69592-11 05/07/2007 1|40

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060

United States
Environmental Protection Agency
Washington, DC 20460

[ ] Registration
[ ] Amendment
[XX] Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
69592-11	Sheryl Rielly	[X] None [ ] Restricted
4. Company/Product (Name)	**PM#**	
Serenade MAX	BPPD 7511	

5. Name and Address of Applicant *(Include ZIP Code)*

Agraquest, Inc.
1530 Drew Avenue.
Davis, CA 95618

[ ] *Check if this is a new address*

6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:
EPA Reg. No. NA
Product Name NA

Section - II

[ ] Amendment - Explain below.
[ ] Resubmission in response to Agency letter dated _____
[X] Notification - Explain below.
[ ] Final printed labels in reponse to Agency letter dated _____
[ ] "Me Too" Application.
[ ] Other - Explain below.

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

Notification of revisions to master label as per PR Notice 98-10. Notification of adding a Pest, change in labeling statement, and change in directions for use that do not affect the use rates.

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

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
[ ] Yes [X] No	[ ] Yes [X] No	[ ] Yes [X] No	[ ] Metal [ ] Plastic [XX] Glass [XX] Paper [XX] Other (Specify) Poly bag with liner
* *Certification must be submitted*	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
[X] Label [ ] Container	1, 2, 4, 6, 12, 24 up to 1000 lbs, 1, 5, 10 kg	Cont.

6. Manner in Which Label is Affixed to Product: Paper glued/peal back
[ ] Lithograph [ ] Paper glued [ ] Stenciled [X] Other: Label Directions are on the container.

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Sherry D. Heins	Product Registration Specialist	530-750-0150 ext. 26

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature	3. Title	4. Typed Name	5. Date
Sherry D. Heins	Product Registration Specialist	Sherry D. Heins	07 March 2007

NOTIFICATION
Date Reviewed: 5-7-07
Reviewed By: S Gaul

EPA Form 8570-1 (Rev. 3-94) Previous editions are obsolete. White - EPA File Copy (original) Yellow - Applicant Copy

AgraQuest, Inc.

1530 Drew Avenue
Davis, CA 95616-6320
tel. 530.750.0150
fax. 530.750.0153
agraquest@agraquest.com
www.agraquest.com

Innovative natural product solutions for pest management

March 07, 2007

Ms. Susanne Cerrelli
Regulatory Action Leader

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
One Potomac Yard, 4th Floor, Room S-4900
2777 South Crystal Drive
Arlington, VA 22202-4501

Subject: Submission of revised master label by Notification: Serenade MAX, EPA Reg. No. 69592-11.

AgraQuest, Inc. hereby submits the attached revised master label to bring further harmony between the Serenade MAX and Serenade ASO EPA master labels. Several of the minor wording changes in the chemigation instructions and Home and Garden sub-label optional statements are a direct result of the dialogue between EPA and AgraQuest as we complete updating of the product labels. As per PR Notice 98-10 the changes submitted fall into three categories; adding a pest, change in labeling statements, and change in directions for use that do not affect the use rates.

The changes are summarized as follows;

1. Page 1- adds "storage & disposal instructions" to the optional statements.
2. Page 2 – add "only" and "or other experts" as per your Jan 31 2007 letter concerning Serenade, EPA Reg. No. 69592-7.
3. Page 12, 13, 14, 16, 18, 19 & 22 – modified application instructions to either use higher rates with increased disease pressure or to use product with another pesticide. Some disease control claims have been modified to suppression. All of these statements are consistent with the Serenade ASO master label, EPA Reg. No. 69592-12, directions for use.
4. Page 14- common name for White mold- Sclerotinina Stem Rot added.
5. Page 16- Bull's Eye Rot, *Neofabraea* spp. added to the Pome fruit crop group.
6. Page 19 -and other tree nut crops already on the label; added macadamia nut which is found in the EPA crop listings for tree nuts; §180.41.

7. Page 29- Gray Leaf Spot- *Pyricularia grisea* has been added to the Turf section.
8. Page 32- Optional statements have been modified to remove the words "and more".

Enclosed you will find the following documents:

1. EPA Form 8570-1.

2. 2 copies of the revised label- one with changes highlighted.

3. A stamped, self-addressed postcard identifying the notification and EPA Registration number of the product.

I can be reached at the numbers below should you have questions regarding this submission.

Sincerely,

Sherry D. Heins
Product Registration Specialist
AgraQuest, Inc.
Phone: 530-750-0150-26
FAX: 530-750-0153
sheins@agraquest.com

69592-11 ack card 4/40

NOTIFICATION REVIEW COORDINATOR- CHECK LIST

1) BPPD Coding Form attached ? ☐ YES ☐ NO
(No- get one from front desk or create bean with PRATS. using Action code 332)

2) The following conditions **must** be met:

a) **8570-1 form complete** including the certification statement verbatim from PR Notice 98-10.
b) **ALL Changes to label are identified.** Registrant should have described all changes to the label on 8570-1 form or letter, and preferably highlighted changes on label.
c) **The changes make sense.** If you have questions check with RAL, Susanne, Jim, Willie or Branch Chief.
d) **Advisory statements are not modified.** Advisory statements can not be made by notification
e) **ALL of the requested changes to the label are covered by PR Notice 98-10** -The table on the end of 98-10 is helpful for finding pertinent sections
f) **The labeling changes conform with latest version of the Label Review Manual.**

If any of the above conditions for item 2 are not met. :

a. Inform RAL of problem.
b. Provide RAL Rejection form letter.
c. Log action out of PRATS.

.....

If all of the above conditions for item 2 are met, continue...

3) If a product name change was submitted:
a) Check REFS - to make sure name not taken
b) Make sure- new name does not present questionable claims (Eg. "Natural Golden Oil", or "No More Rats".)- Consult Label Review Manual. (Chap. 12) See RAL if not sure.

4) If use sites are being deleted
-Contact Jim Hollins of ISB/IRSD. Use site deletions may require Federal Register notice before label can be approved.

5) If label notification is **acceptable**:
a) STAMP submitted label and 8570-1 form with "NOTIFICATION dated____", insert date and your initials.

b) File notification material in file jacket.
c) Log action out of PRATS . If no response required, enter "37" as PRAT response

Serenade® MAX™

A Wettable Powder 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, NURSERIES, SHADE HOUSES, LANDSCAPES, INTERIORSCAPES, SEEDLING PRODUCTION SITES, FOREST SEEDLING PRODUCTION SITES.]

[USE IN TANK MIXES OR ROTATIONAL ALTERNATING SPRAY PROGRAMS WITH OTHER CROP PROTECTION PRODUCTS]

[USE IN RESISTANT MANAGEMENT PROGRAMS]

[USE GROUND, AERIAL, CHEMIGATION AND HAND APPLIED EQUIPMENT]

[FOR AGRICULTURAL USE]

[FOR USE ON ORNAMENTALS, TREES, SHRUBS, TURF, LAWNS, SOD, GOLF COURSES (GREENS, TEES, FAIRWAYS AND ROUGHS), SEEDLINGS, CONIFERS]

[USE IN PRODUCTION OF CONIFERS FOR REFORESTATION]

ACTIVE INGREDIENT

QST 713 strain of dried *Bacillus subtilis*	14.6%
OTHER INGREDIENTS	. . . . . 85.4%
Total	.100.0%

Contains a minimum of 7.3 x 10^9 cfu/g

EPA Reg. No. 69592-11

EPA Est. No.:

1	2	3	4	5
69592-	67545-	66728-	37429-	69592-
MEX-1	AZ-1	GA-2	GA-2	CA-1

Superscript corresponds to last digit of lot number stamped on container

U.S. Patent Nos. 6,060,051, 6,103,228, 6,291,426, and 6,417,163 on QST 713 strain of *Bacillus subtilis*

Net weight: [1 or 2 or 4 or 6 or 12 or 18 or 24 or 1000 lbs. or 1 or 5 or 10 kg]

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID – Agricultural Use

IF ON SKIN: **Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.**

IF IN EYES: **Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.**

IF 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. Have the product label with you when calling a poison control center or doctor.**

[See attached label booklet for First Aid, Precautionary Statements and Directions for Use.]

[Peel back tab for First Aid and Precautionary Statements, Storage & Disposal Instructions and Directions for Use.]

PRECAUTIONARY STATEMENTS– Agricultural Use

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Harmful if inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- **Long-sleeved shirt and long pants**
- **Waterproof gloves**
- **Shoes plus socks**
- **NIOSH approved respirator with any N. P, R or HE filter.**

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 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, the handler PPE requirements may be reduced or modified as specified in the WPS.]

USER SAFETY RECOMMENDATIONS

Users should:
Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
Remove clothing/PPE immediately if pesticides get 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– Agricultural Use

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 washwaters or rinsate. Do not apply when weather conditions favor drift or runoff from treated areas.

For Agricultural U NOTIFICATION

Date Reviewed: 5-7-2007

Reviewed By: Suzanne Cote

DIRECTIONS FOR USE – Agricultural Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

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 emergencies such as leaks or spills, call 24-hour toll-free CHEMTREC hotline at 1.800.424.9300.

AGRICULTURAL USE REQUIREMENTS

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

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

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

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.

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 green houses.

Post harvest treatment of commodities do not fall within the scope of the WPS. PPE for applicators and handlers of treated commodities; waterproof gloves. Keep unprotected persons from handling commodities until sprays have dried.

STORAGE AND DISPOSAL – Agricultural Use

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

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

PESTICIDE DISPOSAL: **Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water when disposing of equipment rinsate.**

CONTAINER DISPOSAL:

For 1000 lb. bulk bag with liner: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If burned stay out of smoke. Return empty bulk bag to manufacturer for reuse. If bulk bag is contaminated and cannot be reused, dispose of in the same manner as liner.

For all other agricultural use containers: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

GENERAL USE INFORMATION– Agricultural Use

Serenade MAX is a broad spectrum, preventative product for the control or suppression of many important plant diseases. Serenade MAX may be applied as a foliar spray alone, in alternating spray programs or in tank mixes with other registered crop protection products. When conditions are conducive to heavy disease pressure, use Serenade MAX in a rotational program with other registered fungicides. Serenade MAX may be applied with spray equipment commonly used for making ground or aerial applications and sprinkler/irrigation systems commonly used for chemigation. Serenade MAX can be used for organic production.

