registered fungicides for Rust control.

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Greenhouse	Disease	Rate	Application Instructions
Crops	DISCOSC	(qt/100	Application instructions
		gal	
an a		spray	
Lasteril Mail in the state	- All and the state of the state	, mix)	and the second
Cucurbit	Powdery Mildew		Mix 1 - 6 qt of Serenade ASO in 100 gallons of
Vegetables	Ērysiphē spp.	1 - 6	water. Apply dilute spray mix as a foliar
	Sphaerotheca spp.		treatment to the point of run-off. For each
Cucumber	Gummy Stem Blight	·,	treatment, apply no more than 6 qt of Serenade
Cantaloupe	Phoma cucurbitacearum	, r '	ASO per acre; equivalent to 4.4 fl oz of
Melon	Didymella bryoniae	£	Serenade ASO per 1000 ft ² .
Muskmelon Squash	Angular Leaf Spot Pseudomonas syringae		Begin applications soon after emergence or
Watermelon	Anthracnose		transplant and when environmental conditions in
and	Colletotrichum		the greenhouse are conductive to disease
cucurbit	lagenarium	· · ·	development. Repeat on 7- to 10-day intervals
vegetables	Downy Mildew	r . Le s	or as needed. Thorough coverage is essential
	Pseudoperonospora	i	For improved performance, use Serenade ASO
	cubensis		in a tank-mix or rotational program with other
South the states	Bacterial Fruit Blotch	el in	régistered fungicides.
Linthing with winds	Acidovorax avenae	÷	
Fruiting	Gray Mold		Mix 1 – 6 qt of Serenade ASO in 100 gallons of
Vegetables	Botrytis cinerea	<u>1</u> -6	water. Apply dilute spray mix as a foliar
Dependent de l'Al-			treatment to the point of run-off. For each treatment, apply no more than 6 qt of Serenade
Pepper	the stand of the s	••••••	ASO per acre; equivalent to 4.4 fl oz of
Eggplant and			Serenade ASO per 1000 ft ² .
other fruiting		с. ⁶	
végétables			For suppression, begin applications soon after
			emergence or transplant and continue on 7- to
			10-day intervals or as needed. When
			environmental conditions in the greenhouse are
· · · ·			conducive to rapid disease development, use
			Serenade ASO in a rotational program with
			other registered fungicides. Thorough coverage
		; 	is essential.
· ·	Powdery Mildew Leveillula taurica	1-6	Mix 1 – 6 qt of Serenade ASO in 100 gallons of
	Oidiopsis taurica	1-0	water. Apply dilute spray mix as a foliar treatment to the point of run-off. For each
	Erysiphe spp.		treatment, apply no more than 6 qt of Serenade
_	Sphaerotheca spp.		ASO per acre; equivalent to 4.4 fl oz of
			Serenade ASO per 1000 ft ² .
	Downy Mildew		For suppression, begin applications soon after
	Pseudoperonospora		emergence or transplant and continue on 7- to
	cubensis		10-day intervals or as needed. Thorough
			coverage is essential. Use the stated maximum
			label rates under conditions conducive to rapid
			disease development. For improved
			performance, use Serenade ASO in a tank-mix
	· .		or rotational program with other registered
		· .	fungicides.
	Bacterial Speck		Mix 1 – 6 qt of Serenade ASO in 100 gallons of
	Pseudomonas syringae	1-6	water. Apply dilute spray mix as a foliar
	pv. tomato		treatment to the point of run-off. For each
			treatment, apply no more than 6 qt of Serenade

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36/ /86

	the second s		a data wa ka <u>ka ka ka ka ka ka ka</u> kata ka
			ASO per acre, equivalent to 4.4 fl oz c
	· ·	2	Serenade ASO per 1000 ft ² .
			Begin applications soon after emergence of transplant and when environmental condition
			are, conducive to disease developmen
. • .			Continue applications on 2- to 7-day intervals
uiting		·· · ·	as needed. Use higher rates when condition
egetable			are conducive to rapid disease developmen
ontinued			For improved performance, use Serenade AS
	and a second	e X	in a tank-mix or in a rotational program wit other registered fungicides.
• .	Bacterial Spot		Mix 1 - 6 qt of Serenade ASO in 100 gallons o
	Xanthomonas.spp.	1-6	water. Apply dilute spray mix as a folia
•	Target Spot		treatment to the point of run-off. For eac
- • · · · · · · · ·	Corynespora cassiicola		treatment, apply no more than 6 qt of Serenad ASO per acre; equivalent to 4.4 fl oz o
	coryricspora cassicola	11 F	Serenade ASO per 1000 ft ² .
		4	Begin applications soon after emergence of
•		Г	transplant and when environmental condition
		1	are conducive to disease developmen
			Continue applications on 2- to 7-day intervals of as needed. When conditions are conducive t
. n			rapid disease development, for improve
			control, use Serenade ASO in a tank-mi
	a state of the second		program with copper-based bactericides
			registered for control of Bacterial and Targe
	l	L	Spot, at labeled rates.
. *			a de la companya de l La companya de la comp
:	, transformation of the second s		
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	a statistica de la construcción de La construcción de la construcción d		
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ruiting	Buck-Eye Rot		Mix 1 – 6 qt of Serenade ASO in 100 gallons o
egetables	Phytophthora parasitica	1 - 6	
	Anthracnose	. <u> </u>	treatment to the point of run-off. For each
epper	Colletotrichum		treatment, apply no more than 6 qt of Serenade
	candidum		ASO per acre; equivalent to 4.4 fl oz o
ggplant and			Serenade ASO per 1000 ft2
ther fruiting.			Begin applications soon after emergence o
egetables	1 The Second State of Second State	der and	transplant and continue on 7- to 10-day intervals
			or as needed. For improved performance o
		÷. ÷,	Serenade ASO, add a surfactant to the spray
			tank to enhance coverage
at she is the state of	Bacterial Canker		Mix 1 - 6 qt of Serenade ASO in 100 gallons o
	<i>Ĉlavibacter</i>	1-6	water. Apply dilute spray mix as a folia
ter an	michiganensis		treatment to the point of run-off. For each
電影 化二苯基苯基			treatment, apply no more than 6 dt of Serenade
And the East	- Inicitigaticitais		ASO per acre; equivalent to 4.4 fl oz o
			Serenade ASO per 1000 ft2
· 理论的	State of the second		Begin applications when environmenta
이 제가 안 많이.	the second second		conditions are conducive to disease
			development. Repeat on 7- to 10-day interval
1999 - 1997 -	Early Blight	<u>م مد مدرث مکم کار محکم محکم محکم محکم محکم محکم محکم محک</u>	or as needed.
Caller endersty	Early Blight		Mix 1 + 6 qt of Serenade ASO in 100 gallons o
	Alternaria solani	1-6	water. Apply dilute spray mix as a folia
	Late Blight		treatment to the point of run-off. For each
the second s	Phytophthora infestans	2, 8 ° 4	treatment, apply no more than 6 qt of Serenade
朝鮮 Kin Ciri Lation Service Ciri Lation		399	ASO per acre; equivalent to 4.4 fl oz o
and a start of the		e. Novel	Serenade ASO per 1000 ft ² .
eneme tertile and in	and and a second se Second second	No. 2 Contraction	For suppression, begin applications when plants
	اين آه م اني الله در الله والعمي		are 4 to 6 inches high. Repeat applications or
alter i setter i	and the second	A. C. A.	5- to 7-day intervals or as needed. For
and the second sec	al magneties and the second second The second se The second se		improved performance, use Serenade ASO in a
and the second		a shire a	tank-mix or rotational program with other registered fungicides for Early and Late Bligh
	า) สาขาร เป็นหน่าง เป็นหนาง เองารษณ์การให้เห็นว่า เป็น การ		control. Use the stated shorter spray intervals
Lastin 17	the state of the s		under conditions conducive to rapid disease
			development.
and constants a second from a	and a second of a second s	5 and 8 and 1 all 1 and 1	
	Bacterial Blight	8. S. 1. O	Mix 1 - 6 qt of Serenade ASO in 100 gallons of
pices	Pseudomonas syringae		water. Apply dilute spray mix as a foliar treatment to the point of run-off. For each
and the second	Anthracnose Colletotrichum spp	達したよ	treatment, apply no more than 6 qt of Serenade
The main is the second	Alternaria Leaf Blight		ASO per acre; equivalent to 4.4 fl oz o
	Alternaria spp.		Serenáde ASO per 1000 ft ² .
, i i i i i i i i i i i i i i i i i i i	Rotortia	and a second	Begin applications when environmental
an martine of the state	Botrytis Botrytis spp.	a direct in the	conditions in the greenhouse are conducive to
a Patrice A	Bouryus spp:		disease development. Repeat on 7- to 10-day
			intervals or as needed
and a second a second and a second and a second		tation and a training	ווונבואפוס טו פא אבבטבע
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Greenhouse	Disease	Rate	Application Instructions
		(qt/100	· · · · · · · · · · · · · · · · · · ·
Crops	and the second		
		gal spray	
	and the second secon	e mix)	A CONTRACT OF
Leafy	Downy Mildew	and the second	Mix 1 - 6 qt of Serenade ASO in 100 gallons of
Vegetables	Bremia lactucae	1-6	water. Apply dilute spray mix as a foliar
이 11 · · · · · · · · · · · · · · · · · ·	Peronospora spp.		treatment to the point of run-off." For each
Lettuce	Powdery Mildew		treatment, apply no more than 6 gt of Serenade
Celery	Erysiphe cichoracearum	and a start of	ASO per acre, equivalent to 4.4 fl oz of
Spinach	Ēryšiphe spp.		Serenade ASO per 1000 ft ² .
Parsley	White Rust		
Radicchio	Albugo occidentalis		Pink Rot - Begin applications approximately 8
			weeks before harvest and repeat on 14-day
and other	Pink Rot	and a start of the	
leafy	Sclerotinia sclerotiorum		intervals. Apply Serenade ASO as a directed
vegetables	Anthracnose		spray in sufficient water to ensure thorough
	Colletotrichum spp.		coverage of the base of the plants and the
· ·	Bacterial Blight		surrounding soil surface. After applications, light
an an a filmer son an	Xanthomonas	网络新闻	irrigation will better incorporate Serenade ASO
	campestris	Report of the	into the soil and may improve disease control.
	Bacterial Leaf Spot		
	Xanthomonas	a the second	Downy Mildew / Powdery Mildew / White Rust -
	campestris pv. vitians	and the state of the second	For suppression, begin applications when
an in the second se	and the second	Start Sa	conditions are conducive to disease
· · · · · · · · · · · · · · · · · · ·	and a second second Second second		development and repeat on 3- to 10-day
	en an en propertien an area Real anna an strange an an an an		intervals of as needed. For improved
			performance, use Serenade ASO in a tank-mix
an a			
	a server start to the		or rotational program with other registered
			fungicides for White Rust, Downy Mildew and
e e la servició datas			Powdery Mildew control.
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	a an fi an a tar a Norgèse	and the second second	Anthracnose – For suppression, begin
for the second second	and the second		applications prior to disease development when
	ser i se transference que	1	environmental conditions and plant stage are
1 - N - M - M2 -	化试验 化开试糖乳油 动物		conducive to rapid disease development.
10 1 X 1 1 113	a de la servició de l	Part of the	Repeat on 7- to 10-day intervals or as needed.
			Use the stated higher rates and shorter
	a ser an		application intervals under heavy disease
			pressure
			For an approximately a first strategy of the end of
			Bacterial Blight / Bacterial Leaf Spot - Begin
	en e		applications, when environmental conditions are
			conducive to disease development. Repeat on
	BARK CONTRACTOR		3- to 10-day intervals or as needed.
· · · · · · · ·	Sclerotinia Head and		Mix 1 - 6 qt of Serenade ASO in 100 gallons of
	Leaf Drop	1-6	water. Apply dilute spray mix as a foliar
	Sclerotinia spp.	a share a	treatment to the point of run-off or as seed line
r i ter		1 . The set of the set	treatment. For each treatment, apply no more
	· · · · · · · · · · · · · · · · · · ·		than 6 gt of Serenade ASO per acre; equivalent
			to 4.4 fl oz of Serenade ASO per 1000 ft2.
			For control of early Sclerotinia Head and Leaf
	· · ·	l	
			Drop Apply at planting or immediately following
			planting but prior to crop emergence as a 4- to 6-
· .			inch seed line treatment. Within 7 days of
	· ·		thinning, make a second application as a
		1	directed spray with multiple nozzles per each
	•	••••••••••••••••	e a la factoria de la companya de la

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·					lower plant le		
	÷.	1. A.			Repeat app		
	tere stan	and a second second second	a santa sa 💡		als if cond		
•		ation in the second second second	이야지 않는 것 같아.	developmen	t persist. U	se the state	d nigher
	a tanan sa sa				conditions con		
					ase pressure on will better		
	3.				he soil and r		
		n an		control.		nay - mprove	uisease
	ninini ≹ren innet≣		4.9	OR		series and an and a series of the series of	
					of Sclerotinia	Head and L	eaf Drop:
				Within 7 day	s of thinning	or transplanti	ng, apply
	1000			as a directe	ed spray with	multiple no:	zzles per
		the second of the second states of			line in suffic		
	1991년 - 1997 1997년 - 1997년 - 1997년 1997년 - 1997년 -				verage of lov		
					soil surface. F		
		والمصبح والمعالية وال			y intervals if		
				development	t përsist. U	se the state	a nigner
				severe dise	conditions con ase pressure		
	Antonio (magazili) Antonio (magazili)	and the second		light irrigatio	on will better	incorporate	Serenade
				ASO into th	ne soil and r	nav improve	disease
: .	e Englishikan	م میں ایک		control.			
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37

39/86

Greenhouse Crops	Disease	Rate (qt/100 gal spray mix)	Application Instructions
		(111A)	
Root and Tuber	Black Rot/Black Crown	1-6	Mix 1 – 6 qt of Serenade ASO in 100 gallons of
	Alternaria spp.	1-0	water. Apply dilute spray mix as a foliar treatment to the point of run-off For each
Vegetables	Alternaria Leaf Blight		
Corret		1. A	treatment, apply no more than 6 qt of Serenade
Carrot	Alternaria dauci		ASO per acre; equivalent to 4.4 fl oz of Serenade ASO per 1000 ft ² .
Potato Sweet Potato	Bacterial Leaf Spot Xanthomonas	- 1	
Cassava	campestris pv. carotae		Begin applications soon after emergence or transplant and when conditions are conducive to
Beets		12	disease development. Repeat on 7- to 10-day
Ginger		,	intervals or as needed. Use the stated higher
Horseradish		4	rates and shorter intervals when conditions are
Radish	• • • • •	· .	conducive to rapid disease development. Apply
Ginseng			in sufficient water to provide thorough coverage.
Turnip and	Bacterial Leaf Blight	· · · · · · · · · · · · · · · · · · ·	Mix 1 – 6 qt of Serenade ASO in 100 gallons of
other root	Xanthomonas	1-6	water. Apply dilute spray mix as a foliar
and tuber	campestris		treatment to the point of run-off. For each
vegetables	Downy Mildew		treatment, apply no more than 6 gt of Serenade
	Peronospora spp.		ASO per acre; equivalent to 4.4 fl oz of
· · · · ·	Powdery Mildew		Serenade ASO per 1000 ft ² .
	Erysiphe spp.		Begin applications soon after emergence or
	Gray Mold		transplant and when conditions are conducive to
	Botrytis spp.		disease development. Repeat on 7- to 10-day.
· .	White Mold		intervals or as needed. Use the stated higher
	Sclerotinia sclerotiorum		rates and shorter intervals when conditions are
			conducive to rapid disease development.
			Thorough coverage is essential.
	Early Blight		Mix 1 – 6 qt of Serenade ASO in 100 gallons of
	Alternaria solani	1-6	water. Apply dilute spray mix as a foliar
	Late Blight	1-0	treatment to the point of run-off. For each
	Phytophthora infestans		treatment, apply no more than 6 qt of Serenade
	n nytophinora mootano		ASO per acre; equivalent to 4.4 fl oz of
		· .	Serenade ASO per 1000 ft ² .
			For suppression, begin applications soon after
			emergence and when conditions are conducive
			to disease development. Repeat on 5- to 7-day
			intervals or as needed. For improved
			performance, use Serenade ASO in a tank-mix
			or rotational program with other registered
			fungicides for Early and Late Blight control.