[OPTIONAL STATEMENT: Serenade MAX is most effectively used in a preventive disease management program. For improved performance use Serenade MAX in a tank-mix or rotational program with other registered fungicides. When using Serenade MAX alone for the first time a rate of 2 lbs. per acre is recommended. Depending upon disease pressure the rate can be increased and/or spray intervals decreased. To enhance performance it is recommended that a surfactant [such as Biotune], known to be safe to the target crop, be added to the spray tank to improve penetration and coverage of above-ground portions of the plant.]

INTEGRATED PEST MANAGEMENT (IPM)

Integrate Serenade MAX 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 – Agricultural Use

Carefully read and follow all label directions, use rates and restrictions. Serenade MAX should be applied prior to or in the early stages of disease development. Use maximum label rates and shortened spray intervals for conditions conducive to threatening or rapid disease development. For proper application, determine the number of acres to be treated, the recommended 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 equipment calibration is essential prior to use.

PREHARVEST INTERVAL – Agricultural Use

Serenade MAX can be applied up to and including the day of harvest.

APPLICATION INSTRUCTIONS – Agricultural Use

GENERAL: Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather–related factors determine 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. Note: This section is advisory in nature and does not supersede the mandatory label requirements.

GROUND: Be sure to maintain agitation during mixing and application to assure uniform product suspension. Thorough coverage of all foliage is essential for effective disease control. Serenade MAX can be applied in commonly used ground equipment, hose-end, pressurized, greenhouse and hand-held sprayers. To achieve good coverage use proper spray pressure, gallonage per acre, nozzles, nozzle spacing and ground speed. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration.

AERIAL: This product can be applied by aerial application. Refer to the Aerial Drift Reduction Advisory Information section of this label for general directions and precautions. Use the application rate indicated for the appropriate crop in sufficient water to achieve thorough coverage, or a minimum of 3 gallons of water per acre.

CHEMIGATION: This product can be applied through sprinkler or drip type irrigation systems , including a center pivot, lateral move, end tow, side wheel roll, traveler, solid set, and hand move. Refer to the Chemigation Directions for Use section of this label for general directions and precautions. Use the application rate indicated for the appropriate crop as specified in the Use Recommendations section of this label.

MIXING INSTRUCTIONS – Agricultural Use

MIXING: Serenade MAX must be diluted with water for Spray applications and may be used in spray equipment commonly used for making ground applications. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of Serenade MAX to the tank. Finish filling the tank to the desired 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 MAX may be tank mixed with other registered pesticides to enhance plant disease control. Do not exceed recommended dosage rates. This product cannot be mixed with any product with prohibition against such mixing. Use of the resulting tank mix must be in accordance with the more restrictive label limitations and precautions.

COMPATIBILITY: Do not combine Serenade MAX 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 MAX is compatible with many commonly used pesticides, fertilizers, adjuvants and surfactants but has not been fully evaluated with all of these. To ensure compatibility of tank-mix combinations they should be evaluated 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 MAX 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 [such as Biotune™] to spray tank.

CHEMIGATION DIRECTIONS FOR USE

General Requirements:

1) **Apply this product only through sprinkler or drip type irrigation systems including center pivot, lateral move, end tow, side wheel roll, traveler, solid set or hand move 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.**
3) **Ensure that the irrigation system used is properly calibrated and if you have questions, call the State Extension Service specialists, the equipment manufacturer 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.

Equipment Requirements:

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 25 individuals daily at least 60 days throughout the year.
2) Chemigation systems connected to the public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply 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 outlet end of the fill pipe and the top of the overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3) 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.
4) The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back towards the injection pump.
5) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
6) 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
7) 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.
8) 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 filled with a system interlock.
9) Do not apply when wind speed favors drift beyond the area intended for treatment

Application Instructions:

1) 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 product to lose effectiveness or strength.
2) Do not combine Serenade MAX 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 MAX has <u>not</u> been fully evaluated for compatibility with all adjuvants or surfactants. It is advisable to conduct a spray compatibility test if mixture with adjuvants or surfactants is planned.

Center-pivot, Lateral Move, End Tow, and Traveler Irrigation Equipment (Use only with electric or oil hydraulic drive systems which provide a uniform water distribution):

- Determine size of area to be treated.
- 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 recommended by the equipment manufacturer. Run system at 80 to 95% of manufacturer's rated capacity.
- Using only water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Serenade MAX fungicide required to treat area.
- Add required amount of Serenade MAX fungicide and sufficient water to meet the injection time requirements of the solution tank.
- Maintain constant solution tank agitation during the injection period.
- Stop injection equipment after treatment is completed. Continue to operate the system until Serenade MAX fungicide solution has cleared the sprinkler head.

Solid-set, Side (wheel) Roll, and Hand Move Irrigation Equipment:

- Determine acreage covered by sprinkler.
- Fill injector solution tank with water and adjust flow rate to use contents over a 10- to 30-minute interval.
- Determine the amount of Serenade MAX fungicide required to treat area.
- Add the required amount of Serenade MAX fungicide into the same quantity of water used to calibrate the injection equipment.
- Maintain constant solution tank agitation during the injection period.
- Operate system at normal pressures recommended by the manufacturer of the injection equipment and used for the time interval established during calibration.

- Inject Serenade MAX fungicide at the end of the irrigation cycle or as a separate application to maximize foliar fungicide retention.
- Stop injection equipment after treatment is completed. Continue to operate the system until Serenade MAX fungicide solution has cleared the last sprinkler head.

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

General: Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed. Note: This section is advisory in nature and does not supersede the mandatory label requirements.

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 reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

CONTROLLING DROPLET SIZE: Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Pressure -Do not exceed the nozzle manufacturer's recommended 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. # of Nozzles - Use the minimum number of nozzles that provide uniform coverage. Nozzle Orientation - 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. Nozzle Type - 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 oriented straight back produce the largest droplets and the lowest drift.

BOOM WIDTH: For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use upwind swath displacement and apply only when wind speed is 3 -- 10 mph as measured by an anemometer. Use medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy.

APPLICATION HEIGHT: Do not make application at a height greater than 10 feet above the top of the largest plants 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.

SWATH ADJUSTMENT: When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up 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: Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. 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, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

CONDITIONS FOR SALE AND WARRANTY

AgraQuest warrants to those persons lawfully purchasing this product that at the time of the first sale of this product by Seller that this product conformed to its description and was reasonably fit for the purposes stated on the label when used in accordance with Seller's directions. Buyers and users of this product assume the risk of any use contrary to such directions. EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESS REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO. Except to the extent prohibited by applicable law, AgraQuest offers this product with the following conditions: 1) buyers and users of this product assume the risk of any storage, handling or use contrary to AgraQuest's label and directions and 2) AgraQuest's liability shall in no case exceed the purchase price of the applicable AgraQuest product.

Serenade® is a registered trademark of AgraQuest.

Made in Mexico

AgraQuest, Inc.
1530 Drew Avenue
Davis, California 95618
www.agraquest.com

AGRA QUEST

Recommended Application Rates for Selected Crops – Agricultural Use

Serenade MAX 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 or use Serenade MAX in a tank mix or rotational program with other registered fungicides.

Crops	Disease	Rate lbs./acre#	Application Instructions
Artichoke	**Powdery Mildew** *Leveillula taurica, Erysiphe cichoracearum* **Gray Mold** *Botrytis spp.* **Bacterial Crown Rot** *Erwinia chrysanthemi*	1 - 3	**Begin application when conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed. Serenade MAX may be applied up to and including the day of harvest.**
Asparagus	**Rust** *Puccinia asparagi* **Botrytis Blight** *Botrytis cinerea*	1 - 3	**Begin application soon after emergence and when conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed. Serenade MAX may be applied up to and including the day of harvest.**
Bananas Plantains	**Sigatoka** *Mycosphaerella spp.*	1 - 3	**Begin application when leaves first appear and repeat on 7 to 21 day intervals or as needed. The addition of an approved emulsifiable oil to spray solutions will improve performance.**
Berries **Blueberries Blackberry Raspberry Loganberry Huckleberry Cranberry Gooseberry Elderberry Currant Caneberry Bushberry and other berry crops**	Mummy Berry *Monilinia vaccinii-corymbosi* **Anthracnose Fruit Rot** *Colletotrichum gloeosporiodes* ***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*	1 - 3	**Mummy Berry** - For suppression, begin application at the bud break stage of development and repeat on a 7 to 10 day interval or as needed. **For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for mummy berry control.** **Bacterial Canker – Apply before fall rains and again during dormancy before spring growth.** **For all other diseases – Begin application prior to disease development and repeat on a 7 to 10 day interval or as needed. For improved performance of Serenade MAX, add a surfactant [such as Biotune] to the spray tank to improve coverage.** **Cranberries – Make application to non-flooded fields only.** **Serenade MAX may be applied to fruit up to and including the day of harvest.**

Rate presented in lbs./acre unless otherwise noted.