40/ /86

Greenhouse Crops	Disease	Rate (qt/100 gal spray mix)	Application Instructions
Strawberry	Powdery Mildew		Mix 1 - 6 qt of Serenade ASO in 100 gallons of
	Sphaerotheca macularis	1-6	water. Apply dilute spray mix as a foliar
s statistica de la companya de la compan	Erysiphe spp.		treatment to the point of run-off. For each
	Anthrachose		treatment, apply no more than 6 qt of Serenade
Calendaria and Alberta	Colletotrichum acutatum		ASO per acre; equivalent to 4.4 fl oz-o
	Botrytis		Serenade ASO per 1000 ft2.
	Botrytis cinerea		Deman (Destable) Afferdes (Afferdesse)
	Gray Mold		Botrytis / Powdery Mildew - For suppression
	Botrytis spp. Angular Leaf Spot	2 1 4 1	begin applications at or before flowering and repeat on 7- to 10-day intervals or as needed
isto de ch	Xanthomonas fragariae		through harvest
$(1,1) \in \{1,2\}$	Adjuno no na naganac		
San to an 1921			Anthrachose - Begin applications prior to
			disease development and repeat on 7- to 10-day
18 a		a se a com	intervals or as needed.
			n na shekara shekara shekara ka ka shekara shekara shekara shekara shekara shekara shekara shekara shekara she Tana shekara sh
a set and		Balla i a sta	Angular Leaf Spot Begin applications when
	·		conditions are conducive to disease
	电磁动 机拉克拉拉 化分子		development. Continue applications at 7- to 10
1 1 A. 1	n an an an ann an tha a Tha ann an tha ann an t		day intervals or as needed. Use the stated
· · ·	• • • • • •		higher rates and shorter intervals wher
			conditions are conducive to rapid disease
	the theology and detailing with the theorem is the		development
	e preste o respectivo de construir.		医肌肉肿 建水合酶医尿氨酸 使不能的 医外庭的 异核
Strand Arts	· 같은 가지 것 수가에 하는 것 같은	an an taon ana a'	For all diseases - For improved performance
			program with other registered fungicides
			Thorough coverage is essential.
- 184 - 1		a β	Serenade may be applied up to and on the day of
	BALL STATION AND STATISTICS THE STATE	4.20年春秋白 ^日	harvest.

FOR USE AS A SOIL TREATMENT ON SELECT AGRICULTURAL FIELD CROPS

Serenade ASO has a 0-Day PreHarvest Interval for all crops contained on this label. Under moderate to severe disease pressure, for improved performance, increase rates and reduce spray intervals as stated or use Serenade ASO in a tank-mix or rotational program with other registered fungicides.

Serenade ASO is a broad spectrum biofungicide for the prevention, suppression and control of soil borne diseases on a wide range of fruits and vegetables as well as cotton. Serenade ASO enhances germination and plant growth by suppressing soil diseases, such as those caused by *Rhizoctonia, Pythium, Fusarium, Verticillium* and *Phytophthora*. See the application tables for specific information.

APPLICATION INSTRUCTIONS:

All Soil Surface (Drench), Shanked-In, Injected and In-Furrow Applications:

Mix 1 qt [(32 fl oz)] to 6 qt [(192 fl oz)] of Serenade ASO in the appropriate amount of water per acre. Use the stated higher rates when the weather conditions are expected to be conducive for disease development, if the field has a history of disease problems, or if minimum/low till programs are in place. Serenade ASO can be mixed with chemical fungicides registered for soil applications.

Soil Surface (Drench) Applications at Planting: Use at planting, seeding, or transplant. Apply finished spray mixture, at a rate to thoroughly soak the growing media through the root zone, as a drench or directed spray using hand-held, mechanical or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler or drip irrigation systems.

Shanked-In or Injected Applications: Serenade ASO can be shanked-in or injected into the soil prior to-, at-, or post-planting/ transplanting of crops alone or with most types of liquid nutrients.

In-Furrow Applications:

For in-furrow applications, apply Serenade ASO as an in-furrow spray in the required amount of water per acre for the crop at planting. Mount the spray nozzle so the spray is directed in the furrow just before the seeds are covered.

Soil Surface (Drench)-Applications at Any Stage of Growth: Apply the finished spray mixture to the surface of the soil as a drench or directed spray using hand-held, mechanical or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler or drip irrigation systems. When applying as a spray (e.g., via hydraulic nozzles at low volumes), it is important to irrigate to move the material into the seed, root or transplant zone. Normal operation of overhead sprinklers and drip irrigation systems are sufficient for effective applications. Optimal performance is obtained with preventative treatments repeated every 21 to 28 days throughout the growing cycle.

Disease Contr	Oliver and the second	در مادر و ۲۰۰۰ بر درمانی و ۲۰۰۰ بر از میگرمانده	n se an anna an anna an anna anna an anna ann Anna anna a
Crops	Disease	Rate (qt/acre)_	Application Instructions
Animal Feed		\$	All_Soil_Surface_(Drench), Shanked-In;
Nongrass	Aphanomyces spp.		Injected and In-Eurrow Applications:
	Fusârium spp.	1	
Alfalfa	Bacterial wilt		Mix 1 qt [(32 fl oz)] to 6 qt [(192 fl oz)] of Serenade
Clover	Macrophomina spp.		ASO in the appropriate amount of water per acre.
Kudzu	Phytophthora spp.		Use the stated higher application rates when the
Lupin	Verticillium spp		weather conditions are expected to be conducive to
Vetch and other			disease development, if the field has a history of
animal feed			disease problems, or if minimum/low till programs
nongrass crops			are in place. SERENADE ASO can be mixed with
Brassica Leafy			chemical fungicides registered for soil applications.
Vegetables	Rhizoctonia spp.		
(Cole Crops)	Pythium spp		Soil Surface (Drench) Applications At Planting:
n	Fusarium spp		Use at planting, seeding or transplant. Apply
Broccoli Cabbage	Verticillium spp. [*]		finished spray mixture, at a rate to thoroughly soak
Cauliflower	Phytophthora spp		the growing media through the root zone, as a
Brussels Sprouts	Clubroot [7]		drench or directed spray using hand-held, mechanical or motorized spray equipment, or as a
Collards	Plasmodiophora brassicae	a l	chémigation drench or directed spray using
Kale	Macrophomina spp.	1 = 6	applicable sprinkler or drip irrigation systems.
Mustard Greens	Mot For Useln		applicable sprinker of drip in gation systems.
Kohlrabi	California	e R	Shanked-In and injected Applications:
and other	Carlly in all is the second second	÷.	Serenade ASO can be shanked-in or injected into
brassica leafy		ten i	the soil prior to-, at-, or post-planting/transplanting of
vegetables	and a start of the second start		crops alone or with most types of liquid nutrients.
Bulb Vegetables			
	Rhizoctonia spp.		In-Furrow Applications:
하지 않는 것	Pythium spp.	્ય મહત્વના ગ	For in-furrow applications, apply Serenade ASO as
Onion	Fusarium spp.	,	an in-furrow spray in the appropriate amount of water.
Garlic	Verticillium spp.		per acre for the crop at planting. Mount the spray
Shallots	Phytophthora spp.		nozzle so the spray is directed in the furrow just
and other bulb.	Bacterial Neck Rot		before the seeds are covered.
vegetables	Pink Root [*]		Coll Culface (Deserth) Applications At Any Caste
(including those	Phoma spp. =		Soil Surface (Drench) Applications At Any Stage
grown for seed	(Suppression)		Apply the finished spray mixture to the surface of the
production)			soil as a drench or directed spray using hand-held.
	TNot For Use In		mechanical or motorized spray equipment, or as a
	California]		chemigation drench or directed spray using
	14 - Carles and a second and a		applicable sprinkler or drip irrigation systems. When
Cereal Grains			applying as a spray (e.g., via hydraulic nozzles at
	Rhizoctonia spp.		low volumes), it is important to irrigate to move the
Barley	Pythium spp:		material, into the seed, root or transplant zone.
Corn	Fusarium spp. Verticillium spp.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Normal operation of overhead sprinklers and drip
Millets	Phytophthora spp.	\mathcal{O}	irrigation systems are sufficient for effective
Oat	· 글 사람이라는 법이 전쟁 것같 것, 영양 것이 있는 것 같은 것 같 것 같다.	0.75 6	applications. Optimal performance is obtained with
Rice	Dana iac	0.25 – 6	preventative treatments repeated every 21 to 28

Cereal Grains Barley Fusarium spp. Fusarium spp. Verticillium spp. Phytophthora spp. Corn ÷., Millets Oat 🤇 Bakanae 0.25 - 6 Rice Gibberella fujikuroi Rye Macrophomina spp. Sorghum Triticale Wheat and other cereal

grain crops

preventative treatments repeated every 21 to 28

days throughout the growing cycle.

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44/ 186

Crops	Disease	Rate (qt/acre)	Application Instructions	
Citrus Fruit [*]			All Soil Surface (Drench), Shanked-In,	
	Rhizoctonia spp.	•	Injected and In-Furrow Applications: Mix 1	
Orange	Pythium spp. [*]	:.	qt [(32 fl oz)] to 6 qt [(192 fl oz)] of Serenade ASO.	
<u> </u>	Fusarium spp.		in the appropriate amount of water per acre. Use	
Grapefruit	Verticillium spp.	· · · · ·	the stated higher application rates when the	
Lemon	Phytophthora spp.		weather conditions are expected to be conducive to	· · · ·,
Tangerine	Macrophomina spp.		disease development, if the field has a history of	
Tangelo	macrophonina spp.		disease problems, or if minimum/low till programs	
Pummelo	[*Not For Use In		are in place. SERENADE ASO can be mixed with	
and other citrus	California]	· ·	chemical fungicides registered for soil applications.	
crops	Cantornal	· · · ·	chemical lungicides registered to soli applications.	
, crops		- 14 Tel +	Call Civing (Descape) Amplications of Disetting	
		· · .	Soil Surface (Drench) Applications At Planting:	
· · ·		· · · ·	Use at planting, seeding or transplant. Apply	
			finished spray mixture, at a rate to thoroughly soak	
	· .		the growing media through the root zone, as a	1.1
		•	drench or directed spray using hand-held,	· .
			mechanical or motorized spray equipment, or as a	
	le d'Alexandre San	1	chemigation drench or directed spray using	<u>.</u> • • •
1 - C C C C C C C C		at page 1	applicable sprinkler or drip irrigation systems.	
The second second		. 4		
		x	Shanked-In and Injected Applications: Serenade	
	et de la companya de		ASO can be shanked-in or injected into the soil	
		1-6	prior to-, at-, or post-planting/transplanting of crops	• • •
	. 1	-	alone or with most types of liquid nutrients.	
	Maria da Calendaria da Cale	1. 1. L		
	a et Maria de Calendaria de	·	In-Furrow Applications: For in-furrow applications,	
			apply Serenade ASO as an in-furrow spray in the	
			appropriate amount of water per acre for the crop at	
		•	planting. Mount the spray nozzle so the spray is	
			directed in the furrow just before the seeds are	
			covered	
			n na strand and an anna an anna an anna an anna an anna	
			Soil Surface (Drench) Applications At Any Stage	
			of Growth: Apply the finished spray mixture to the	·
	· ·	•	surface of the soil as a drench or directed spray	1.4
	· · ·		using hand-held; mechanical or motorized spray	1.
		· · ·	equipment, or as a chemigation drench or directed	•••
			spray using applicable sprinkler or drip irrigation	19 - 1 1
			systems. When applying as a spray (e.g., via	, îř
			hydraulic nozzles at low volumes), it is important to	-
			irrigate to move the material into the seed, root or	
		··· ·	transplant zone. Normal operation of overhead	
· · · ·			sprinklers and drip irrigation systems are sufficient.	
			for effective applications. Optimal performance is	
			obtained with preventative treatments repeated	• •
			every 21 to 28 days throughout the growing cycle.	
	Dhudaahéhana asa			
	Phytophthora spp.		Soil Surface (Drench) Applications At Root	e Si
			Flush: Apply 1 fl oz of the finished spray mixture	÷
			per plant to the surface of the soil at root flush (just	
	[*Not For Use In	• •	prior to foliar (vegetative) flush) as a drench or	
	California]		directed spray using hand-held, mechanical or	
			motorized spray equipment, or as a chemigation	
		1 - 6	drench or directed spray using applicable sprinkler	
			or drip irrigation systems. When applying as a	
			spray (e.g., via hydraulic nozzles at low volumes), it	i i
			is important to irrigate to move the material into the	• :
			root of transplant zone. Normal operation of	5. ×.
		· · · · ·	overhead sprinklers and drip irrigation systems are	5
•			sufficient for effective applications.	
			ounces in or cricerre approarens.	

45/ /86

Crops	Disease	Rate	Application Instructions
W	A March March & March & March &	the (qt/acre) ∴	an a
Côrn[*]			All Soil Surface (Drench), Shanked-Ir
Stuff 1. Start Start	Rhizoctonia spp. [*]	3	Injected and In-Furrow Applications:
Weet Corn			
	Pythium spp. [*]		Mix 1 qt [(32 fl oz)] to 6 qt [(192 fl oz)] of Serenad
Popcorn	Fusarium spp. [*]		ASO in the appropriate amount of water per acre
Seed Corn	Verticillium spp.		Use the stated higher application rates when the
Silage Corn	Phytophthora spp.		weather conditions are expected to be conduciv
Field, Côrn	Not For Use In		to disease development, if the field has a history
Cotton			disease problems, or if minimum/low till program
			are in place. SERENADE ASO can be mixed wit
and a state of the second s	an all all an an an air ann an All an an ann an air air an an an air air an air an air an air an air an air an An ann an a	949 10 · · · · ·	chemical fungicides registered for soil application
Sucurbit	A BARRAN	於 어떤 것	
/egetables	Rhizoctonia spp:		Soil Surface (Drench) Applications At Planting
AL NOT UN	Pythium spp.		
Cucumber	Fusarium spp.		Use at planting, seeding or transplant. Apply
Cantaloupe	Verticillium spp. [*]		finished spray mixture, at a rate to thoroughly soa
Vielon	Phytophthora spp.		the growing media through the root zone, as a
Muskmelon .	Monosporascus	States 1	drench or directed spray using hand-held,
Souash	cannonballus		mechanical or motorized spray equipment, or as a
Watermelon and			chemigation drench or directed spray using
	Macrophomina spp.		applicable sprinkler or drip irrigation systems.
other cucurbit			
vegetables	Not For Use In	2014 146	Shanked-In and Injected Applications:
States - mainter and	California]	3.7	
Fruiting	A CARLON AND AND		Serenade ASO can be shanked in or injected into
Vegetables	Rhizoctonia spp		the soil prior to-, at-, or post-planting/transplanting
	Pythium spp.		of crops alone or with most types of liquid
Pedder	Fusarium spp.	1 - 6	nutrients.
Tomato			Ŷ
	Verticillium spp. [*]	ARC AND	In-Furrow Applications: For in-furrow
Eggplant	Phytophthora spp.		applications, apply Serenade ASO as an in-furrow
Ground Cherry	Macrophomina spp.		spray in the appropriate amount of water per acre
Tomatillo			for the crop at planting. Mount the spray nozzle s
Okra	r™Nôt For Use In		the spray is directed in the furrow just before the
and other fruiting .	California]		
regetables			seeds are covered.
. <u>(</u>	Southern blight		
豪	Sclerotium rolfsii		Soil Surface (Drench) Applications At Any
and an in the second	Suppression Only		Stage of Growth: Apply the finished spray
eafy			mixture to the surface of the soil as a drench or
/ēgētables	Rhizoctonia spp.	State of the state	directed spray using hand-held, mechanical or
	Pythium spp.	6-5-	motorized spray equipment, or as a chemigation
êttuce.	Fusarium spp.	•	drench or directed spray using applicable sprinkle
Celery.	Verticillium spp.		or drip irrigation systems. When applying as a
		5 N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	spray (e.g., via hydraulic nozzles at low volumes).
Spinach	Phytophthora spp.	a arrit	
Parsley			it is important to irrigate to move the material into
Radicchio			the seed, root or transplant zone. Normal
ind other leafy	北口市 役割したため 花瀬		operation of overhead sprinklers and drip irrigation
egetables-	[1]香水、香花、白、香水、		systems are sufficient for effective applications.
141.51			Optimal performance is obtained with preventative
	The second s		treatments repeated every 21 to 28 days
\$.5		8	throughout the growing cycle.
Andress	An and a second s	تا م في يوم حمد ا	

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	•		•		
	Crops	Disease	Rate	Application Instructions	
			(qt/acre)		
	Continued Leafy	Scierotinia Head and Leaf Drop		All Soil Surface (Drench), Shanked-In, injected and In-Furrow Applications:	
	Vegetables	Scierotinia spp.			
	Lettuce			Mix 1 qt [(32 fl oz)] to 6 qt [(192 fl oz)] of Serenade ASO in the appropriate amount of	•
	Celery Spinach			water per acre. Use the stated higher application rates when the weather conditions	
•	Parsley			are expected to be conducive to disease	
	Radicchio and other leafy	the second second	· · ·	development, if the field has a history of disease problems, or if minimum/low till	
	vegetables			programs are in place SERENADE ASO can be mixed with chemical fungicides registered	
				for soil applications	
۰.			and the second	Soil Surface (Drench) Applications At	
				Planting: Use at planting, seeding or transplant. Apply finished spray mixture, at a	
				rate to thoroughly soak the growing media	· .
				through the root zone as a drench or directed spray using hand held mechanical or	
				motorized spray equipment, or as a chemigation drench of directed spray using	
				applicable sprinkler or drip irrigation systems	
· •				Repeat applications on 10- to 14-day intervals if conditions for disease	
			1-6	development persist. Use the stated higher rates under conditions conducive to moderate.	· ·
				to severe disease pressure. Light irrigation	
				after application to incorporate the product; may improve disease control.	
				Shanked-In and Injected Applications:	
				Serenade ASO can be shanked in or injected into the soil prior to-, at-, or post	
			1	planting/transplanting of crops alone or with	
-				most types of liquid nutrients. Repeat applications on 10 to 14 day intervals if	
				conditions for disease development persist Use the stated higher rates under conditions	
		en and a state of the state of		conducive to moderate to severe disease	
· .			•	pressure. Light irrigation after application to incorporate the product may improve disease	
				control.	
	· ·			In-Furrow Applications:	
				For in-furrow applications, apply Serenade ASO as an in-furrow spray in the appropriate	
				amount of water per acre for the crop at planting. Mount the spray nozzle so the	
		_		spray is directed in the furrow just before the	
		· · ·	i i	seeds are covered. Repeat applications on 10- to 14-day intervals if conditions for	
		L		disease development persist. Use the stated	
		•			
			· .	. 44	. •

higher rates under conditions conducive to moderate to severe disease pressure. Light irrigation after application to incorporate the product may improve disease control. Soil Surface (Drench) Applications At Any Stage of Growth Apply the finished spray mixture to the surface of the soil as a drench or directed
spray using hand-held, mechanical or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler or drip irrigation systems. When applying as a spray (e.g., via hydraulic nozzles at low volumes), it is important to irrigate to move the material into the seed, root or transplant zone. Normal operation of
overhead sprinklers and drip irrigation systems are sufficient for effective applications. Optimal performance is obtained with preventative treatments repeated on 10- to 14-days intervals if conditions for disease development persist Use the stated higher rates under conditions conducive to moderate to severe disease pressure.

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48/ /86

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Crops	Disease	Rate	Application Instructions
م واقع ال الحاد الم المع العلم المحاد الم	n an the second seco	(qt/acre)	and the second
Legumes			All Soil Surface (Drench), Shanked
Vegetables	Rhizoctonia spp.		Injected and In-Furrow Applications:
(Succulent or	Pythium spp. [*]		
Dried)	Fusarium spp [*]		Mix 1 gt [(32 fl oz)] to 6 gt [(192 fl oz)
Dineu,	Verticillium spp. [*]		Serenade ASO in the appropriate amount
		1	
Beans	Phytophthora spp.		water per acre. Use the stated high
Green Beans	[*]	14 A.	application rates when the weather condition
Snap Beans	Macrophomina spp.	1	are expected to be conducive to dise
Shell Beans	Aphanomyces spp.	-	development, if the field has a history
Soybeans		1	disease problems, or if minimum/low
Dry Beans	Not For Use In		programs are in place. SERENADE ASO
Garbanzo	California]		be mixed with chemical fungicides register
Beans			for soil applications.
Lima Beans	the second second second		
Peas			Soil Surface (Drench) Applications
Chick Peas			Planting: Use at planting, seeding
Split Peas			transplant. Apply finished spray mixture,
Lentils			rate to thoroughly soak the growing me
and other			through the root zone, as a drench or direct
legume			spray using hand-held, mechanical
vegetables		Star and a star a	motorized spray equipment, or as
(including those			chemigation drench or directed spray us
grown for seed	1. E. S.	· · · ·	applicable sprinkler or drip irrigation syster
or oil			
production)			Shanked-In and Injected Applications:
Oilseed	· · · · · · · · · · · · · · · · · · ·		Serenade ASO can be shanked-in or inject
	Rhizoctonia spp. [*]		into the soil prior to-, at-, or p
Crops[*]		1-6	planting/transplanting of crops alone or v
0	Pythium spp. [*]		most types of liquid nutrients.
Canola	Fusarium spp. [*]		most types of inquid mutilents.
Castor	Verticillium spp. [*]	•	
Cotton	Phytophthora spp.		In-Furrow Applications:
Flax	[*]		For in-furrow applications, apply Seren
Rapeseed	Clubroot[*]		ASO as an in-furrow spray in the appropr
Safflower	Plasmodiophora		amount of water per acre for the crop
Sesame	brassicae		planting. Mount the spray nozzle so
Sunflower			spray is directed in the furrow just before
and other			seeds are covered.
oilseed crops			
(including those			Soil Surface (Drench) Applications At A
			Stage of Growth:
grown for seed			
or oil		L	Apply the finished spray mixture to
production)			surface of the soil as a drench or direct
Olive			spray using hand-held, mechanical
(including those	Rhizoctonia spp.		motorized spray equipment, or as
	Pythium spp.		chemigation drench or directed spray us
production)	Fusarium spp.		applicable sprinkler or drip irrigation syste
	Verticillium spp.		When applying as a spray (e.g., via hydra
	Phitophthom one		nozzles at low volumes), it is important
	Phytophthora spp.		irrigate to move the material into the se
Peanut			root or transplant zone. Normal operation
	Rhizoctonia spp. [*]		
	Pythium spp. [*]		overhead sprinklers and drip irriga
			systems are sufficient for effect
production) I	Fusarium spp. [*]		applications. Optimal performance

49/	
186	

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Image: Second control of the second			· · ·	49/
Image: Second control of the second				
Image: Second control of the second	ا	Phytophthora spp.	obtained with preventative treatm	ents
		[1] Macrophomina(spp.	growing cycle.	t the the second se
		Aspergillus spp Cviindrocladium Black		
		Mot For Use In	and the second for second and	
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50/ 186

Crops	Disease	Rate (qt/acre)	Application Instructions
Pome Fruit			All Soil Surface. (Drench), Shanked-In,
i onic i fuit	Rhizoctonia spp.		Injected and In-Furrow Applications:
Apple	Pythium spp.		injected and intration Applications.
	Fusarium spp.	×	
Crabapple			Mix 1 qt [(32 fl oz)] to 6 qt [(192 fl oz)] of
Pear	Verticillium spp.		Serenade ASO in the appropriate amount of
Quince	Phytophthora spp.		water per acre. Use the stated higher
Mayhaw		. 1	application rates when the weather conditions
and other pome			are expected to be conducive to disease
fruit			development, if the field has a history of
Root and Tuber		., .	disease problems, or if minimum/low till
Vegetables	Rhizoctonia spp.		programs are in place. SERENADE ASO can
	Pythium spp.		be mixed with chemical fungicides registered for
Carrot	Fusarium spp.		soil applications.
Potato	Verticillium spp. [*]		
Sweet Potato	Phytophthora spp.		Soil Surface (Drench) Applications At
Cassava	Clubfoot		Planting: Use at planting, seeding or
Beets	Plasmodiophora		transplant. Apply finished spray mixture, at a
Ginger	brassicae		rate to thoroughly soak the growing media
Horseradish	Macrophomina spp.		through the root zone, as a drench or directed
Radish	Aphanomyces spp.,		spray using hand-held, mechanical or motorized
Ginseng	Sclerotium rolfsii,		spray equipment, or as a chemigation drench or
Turnip and other			directed spray using applicable sprinkler or drip
root and tuber	Erwinia spp. [*]		irrigation systems.
	Colletotrichum spp.		ingation systems.
vegetables			Shanked-In and Injected Applications:
(including those	[*Not For Use In		Serenade ASO can be shanked in or injected
grown for seed	California]		
production)			into the soil prior to-, at-, or post-
	Common Scab	•	planting/transplanting of crops alone or with
	Streptomyces scables		most types of liquid nutrients.
	(Suppression Only)	1 - 6	
	(In-Furrow Applications:
			For in-furrow applications, apply Serenade ASO
			as an in-furrow spray in the appropriate amount
			of water per acre for the crop at planting.
Stone Fruit			Mount the spray nozzle so the spray is directed
	Rhizoctonia spp.	•	in the furrow just before the seeds are covered.
Apricot	Pythium spp.		
Cherry	Fusarium spp.		Soil Surface (Drench) Applications At Any
Nectarine	Verticillium spp.	-	Stage of Growth:
Peach	Phytophthora spp.		Apply the finished spray mixture to the surface
Plum	, nytophtiola spp.		of the soil as a drench or directed spray using
	1 1		hand-held, mechanical or motorized spray using
Prune			
and other stone	1		equipment, or as a chemigation drench or
fruit			directed spray using applicable sprinkler or drip
Tobacco			irrigation systems. When applying as a spray
Augustition		•	(e.g., via hydraulic nozzles at low volumes), it is
Strawberry	Angular Leaf Spot		important to irrigate to move the material into
	Xanthomonas fragariae		the seed, root or transplant zone. Normal
	Black Root Rot		operation of overhead sprinklers and drip
	(complex)		irrigation systems are sufficient for effective
	Common Leaf Spot		applications. Optimal performance is obtained
	Ramularia tulasneii		with preventative treatments repeated every 21
	Leather Rot		to 28 days throughout the growing cycle.
	Phytophthora cactorum		to be days throughout the growing cycle.
	Macrophomina spp.		For Colletetrichum ann. Llass:
	Phytophthora Crown		For Colletotrichum spp. Uses:
	Rot		Use a foliar fungicide to control stem lesions
			once plants have emerged.
	Phytophthora spp.		
	Red Stele Phytophthora fragariae		· · · ·