Crops	Disease	Rate lbs./acre#	Application Instructions
Brassica vegetables (Cole Crops) **Broccoli Cabbage Cauliflower Brussels Sprouts Collards Kale Mustard Greens Kohlrabi and other brassica crops**	**Pin Rot Complex** ***Alternaria/Xanthomonas*** **Bacterial Leaf Spot** ***Pseudomonas syringae*** **Bacterial Soft Rot** ***Erwinia / Pseudomonas*** **Black Rot** ***Xanthomonas campestris*** **Xanthomonas Leaf Spot** ***Xanthomonas campestris*** **Alternaria Leaf Spot** ***Alternaria* spp.** **Anthracnose** ***Colletotrichum higginsianum*** **Cercospora Leaf Spot** ***Cercospora brassicaicola*** **Downy Mildew** ***Peronospora parasitica*** ***Peronospora* spp.** **Powdery Mildew** ***Erysiphe polygoni*** **Southern Blight** ***Sclerotium rolfsii***	**1 - 3**	**Pin Rot** - For suppression, begin application when environmental conditions are conducive to disease development and repeat on 7 to 10 day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for pin rot control. **For all other diseases - Begin application soon after emergence or transplant and when conditions are conducive to disease development. Repeat on a 7 to 10 day interval or as needed.**
Bulb Vegetables **Onion Garlic Shallots and other bulb vegetables**	Botrytis Neck Rot ***Botrytis* spp.** Botrytis Leaf Blight ***Botrytis squamosa*** Onion Purple Blotch ***Alternaria porri*** Onion Downy Mildew ***Peronospora destructor*** **Downy Mildew** ***Peronospora* spp.** **Powdery Mildew** ***Erysiphe* spp.** **White Rot** *Sclerotium cepivorum*	**1 - 3**	**Begin application when environmental conditions are conducive to disease development and repeat on a 7 to 10 day interval or as needed. Apply sufficient water to provide complete coverage of plants. When conditions are conducive to rapid disease development, use Serenade MAX in a rotational program with other registered fungicides for Botrytis neck rot control.**
	Rust ***Puccinia porri***	**1 - 3**	**For suppression, begin application when conditions are conducive to disease development and repeat on a 7 to 10 day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for rust control.**

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Crops	Disease	Rate lbs./acre #	Application Instructions
Cereal Grains Barley Corn Millets Oat Rice Rye Sorghum Triticale Wheat and other cereal grain crops	Powdery Mildew *Erysiphe graminis* Rust *Puccinia* spp. Blast *Pyricularia orysae* Sheath Spot *Rhizoctonia oryzae* Sheath Blight *Thanatephorus cucumeris,* (Anamorph: *Rhizoctonia solani*) *Thanatephorus kernel* Smut *Tilletia barclayana* Bacterial Blight and Streak *Xanthomonas spp* Stem Rot *Sclerotium oryzae* *Magnaporthe* spp Brown Rot, Leaf Spots and Smuts *Cercospora spp* *Entyloma spp* *Dreschlera spp* *Cochliobolus spp* *Ceratobasidium spp*	1 -3	Begin applications when environmental conditions and plant stage are conducive to disease development. Repeat on 7 to 10 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure.

Crops	Disease	Rate lbs./acre	Application Instructions
Citrus **Orange** **Grapefruit** **Lemon** **Tangerine** **Tangelo** **Pummelo** **and other citrus crops**	**Greasy spot** ***Mycosphaerella citri*** **Post Bloom Fruit Drop** ***Colletotrichum acutatum*** **Scab** ***Elsinoe fawcetti*** **Melanose** ***Diaporthe citri*** **Alternaria Leaf Spot** ***Alternaria alternate*** **Bacterial Blast** *Pseudomonas syringae*	**1 -3**	**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 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 a 7 to 10 day interval 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 a 14 to 21 day interval until fruit becomes resistant.** **Alternarial 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 7 to 10 day intervals or as needed. *For improved performance on post bloom fruit drop, scab and* melanose, use Serenade in a tank mix or rotational program with other registered fungicides.
Coffee	**Coffee Berry Disease** *Colletotrichum coffeanum* **Bacterial Blight** *Pseudomanas syringae*	1-3	Begin applications when environmental conditions are conducive to disease development. Continue applications on 7 to 10 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure. For improved performance use Serenade MAX in a tank mix or rotational program with other registered fungicides
Corn **Sweet Corn** **Popcorn** **Seed Corn** **Silage Corn** **Field Corn** **and other corn crops**	**Common rust** ***Puccinia sorghi*** **Northern Leaf Blight** ***Exserohilum turcicum*** ***Helminthosporium turcium*** **Southern Leaf Blight** ***Bipolaris maydis*** ***Helminthosporium maydi*** ***Cochliobolus heterostrophus***	**1 - 3**	**Begin applications when environmental conditions are conducive to disease development. Continue applications on 7 to 10 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure.**

Crops	Disease	Rate lbs./acre	Application Instructions
Cucurbits **Cucumber** **Cantaloupe** **Melon** **Muskmelon** **Squash** **Watermelon** **and other cucurbit crops**	**Powdery Mildew** ***Erysiphe* spp.** ***Sphaerotheca* spp.** **Gummy Stem Blight** ***Didymella bryoniae*** ***Phoma cucurbitacearum*** **Angular Leaf Spot** ***Pseudomonas syringae*** **Anthracnose** ***Colletotrichum lagenarium*** **Downy Mildew** ***Pseudoperonospora cubensis*** **Bacterial Fruit Blotch** ***Acidovorax avenae***	**1- 3**	Begin application soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7 to 10 day interval or as needed. When environmental conditions and plant stage are conducive to rapid disease development, use Serenade MAX in a rotational program with other registered fungicides.
Fruiting Vegetables **Pepper** **Tomato** **Eggplant** **Ground Cherry** **Tomatillo** **Okra** **and other fruiting vegetables**	Bacterial Spot ***Xanthomonas* spp.** **Target Spot** *Corynespora cassiicola*	**1 - 3**	**Begin application soon after emergence or transplant and when environmental conditions are conducive to disease development. Continue applications on a 5 to7 day interval or as needed. When conditions are conducive to rapid disease development, for improved control, use Serenade in a tank mix program with copper-based bactericides registered for control of bacterial spot at labeled rates.**
	Bacterial Speck ***Pseudomonas syringae pv tomato***	**1 - 3**	**Begin application soon after emergence or transplant and when environmental conditions are conducive to disease development. Continue applications on a 5 to 7 day interval or as needed. Use higher rates when conditions are conducive to rapid disease development.**
	Early Blight ***Alternaria solani*** Late Blight suppression ***Phytophthora infestans***	**1 - 3**	**For suppression, begin application when plants are 4- to 6-inches high. Repeat applications on a 5 to 7 day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for late blight control. Use shorter spray intervals under conditions conducive to rapid disease development.**
	Powdery Mildew ***Leveillula taurica*** ***Oidiopsis taurica*** ***Erysiphe* spp.** ***Sphaerotheca* spp.** **Downy Mildew** ***Pseudoperonoospera cubensis***	**1 - 3**	**For suppression, begin application soon after emergence or transplant and continue on a 7 to 10 day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for powdery mildew control.**
	Buck-eye Rot *Phytophthora parasitica* **Anthracnose** *Colletotrichum candidum*	**1-3**	**Begin application soon after emergence or transplant and continue on a 7 to 10 day interval or as needed. For improved performance of Serenade MAX add a surfactant [such as Biotune] to the spray tank to improve coverage.**
	Bacterial Canker *Clavibacter michiganensis*	**1-3**	Begin applications when environmental conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed.
	Gray Mold ***Botrytis cinerea***	**1 - 3**	**Begin application soon after emergence or transplant and repeat on a 7 to 10 day interval or as needed.**

Crops	Disease	Rate lbs./acre#	Application Instructions
Grape	Gray Mold *Botrytis cinerea* Sour Rot [a complex of pathogens *Aspergillus niger, Alternaria tenuis, Botrytis cinerea, Cladosporium herbarum, Rhizopus arrhizus, Penicillium* sp., and others]	1 - 3	Begin application at bloom, before bunch closure, at verasion and preharvest. Apply in sufficient water to provide full coverage. Serenade may be applied to fruit up to and including the day of harvest.
	Powdery Mildew *Uncinula necator*	1 - 3	Begin application when new shoots are ½- to 1½- 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 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 - 3	For suppression, apply at 10-inch shoot, then at 7-10 day intervals until bunch closure (berry touch). For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for downy mildew control.
	Phomopsis *Phomopsis viticola*	1 - 3	Begin applications when shoots are ½ to 1 inch long and repeat when shoots are 6-8 inches long.
	Black Rot *Guignardia bidwelli*	1-3	Begin applications when shoots are 4 to 6 inches in length and repeat on 7 - 10 day intervals throughout the season until the berries start to change color.
	Eutypa *Eutypa lata*	2 – 5%	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).
Herbs/ Spices	Bacterial Blight *Pseudomonas syringae* Anthracnose *Colletotricum* spp. Alternaria Leaf Blight *Alternaria* spp. Botrytis *Botrytis spp.*	1 - 3	Begin application when environmental conditions are conducive to disease development. Repeat on 7 to 10 day interval or as needed.

#Rate presented in lbs./acre unless otherwise noted

Crops	Disease	Rate lbs./acre#	Application Instructions
Hop	Powdery Mildew ***Sphaerotheca macularis*** Downy Mildew *Peronospora* spp.	**2 - 4 lbs./100 gal**	**Use the higher rates when moderate to high disease pressure is present or expected.** **Begin applications when environmental conditions are conducive to rapid disease development. Continue sprays at 7-day intervals or as needed. Apply at a rate of 2-4 lbs. per 100 gallons of water using ground equipment.** **Minimum spray volume recommendations for hop growth stages are as follows:** Emergence to training: **Use 2-4 lbs. of product per 100 gallons of water. Apply using a minimum spray volume of 20 gallons per acre. Coverage will vary with the size of the vines and the type of spray equipment. Apply adequate spray volume to achieve complete spray coverage.** Training to wire: **Use 2-4 lbs. of product per 100 gallons of water. Apply using a minimum spray volume of 50 gallons per acre. Coverage will vary with the size of the vines and the type of spray equipment. Apply adequate spray volume to achieve complete spray coverage.** Wire touch through harvest: **Use 2-4 lbs. of product per acre. Apply in a minimum spray volume of 100 gallons per acre. Higher water volumes may be necessary to achieve thorough coverage after side arms develop. Apply adequate spray volume to achieve complete spray coverage. Use the higher rates when moderate to high disease pressure is present or expected.**
Leafy Vegetables **Lettuce** **Celery** **Spinach** **Parsley** **Radicchio and other leafy vegetable crops**	Downy Mildew ***Bremia lactucae*** ***Peronospora* spp.** Powdery Mildew ***Erysiphe cichoracearum*** **Pink Rot** **Sclerotinia sclerotiorum** **Anthracnose-suppression** *Colletotrichum spp.* **Bacterial Leaf Spot** *Xanthomonas campestris* pv. *vitians* **Bacterial Blight** *Xanthomonas campestris*	**1 - 3**	**Pink rot – Begin application approximately 8 weeks before harvest and repeat on a 14-day interval. Apply Serenade as a directed spray in sufficient water to ensure thorough coverage of the base of the plants and the surrounding soil surface. Light irrigation following application to incorporate Serenade may improve disease control.** Downy mildew / powdery mildew - **For suppression, begin application when conditions are conducive to disease development and repeat on 7 to 10 day intervals or as needed. For improved performance, use Serenade MAX in a tank mix or rotational program with other registered fungicides for downy mildew and powdery mildew control.** **Anthracnose – suppression-** Begin application prior to disease development when environmental conditions and plant stage are conducive to rapid disease development and repeat on a day 7 to 10 day interval or as needed. Use higher rates and shorter application intervals under heavy disease pressure.. **Bacterial Blight /Bacterial Leaf Spot-** Begin applications when environmental conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed.