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Gröps Disease Rate (quacre) Application instructions Bernes: Armillaria Root Rot Amillaria Spp. All.Soll/Surface (Drench) Applications: Blueberry Blackberry Raspberry Loganberry Huckleberry Gröps Armillaria Root Rot Amillaria Spp. Mix.1 ot ((32 ft oz)) to 6 ot ((192 ft oz)) of Serenade ASO in the appropriate amount of water per acre. Use the stated higher application, rates when the weather conditions are expected to be conducive to disease development of the field has a history of disease problems, or, if minimum/low till programs are in place. SERENADE ASO can be mixed with chemical fungicides registered for soil applications. Grape Oak Root Fungus Armillaria Root Rot Amillaria mellea 1=6 Soil Surface (Drench) Applications At Planting: Use at planting seeding of transplant Apply finished spray mixture at a rate to thoroughly soak the trowing, media through the root zone, as a drench or directed spray using fraid-heid, mechanical or motorized spray using applicable sprinkler or drip irrigation systems. Soil Surface (Drench) Applications At Any Stage of Growth. Apply the finished spray mixture to the surface of the soil as a drench or directed spray using hand-heid, mechanical or motorized spray using applicable sprinkler or drip irrigation systems. Soil Surface (Drench) Applications At Any Stage of Growth. Apply the finished spra		Verticillium Wilt Vertičillium dahlia Rhizoctonia spp. Fusarium spp:		
Blueberry Blackberry Raspberry Loganberry Huckleberry Raspberry Loganberry Huckleberry Cranberry Cranberry Cranberry Blackberry Huckleberry Cranberry Cranberry Cranberry Coranberry Coranberry Coranberry Coranberry Currant and other berny Cranber Brow Comminiana melleaAmiliana Root Rot Rot Rot Rot Rot Serenade ASO in the appropriate amount of water per acre. Use the stated higher application rates when the weather condutions are expected to be conducive to disease development if the field has a history of disease problems, or if minimum/low till programs are in place. SERENADE ASO can be mixed with chemical fungicides registered for soil applications. At Planting: Use at "planting" seeding of transplant. Apply finished spray mixture at a rate to thoroughly soak the growing media through the root zone, as a dirench or directed spray eaupment, or as a chemigation drench or directed spray using applicable sprinkler or drip irrigation systems.Soil Surface (Drench) Applications At Any Stage of Growth. Apply the finished spray mixture to the surface of the soil as a chemigation drench or directed spray using applicable sprinkler or drip irrigation systems. When applying as a spray (e.g. via hydraulic nozzles at low volumes), it is important to irrigate move the material into the section of overhead sprinklers and drip irrigation systems are sufficient, for effective applicable on other drop irrigation systems are sufficient for effective applicable sprinklers and drip	Crops	Disease		Application Instructions
Elderberry Currant and other berry crops Grape Oak Root Fungus Armillaria Root Rot Armillaria mellea 1=5 Cak Root Fungus Armillaria mellea 1=5 Coll Surface (Drench) Applications At Ary Stage of Growth. Apply the finished spray mixture to the surface of the soil as a drench or directed spray using applicable sprinkler or drip irrigation systems. Soil Surface (Drench) Applications At Any Stage of Growth. Apply the finished spray mixture to the surface of the soil as a drench or directed spray using hand-held, mechanical or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler or drip irrigation systems. When applying as a spray (e.g., via hydraulic nozzles at low volumes), it is important to irrigate to move the material into the seed, root or transplant zone. Normal operation of overhead sprinklers and drip irrigation systems are sufficient, for effective applications. Optimal performance is obtained	Blueberry Blackberry Raspberry Loganberry Huckleberry Cranberry Gooseberry	Amillaria spp Verticillium Wilt Verticillium dahlia Phytophthora Root Rot		Mix 1 qt [(32, ft oz)] to 6 qt [(192, ft oz)] of Serenade ASO in the appropriate amount of water per acre. Use the stated higher application rates when the weather conditions are expected to be conducive to disease development, if the field has a history of disease problems, or if minimum/low till
Soil Surface (Drench) Applications At Any Stage of Growth: Apply the finished spray mixture to the surface of the soil as a drench or directed spray using hand-held: imechanical, or imotorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler or drip irrigation systems. When applying as a spray (e.g., via hydraulic nozzles at low volumes), it is important to irrigate to move the material into the seed, root or transplant zone. Normal operation of overhead sprinklers and drip irrigations. Optimal performance is obtained	Currant and other berry crops	Armillaria Root Rot	6	be mixed with chemical fungicides registered for soil applications. Soil Surface (Drench) Applications: At Planting: Use at planting seeding or transplant. Apply finished spray mixture, at a rate to thoroughly soak the growing media through the root zone as a drench or directed spray using hand-held mechanical or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler or drip
to 28 days throughout the growing cycle.				Soil Surface (Drench) Applications At Any Stage of Growth. Apply the finished spray mixture to the surface of the soil as a drench or directed spray using hand-held, imechanical of motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler or drip irrigation systems. When applying as a spray (e.g., via hydraulic nozzles at low volumes), it is important to irrigate to move the material into the seed, root or transplant zone. Normal operation of overhead sprinklers and drip irrigation systems are sufficient, for effective applications. Optimal performance is obtained with preventative treatments repeated every 21

FOR USE ON ORNAMENTALS, TREES, SHRUBS, FLOWERS, BEDDING PLANTS, TROPICAL PLANTS (ORNAMENTALS - Poinsettia, Orchids, Dieffenbachia, Palms, Spathiphyllum, Rhaphiolepis, Aglaonema and FRUIT – Bananas, Mangos, Papaya), TURF, LAWNS, SOD, GOLF COURSES (GREENS, TEES, FAIRWAYS AND ROUGHS), SEEDLINGS, CONIFERS - [Agricultural

Use], [Commercial], [Residential Use], [Reforestation]

Serenade ASO has a 0-Day PreHarvest Interval for all crops contained on this label.

Under moderate to severe disease pressure, for improved performance, increase rates and reduce spray intervals as stated or use Serenade ASO in a tank-mix or rotational program with other registered fungicides.

[As appropriate for uses:] Serenade ASO is a protectant fungicide for use indoors and outdoors for control of certain foliar diseases in the field, greenhouses [open or enclosed], interiorscapes, residential and commercial landscapes, nurseries [open or enclosed], shadehouse environments, glasshouses, seedling production sites, golf courses (greens, tees, fairways, and roughs), forests, and forestry seedling production sites.

Serenade ASO can be applied to ornamentals, trees, shrubs, flowers, annual and perennial bedding plants, potted flowers, cut flowers, tropical foliage, container-grown trees and shrubs, forestry seedlings, turf, lawns, sod, golf courses (greens, tees, fairways, and roughs) and conifers for reforestation purposes (greenhouses, shadehouses, nurseries, indoors, outdoors, containers of field).

[PLANTS EVALUATED FOR PHYTOTOXICITY]

Serenade ASO has been tested for phytotoxicity on [a number of] [the] or namental species [listed below]. Since it is impossible to test all of the species and cultivars listed on this label under all conditions, conduct a small-scale, preliminary trial to check for sensitivity before using this product on a large number of plants.

[TABLE OF PLANTS EVALUATED FOR PHYTOTOXICITY]

Alyssum		ring Plants:] Azalea	Begonia	Calla Lily	Chrysanthemum
Cyclamen	Dianthus	Dwarf Bee-Bal	m'	Easter Lily	Garden Phlox
Geraniums	Gerbera	Golden Star	Hydrangea	Impatiens	Kalanchoe
Linaria	Lisianthus	Lobelia	Marigolds	Orchids	Pansies
Petunia	Poinsettia	Portulaca	Ranunculus	Roses	Salvia spp.
Snapdragons	Stock	Verbéna spp.	Vinca	Violas	Zinnias 1

[Tropical Foliage:]

[Aglaonema	Dieffenbachia	Dracaena spp.	English Ivy	
Hibiscus	Leatherleaf Fern	Spathiphyllum]		

[Trees and Shrubs:]

[Azalea	Boxwood	Crape Myrtle	Dogwood	Gumpo Azalea	
Indian (India) H	awthorn	Japanese Mapl	le	Ligustrum japonicum	
Lilac	Loropetalum	Photinia	Rhododendron	Rosaceae spp.	
Soft Touch Holl	y	Spirea]			

Foliar Application Use on Ornamentals, Trees, Shrubs, Flowers, Bedding, Plants, Tropical Plants, Seedlings, Conifers:

APPLICATION INSTRUCTIONS: Mix 1 – 6 qt of Serenade ASO in 100 - 300 gallons of water. Apply dilute spray mix as a foliar treatment to the point of run-off. For each treatment, apply no more than 6 qt of Serenade ASO per acre; equivalent to 4.4 fl oz of Serenade ASO per 1000 square feet. Make applications on a 3- to 10-day schedule. Begin applications when conditions favor disease development prior to the onset of disease. [Begin applications prior to or in the early stages of disease development.]

53/ /86

Under normal conditions, apply 4 gt Serenade ASO per 100 – 300 gallons of water per acre on a 7-day schedule. When conditions favor severe disease development, shorten the spray interval of use a higher rate as stated in the application table. Thorough coverage is essential for effective disease control. See application rate tables for more detailed application instructions.

Crops Disease Rate (qt/100,300 gal spray Application instructions Ornamentals Trees, Strubs, Anthracnose (colleiotrichum spp. Flowening) Plants in Fleids, Glasshouses, Shadehouses and Nurseries (Indoors and Outdoors): Plants, Flowening, Plants, Tropical Plants, Annuals Bacteria Eximina spp. Spicarbon rosea Nix 1 – 6 qt of Serenade ASO in 100 gallons of water. Sectorial Plants, Diplocarpoin rosea Bedding Plants Potted Flowers Collage Plants Bacty is schedule. Mix 1 – 6 qt of Serenade ASO in 100 gallons of water. Sectorial reatment to the point of run- off. For each treatment to the point of run- co of secase development prior to the onset of disease. [Begin applications prior to or in the early stages of disease development.] Dunder Fordial Foliage Container- Broweny Mildew Erysiphe spp. Oridum spp. Podosphaera spp. Sphaerotheca spp. Sphaerotheca spp. Under normal conditions, apply 4 qt Serenade ASO per 100 - 300 gallons of water per acres on a 7-day schedule. When conditions favor severe disease development.] Phytophthora spp. Prodosphare app	12 gale - and a strain and and an addition	Application Rates of Seren Ornamentals, Trees, Shrul	bs, Flowering P	lants and Tropical Plants
TreesColletotinchum spp.1 - 6Glässhouses.ShädehousesandShrubs, FloweringBacteriaErwinia spp.1 - 6Glässhouses.ShädehousesandPlants, and Tropical PlantsErwinia spp.Mix 1 - 6 qt of Serenade ASO in 100 gallons of water. Apply dilute spray mix as a foliar treatment of the point of run- off. For each treatment, apply no more uluding:Annuals Perennials Bedding Plants Out Flowers Cut Flowers DeciduousBlack Spot of Rose Diplocarpon roseaMix 1 - 6 qt of Serenade ASO per acre. equivalent to 4.4 fl oz of Serenade ASO per 1000 ft?Detiduous FreesBotrytis Botrytis cinereaMake applications on a 3- to 10-day schedule. Begin applications when conditions, favor disease / development pipications prior to or in the early stages of disease development.]Downy Mildew Peronospora spp. Container- Grown PlantsLeaf Spots Atternara spp. Cercospora spp. Entomosporium spp.Northecium spp.Vene conditions, favor severe disease development.]Vinder normal conditions favor severe disease development, shorte the spray interval or use a higher rate, as stated. Thorough coverage is essential for effective disease control.Spiter the spp. Oidium spp. Podosphaera spp. Sphaerotheca spp. Sphaerotheca spp.Phytophthora spp. Phytophthora spp.Phytophthora spp. Phytophthora spp.Phytophthora spp. Sphaerotheca spp.Phytophthora spp. Cordum spp.Phytophthora spp.Phytophthora spp. Cordum spp.Phytophthora spp.Down Mildew Erysiphe spp. Ordicum spp.Phytophthora	Çrops.	المراجع المحافظ المحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحا	(qt/100-300 gal spray	Application Instructions
Scab	Trees, Shrubs, Flowering, Plants, and Tropical Plants Including: Annuals Perennials Bedding Plants Potted Flowers Cut Flowers Foliage Plants Deciduous Trees Deciduous Shrubs Tropical Foliage Container-	Colletotrichum spp. Bacteria Erwinia spp Pseudomonas spp. Xanthomonas spp. Xanthomonas spp. Black Spot of Rose Diplocarpon rosea Botrytis Botrytis cinerea Downy Mildew Peronospora spp. Leaf Spots Alternaria spp. Cercospora spp. Entomosporium spp. Helminthosporium spp. Myrothecium spp. Septoria spp. Septoria spp. Didium spp. Podosphaera spp. Sphaerothēca spp. Sphaerothēca spp.		Glasshouses, Shadehouses and Nurseries (Indoors and Outdoors): Mix 1 – 6 qt of Serenade ASO in 100 gallons of water. Apply dilute spray mix as a foliar treatment to the point of run- off. For each treatment, apply no more than 6 qt of Serenade ASO per acre; equivalent to 4.4 fl oz of Serenade ASO per 1000 ft ² Make applications on a 3- to 10-day schedule. Begin applications when conditions, favor disease development plor to the onset of disease. [Begin applications prior to or in the early stages of disease development.] Under normal conditions, apply 4 qt Serenade ASO per 100 - 300 gallons of water per acre on a 7-day schedule. When conditions favor severe disease development, shorten the spray interval or use a higher rate, as stated. Thorough coverage is essential for effective

Post-Harvest Dip Use on Cut Flowers/Buds: APPLICATION INSTRUCTIONS: For post-harvest dip applications on cut flower crops, dip flowers/buds in a solution containing 6 to 25 fl oz of Serenade ASO in 10 gallons of water soon after cutting. Immerse flowers to completely cover with the treatment solution. Use the stated higher rates under conditions of heavy disease pressure.

See application rate tables for rates and application instructions.