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Crops	Disease	Rate lbs./acre	Application Instructions
Leafy Vegetables **Lettuce** **Celery** **Spinach** **Parsley** **Radicchio and other leafy vegetable crops**	Sclerotinia Head and Leaf Drop ***Sclerotinia* spp.**	1-3	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. 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 within 7 days of thinning. Repeat applications on 10 to 14 day intervals if conditions for disease development persist. Use higher rates under conditions conducive to moderate to severe disease pressure. Light irrigation after application to incorporate the product may improve disease control.** **OR** For control of Sclerotinia head and leaf drop: **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 within 7 days of thinning or transplanting. Repeat applications on 10 to 14 day intervals if conditions for disease development persist. Use higher rates under conditions conducive to moderate to severe disease pressure. Light irrigation after application to incorporate the product may improve disease control.**
Legumes/ Vegetables (succulent and dried beans and peas) **Beans** **Green beans** **Snap beans** **Shell beans** **Soybeans** **Dry Beans** **Garbanzo beans** **Lima beans** **Peas** **Chick peas** **Split peas** **Lentils** **and other legume/ vegetable crops**	Rust *Uromyces appendiculatus*	1 - 3	**For suppression, begin application soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed. For improved performance, use Serenade MAX in a tank mix or rotational program with other registered fungicides for rust control.**
	Rust ***Puccinia* spp** **Bacterial Pustule** *Xanthamonous spp.* **Powdery Mildew** ***Erysiphe* spp** **Downy Mildew** *Peronospora mansherica*	1 - 3	**Begin applications when environmental conditions and plant stage are conducive to disease development. Repeat on 7 to 10 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure.**
	Asian Soybean Rust ***Phakospora pachyrhizi***	1-3	**Use as part of a program with other fungicides labeled for Asian Soybean Rust. Begin applications when environmental conditions are conducive to disease development. Continue at 7 to 14 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure.**
	Aphonomyces spp	1 - 3	**Begin application soon after emergence or transplant and when conditions are conducive to disease development. Repeat on a 7 to 10 day interval or as needed.**
	White Mold (Sclerotinia Stem Rot) ***Sclerotinia sclerotiorum*** **Gray Mold** (Botrytis Blight) *Botrytis spp.*	1 - 3	**Begin application soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed. When conditions are conducive to rapid disease development use Serenade MAX in a rotational program with other registered fungicides.**

Crops	Disease	Rate lbs./acre	Application Instructions
Mint andother herb/spices	Rust *Puccinia menthae* Powdery Mildew *Erysiphe spp* Downy Mildew *Peronospora* spp.	1 - 3	**Begin application soon after emergence and when conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure.**
Oil Seed Crops **Canola Castor Coconut Cotton Flax Oil Palm Olive Peanut Rapeseed Safflower Sesame Sunflower Soybeans and other oilseed crops**	**Bacterial Speck** *Pseudomonas syringe pv. glycinea* **Brown Spot** *Septoria glycines* **Pod and Stem Blight** *Diaporthe phaseolorum var. sojae* *Phomopsis longicola* **Downy Mildew** *Peronospora mansherica* **Rust** **White Mold** (Sclerotinia Stem Rot) *Sclerotinia sclerotiorum* **Bacterial Pustule** *Xanthamonous spp*	1 -3	**Begin application soon after emergence and when conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure.**
	Asian Soybean Rust *Phakospora pachyrhizi*	1-3	**Use as part of a program with other fungicides labeled for Asian Soybean Rust. Begin applications when environmental conditions are conducive to disease development. Continue at 7 to 14 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure.**
Olive	**Olive Knot** *Pseudomonas savastanoi* **Leaf Spot** *Cercospora cladosporioides*	1 - 3	Apply before fall rains and again during dormancy before spring growth. Under conditions conducive to heavy disease pressure for improved control, use Serenade MAX in a tank-mix or rotational program with a copper-based bactericide registered for control of 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.
Peanut	Early Leaf Spot *Cercospera* spp. *Cercospera arachidicola* *Late Leaf Spot* *Cercosporidium personatum* **Rust** *Puccinia arachidis* **White Mold** *Sclerotinia sclerotiorum* **Web Blotch** *Phoma arachidicola*	1 - 3	**Begin application when environmental conditions are conducive to disease development. Repeat applications on 14-day intervals or as needed. For improved control, use Serenade MAX in a tank mix program with copper-based fungicides registered for control of peanut leaf spot. . Peanut hay may be fed to livestock.**

Crops	Disease	Rate lbs./acre	Application Instructions
Pome Fruit **Apple** **Crabapple** **Pear** **Quince** **Mayhaw** **and other pome fruit**	**Fire Blight** *Erwinia amylovora*	1-3	**For suppression begin application at 1 – 5% bloom and repeat as necessary to protect open, untreated blossoms when conditions favoring disease development are likely to occur. For maximum control, use Serenade MAX prior to and as close as possible to fire blight infection events. During periods of rapid bloom development and frequent infection periods, spray intervals of 3 – 7 days may be required. After petal fall, continue applications on a 7-day interval while environmental conditions favor disease development.** **Apply in sufficient water to provide full coverage. For improved performance, use Serenade MAX in a rotational program with antibiotics registered for fire blight control such as but not limited to 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 Max 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 MAX.**
	Scab *Venturia* **spp.**	1 - 3	**For suppression, begin application at green tip or when environmental conditions become favorable for primary scab development and repeat on a 7 to 10 day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for scab control.**
	Brooks Spot *Mycosphaerella pomi* **Cedar Apple Rust** *Gymnosporangium juniperi-virginianae* **Flyspeck** *Schizothyrium pomi* **Sooty Blotch** *Gloeodes pomigena* **Bot Rot** *Botryosphaeria dothidea* **Bitter Rot** *Colletotrichum spp.* Bull's Eye Rot *Neofabraea* spp.	1-3	**For control of Brooks Spot, Cedar Apple Rust, Flyspeck Sooty Blotch, Bot Rot, Bitter Rot and Bull's Eye Rot:** Begin applications pre-bloom when environmental conditions are conducive to disease development. Repeat applications at 7 to 14 day intervals or as needed. Apply in sufficient spray volume to ensure thorough coverage. Use higher application rates and shorter spray intervals when conditions are conducive to rapid disease development or heavy disease pressure. For improved performance of Serenade MAX add a surfactant [such as Biotune® Adjuvant], known to be safe to the target crop, to the spray tank to improve coverage and wetting of plant surfaces. Serenade may be applied up to and including the day of harvest (0-day PHI).
	Powdery Mildew *Podosphaera leucotricha*	1 - 3	**Begin application at tight cluster, or sooner, if conditions are conducive to disease development. Repeat applications through the second cover spray on a 7 to 10 day interval. Additional sprays beyond second cover may be needed on susceptible varieties or when environmental conditions are conducive to rapid disease development. Use high label rate and shorter spray intervals when conditions are conducive to rapid disease development.**

Crops	Disease	Rate lbs./acre	Application Instructions
Root / Tuber and Corm Vegetables **Carrot** **Potato** **Sweet Potato** **Beets** **Ginger** **Horseradish** **Radish** **Gingseng** **Turnip and other root/ tuber and corm crops**	**Black Rot/** **Black Crown Rot** *Alternaria* spp. **Alternaria Leaf Blight** *Alternaria dauci* **Bacterial Leaf Spot** *Xanthomonas campestris pv. carotae*	1- 3	**Begin application soon after emergence or transplant and when conditions are conducive to disease development. Repeat on a 7 to 10 day interval or as needed. Use high rates and shorter intervals when conditions are conducive to rapid disease development. Apply in sufficient water to provide thorough coverage**
	Bacterial Leaf Blight *Xanthomonas campestris* **Downy Mildew** ***Peronospora* spp.** **Powdery Mildew** ***Erysiphe* spp.** **White Mold** ***Sclerotinia sclerotiorum*** **Gray Mold** ***Botrytis* spp.**	1 - 3	Begin application soon after emergence or transplant and when conditions are conducive to disease development. Repeat on a 7 to 10 day interval or as needed.
	Early Blight *Alternaria solani* **Late Blight** suppression *Phytophthora infestans*	1 - 3	For suppression, begin application soon after emergence and when conditions are conducive to disease development. Repeat on a 5 to 7 day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for late blight control.
Roses, Field	**Powdery Mildew** ***Sphaerotheca* spp.** **Rust** ***Puccinia* spp..**	1- 3	**Begin applications when environmental conditions and plant stage are conducive to disease development. Continue applications on 7 to 14 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure.**