Applic	ation Rates of Serenade	ASO for Post-	Harvest Dip on Cut Flowers/Buds
Crops	Disease	Rate (fl oz/10 gal water)	Application Instructions
5.4°E1		Water)	
Cut Flowers	Black Spot of Rose Diplocarpon rosea Botrytis Botrytis cinerea	6 - 25	Dip flowers/buds in a solution containing 6 to 25 fl oz of Serenade ASO in 10 gallons of water soon after cutting. Immerse flowers to completely cover with the treatment solution Use the stated higher rates under conditions of heavy disease pressure.
· · · · · · · · · · · · · · · · · · ·	Downy Mildew Peronospora spp. Powdery Mildew		
no Sector Sector Sector Sector Sector Sector Sector Sector Sector	Erysiphe spp. Oidium spp. Pödosphaera spp. Sphaerotheca spp.		می از می از می این این این این این این این این این ای
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Soil Drench Applications on Ornamentals, Trees, Shrubs, Flowers, Bedding Plants, Tropical Plants, Seedlings, Conifers, Fruits and Vegetables: [Agricultural], [Commercial], [Residential Use], [Indoors and Outdoors], [Greenhouses, Glasshouses, Nurseries, Shadehouses], [Open and Enclosed]

Serenade ASO is a broad spectrum biofungicide for the prevention, suppression and control of soil borne diseases on a wide range of annual and perennial bedding plants, potted flowers, foliage plants, deciduous trees and shrubs, and fruits and vegetables grown in protected and outdoor environments. Serenade ASO enhances germination and plant growth by suppressing diseases caused by *Rhizoctonia*, *Pythium*, *Fusarium*, *Verticillium*, and *Phytophthora*.

APPLICATION INSTRUCTIONS: Mix 1 qt [(32 f) oz)] to 6 qt [(192 f) oz)] of Serenade ASO with 100 - 300 gallons of water. Use the stated higher application rates under conditions of heavy disease pressure. Apply finished mixture, at a rate to thoroughly soak the growing media through the root zone, as a drench or directed spray using hand-held, mechanical or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler irrigation systems. Begin applications during or after seeding, sticking of cuttings or after transplanting to propagation beds, containers, pots or trays. Optimal performance is obtained with preventative treatments repeated every -21 to 28 days throughout the growing cycle. Serenade ASO can be mixed with chemical fungicides registered for soil applications. See application rate tables for more detailed application instructions.

Application Rates of Serenade ASO When Used as a Soil Drench in Field, Greenhouses, Glasshouses, Shadehouses, or Nurseries [Outdoors and Indoors] [Open or Enclosed].						
Crops	ورود والمعروق المتقر أستق	Rate (qt/100 - 300 gal ∠spray mix)	Application Instructions			
Ornamentals Trees Shrubs Annuals Perennials	Rhizoctonia spp: Pythium spp.	1-6	Soil Drench Uses: Field, Greenhouses, Glasshouses, Shadehouses, Indoors/Outdoors, Open And Enclosed Nurseries			
Flowering Plants Tropical Plants Bedding Plants Container Plants Potted Plants	Fusarium spp. Verticillium spp.		Mix 1 qt [(32 fl oz)] to 6 qt [(192 fl oz)] of Serenade ASO with 100 - 300 gallons of water. Use the stated higher application rates under conditions of heavy disease pressure.			
Foliage Plants Deciduous Trees Deciduous Shrubs	Phytophthora Spp.		Apply finished mixture, at a rate to thoroughly soak the growing media through the root zone, as a drench or directed spray using hand-held, mechanical or motorized spray equipment, or as a chemigation drench or directed spray using			
Forestry Seedlings Fruits Vegetables			applicable sprinkler irrigation systems. Begin applications during or after seeding, sticking of cuttings or after transplanting to propagation beds, containers, pots or trays. Optimal			
and other crops grown in greenhouses glasshouses, shadehouses,			performance is obtained with preventative treatments repeated every 21 to 28 days throughout the growing cycle. Serenade ASO can be mixed with chemical fungicides registered for soil applications.			
Indoors/outdoors, open and enclosed						

54

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Turf, Lawns, Sod, Golf Courses (Greens, Tees, Fairways, And Roughs), And Ornamental Turf Use: [Agricultural], [Commercial], [Residential Use]

Serenade ASO is a broad spectrum bjofungicide for use in the prevention, suppression and aiding in control of turf and lawn diseases (Brown Patch, Dollar Spot, Powdery Mildew, Rust, Gray Leaf Spot and Anthracnose).

APPLICATION INSTRUCTIONS: Apply 2 - 10 fl oz of Serenade ASO per 1000 sq ft of surface area. Apply in sufficient water to provide thorough coverage, depending on the application equipment. Two gallons of water per 1000 sq ft of surface is commonly used. See application rate tables for more detailed application instructions.

Application Rat	tes of Serenade ASO for Rou	Turf, Lawns, So ghs), and Ornan	id; Golf Courses (Greens, Tees, Fairways and nental Turf
Crops	Disease	Rate (fl oz/1000 sq ft of surface	Application Instructions
an an an an an an an Aller. An t-an an t-an an Aller an t-an	and the state of t	area)	
Turf	Brown Patch		Apply 2 to 10 fl oz of Serenade ASO per 1000 sq
Sod	Rhizoctonia		ft of surface area. Apply in sufficient water to
Lawns	solani		provide thorough coverage, depending on the
Golf Courses		• •	application equipment. Two gallons of water per
(Fairways,	Dollar Spot		1000 sq ft of surface is commonly used.
Roughs, Greens,	Lanzia spp.		
and Tees)	Moellerodiscus spp.		Begin applications when conditions are
	Sclerotinia	(i	conducive to disease development. Continue
Seed Production	homeocarpa		applications on 7- to 10-day intervals or as
Grasses			needed. Under moderate to severe disease
	Powdery Mildew	· · ·	pressure, for improved performance, increase
Bluegrass	Erysiphe		rates and reduce spray intervals as stated or use
Bentgrass	graminis	2 - 10	Serenade ASO in a tank-mix or rotational
Bermudagrass	· · · · · · · · · ·		program with other registered fungicides.
Dichondra	Rust		
Fescue	Puccinia spp.		Aids in control of: Brown Patch, Dollar Spot,
Orchardgrass			Powdery Mildew, Rust, Anthracnose and Gray
Poa Annua	Anthracnose		Leaf Spot.
St. Augustine	Colletotrichum		
Ryegrass	graminicola	*• ·	Optional/Alternate Statements / Examples of
Zoysia		•	Mixing/Application Instructions are in Brackets
Mixtures	Gray Leaf Spot		below:
and other grasses	Pyricularia		[Mix at the rate of 1 to 5 fl oz of Serenade ASO
or ornamental turf	Grisea	1997 - A.	per gallon of water, and apply spray solution at
and the second second		ta general de la companya de la comp	the rate of 2 gallons per 1000 sq ft of turf
and a star in the	Fairy Ring		(equivalent to 2 to 10 fl oz of Serenade ASO per
	Various		1000 sq ft of turf).]
	Basidiomycetes	ŕ	
	Gray Snow Mold	9	Mix at the rate of 2 to 10 fl oz of Serenade ASO
1.4 1	Typhula Blight		per gallon of water, and apply spray solution at
· ·	Typhula spp.		the rate of 1 gallon per 1000 sq ft of turf
•	Pink Snow Mold	[1% - 4%	(equivalent to 2 to 10 fl oz of Serenade ASO per
	Fusarium Patch	solution]	1000 sq ft of turf).]
	Microdochium	• ·	i ooo og it or turijtij
			[Mix at the rate of 5 fl oz of Serenade ASO per
	nivale .	1. J.	gallon of water when included in a tank mix with

			and the second	red fungicides.]	1
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		[2% - 8	of the second		· 1.
	and the second	2%	270		apply spray
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the second se	Pythium Blig	3010	radiv a 1%	to 4% solution, and	7 1000 SQ 1000
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· · ·	Pythium		t te now of t	he rate of a start and	of Serendue I
1	l in the second s	natum	I SOIDIION C.	to 4% solution, and he rate of 2 gallons per light to 2.5 to 10 fl oz	
	aphaniden	liature	the second se	he rate of 2 gallons per lient to 2.5 to 10 fl oz	
e 1 .	april a	21	Thirt (equive	100 m / c 1. 4 l	- 1 1 1
	Durbium SDD		40		· · ·
	Pythium spp			00 sq ft of turf).]	
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			1 main o 2%	6 10 070 00	
		Sec. 15. 16.		the rate of 1 gallon pe alent to 2.5 to 10 fl o don so ft of turn.]	
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				000 sq ft of turf).]	
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STORAGE AND DISPOSAL Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use.

PESTICIDE DISPOSAL: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER HANDLING: [For 2.5-gallon plastic containers] - Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

[For 30-gallon plastic containers] - Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

[For 110-gallon or larger returnable mini-bulk containers] – Return empty container for reuse. Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

[batch codes are sticker applied to the front panel of every label on every product container]

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product at once for a retund of the purchase price. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability. These terms may only be modified by a written document signed by a duly authorized representative of Bayer CropScience LP.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials; of the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF EITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

57

NET CONTENTS:



PRODUCED FOR

(BAYER) Bayer CropScience

Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709 1-866-99BAYER (1-866-992-2937)

SERENADE[®] ASO

AN AQUEOUS SUSPENSION BIOFUNGICIDE

SUB-LABEL,B For Seed Treatment Use

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SERENADE [®] AS	5	0	,
그는 물건이 잘 해외했다. 이 이 관련이 하는 것 같은 것 같	T 1.		

[Alternate Brand Names: Serenade® Biofungicide, Serenade® Soil]

[Optional/Alternate Statement: "NOP Logo: For Organic Production"] [Optional/Alternate Statement: "NOP Logo: Can be Used for Organic Production"] [use in field applications: greenhouses, glasshouses, nurseries, shadehouses, landscapes, interiorscapes, seedling production sites, and forest seedling production sites]

[Use in Application Mixes with other commercial seed treatment production sites]

[use in resistance management programs] [For Agricultural Use]

[For use on Ornamentals, Trees, Shrubs, Turf, Lawns, Sod, Seedlings, and Conifers] [Use In Production of Conifers For Reforestation]

ACTIVE INGREDIENT: QST 713 strain of Bacillus subtilis OTHER INGREDIENTS TOTAL

*Contains a minimum of 1 x 10° cfu/g EPA Registration No. 264-1152

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577 For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

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	r.	-	Move perso				
			• If person is	not breathing,	call 911 or an	ambulance, tl	hen give artifici
14	4. 5.		respiration,	preferably mou	ith-to-mouth if	possible.	ta da ang ng sa

Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for
treatment.

[Reference Statement for Booklets, For ADDITIONAL PRECAUTIONARY STATEMENTS and DIRECTIONS FOR USE. See Inside Booklet. See FIRST AID STATEMENT on the back panel.] [USE OF PRODUCT INDICATES ACCEPTANCE OF "CONIDTIONS FOR SALE AND WARRANTY"]

Bayer CropScience LP P.Q. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709 ial

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION

Harmful if inhaled. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

The PPE requirements below apply to both <u>Worker Protection Standard (WPS)</u> uses (in general, agricultural-plant uses are covered by the Worker Protection Standard (40 CFR Part 170)) and <u>Non-WPS</u> uses.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoës plus socks

Mixers/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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

[OPTIONAL: ENGINEERING CONTROLS]

[OPTIONAL STATEMENT: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets 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.]

[IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.]

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Cover spilled seed, or collect spilled seed from soil surface.

EMERGENCY INFORMATION

For emergencies such as leaks or spills, call 24-hour, toll-free BAYER hotline at 1-800-334-7577.

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 State or Tribal agency responsible for pesticide regulation. [For use only as described on this label. Not for isolation or deformulation. Do not culture.]

Note to the reviewer: All uses on the label may be for Commercial and or Non-commercial (on agricultural establishments):]

[For Commercial Seed Treatment Use: Not for use on agricultural establishments in hopper-box, planterbox, slurry-box or other seed treatment applications at or immediately before planting.

The U.S. Environmental Protection Agency requires the following statements on containers containing seed treated with Serenade ASO: • Store treated seed away from food and feedstuff

- Do not allow children, pets or livestock to have access to treated seeds.
- Treated seeds exposed on soil surface may be hazardous to wildlife.
- Cover spilled seed or collect spilled treated seeds from the soil surface spilled during loading, and planting (such as in row ends). • Dispose of all excess treated seed by burying seed away from bodies of water.

 - Dispose of seed packaging or containers in accordance with local requirements.

NON-AGRICULTURAL USE REQUIREMENTS

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

Keep unprotected persons from handling portions of harvested agricultural plants that have been treated until sprays have dried.

Note: This product does not contain dye and is not covered by an appropriate tolerance, tolerance exemption, or other clearance under the Federal Food, Drug and Cosmetic Act. To comply with 40 CFR 153 155, therefore, all seed treated commercially with this product must be colored with an EPAapproved dve or colorant of a suitable color to prevent accidental use as food for man or feed for animals.1

[Seed Treatment Use on Agricultural Establishments in hopper-box, planter-box, slurry-box or other seed treatment applications at or immediately before planting.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

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Exception: If the seed is treated with the product and the seed is soil injected or soil incorporated, the Worker Protection Standard, 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

waterproof gloves
 shoes plus socks

BASIC USE INFORMATION

Serenade ASO is a broad spectrum biofungicide seed treatment for the prevention, suppression and control of soil borne diseases that attack root systems. Serenade ASO enhances germination and plant growth by suppressing soil diseases such as those caused by *Rhizoctonia*, *Rythium*, *Eusanum*, *Aspergillus* and *Phytophthora*. Additionally, Serenade ASO has been shown to increase nodulation of nitrogen-fixing bacteria when used on many legumes.

INTEGRATED PEST MANAGEMENT (IPM)

Integrate Serenade ASO into an overall disease and pest management strategy whenever fungicide use is necessary. Follow practices known to reduce disease development. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.

Be sure use of this product conforms to resistance management strategies

USE RATE DETERMINATION

Carefully read and follow all label directions, use rates and restrictions. Prepare only the amount of product solution required to treat the amount of seed required. IMPORTANT: READ CONDITIONS FOR SALE AND WARRANTY BEFORE USE

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[For Commercial Seed Treatment: Serenade ASO as a seed treatment may be applied as a water-based slurry alone or with other registered seed treatment insecticides and fungicides through standard slurry or mist commercial seed treatment equipment.

[additional/alternate statement;

162

For Seed Treatment Use on Agricultural Establishments in hopper-box, planter-box, slurry-box or other seed treatment applications at or immediately before planting. Do not store excess treated seeds beyond planting time.]

For improved performance use Serenade ASO in a program with other registered fungicides for seed treatment.

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MIXING INSTRUCTIONS

all in the state of a state of a state MIXING: Serenade ASO may be mixed with other registered pesticides to enhance seed germination. This product cannot be mixed with any product with a prohibition against such mixing. When mixing Serenade ASO with other registered pesticides, always read and follow all use directions, restrictions, and precautions of both Serenade ASO and the mix partner(s). Use of the resulting mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates.

COMPATIBILITY: Do not combine Serenade ASO in the slurry with pesticides, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions.

The second states and the se Sec. F. < Record C Serenade ASO is compatible with many commonly used pesticides; but has not been fully evaluated with all of these. and a second second

For Use as a Seed Treatment:

To mix when using with other chemical insecticide or fungicide seed treatments: first add the chemical insecticides or fungicides to the slurry mix with approximately ½ of the required water. Slowly add the Serenade ASO to the slurry until a suspension is obtained. Add the remainder of the water and maintain continuous agitation. Do not store mixed slurries for more than 4 hours.

To mix when using only Serenade ASO seed treatment: Add ½ the required water to the slurry mix. Slowly add the Serenade ASO to the slurry until a suspension is obtained. Add the remainder of the water and maintain continuous agitation. Do not store mixed slurries for more than 4 hours.

See application rate tables for more detailed application instructions.

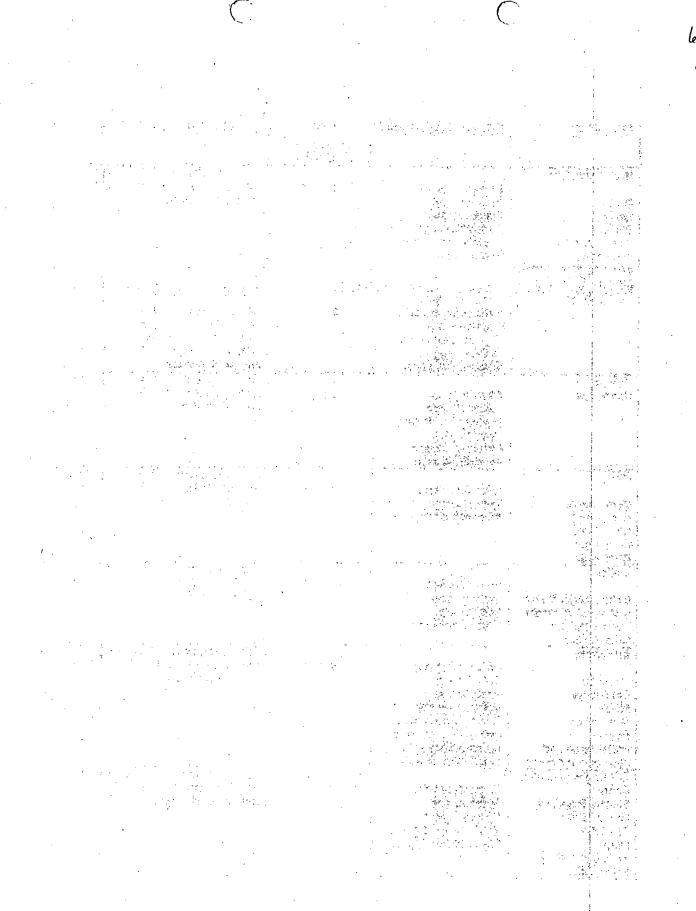
66/ 186

Application Ra	tes of Serenade ASO for	Seed Treatment F	or Select Agricultural Crops
	Disease Suppressed	Rate	Application Instructions
		fl oz per 100 lb	 A set of the set of
,		of seed	and the state of the second state of the second state of the
Artichoke			For suppression of seedling and
Artichoke	Pythium spp.	0.1 – 3	root diseases apply 0.1 to 3 fl.oz.
	Verticillium dahliae		per 100 lb of seed
	Vendoman damac		For suppression of seedling and
Asparagus	Eucorium con	0.1 – 3	
	Fusarium spp.	0.1-3	root diseases apply 0.1 to 3 fl oz per 100 lb of seed
	Phytophthora spp.	in a start and a	
Brassica			For suppression of seedling and
- · ·	Rhizoctonia spp.	0,1 – 3	root diseases apply 0.1 to 3 fl oz
Broccoli	Pythium spp.		per 100 lb of seed,
Cabbage	Fusarium spp.		
Cauliflower	Verticillium spp.		
Brussels Sprouts	Phytophthora spp.		
Collards	Sclerotinia spp:		A The water of the second states and the second
Kale	Plasmodiophora		
Mustard Greens	brassicae		· 着小 · · · · · · · · · · · · · · · · · ·
Kohlrabi	en de fan de la de la gegeneration de la de l La de la d	[* · · · · · · · · · · · · · · · · · ·	
and other brassica			
crops		a han an a	
Legume Vegetables			For suppression of seedling and
	Alternaria spp.	0.1 – 3	root diseases apply 0.1 to 3 fl oz
Beans Sprouts	Anthracnose spp.		per 100 lb of seed. For
Bean, Adzuki	Ascochyta Blight		improvement of anodulation by
Bean, Black	<i>Fusarium</i> spp.		Rhizobium, apply at 0.1 to 2 fl oz.
Blue Lake	Phytophthora spp.		per 100 lb of seed.
Bean, Broad	Pythium spp.		a that a state of a state of a state
Bean, Butter	Rhizoctonia spp.	and the second second	and the second
Bean, Cacao			n in the second seco
Bean, Dry			
Bean, Fava			
Bean, French			
Bean, Garden		and the second	
Bean, Garbanzo			
Bean, Green Bean, Kidney			and the second
Bean, Lima			
Bean, Mung	· ,		
Bean, Navy Bean, Pea			
Bean, Pigeon			
Bean, Pinto			· · · · ·
Bean, Red			
Bean, String			
Bean, Sugar			
Bean, Snap	(
and other fresh, dry,			
vine, fuel and forage			
legume vegetables			
grown for seed			· · · · ·

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67/ 86

Seed Crops	Disease Suppressed	Rate	Application Instructions
		fl oz per 100 lb	
e Este a sete a para del da canta da jete je daga da.	he man in a second star and a second star and	of seed	:
Bulb Vegetables			For suppression of seedling and
· · · · · · · · · · · · · · · · · · ·	Rhizoctonia spp.	0.1 – 3	root diseases apply 0.1 to 3 fl oz
Onion	Pythium spp.		per 100 lb of seed.
Garlic	Fusarium spp.		
Shallots	Verticillium spp.		
and other bulb	Phytophthora spp.		
vegetables	Phoma spp.		
including those grown			
for seed production		and the second	and and a second and and and and a second
Coffee Bean	Alternaria spp.		For suppression of seedling and
	Anthracnose spp.	0.1 – 3	root diseases apply 0.1 to 3 fl oz
· · ·	Fusarium spp.		per 100 lb of seed. For
· ·	Phytophthora spp.		improvement of nodulation by
	Pythium spp.		Rhizobium, apply at 0.1 to 2 fl oz
a mana and a constant when the first of the second second	Rhizoctonia spp		per 100 lb of seed.
Canola			For suppression of seedling and
Rapeseed	Alternaria spp.	0.3 –5	root diseases apply 0.3 to 5 fl oz
	<i>Fusarium</i> spp.		per 100 lb of seed.
	Leptosphäeria spp.		
	Pythium spp.		
	Rhizoctonia spp.		· · · · · · · · · · · · · · · · · · ·
an a	Sclerotinia spp.	<u> </u>	
Corn	.	00 F	For suppression of seedling and
Contract Of Statist	Fusarium spp.	0.2 – 5	root diseases apply 0.2 to 5 fl oz
Corn, Sweet	Pythium spp.		per 100 lb of seed
Corn, Feed Corn, Field	Rhizoctonia spp.		
Corn, Fuel			
Corn, Pop			
Cotton		· · · · · · · · · · · · · · · · · · ·	For suppression of and root
	Fusarium spp.	0.2 – 3	diseases, apply 0.2 to 3 fl oz per
Cotton, Short Staple	Pythium spp.		100 lb of seed.
Cotton, Long Staple	Phoma spp.		
Cotton, Upland	Rhizoctonia spp.	•	
Cotton, Pima		•	
Cucurbits			For suppression of seedling and
	Rhizoctonia spp.	0.1 – 5	root diseases apply 0.1 to 5 fl oz
Cucumber	Pythium spp.	, , -	per 100 lb of seed.
Cantaloupe	Fusarium spp.		
Mélon	Verticillium spp.		
Muskmelon	Phytophthora spp.		· · ·
Squash	Macrophomina spp.		· ·
Watermelon and	Acremonium spp.		· · · ·
other cucurbit crops	Thielaviopsis spp.		· ·
Fruiting Vegetables	e e e e e e e e e e e e e e e e e e e		For suppression of seedling and
Pepper	Rhizoctonia spp.	0.1 – 3	root diseases apply 0.1 to 3 fl oz
Tomato Eggplant	Pythium spp.	• •	per 100 lb of seed.
Ground Cherry	Fusarium spp.	· .	
Tomatillo	Verticillium spp.		
Okra	Phytophthora spp.		
and other fruiting			
vegetables			



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69/ /86

Send Crope	Disease Suppressed	Rate	Application Instructions
Seeu crups,	Phisease Suppressed	fl oz per 100 lb	
hand and the second	and the second	of seed	
Leafy Vegetables			For suppression of seedling and
	Rhizoctonia spp.	0.1 – 3 status	root diseases apply 0.1 to 3 fl oz
Lettuce	Pythium spp.	[per 100 lb of seed.
Celery	Fusarium spp.	. · · ·	
Spinach	Verticillium spp.	1	free Coler is a c
Parsley	Phytophthora spp.		
Radicchio	Phoma spp.	f.	in a state of the
and other leafy	Rhizomonas spp.		
vegetables crops	Sclerotinia spp		
including those grown		1 2 2 2	
for seed production			i e addina d'anna an
Legume Vegetable		14	For suppression of seedling and
Foliage	<i>Fusarium</i> spp.	0.1 – 3	root diseases apply 0.1 to 3 fl.oz
	Pythium spp.	,	per 100 lb of seed.
Vegetable, grain,	Rhizoctonia spp.	t ser a	
seed and pod, fodder		· · · ·	一般 小学 かん いい
and forage			
Legume Fuel	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		and the second
Grain Cereal Crops			For suppression of seedling and
Chain Ocicui Oropo	Cochliobus spp.	0.1 – 3	root diseases apply 0.1 to 3 fl oz
Amaranth, Grain	Fusarium spp.	0.0	per 100 lb of seed.
Sorghum, Grain	Pythium spp.		
Barley, Grain	Penicillium spp.		
Oat, Grain	Rhizoctonia spp		
Wheat, Grain	Stagonospora spp.		
Lupine Grain	Tilletia spp.		
4.	Ustilago spp.		
		· · ·	
4			
and the second s		· · · · · · · · · · · · · · · · · · · ·	
Peanut			For suppression of seedling and
A State of a	Aspergillus spp.	0.2 - 4.0	root diseases and for improvement
	Fusarium spp.		of nodulation by Rhizobium, apply
	Pythium spp.		0.2 to 4.0 fl oz per 100 lb of seed.
	Rhizoctonia spp.		
·	Rhizopus spp.	÷	
	Sclerotinia spp.		
Rice	OCIELOUIIIB SPD.		For suppression of seed diseases
NICE	<i>Fusarium</i> spp.	0.1 – 3	apply 0.1 to 3 fl oz per 100 lb of
Dias India-		0.1-3	
Rice, Indian	Helminthosporium		seed.
Rice, sweet	spp.		
Rice, waxy	Pythium spp.		
Rice, wild	Rhizoctonia spp.	- <u></u> ,	
Soybean			For suppression of seedling and
	Fusarium spp.	0.1 – 3	root diseases or improvement of
	Penicillium spp.		nodulation by Bradyrhizobium
	Pythium spp.		apply 0.1 to 3 fl oz per 100 lb of
]	Phytophthora spp.		seed.
	Rhizoctonia spp.		
i - <u></u>	Contraction of the second s	÷	ل <u>نہ جب جن میں میں میں میں میں میں میں میں میں میں</u>

70/

Seed Crops	Disease Suppressed	Rate fl oz per 100 lb of seed	Application Instructions
Sugarbeet	Aphanomyces spp. Fusarium spp. Pythium spp.	0.1 - 3	For suppression of seed diseases apply 0.1 to 3 fl oz per 100 lb of seed.
	Rhizoctonia spp	· · · · · · · · · · · · · · · · · · ·	
Sunflower	Fusarium spp. Pythium spp. Phytophthora spp. Plasmopara spp.	0.1 – 3	Eor supplession of seed diseases, apply 0.1 to 3 fl oz per 100 lb of seed.
	Rhizoctonia spp.		
Grass, Forage,			For suppression of seedling and
Fodder, Hay	<i>Fusarium</i> spp.	0.1 – 3	root diseases apply 0.1 to 3 fl oz
Deblogroph	Pythium spp.		per 100 lb of seed.
Bahiagrass Grass, Pasture,	Rhizoctonia spp.	:	An and the second second
Forage	·		
Grass, Pasture, Hay	, i		
Grass, Pasture, Silage			
Grass, Rangeland,	11		
Forage Grass, Rangeland, Hay			
Grass, Rangeland, Silage		·* • . ·	
Grass, Rangeland, Straw		1 ¹ 5 m (r	e tip i ta sun de la companya de la La companya de la comp
Savannah Grass, Straw		а. 	
Switch grass			
Sudan grass			

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Crops	Disease		Application Instructions
	Suppressed	fl oz per 100 lb	
		of seed	· · · · ·
Grass			For suppression of seedling and
	Fusarium spp.	0.1 – 3	root diseases apply 0.1 to 3 fl oz
Bluegrass	Pythium spp.		per 100 lb of seed.
Bentgrass	Rhizoctonia spp.		
Bermudagrass		зс.	Serenade ASO can be used for all
Dichondra		۰. ب	types of grass seeds including
Fescue			those produced for Turf, Sod,
Orchardgrass			Lawns, and Golf Courses.
Poa annua	- 1	ter a	
St. Augustine		· * *	
Rye grass			
Zoysia			and the state of the
Mixtures			
and other grass or		1.3	
ornamental turf seeds		· ·	
Animal Feed,		يەردى. ئەردى	and supplession of securing and
Nongrass	Fusarium spp.	0.1 – 3	root diseases apply 0.1 to 3 fl oz
	Pythium spp.	tele per te	per 100 lb of seed.
Alfalfa	Rhizoctonia spp.		for the second
Oil Seed Crops	land an a star was been been been been been been been bee	nite y	For suppression of seedling and
-	Rhizoctonia spp.	0.1 – 3	root diseases apply 0.1 to 3 fl oz
Canola	Pythium spp.		per 100 lb of seed.
Castor	<i>Fusarium</i> spp.	•	
Coconut	Verticillium spp.		· · · ·
Cotton	Phytophthora spp.	•	
Flax	Plasmodiophora		•
Oil Palm Olive	brassicae Thistada and		
	Thielaviopsis spp.		
Peanut Rapeseed			
Safflower			
Sesame			
Sunflower			
Soybeans		,	
and other oil seed			
Crops		۰.	
including those grown			
for seed production			
	· · · · · · · · · · · · · · · · · · ·		

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Application	Rates of Serenade ASO	for Seed Treatment	nt For Ornamental Crops
Crops	Disease Suppressed	Rate fl oz per 100 lb of seed	Application Instructions
Ornamental Plant Seeds Annual and Perennial Flower, Herb and other Vegetable Seeds	Alternaria spp. Anthracnose spp. Ascochyta rabiei Aphanomyces spp. Aspergillus spp. Fusarium spp.	0.1 - 10	For suppression of root disease, apply 0.1 to 10 fl oz per 100 lb of seed. Adjust rate accordingly to provide good coverage. Larger seeds, because of reduced surface area, require less product per 100 lb than smaller seeds.
Forestry Seeds	Leptosphäeria spp. Macrophomina spp. Phoma spp. Phytophthora spp. Pythium spp.		
· · · · · · · · · · · · · · · · · · ·	Rhizoctonia spp. Rhizopus spp. Sclerotinia spp. Sphacelotheca spp. Thielaviopsis spp. Ustilago spp. Verticillium spp.	•	

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

PESTICIDE STORAGE: Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use.