Crops	Disease	Rate lbs./acre	Application Instructions
Stone Fruit **Apricot** **Cherry** **Nectarine** **Peach** **Plum** **Prune** **andother stone fruit crops**	**Anthracnose** suppression *Colletotrichum* **spp.** **Powdery Mildew** *Sphaerotheca parnnosa* *Podosphaera clandestine* *Podosphaera* spp **Rusty Spot** *Podosphaera leucotricha* **Bacterial Canker** *Pseudomonas* **spp.** **Alternaria Spot / Fruit Rot** *Alternaria alternata* **Scab** *Cladosporium carpophilum* **Brown Rot Blossom Blight** *Monilinia laxa* **Fruit Brown Rot** suppression *Monilinia fruticola* **Gray mold** *Botrytis cinerea* **Shot Hole** suppression *Wilsonomyces carpophilus* *Xanthomonas pruni* *Bhumeriella gaapi* *Cercospora* **spp.** **Bacterial Leaf Spot/ Bacterial Spot** *Xanthomonas arboricola*	1 - 3	**Brown Rot Blossom Blight – Begin application at early bloom and repeat through petal fall on a 7-day interval or as needed.** **Scab – Begin application at petal fall and repeat on a 7 to 10 day interval or as needed.** **Bacterial Blight – Apply post harvest before fall rains and again during dormancy before spring growth.** Powdery Mildew - **For suppression, begin application at popcorn stage and repeat on a 7-day interval or as needed. For improved performance, use Serenade MAX in a tank mix or rotational program with other registered fungicides for powdery mildew control.** For all other diseases – **Begin application prior to disease development when environmental conditions and plant stage are conducive to rapid disease development and repeat on a 7 to 10 day interval or as needed. Use 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.** Post harvest disease protection – **To aid in the control of post harvest infections of *Botrytis* and *Monolinia* apply Serenade prior to harvest with sufficient water to thoroughly cover fruit. Apply on a 7-day schedule or as needed up until the time of harvest.** **Bacterial Leaf Spot/ Bacterial Spot**- Begin applications at bud break and continue on a 7 to 14 day schedule or as needed until harvest. During periods of rapid disease development and frequent infection periods, use Serenade in a program with other registered antibiotics and/or copper bactericides. For the improved performance of Serenade MAX, add a surfactant [such as Biotune] to the spray tank to improve coverage. **Serenade MAX may be applied to fruit up to and including the day of harvest.**
Strawberry	**Powdery Mildew** *Sphaerotheca macularis* *Erysiphe* **spp.** **Anthracnose** *Colletotrichum acutatum* **Botrytis** *Botrytis cinerea* **Gray Mold** *Botrytis* **spp.** **Angular Leaf Spot** *Xanthomonas fragariae*	1 - 3	**Botrytis/Powdery mildew - For suppression, begin application at or before flowering and repeat on 7 to 10 day intervals or as needed through harvest. Use higher rates and shorter application intervals under heavy disease pressure. For improved performance, use Serenade MAX in a tank mix or rotational program with other registered fungicides for powdery mildew and botrytis control.** **Anthracnose – Begin application prior to disease development and repeat on 7 to 10 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure. For improved performance, use Serenade MAX in a tank mix or rotational program with other registered fungicides. Thorough coverage is essential.** **Angular Leaf Spot** - Begin applications when environmental conditions are conducive to disease development. Continue applications on 7 to 10 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure. For improved performance, use Serenade MAX in a tank mix or rotational program with other registered fungicides. Thorough coverage is essential. **Serenade may be applied up to and including the day of harvest.**

Crops	Disease	Rate lbs./acre	Application Instructions
Sugar Beets	**Powdery Mildew** ***Erysiphe betae*** ***Erysiphe polygoni*** **Leaf Spot** ***Cercospora beticola*** **Ramularia** ***Ramularia* spp** **Rust** ***Uromyces betae***	**1 - 3**	**Begin applications when environmental conditions are conducive to disease development. Continue applications on 7 to 10 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure.**
Tobacco	**Blue Mold** ***Peronospora hyoscyami***	**1 - 3**	**Begin applications when conditions are conducive to disease development. Continue applications on 7 to 10 day intervals or as needed.**
Tree Nuts **Almond** **Pistachio** **Pecan** **Walnut** **Filberts** **Chestnut** **Cashew** **Beechnut** **Butternut** **Macadamia** **And other tree nut crops**	Walnut Blight ***Xanthomonas campestris*** **Alternaria Leaf Spot** ***Alternaria alternata*** **Anthracnose suppression** ***Colletotrichum acutatum*** **Bacterial Canker** ***Pseudomonas syringae*** **Scab** ***Cladosporium carpophilum*** **Botryosphaeria Blight** ***Botryosphaeria dothidea*** **Shot Hole suppression** ***Wilsonomyces carpophilus*** ***Xanthomonas pruni*** ***Blumeriella gaapi*** ***Cercospora* spp.** **Brown Rot suppression** ***Monilinia* spp.** **Pecan Scab** *Cladosporium caryigenum*	**1-3**	Walnut Blight – **Begin application no later than pistillate bloom and repeat** on 7 to 10 day intervals or as needed. Apply in advance of rain for maximum **protection. Under conditions conducive to heavy disease pressure, for improved control, use Serenade in a tank-mix or rotational program with a copper-based bactericide registered for control of walnut blight.** **For all other diseases – Begin application prior to disease development and repeat on 7 to 10 day intervals or as needed. Use 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.**
Tropical Fruits **Avocado** **Mango** **Papaya** **Bananas** **Plantains** **Pineapple** **and** **other tropical fruits**	**Anthracnose** ***Colletotrichum gloeosporioides*** *Colletotrichum ananas* **Bacterial Canker** *Xanthomonas campestris* **Scab** ***Sphaceloma perseae***	**1 - 3**	**Avacado/Mango** - Begin application at budbreak and repeat on a 14 to 21 day interval or as needed through harvest. **Papaya/Pineapple** - Begin application at flowering and repeat on a 14 to 21 day interval or as needed through harvest. **Bacterial Canker** – Begin applications when environmental conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed. **Serenade MAX may be applied to fruit up to and including the day of harvest.**
	Sigatoka *Mycosphaerella fijiensis.*	1-3	Begin application when leaves first appear and repeat on a 7 to 21 day interval or as needed. Apply in sufficient water to obtain thorough coverage of foliage. For improved disease control, Serenade may be tank-mixed with oil or other fungicides registered for control of Sigatoka at labeled rates. When conditions are conducive to rapid disease development and/or heavy disease pressure, higher application rates and rotational spray programs with other fungicides registered for control of Sigatoka are recommended.

Crops	Disease	Rate lbs./acre	Application Instructions
Kiwi	**Botrytis Fruit Rot** *Botrytis cinerea* **Bacterial Blight** *Pseudomonas viridiflava* **and** *Pseudomonas syringae* **Sclerotinia** *Sclerotinia sclerotiorum*	1-3	**Kiwi – Begin application at early bloom and repeat on 7 to 10 day intervals or as needed. Serenade MAX may be applied to fruit up to and including the day of harvest.**
Watercress	**Cercospora leafspot** *Cdrcospora* **spp.**	1 – 3	**Begin applications when conditions are conducive to disease development. Continue applications on 7 to 10 day intervals or as needed.**
Seed Production Crops blue grass rye grass fescue orchard grass and other crops grown to produce seeds	**Powdery Mildew** *Erysiphe spp.* **Rust** *Puccinia* **spp.**	1 -3	**Begin applications when environmental conditions and plant stage are conducive to disease development. Repeat on 7 to 10 day intervals or as needed. Use higher rates and shorter application intervals under heavy disease pressure.**

Recommended Application Rates for Selected Greenhouse Crops

(Serenade 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 or use Serenade MAX in a tank mix or rotational program with other registered fungicides.

Green-house Crops	Diseases	Rate lbs./100 gallons spray mix	Application Instructions
Brassica **Broccoli** **Cabbage** **Cauliflower** **Brussels Sprouts** **Collards** **Kale** **Mustard Greens** **Kohlrabi and other rassica crops**	**Pin Rot Complex** *Alternaria/Xanthomonas* **Bacterial Leaf Spot** *Pseudomonas syringae* **Bacterial Soft Rot** *Erwinia / Pseudomonas* **Black Rot** *Xanthomonas campestris* **Xanthomonas Leaf Spot** *Xanthomonas campestris* **Alternaria Leaf Spot** *Alternaria* spp. **Anthracnose** *Colletotrichum higginsianum* **Cercospora Leaf Spot** *Cercospora brassicaicola* **Downy Mildew** *Peronospora parasitica* *Peronospora* spp. **Powdery Mildew** *Erysiphe polygoni* **Southern Blight** *Sclerotium rolfsii*	**1- 3**	**Pin Rot** – For suppression, begin application when environmental conditions in the greenhouse are conducive to disease development and repeat on a 7 to 10 day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for pin rot control. **For all other diseases – Begin application soon after emergence or transplant and when conditions in the greenhouse are conducive to disease development. Repeat on a 7- to 10-day interval or as needed.**
Bulb Vegetables **Onion** **Garlic** **Shallots and other bulb vegetables**	**Botrytis neck rot** *Botrytis* **spp.** **Botrytis Leaf Blight** *Botrytis squamosa* **Onion Purple Blotch** *Alternaria porri* **Onion Downy Mildew** *Peronospora destructor* **Downy Mildew** *Peronospora* **spp.** **Powdery Mildew** *Erysiphe* **spp.** **White Rot** *Sclerotium cepivorum*	**1- 3**	**Begin application when environmental conditions in the greenhouse are conducive to disease development and repeat on a 7- to 10-day interval or as needed. When conditions in the greenhouse are conducive to rapid disease development, use Serenade MAX in a rotational program with other registered fungicides for Botrytis neck rot control. Thorough coverage is essential.**
	Rust *Puccinia porri*	**1 – 3**	**For suppression, begin application when conditions are conducive to disease development and repeat on a 7- to 10-day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for rust control. Do not apply more than 6 lb. per acre per application.**

Green-house Crops	Diseases	Rate lbs./100 gallons spray mix	Application Instructions
Cucurbits Cucumber Cantaloupe Melon Muskmelon Squash Watermelon and other cucurbits	Powdery Mildew Erysiphe spp. Sphaerotheca spp. Gummy Stem Blight *Phoma cucurbitacearum* *Didymella bryoniae* Angular Leaf Spot *Pseudomonas syringae* Anthracnose *Colletotrichum lagenarium* Downy Mildew *Pseudoperonospora cubensis* Bacterial Fruit Blotch *Acidovorax avenae*	1 -3	**Begin application soon after emergence or transplant and when environmental conditions in the greenhouse are conducive to disease development. Repeat on 7 to 10 day interval or as needed. Thorough coverage is essential. For improved performance, use Serenade MAX in a tank mix or rotational program with other registered fungicides.**
Fruiting Vegetables **Pepper Tomato Eggplant and other fruiting vegetables**	**Gray mold** ***Botrytis cinerea***	**1 -3**	For suppression, **begin applications soon after emergence or transplant and continue on a 7 -10 day interval or as needed. When environmental conditions in the greenhouse are conducive to rapid disease development, use Serenade MAX in a rotational program with other registered fungicides. Thorough coverage is essential.**
	Powdery mildew *Leveillula taurica* *Oidiopsis taurica* *Erysiphe* spp. *Sphaerotheca* spp. **Downy Mildew** ***Pseudoperonospora cubensis***	**1 – 3**	**For suppression, begin applications soon after emergence or transplant and continue on a 7- 10 day interval or as needed. Thorough coverage is essential. Use maximum label rates under conditions conducive to rapid disease development. For improved performance, use Serenade MAX in a tank mix or in a rotational program with other registered fungicides.**
	Bacterial Speck *Pseudomonas syringae pv tomato*	1-3	Begin application soon after emergence or transplant and when environmental conditions are conducive to disease development. Continue applications on a 5 to 7 day interval or as needed. Use higher rates when conditions are conducive to rapid disease development. For improved performance, use Serenade in a tank mix or in a rotational program with other registered fungicides.
	Bacterial Spot ***Xanthomonas* spp.** **Target Spot** *Corynespora cassliicola*	**1 – 3**	Begin application soon after emergence or transplant and when environmental conditions are conducive to disease development. Continue applications on a 5 to 7 day interval or as needed. When conditions are conducive to rapid disease development, for improved control, use Serenade in a tank mix program with copper-based bactericides registered for control of bacterial spot at labeled rates
	Buck-eye Rot *Phytophthora parasitica* **Anthracnose** *Colletotrichum candidum*	**1-3**	Begin application soon after emergence or transplant and continue on a 7 to 10 day interval or as needed. For improved performance of Serenade MAX add a surfactant [such as Biotune] to the spray tank to omprove coverage.
	Bacterial Canker *Clavibacter michiganensis*	**1-3**	Begin applications when environmental conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed.
	Early Blight *Alternaria solani* **Late Blight** suppression ***Phytophthora infestans***	**1 – 3**	For suppression, begin application when plants are 4- to 6-inches high. Repeat applications on a 5- to 7-day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for late blight control. Use shorter spray intervals under conditions conducive to rapid disease development.

Green-house Crops	Diseases	Rate lbs./100 gallons spray mix	Application Instructions
Herbs/ Spices	**Bacterial Blight** ***Pseudomonas syringae*** **Anthracnose** *Colletotricum* spp. **Alternaria Leaf Blight** ***Alternaria*** **spp.** **Botrytis** ***Botrytis spp.***	1 – 3	Begin application when environmental conditions in the greenhouse are conducive to disease development. Repeat on a -7- to 10-day interval or as needed.
Leafy Vegetables **Lettuce Celery Spinach Parsley Radicchio and other leafy vegetables**	Downy Mildew ***Bremia lactucae*** ***Peronospora*** **spp.** Powdery Mildew ***Erysiphe cichoracearum*** ***Erysiphe*** **spp.** **Pink Rot** **Sclerotinia sclerotiorum** **Anthracnose suppression** *Colletotrichum spp.* **Bacterial Blight** *Xanthomonas campestris* **Bacterial Leaf Spot** *Xanthomonas campestris* pv. *vitians*	1 – 3	**Pink rot – Begin application approximately 8 weeks before harvest and repeat on a 14-day interval. Apply Serenade as a directed spray in sufficient water to ensure thorough coverage of the base of the plants and the surrounding soil surface. Light irrigation following application to incorporate Serenade may improve disease control.** **Downy mildew / powdery mildew – For suppression, begin application when conditions are conducive to disease development and repeat on a 7- to 10-day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for downy mildew and powdery mildew control.** **Anthracnose - suppression** Begin application prior to disease development when environmental conditions and plant stage are conducive to rapid disease development and repeat on a day 7 to 10 day interval or as needed. Use higher rates and shorter application intervals under heavy disease pressure.. **Bacterial Blight /Bacterial Leaf Spot**- Begin applications when environmental conditions are conducive to disease development. Repeat on 7 to 10 day intervals or as needed.
	Sclerotinia Head and Leaf Drop ***Sclerotinia*** **spp.**	1 – 3	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. 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 within 7 days of thinning. Repeat applications on 10 to 14 day intervals if conditions for disease development persist. Use higher rates under conditions conducive to moderate to severe disease pressure. Light irrigation after application to incorporate the product may improve disease control.** **OR** For control of Sclerotinia head and leaf drop: **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 within 7 days of thinning or transplanting. Repeat applications on 10 to 14 day intervals if conditions for disease development persist. Use higher rates under conditions conducive to moderate to severe disease pressure. Light irrigation after application to incorporate the product may improve disease control.**

Green-house Crops	Diseases	Rate lbs./100 gallons spray mix	Application Instructions
Root / Tuber **Carrot** **Potato** **Sweet Potato** **Beets** **Ginger** **Horseradish** **Radish** **Ginseng** **Turnip and other root/ tuber crops**	**Black Rot/Black Crown Rot** *Alternaria* spp. **Alternaria Leaf Blight** *Alternaria dauci* **Bacterial Leaf Spot** *Xanthomonas campestris pv. carotae*	**1 - 3**	**Begin application soon after emergence or transplant and when conditions are conducive to disease development. Repeat on a 7 to 10 day interval or as needed.** Use high rates and shorter intervals when conditions are conducive to rapid disease development. Apply in sufficient water to provide thorough coverage.
	Bacterial Leaf Blight *Xanthomonas campestris* **Downy Mildew** ***Peronospora* spp.** **Powdery Mildew** ***Erysiphe* spp.** **Gray Mold** ***Botrytis* spp.** **White Mold** ***Sclerotinia sclerotiorum***	**1 - 3**	Begin application soon after emergence or transplant and when conditions are conducive to disease development. Repeat on a 7 to 10 day interval or as needed. Use high rates and shorter intervals when conditions are conducive to rapid disease development. Thorough coverage is essential.
	Early Blight *Alternaria solani* **Late Blight** *Phytophthora infestans*	**1 - 3**	For suppression, begin application soon after emergence and when conditions are conducive to disease development. Repeat on a 5 to 7 day interval or as needed. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for late blight control.
Strawberry	**Powdery Mildew** ***Sphaerotheca macularis*** ***Erysiphe* spp** **Anthracnose** ***Colletotrichum acutatum*** **Botrytis** ***Botrytis cinerea*** ***Gray Mold*** ***Botrytis* spp.** **Angular Leaf Spot** *Xanthomonas fragariae*	**1-3**	**Botrytis/Powdery mildew - For suppression, begin application at or before flowering and repeat on a 7 to 10 day interval or as needed through harvest. For improved performance, use Serenade in a tank mix or rotational program with other registered fungicides for powdery mildew and botrytis control.** **Anthracnose – Begin application prior to disease development and repeat on a 7 to 10 day interval or as needed.** **Angular Leaf Spot** - Begin application when conditions are conducive to disease development. Continue sprays at 7 to 10 day intervals or as needed. Use high rates and shorter intervals when conditions are conducive to rapid disease development. For improved performance, use Serenade MAX in a tank mix or rotational program with other registered fungicides. **Thorough coverage is essential.** **Serenade may be applied up to and including the day of harvest.**

Recommended Application Rates for Selected Post Harvest Application to Crops – Agricultural Use

(Serenade MAX has a 0-Day PreHarvest Interval for all crops contained on this label)

POST HARVEST DISEASE PROTECTION

Crops	Diseases	Rate	Application Instructions
Bulb Vegetables Onion Garlic Shallots and other bulb vegetables	**Botrytis** *Botrytis spp*	1-3 lbs. / 25 gallons water	**For suppression prepare the equivalent of 1 lb. to 3 lb. of Serenade MAX in 25 gallons of water. Spray, flood or dip with sufficient water to achieve thorough coverage of fruit. When dipping, replenish the suspension when the volume is too low or when it becomes dirty.**
Root/ Tuber Potatoes Carrot Potato Sweet Potato Beets Ginger Horseradish Radish Gingseng Turnip and other root/ tuber crops	**Silver Scurf** ***Helminthsporium solani***	**1.0-3.0 oz/ Ton**	**Potatoes: For the post harvest application to aid in the control of silver scurf and Fusarium Tuber Rot. Sanitation and other cultural practices should also be employed to aid in control and minimize the potential for disease.** <u>Conveyer Line Application:</u> **Prepare the equivalent of 3 1/4 to 9 3/4 lbs of Serenade MAX in 25 gallons of water. Spray 2 quarts of the Serenade MAX/ water suspension per ton of potatoes. Potatoes must rotate along the conveyor line into the storage area to ensure complete coverage. If needed, adjust rate of spray solution to ensure thorough coverage while maintaining recommended rate of Serenade MAX per ton of potatoes.**
	Gray Mold *Botrytis Cinerea* Sclerotinia Rot *Sclerotinia sclerotiorum*	1-3 lbs. / 25 gallons water	**For suppression prepare the equivalent of 1 lb. to 3 lb. of Serenade MAX in 25 gallons of water. Spray, flood or dip with sufficient water to achieve thorough coverage of fruit. When dipping, replenish the suspension when the volume is too low or when it becomes dirty.**
Pome Fruit Apple Crabapple Pear Quince Mayhaw and other pome fruits	**Gray Mold** ***Botrytis cinerea***	1-3 lbs. / 25 gallons water	**For suppression prepare the equivalent of 1 lb. to 3 lb. of Serenade MAX in 25 gallons of water. Spray, flood or dip with sufficient water to achieve thorough coverage of fruit. When dipping, replenish the suspension when the volume is too low or when it becomes dirty.**
Stone Fruit Apricot Cherry Nectarine Peach Plum and other stone fruit crops	**Gray Mold** ***Botrytis cinerea*** **Brown Rot** ***Monolinia fructicola***	1-3 lbs. / 25 gallons water	**For suppression prepare the equivalent of 1 lb. to 3 lb. of Serenade MAX in 25 gallons of water. Spray, flood or dip with sufficient water to achieve thorough coverage of fruit. When dipping, replenish the suspension when the volume is too low or when it becomes dirty.**

Post-harvest Crops	Diseases	Rate	Application Instructions
Kiwi	**Gray Mold** ***Botrytis cinerea***	1-3 lbs. / 25 gallons water	**For suppression prepare the equivalent of 1 lb. to 3 lb. of Serenade MAX in 25 gallons of water. Spray, flood or dip with sufficient water to achieve thorough coverage of fruit. When dipping, replenish the suspension when the volume is too low or when it becomes dirty.**
Citrus Orange Grapefruit Lemon Tangerine Tangelo Pummelo and other citrus crops	**Anthracnose** *Colletotrichum gloeosporioides)*	1-3 lbs. / 25 gallons water	**For suppression prepare the equivalent of 1 lb. to 3 lb. of Serenade MAX in 25 gallons of water. Spray, flood or dip with sufficient water to achieve thorough coverage of fruit. When dipping, replenish the suspension when the volume is too low or when it becomes dirty.**
Tropical Fruit Avocado Bananas Plantains Mangos Papaya Pineapple and other tropical fruits	**Anthracnose** *Colletotrichum spp.*	1-3 lbs. / 25 gallons water	**For suppression prepare the equivalent of 1 lb. to 3 lb. of Serenade MAX in 25 gallons of water. Spray, flood or dip with sufficient water to achieve thorough coverage of fruit. When dipping, replenish the suspension when the volume is too low or when it becomes dirty.**

FOR USE ON ORNAMENTALS, TREES, SHRUBS, FLOWERS, BEDDING PLANTS, TROPICAL PLANTS (ORNAMENTALS - Poinsetta, Orchids, Dieffenbachia, Palms, Spathipphyllum, Rhaphiollepsis, Anglonemoa and FRUIT – Bananas, Mangos, Papaya), TURF, LAWNS, SOD, GOLF COURSES (GREENS, TEES, FAIRWAYS AND ROUGHS), SEEDLINGS, CONIFERS -[Agricultural Use], [Commercial], [Residential Use] [Reforestation]–

Serenade MAX is a protectant fungicide for use indoors and outdoors for control of certain foliar diseases in the field, greenhouses [open or enclosed], interiorscape, residential and commercial landscapes, nurseries [open or enclosed] shade house environments, seedling production sites, golf courses (greens, tees, fairways and roughs), forests, forestry seedling production sites.