PESTICIDE DISPOSAL: To avoid wastes, use all material in this container by application according to label directions (If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER HANDLING: [For 2.5-gallon plastic containers] - Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows, Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ½ 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, a Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

[For 30-gallon plastic containers] - Nonrefillable container: Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ½ 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. Empty rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke:

[For 110-gallon or larger returnable mini-bulk containers] – Return empty container for reuse. Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank.⁴ Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or dispose of in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke:

[batch codes are sticker applied to the front panel of every label on every product container]

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product at once for a refund of the purchase price. By using this product, user or buyer accepts the following Conditions. Disclaimer of Warranties, and Limitations of Liability. These terms may only be modified by a written document signed by a duly authorized representative of Baver CropScience LP

(FOR SEED TREATMENT ONLY: Treatment of highly mechanically damaged seed, or seed of known low vigor and poor guality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small portion of seed before committing the total seed lot to a selected chemical treatment. Due to seed quality conditions beyond the control of Bayer GropScience LP, no claims are made to guarantee germination of carry-over seed.1

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions; presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer. and a state of the state

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP/S ELECTION, THE REPLACEMENT OF PRODUCT

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NET CONTENTS:

PRODUCED FOR

(PAPER) Baver CropScience

Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709 1-866-99BAYER (1-866-992-2937)



SUB-LABEL C

For Home and Garden Use

SERENADE[®] ASO

[Alternate Brand Name: Serenade® Garden Disease Control Concentrate]	
[Alternate Brand Name: Serenade® Garden Disease Control Ready to Spray]	
[Alternate Names for Turf Label when sold for hose-end sprayers:]	. 1
[Serenade® Garden Lawn Disease Control - Ready to Spray],	
[Serenade® Garden Turf Disease Control – Ready to Spray],	
[Serenade® Garden Lawn Disease Control],	
[Serenade® Garden Turf Disease Control],	
[Serenade® Garden Disease Control for Lawns - Ready to Spray]	
[Serenade® Garden Disease Control for Turf - Ready to Spray]	
[An Aqueous Suspension Biofungicide]	
[For Home and Garden Use][For Home, Garden and [Lawn] [(Tun)] Use]	Lagreen and Sydge and a
[Optional/Alternate Statement: "NOP Logo: For Organic Gardening"]	
[Optional/Alternate Statement: "NOP Logo: Can be Used for Organic Gardening"]	
["NOP Logo: For Organic Lawn Care"]	

QST 713 strain of Bacillus subtilis*	· · · · · · · · · · · · · · · · · · ·	1.34%
OTHER INGREDIENTS		
TOTAL:		100.00%
*Contains a minimum of 1 x 10 ⁹ cfu/g		

EPA Reg. No. 264-1152

EPA Est. No.:

KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577 For PRODUCT USE Information Call 1-877-229-3724

FIRST AID

IF INHALED:	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
Have the product con	Call a poison control center or doctor for further treatment advice. ainer or label with you when calling a poison control center or doctor or going for
treatment.	

[Reference Statement for Booklets: For FIRST AID STATEMENT, ADDITIONAL PRECAUTIONARY STATEMENTS and DIRECTIONS FOR USE: See Inside Booklet.]

[USE OF PRODUCT INDICATES ACCEPTANCE OF "CONIDTIONS FOR SALE AND WARRANTY"] Bayer CropScience LP

P.O. Box 12014, 2 T.W. Alexander Drive

Research Triangle Park, North Carolina 27709

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Harmful if inhaled. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

To protect the environment, do not allow pesticide to enter or run-off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run-off to water bodies or drainage,systems.

DIRECTIONS FOR USE

It is a violation of Federal law to use this production a manner inconsistent with its labeling. For use only as described on this label. Not for isolation or deformulation. Do not culture]

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BASIC USE INFORMATION

[Serenade ASO] [This product] [Alternate Statement: is a broad spectrum, preventative biofungicide recommended for the control of suppression of many important plant diseases.] [Alternate Statement: effectively controls or prevents a wide range of important fungal and bacterial plant diseases.] [Serenade ASO] It may be used on roses, vegetables, fruits, nuts, flowers, houseplants, foliage, trees, shrubs, lawns, turn, sod, and ornamental turn [located in residential landscapes] [located in residential interiorscapes] [located in residential greenhouses].

[Serenade ASO may be applied any time of day, in full sun and high temperatures; without stressing or burning foliage.]

Serenade ASO [This product] can be applied up to and on the day of harvest.] [Serenade ASO can be used on the day of harvest and on all fruits and vegetables used in canning.] [[IMPORTANT: READ CONDITIONS FOR SALE AND WARRANTY BEFORE USE

[QUICK FACTS] [READ THE LABEL FIRST!] [READ LABEL FIRST graphic]

Statistic Shop + 15.

WHEN TO USE

- For best results, treat prior to foliar disease development or at the first sign of foliar disease infection.
- Repeat at 7-day intervals or as needed.
- [Under conditions of high disease pressure.] [When environmental conditions favor rapid disease development (high humidity, excessive rain, extreme moisture condition, etc.), spray more often]
- [Alternate: shorten the spray interval].

BEFORE YOU USE

Read and follow these directions when using:

- Do not allow spray to drift from application site.
- [[For Pressurized Hand-Held Sprayer and Spray Trigger Bottle Use Only] Do not allow spray mixture to stand overhight or for prolonged periods.]

[FOR BEST RESULTS]

- [Shake Well Before Use.]
- [Spray to ensure thorough coverage.]
- [Repeat at 7-day intervals or as needed.]
- [Under conditions of high disease pressure,] [When environmental conditions favor rapid disease development (high humidity, excessive rain, extreme moisture condition, etc.), spray more often] [Alternate: shorten the spray interval].

[Specific Application Instructions in four groups as appropriate for the type of sprayer]

[Pressurized Hand-Held Sprayer and Spray Trigger Bottle] [Serenade ASO can be applied in commonly used pressurized hand-held sprayers and spray trigger bottles.]

HOW TO USE [Alternate statement: MIXING AND APPLICATION INSTRUCTIONS]

- Shake Well Before Use
 Fill sprayer or bottle with appropriate amounts of concentrate and water (use water only).
- Mix the spray solution thoroughly
- Keep spray solution agitated during application.

HOW MUCH TO USE

[For] Fruits, Vegetables, Nuts [(e. g. Apples/Pears, Broccoli, Carrot, Cherries, Cucurbits, Grapes, Leafy Vegetables, Onions/Garlic, Pepper, Tomato, and Walnuts)]

- 2 fl oz (¼ cup = 4 TBSP) to 4 fl oz (½ cup = 8 TBSP) of Serenade ASO per gallon of water.
- Spray plants to run-off, covering both top and bottom surface of foliage to ensure thorough coverage.

[For] [Annual and Perennial] Ornamental Plants, Flowers, Flowering Plants, Tropical Follage, Follage, Trees and Shrubs

- 2 fl oz (¼ cup = 4 TBSP) to 4 fl oz (½ cup = 8 TBSP) of Serenade ASO per gallon of water.
- Spray plants to run-off, covering both top and bottom surface of foliage to ensure thorough coverage.

[For] Lawns [, Turf, Sod and Ornamental Turf]:

- 2 fl oz (1/4 cup = 4 TBSP) to 8 fl oz (1 cup = 16 TBSP) of Serenade ASO per gallon of water.
- Apply at a rate of 1 gallon of spray solution per 1,000 square feet of lawn [or Turf, Sod and Ornamental Turf].

[Optional/Alternate: [For] Lawns [, Turf, Sod and Ornamental Turf]

- 1 fl oz (1/2 cup = 2 TBSP) to 4 fl oz (1/2 cup = 8 TBSP) of Serenade ASO per gallon of water.
- Apply at a rate of 2 gallons of spray solution per 1,000 square feet of lawn [or Turf, Sod and Ornamental Turf] (equivalent to 2 to 8 fl oz of Serenade ASO per 1,000 square feet of lawn [or Turf, Sod and Ornamental Turf]).]

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[Hose-End Sprayer] [Alternate statement: How To Use Hose-end Sprayer]

HOW TO USE APPLICATION INSTRUCTIONS

- Shake Well Before Use
- Follow hose end sprayer directions to determine how to fill, set dial, clean and disconnect from hose.
- Set dial on sprayer to deliver rates of Serenade ASO [this product] per gallon of water as directed below.

HOW MUCH TO USE

No mixing or measuring is needed. Dilutes automatically as you spray. Spray plants to run-off.

[For] Fruits, Vegetables, Nuts [(e. g. Apples/Pears, Broccoli, Carrot, Cherries, Cucurbits, Grapes, Leafy Vegetables, Onions/Garlic, Pepper, Tomato, and Walnuts)]

- Set sprayer to apply 2 fl oz (½ cup = 4 TBSP) to 4 fl oz (½ cup = 8 TBSP) of Serenade ASO per gallon of water.
- Spray plants to run-off, covering both top and bottom surface of foliage to ensure thorough coverage.

[For] [Annual and Perennial] Ornamental Plants, Elowers, Elowering Plants, Tropical Foliage, Foliage, Foliage, Trees and Shrubs;

- Set sprayer to apply 2 fl oz (½ cup = 4 TBSP) to 4 fl oz (½ cup = 8 TBSP) of Serenade ASO per gallon of water.
- Spray plants to run-off, covering both top and bottom surface of foliage to ensure thorough coverage.

[For] Lawns [, Turf, Sod and Ornamental Turf]:

- Set sprayer to apply 2 fl.oz (% cup = 4 TBSP) to 8 fl.oz (1 cup = 16 TBSP) of Serenade ASO per gallon of water.
- Apply at a rate of 1 gallon of spray solution per 1,000 square feet of lawn [or Turf, Sod and Ornamental Turf].

[Optional/Alternate: [For] Lawns [, Turf, Sod and Ornamental Turf]:

- Set sprayer to apply 1 fl oz (% cup = 2 TBSP) to 4 fl oz (½ cup = 8 TBSP) of Serenade ASO per gallon of water.
- Apply at a rate of 2 gallons of spray solution per 1,000 square feet of lawn [or Turf, Sod and Ornamental Turf] (equivalent to 2 to 8 fl oz of Serenade ASO per 1,000 square feet of lawn [or Turf,
- Sod and Ornamental Turf]).]

[Optional/Alternative: [Eor] Lawns [, Turf, Sod and Ornamental Turf]:

- Set sprayer to apply 2 fl oz (½ cup = 4 TBSP) to 4 fl oz (½ cup = 8 TBSP) of Serenade ASO per gallon of water.
- Apply one gallon of spray solution to thoroughly cover 500 square feet of lawn [or Turf, Sod and Ornamental Turf] (equivalent to 4 to 8 fl oz of Serenade ASO per 1,000 square feet of lawn [or Turf, Sod and Ornamental Turf]):]

[Optional/Alternative:: [For] Lawns [, Turf, Sod and Ornamental Turf]:

- Set sprayer to apply 1 fl oz (½ cup = 2 TBSP) to 2 fl oz (½ cup = 4 TBSP) of Serenade ASO per gallon of water.
- Apply one gallon of spray solution to thoroughly cover 250 square feet of lawn [or Turf, Sod and Ornamental Turf] (equivalent to 4 to 8 fl oz of Serenade ASO per 1,000 square feet of lawn [or Turf, Sod and Ornamental Turf]).]

[Hose-End Sprayer on Ready to Spray Bottle]

Note to Reviewer: These instructions will recommend either 4 fl oz or 5 fl oz of Serenade ASO applied depending upon the nozzle that is used. Nozzles are manufactured to deliver set volumes of product and cannot be altered by the consumer.]

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形式建筑出版设备中心

HOW MUCH TO USE

No mixing or measuring is needed. Dilutes automatically as you spray. [COVERAGE]

- IFor Lawns: Treats up to 5600 square feet: I(28 fl oz size)]
 - [Alternate Statement: Treats up to 6400 square feet [(32 fl oz size)]

HOW TO USE [APPLICATION INSTRUCTIONS] For Lawns [, Turf, Sod and Ornamental Turf];

- 1. Shake container well before using.
- Make sure the nozzle is in the "OFF" position with the safety tab in the valve notch. 2.
- Securely attach a garden hose to the hose-end spray nozzle, tightening nozzle, 3
- 4. Calculate the square feet of the area to be treated by multiplying length by width 4 [alternate text: 5] fl oz of Serenade ASO - will treat 1000 square feet of lawn [, Turf; Sod and Ornamental Turf]
- Turn on water at faucet. Extend hose to the farthest area to be treated and work backward toward. 5 the faucet.
- To begin spraying, point nozzle at the lawn [, Turf, Sod and Ornamental Turf] to be treated and bend the safety tab back while turning the dial clockwise. The water will automatically start mixing and 6. spraving. Walk backwards at a steady pace sweeping the sprav in an overlapping motion to cover. the area to be treated. Refer to the sight gauge on the side of the bottle to guide coverage (example: When 1 fl oz of [Serenade ASO] [this product] has been used, you should have covered 200. [Alternate text: 250] square feet of lawn [, Turf, Sod and Ornamental Turf]).
- 7. To turn the sprayer off, turn the dial in the opposite direction (counter-clockwise) until the water stops flowing and the safety tab engages. Turn the water off at the faucet. To relieve pressure before detaching sprayer, bend the safety tab back and turn the dial on (clockwise) until the water stops spraying. Then, turn the dial back to the off position until the safety tab engages.
- 8. Detach the hose-end sprayer from the hose and store unused product in a cool, dark place until its next use.