Serenade MAX 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 conifer production for reforestation purposes (greenhouses, shade houses, nurseries, indoors, outdoors, containers or field).

Foliar Application Use on Ornamentals, Trees, Shrubs, Flowers, Bedding Plants, Tropical Plants, Seedlings, Conifers:
APPLICATION INSTRUCTIONS: Apply Serenade MAX at rates ranging from 1 to 3 lbs. of product in 100 [– 300] gallons of water per acre. 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.]

Under normal conditions apply Serenade MAX at a rate of 2 lbs. of product per 100 – [300] gallons of spray solution per acre on a 7-day schedule. When conditions favor severe disease development shorten the spray interval or use a higher rate. Thorough coverage is essential for effective disease control. When more diluted or concentrated spray solutions are needed for the type of equipment being used, follow the "Use Determination" section of this label. See application rate tables for more detailed application instructions.

Post Harvest Dip Use on Cut Flowers/Buds:
APPLICATION INSTRUCTIONS: For post-harvest dip applications on cut flower crops, dip cut flowers/buds in a solution containing 3 to 12 ounces of Serenade MAX in 10 gallons of water soon after cutting. Immerse flowers for a period sufficient to provide thorough contact between cut flower/bud and the treatment solution. Use higher rates under conditions of heavy disease pressure.
See application rates tables for rates and application instructions.

See application rates tables for rates and application instructions.

PLANTS EVALUATED FOR PHYTOTOXICITY

Serenade MAX has been tested for phytotoxicity on the ornamental species listed below. Since it is impossible to test all of the species and cultivars listed on this label under all conditions it is recommended that a small-scale preliminary trial be conducted to check for sensitivity before using this product on a large number of plants, using the product in accordance with all label use directions.

TABLE 1

PLANTS EVALUATED FOR PHYTOTOXICITY

Annual and Perennial Flowering Plants:

Alyssum	Asters	Azalea
Begonia	Calla lily	
Chrysanthemum	Cyclamen	Dianthus
Dwarf Bee-Balm		Easter lily
Garden phlox	Geraniums	Gerbera
Golden star	Hydrangea	Impatiens
Kalanchoe	Lanaria	Lisianthus
Lobelia	Marigolds	Orchids
Pansies	Petunia	Poinsettia
Portulaca	Ranunculus	Roses
Salvia spp.	Snapdragons	Stock
Verbena spp.	Vinca	Violas
Zinnias		

Tropical foliage:

Aglonema	Dieffenbachia
Dracaena spp.	English Ivy
Hibiscus	Leatherleaf Fern
Spathiphyllum	

Trees and Shrubs:

Azalea	Boxwood
Crape myrtle	Dogwood
Jumbo azalea	Indian Hawthorn
Japanese maple	*Ligustrum japonicum*
Lilac	Loropetalum
Photinia	Rhododendron
Rosaceae spp.	Soft Touch Holly
Spirea	

FOR USE AS SOIL DRENCH APPLICATIONS on Ornamentals, Trees, Shrubs, Flowers, Bedding Plants, Tropical Plants, Seedlings, Conifers: [Agricultural], [Commercial], [Residential Use] [Indoors and Outdoors] [Greenhouses, Glasshouses, Nurseries] [Open and Enclosed]

Serenade MAX 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 environments. Serenade MAX enhances germination and plant growth by suppressing diseases caused by Rhizoctonia, Pythium, Fusarium and Phytophthora.

APPLICATION INSTRUCTIONS: Mix 1 lb. to 3 lb. of Serenade MAX with 100 gallons of water. Use 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 (1 pint / sq. ft. for each 3 inches of soil depth) 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 – 28 days throughout the growing cycle. Serenade MAX can be mixed with chemical fungicides registered for soil applications.
See application rate tables for more detailed application instructions.

FOR USE ON TURF, LAWNS, SOD, GOLF COURSES (GREENS, TEES, FAIRWAYS AND ROUGHS) ORNAMENTAL TURF- [Agricultural], [Commercial], [Residential Use]

Serenade MAX is a broad spectrum biofungicide for use in the prevention, suppression and aiding in control of turf and lawn diseases; brown patch, dollar spot, powdery mildew, rust and anthracnose.

Turf, Lawns, Sod, Greens, Ornamental Turf Use:
APPLICATION INSTRUCTIONS: Apply at the rate of 1-3 oz. of Serenade MAX 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 Rates for Turf, Lawns, Sod, Golf Courses (Greens, Tees, Fairways and Roughs), Ornamental Turf

Serenade MAX 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 or use Serenade MAX in a tank mix or rotational program with other registered fungicides.

Crops	Disease	Rate /1000 sq. ft of surface area	Application Instructions
Turf, Sod, Lawns, Golf Course, (Fairways, Roughs, Greens, Tees) Seed production grasses, etc. Bluegrass Bentgrass Bermuda grass Dichondra Fescue Orchard grass Poa Annua St. Augustine Ryegrass Zoyzia Mixtures and other grasses or ornamental turf	**Brown patch** *Rhizoctonia solani* **Dollar Spot** *Lanzia spp,* *Moellerodiscus*, spp. *Sclerotinia homeocarpa* **Powdery Mildew** *Erysiphe graminis* **Rust** *Puccinia spp.* **Anthracnose** *Colletotrichum graminicola* **Gray Leaf Spot** ***Pyricularia grisea***	1-3 oz.	Apply at the rate of 1oz to 3 oz of Serenade MAX 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. Begin applications when conditions are conducive to disease development. Continue applications on 7 to 10 day intervals or as needed. Under moderate to severe disease pressure, for improved performance, increase rates and reduce spray intervals or use Serenade MAX in a tank mix or rotational program with other registered fungicides. Aids in control of; brown patch, dollar spot, powdery mildew, rust and anthracnose. [Optional/Alternate Statements/Examples of Mixing/Application Instructions are in Brackets below] [Mix at the rate of 0. 5-1.5 oz of Serenade MAX per gallon of water and apply spray solution at the rate of 2 gallons per 1000 sq. ft. (equivalent to 1 to 3 oz per 1000 sq. ft. of turf.] [Mix at the rate of 1 oz to 3 oz of Serenade MAX per gallon of water and spray solution at the rate of one gallon per 1000 sq. ft. of turf. (Equivalent to 1 to 3 oz per 1000 sq. ft. of turf.] [Mix at the rate of 1.5 oz. of Serenade MAX per gallon of water when included in a tank mix with other registered fungicides.]

Application Rates for Use as a Foliar Spray on Ornamentals, Trees, Shrubs, Flowering Plants

Serenade MAX 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 or use Serenade MAX in a tank mix or rotational program with other registered fungicides.

Crops	Disease	Rate lbs./100 gallons spray mix	Application Instructions
Ornamentals **Trees, Shrubs** **Flowering Plants** **Tropical Plants** Fields, Outdoors, Indoors, Greenhouses, Nurseries Annuals Perennials Bedding plants Potted flowers Cut flowers Foliage plants Deciduous trees Deciduous shrubs Tropical foliage Container grown plants	**Anthracnose** -- *Colletotrichum* spp. **Bacteria** – *Erwinia* spp *Psuedomonas* spp *Xanthomonas* spp **Black spot of rose** -- *Diplocarpon rosea* **Botrytis** -- *Botrytis cinerea* **Downy Mildew** -- *Peronospora* spp. **Leaf spots** - *Alternaria* spp *Cercospora* spp *Entomosporium* spp *Helminthsporium* spp *Myrothecium* spp *Septoria* spp. **Powdery mildew** – *Erysiphe* spp *Oidium* spp *Podosphaera* spp *Sphaerotheca* spp. *Phytophthora* spp -- **Rust** – *Puccinia* spp. **Scab** – *Venturia* spp.	**1-3**	**Indoors, Outdoors, Field, Greenhouse, and Nursery Grown Plants**: Apply Serenade MAX at rates ranging from 1-3 lbs. of product in 100 – 300 gallons of water per acre. 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.] Under normal conditions apply Serenade MAX at a rate of 2 pounds of product per 100 - 300 gallons of spray solution per acre on a 7 day schedule. When conditions favor severe disease development shorten the spray interval or use a higher rate. Thorough coverage is essential for effective disease control. When more diluted or concentrated spray solutions are needed for the type of equipment being used, follow the "Use Determination" section of this label. **Post-Harvest Dip Application on Cut Flowers**: For post-harvest dip applications on cut flower crops, dip cut flowers/buds in a solution containing 3 to 12 ounces of Serenade MAX in 10 gallons of water soon after cutting. Immerse flowers for a period sufficient to provide thorough contact between cut flower/bud and the treatment solution. Use higher rates under conditions of heavy disease pressure.

Application Rates for Soil Drench Uses in Field, Greenhouses, Shadehouses, Nuseries [Outdoors and Indoors] [Open or Enclosed]

Serenade MAX 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 or use Serenade MAX in a tank mix or rotational program with other registered fungicides.