[Hose-End Spraver on Ready to Sprav Bottle]

Note to Reviewer: This nozzle is calibrated to deliver 2 - 4 fl oz of Serenade ASO per gallon of spray solution applied. and the second s

HOW MUCH TO USE

No mixing or measuring is needed. Dilutes automatically as you spray.

Spray plants to run-off.

[COVERAGE]

RAGE] [For other Uses:], Makes up to 14 gallons finished spray [(28 fl oz size)]

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[Alternate Statement: Makes up to 16 gallons finished spray [(32 fl oz size)]

HOW TO USE [APPLICATION INSTRUCTIONS]

[For] Fruits, Vegetables, Nuts [(e.g. Apples/Pears, Broccoli, Carrot, Cherries, Cucurbits, Grapes Leafy Vegetables Onions/Garlic, Pepper, Tomato, and Walnuts)] [Annual and Perennial] Ornamental Plants; Flowers, Flowering Plants, Tropical Follage, Follage, Trees and Shrubs:

- Shake container well before using
 Make sure the nozzle is in the "OFF" position with the safety tab in the valve notch.
- Securely attach a garden hose to the hose-end spray nozzle, tightening nozzle 3.
- Turn on water at faucet 4

- 5. To begin spraying, point nozzle at the area to be treated and bend the safety tab back while turning the dial clockwise. The water will automatically start mixing and spraying.
- Spray plants to run-off, thoroughly covering both top and bottom surface of foliage to ensure thorough coverage, sweeping the spray in an overlapping motion to cover the area to be treated.

To turn the sprayer off, turn the dial in the opposite direction (counter-clockwise) until the water **7**. stops flowing and the safety tab engages. Turn the water off at the faucet. To relieve pressure before detaching sprayer, bend the safety tab back and turn the dial on (clockwise) until the water stops spraying. Then, turn the dial back to the off position until the safety tab engages.

à. Detach the hose end sprayer from the hose and store unused product in a cool, dark place until. its next use.

ALTERNATE STATEMENT: WHERE TO USE: VEGETABLES; FRUITS; NUTS; FLOWERS FOLIAGE, TREES, AND SHRUBS]

ALTERNATE STATEMENT: USE SITES: VEGETABLES, FRUITS, NUTS, FLOWERS, FOLIAGE, TREES, AND SHRUBS]

[SERENADE ASO] [MAY BE USED ON [THE FOLLOWING]] والمواد والجارية والمجلجة الموجوب أستاه وزرار [Alternate: VEGETABLES; FRUITS, NUTS, FLOWERS, FOLIAGE AND ORNAMENTAL PLANTS] [Alternate: [PLANTS] [SITES]] and the open set

[HOME and GARDEN] [VEGETABLE[S], FRUIT[S] AND NUT[S] PLANTS:1 Artichoke, Asparagus

Berries (Blueberry, Blackberry, Raspberry, Loganberry, Huckleberry, Cranberry, Gooseberry, Elderberry, Currant, and other berries)

4. 1. 1. 1. 1. 1. - Berry Lines

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Brassica Leafy Vegetables (Broccoli, Cabbage, Cauliflower, Brussels Sprouts, Collards, Kale, Mustard Greens, Kohlrabi and other brassica leafy vegetables)

Bulb Vegetables (Onion, Garlic, Shallots and other bulb vegetables)

Citrus Fruit (Orange, Grapefruit, Lemon, Tangerine, Tangelo, Pummelo and other citrus fruit) Cucurbit Vegetables (Cucumber, Cantaloupe, Melon, Muskmelon, Squash, Watermelon and other

cucurbit vegetables) Fruiting Vegetables (Pepper, Tomato, Eggplant and other fruiting vegetables)

Grape, Herbs and Spices, Hop

Leafy Vegetables (Lettuce, Celery, Spinach, Parsley, Radicchio and other leafy vegetables) Legume Vegetables (Beans, Green Beans, Snap Beans, Shell Beans, Dry Beans, Garbanzo Beans, Lima Beans, Peas, Chick Peas, Split Peas, Lentils and other legume vegetables).

Mango, Mint, Olive, Papaya, Peanuts Pome Fruit (Apple: Crabapple: Pear: Quince: Mayhaw and other pome fruit) Root and Tuber Vegetables (Carrot, Potato, Sweet Potato, Beets, Ginger, Horseradish, Radish, Ginseng, Turnip and other root and tuber vegetables)

Stone Fruit (Apricot, Cherry, Nectarine, Peach, Plum; Prune and other stone fruit) Strawberry, Sweet Corn, Tobacco, Watercress

Tree Nuts (Almond, Pistachio, Pecan, Walnut, Filberts, Chestnut, Cashew, Beechnut, Butternut and other tree nuts)

[[RESIDENTIAL] GREENHOUSE PLANTS:]

[Brassica Leafy Vegetables (Broccoli, Cabbage, Cauliflower, Brussels Sprouts, Collards, Kale, Mustard Greens, Kohlrabi and other brassica leafy vegetables) Bulb Vegetables (Onion, Garlic, Shallots and other bulb vegetables)

Cucurbit Vegetables (Cucumber, Cantaloupe, Melon, Muskmelon, Squash, Watermelon, and other cucurbit vegetables) Fruiting Vegetables (Pepper, Tomato, Eggplant and other fruiting vegetables)

Herbs and Spices

Leafy Vegetables (Lettuce, Celery, Spinach, Parsley, Radicchio and other leafy vegetables) Root and Tuber Vegetables (Carrot; Potato; Sweet Potato, Beets, Ginger, Horseradish, Radish, Ginseng, Turnip and other root and tuber vegetables) n felo ser en en felo ser la policita en la policita policita de la presenta de mentera de meses La policita de la poli Strawberry]

[ORNAMENTALS, TREES, FOLIAGE, SHRUBS, FLOWERS, FLOWERING PLANTS, TROPICA PLANTS:]

[Roses]

Spireal

[Other Ornamentals, Trees, Shrubs, Foliage, Flowers, Flowering Plants, Tropical Plants, including any or [Other Omamentals, Trees, Shrups, Foliage, Flowers, Flowering Flaus, Flowering, Flowerit

[PLANTS EVALUATED FOR PHYTOTOXICITY]

[Annual and Perennial Flowering PI	ante 1/2 · · · · · · · · · · · · · · · · · · ·
Alyssum Asters	
Chrysanthemum	Cyclamen Dianthus Dwarf Bee-Balm
Easter Lily Garden Phlox	Geraniums Gerbera Golden Star
Hydrangea Impatiens	Kalanchoe Linaria Lisianthus Lobelia
Marigolds Orchids	Pansies Pétunia Poinséttia Portulaca
3	
Ranunculus Roses	Salvia spp. Snapdragons Stock
Verbena spp. Vinca	Violas Zinnias)
[Tropical Foliage:] [Aglaonema Dieffenbachia	Dracaena spp. English Ivy
	Crothinhullium]
Hibiscus Leatherleaf Fern	Spathiphyllum]
[Trees and Shrubs:]	n in the state of the state in the second state of
[Azalea Boxwood Crape Myrtle	Dogwood
Gumpo Azalea Indian Hawtho	
Ligustrum japonicum Lilac	Loropetalum
Photinia Rhododendro	しょうしん 解剖 ふうし 一般 二人物 雪 はっぱ かいようえい しゃくしん しっぱい しんしゅう しゃくみんせんえいえい かがん ね

[ORNAMENTALS, TREES, FOLIAGE, SHRUBS, FLOWERS, FLOWERING PLANTS, TROPICAL PLANTS:]

Optional Statement: Some pesticides can cause phytotoxic effects, ranging from slight burning or browning of leaves to distorted leaves, fruit, flowers or stems. Damage symptoms may vary with the type of plant that has been treated. It is impossible to test all plants for phytotoxicity. To assure that the plants. to be treated are not sensitive to the treatment, apply a small amount of the highest application rate of the. product to a few leaves or the above ground portion of a plant and check within 3 days for signs of phytotoxicity. Use product according to label directions.]

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DISEASES CONTROLLED [OR SUPPRESSED] [OR PREVENTED] [BY SERENADE ASO] [ON VEGETABLES, FRUITS, NUTS, ORNAMENTAL PLANTS, TREES, SHRUBS, FOLIAGE, FLOWERS, FLOWERING PLANTS, TROPICAL PLANTS] [Alternate: [ON PLANTS] [SITES]] Anthracnose [(Colletotrichum spp.)] Bacteria [(Envinia(spp.; Pseudomonas spp.; Xanthomonas spp.)] Bacterial Leaf Blight [(Xanthomonas campestris)] Bacterial Speck [(Pseudomonas syringae pv. tomato)] Bacterial Speck [(r:seudomoras symgae.jv::tomato)]; Bacterial Spot [(Xanthomonas spp.)] - suppression Bean Rust [(Uromyces appendiculatus)]:- suppression Black Mold [(Alternaria alternata)] Black Rot/Black Crown Rot [(Alternaria spp.)] Black Spot [of Rose] [(Diplocarmon rosea)] Black Spot [of Rose] [(Diplocarpon rosea)] Botrytis [(Botrytis spp.)] eranti sua Botrytis Leaf Blight [(Botrytis squamosa)] Botrytis Neck Rot [(Botrytis spp.)] Downy Mildew [(Bremia lactucae, Peronospora spp., and Plasmopara viticola)] - suppression. Early Blight [(Alternaria solani)] - suppression Fire Blight [(Erwinia amylovora)] - suppression and a transfer to a s Grav Mold [(Botrytis cinerea)] Greasy Spot [(Mycosphaerella citri)] - suppression The state of the second second second Late Blight [(Phytophthora infestans)] = suppression. Leaf Spots ((Alternaria spp., Cercospora spp., Entomosporium spp., Helminthosporium spp., Myrothecium spp., Septona spp.)] Onion Downy Mildew [(Peronospora destructor)]: Onion Purple Blotch [(Alternaria porri)] Phytophthora spp. Phytophthora spp. Pin Rot [(Alternaria/Xanthomonas complex)] - suppression 建装装 编合性的 Powdery Mildew [(Uncinula necator, Erysiphe spp., Sphaerotheca spp., Oidiopsis taurica, Leveillula taurica, Podosphaera leucotricha, Oidium spp., Podosphaera spp.)] Rust [(Puccinia spp.)] Scab [(Venturia spp.)] - suppression Sclerotinia Head and Leaf Drop [(Sclerotinia spp.)] Sour Rot REAL STRATES CONTRACTOR STRATES AND A REAL STRATES Target Spot [(Corynespora cassiicola)] $-\frac{1}{2}$ (1,1) (2)Walnut Blight [(Xanthomonas campestris)] White Mold [(Sclerotinia sclerotiorum)] - suppression Start Start A the second second of the second of the second second of the second of the second of the second of the second Le hard and a star

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LAWNS [TURF] [, SOD] [AND ORNAMENTAL TURF]:

Bluegrass, Bentgrass, Bermudagrass, Dichondra, Fescue, Orchardgrass, Annual Bluegrass (*Poa annua*), St Augustine, Ryegrass, Zoysia, Mixtures and other grasses or ornamental turf.

DISEASES CONTROLLED [OR SUPPRESSED] [OR PREVENTED] [BY SERENADE ASO] [ON LAWNS] [, SOD] [,TURF] [AND ORNAMENTAL TURF]]

Lawn [and Turf[, Sod]] Diseases:

Brown Patch [(Rhizoctonia solani)]

Dollar. Spot [(*Lanzia* spp., *Moellerodiscus* spp., formerly Sclerotinia homeocarpa)] Powdery Mildew [(*Erysiphe ğraminis*)] Rust [(*Puccinia* spp.)] Anthracnose [(*Colletotrichum graminicola*)] Red Thread [(*Laetisaria fuciformis*)] Fairy Ring [(Various *Basidiomycetes*)] Gray Snow Mold, Typhula Blight [(*Typhula* spp.)] Pink Snow Mold, Fusarium Patch [(*Microdochium nivale*)] Pythium Blight [[(*Pythium aphanidermatum*)] [(*Pythium* spp.)]]

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container only. [Alternate: in an area inaccessible to children] [or Alternate: out of reach of children]. Keep container closed when not in use. Store at room temperature.

PESTICIDE DISPOSAL AND CONTAINER HANDLING:

Nonrefillable container. Do not reuse or refill this container.

If empty:

Place in trash or offer for recycling, if available.

If partly filled:

Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

[batch codes are sticker applied to the front panel of every label on every product container]

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use. Conditions: Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions: Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Bayer CropScience LP. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use of application. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained nerein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE; SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER. CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

NET CONTENTS:



PRODUCED FOR

Bayer CropScience

Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709 1-866-99BAYER (1-866-992-2937)

Serenade ASO (PENDING) 11/20/13, 05/28/2014

[Attacks over 40 diseases] [Attacks both fungal & bacterial diseases] [Apply any time of day] [Will not burn or injure [leaves] [or [lawns] [(turf)] [sod]] [Fungicide (or Biofungicide) that attacks harmful garden and lawn diseases]

[[For] Use on Roses, Vegetables, Fruits, Flowering Plants, Trees, Shrubs and Lawns [(Turf)] [Sod]]

[Controls Powdery Mildew, Rust, Gray Mold [and other listed diseases]]"

[Suppresses Black Spot, Late Blight, Scab [and other listed diseases]]

[Concentrate] [Same active ingredient used by farmers]

[Effectively controls or prevents a wide range of fungal and bacterial plant diseases]

[Promotes healthier gardens]

[Prevents and controls harmful garden diseases] [Powered by BAYER]

[Optional Claims for Lawn and Turf Label:]

[Prevents and controls harmful (major) lawn diseases (including Brown Patch, Dollar Spot, Red Thread)] [Controls Brown Patch, Dollar Spot and other listed [common] lawn diseases] [Use on all lawns to prevent and control major lawn diseases]

[Promotes healthy, disease-free lawns] ["Easy,[.][!] Attach Hose and Spray.[[]"].

[Same active ingredient used on golf courses] [Promotes Greener, Healthier Lawns] [Promotes greener, healthy, disease-free lawns] [Easy to use]

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