Crops	Disease	Rate* Lbs./100 gallons spray mix	Application Instructions
Ornamentals Trees Shrubs Annuals Perennials Flowering plants Tropical plants Bedding plants Container plants Potted plants Foliage plants Deciduous trees Deciduous shrubs Forestry Seedlings Fruits Vegetables and other crops grown in greenhouses and open and enclosed nurseries	*Rhizoctonia spp. Pythium spp.* *Fusarium spp.* *Phytophthora spp.*	1-3	**Soil Drench Uses: Field, Greenhouses, Glasshouse, Shadehouses, Indoors/Outdoors, Open And Enclosed Nurseries** Mix 1 lb. to 3 lb. of Serenade MAX with 100 gallons of water. Use 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 (1 pint / sq. ft. for each 3 inches of soil depth) 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 – 28 days throughout the growing cycle. Serenade MAX can be mixed with chemical fungicides registered for soil applications.

*** Rate presented in pounds/100 gallons of spray mix otherwise noted.**

For Home and Garden Use

Serenade® MAX™

[For Home and Garden Use]
[For Home, Garden and Lawn (Turf) Use]

[Alternate Name: Serenade® Garden Disease Control]
[Alternate Name: Serenade® Garden Disease Control Wettable Powder]

A Wettable Powder Biofungicide

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

[Optional Claims:]
[Attacks over 40 diseases]
[Attacks both fungal & bacterial diseases]
[Apply any time of day]
[Will not burn or injure leaves, lawns (turf)]
[Fungicide (or Biofungicide) that attacks harmful garden and lawn diseases]
[Use on Roses, Vegetables, Fruits, Flowering Plants, Trees, Shrubs and Lawns (Turf)]
[Controls Bacterial Spot, Powdery Mildew, Rust, Grey Mold, Leaf Blight, Scab]
[Same active ingredient used by farmers]
[Optional Claims for Lawn and Turf Label:]
[Prevents and controls harmful (major) lawn diseases (including brown patch, dollar spot)"]
[Controls Brown Patch, dollar spot and other common lawn diseases]
[Use anytime 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]

ACTIVE INGREDIENT	
QST 713 strain of dried *Bacillus subtilis*	14.6%
OTHER INGREDIENTS	**85.4%**
Total	100.0%

Contains a minimum of 7.3×10^9 cfu/g

EPA Reg. No. 69592-11

EPA Est. No.:

1	2	3	4	5
69592-	67545-	66728-	37429-	69592-
MEX-1	AZ-1	GA-2	GA-2	CA-1

Superscript corresponds to last digit of lot number stamped on container

U.S. Patent Nos. 6,060,051, 6,103,228, 6,291,426, and 6,417,163 on QST 713 strain of *Bacillus subtilis*

Net weight:

KEEP OUT OF REACH OF CHILDREN

CAUTION

[For smaller container sizes:]
[See attached booklet for First Aid Statements.]
[Peel back tab for First Aid and Precautionary Statements and Directions for Use.]

FIRST AID

IF ON SKIN: Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

IF IN EYES: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF 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. Have the product label with you when calling a poison control center or doctor.

PRECAUTIONARY STATEMENTS– Home and Garden

HAZARDS TO HUMANS & DOMESTIC ANIMALS
Causes moderate eye irritation. Harmful if absorbed through skin. Harmful if inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

ENVIRONMENTAL HAZARDS – Home and Garden

Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE – Home and Garden

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

GENERAL USE INFORMATION – Home and Garden

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

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

[Serenade MAX CAN BE USED ON THE DAY OF HARVEST AND ON ALL FRUITS AND VEGETABLES USED IN CANNING.]

This product can be used for organic and non-organic crop production.

As a general precaution, when exposed to high concentrations of a living microbial product such as this, wear a dust particle mask when mixing or applying this product.

MIXING AND APPLICATION INSTRUCTIONS – Home and Garden

Serenade MAX can be applied in commonly used pressurized hand-held sprayers, and spray trigger bottles. Spray to ensure thorough coverage of the plant.

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].

Serenade MAX can be applied up to and including the day of harvest.

Pressurized Hand-Held Sprayer Application Instructions:

Mixing and Application:

For all applications mix the spray solution thoroughly and keep spray solution agitated during application. Do not allow spray mixture to stand overnight or for prolonged periods.

For Fruits, Vegetables, Nuts (e. g. Apples/Pears, Broccoli, Carrot, Cherries, Cucurbits, Grapes, Leafy Vegetables, Onions/Garlic, Pepper, Tomato, and Walnuts): mix 1/8 cup to ½ cup (1/8 cup = 2 TBSP to ½ cup = 8 TBSP) of Serenade MAX per gallon of water. Spray plants to runoff, covering both top and bottom surface of foliage to ensure thorough coverage.

For Annual and Perennial Ornamental Plants, Flowering Plants, Tropical Foliage, Trees and Shrubs: mix 1/8 cup to ½ cup (1/8 cup = 2 TBSP to ½ cup = 8 TBSP), of Serenade MAX per gallon of water. Spray plants to runoff, covering both top and bottom surface of foliage to ensure thorough coverage.

For Lawns, Turf and Ornamental Turf: mix 3 TBSP of Serenade MAX per gallon of water. Apply at a rate of 1 gallon of spray solution per 500 square feet.

[Optional/Alternate: For Lawns, Turf and Ornamental Turf: mix 1.5 TBSP of Serenade MAX per gallon of water. Apply at a rate of 2 gallons of spray solution per 500 square feet.]

[Serenade MAX] MAY BE USED ON [THE FOLLOWING]: [Alternate: VEGETABLES, FRUIT, NUTS, AND ORNAMENTAL PLANTS] [Alternate; PLANTS, CROPS, SITES]

PLANTS [CROPS, SITES]:

HOME and GARDEN [VEGETABLE, FRUIT AND NUTS] PLANTS:

Artichoke, Asparagus

Berries (Blueberries, Blackberry, Raspberry, Loganberry, Huckleberry, Cranberry, Gooseberry, Elderberry, Currant, Caneberry , and other berry crops)

Brassica (Broccoli, Cabbage, Cauliflower, Brussels Sprouts, Collards, Kale, Mustard Greens, Kohlrabi and other brassica crops)

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

Citrus (Orange, Grapefruit, Lemon, Tangerine, Tangelo, Pummelo and other citrus crops)

Cucurbits (Cucumber, Cantaloupe, Melon, Muskmelon, Squash, Watermelon and other cucurbit crops)

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

Grape, Herbs/ Spices, Hop

Leafy Vegetables (Lettuce, Celery, Spinach, Parsley, Radicchio and other leafy vegetable crops)

Legumes/vegetables (Beans, Green beans, Snap beans, Shell beans, Dry Beans, Garbanzo beans, Lima beans, Peas, Chick peas, Split peas, Lentils and other legume/ vegetable crops)

Mango, Mint, Olive, Papaya, Peanuts

Pome Fruit (Apple, Crabapple, Pear, Quince, Mayhaw and other pome fruit)

Root / Tuber (Carrot, Potato, Sweet Potato, Beets, Ginger, Horseradish, Radish, Gingseng, Turnip and other root/ tuber crops)

Roses

Stone Fruit (Apricot, Cherry, Nectarine, Peach, Plum, Prune, and other stone fruit crops)

Strawberry, Sweet Corn, Tobacco, Watercress

Tree Nut (Almond, Pistachio, Pecan, Walnut, Filberts, Chestnut, Cashew, Beechnut, Butternut and other tree nut crops)

GREENHOUSE PLANTS:

Brassica (Broccoli, Cabbage, Cauliflower, Brussels Sprouts, Collards, Kale, Mustard Greens, Kohlrabi and other brassica crops)

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

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

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

Herbs/ Spices

Leafy Vegetables (Lettuce, Celery, Spinach, Parsley, Radicchio, and other leafy vegetables)

Root / Tuber (Carrot, Potato, Sweet Potato, Beets, Ginger, Horseradish, Radish, Gingseng, Turnip and other root/ tuber crops)

Strawberry

ORNAMENTALS, TREES, SHRUBS, FLOWERING PLANTS, TROPICAL PLANTS:

PLANTS EVALUATED FOR PHYTOTOXICITY

Annual and Perennial Flowering Plants:

Alyssum	Asters	Azalea
Begonia	Calla lily	
Chrysanthemum	Cyclamen	Dianthus
Dwarf Bee-Balm	Easter lily	
Garden phlox	Geraniums	Gerbera
Golden star	Hydrangea	Impatiens
Kalanchoe	Lanaria	Lisianthis
Lobelia	Marigolds	Orchids
Pansies	Petunia	Poinsettia
Portulaca	Ranunculus	Roses
Salvia spp.	Snapdragons	Stock
Verbena spp.	Vinca	Violas
Zinnias		

Tropical foliage:

Aglonemea	Dieffenbachia
Dracaena spp.	English Ivy
Hibiscus	Leatherleaf Fern
Spathiphyllum	

Trees and Shrubs:

Azalea	Boxwood
Crape myrtle	Dogwood
Jumbo azalea	Indian Hawthorn
Japanese maple	*Legustrum japonicum*
Lilac	Loropetalum
Photinia	Rhododendron
Rosaceae spp.	Soft Touch Holly
Spirea.	

[Optional Statement: 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. Use product according to label directions.]

DISEASES CONTROLLED [OR SUPRESSED] [OR PREVENTED] [BY SERENADE MAX] [ON VEGETABLES, FRUIT, NUTS, ORNAMENTAL PLANTS] [Alternate; ON PLANTS, CROPS, SITES]

Anthracnose -- *Colletotrichum* spp.

Bacteria-*Erwinia* spp, *Psuedomonas* spp, *Xanthomonas* spp

Bacterial Leaf Blight *(Xanthomonas campestris)*

Bacterial Speck (Pseudomonas syringae pv.) 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 -- *Diplocarpon rosea*

Botrytis *(Botrytis spp)*

Botrytis Leaf Blight ***(Botrytis squamosa)***

Botrytis Neck Rot ***(Botrytis* spp.)**

Downy Mildew *(Bremia lactucae, Personospora* spp., and *Plasmopara viticola)* - suppression

Early Blight ***(Alternaria solani)* – suppression**

Fire Blight ***(Erwinia amylovora)* – suppression**

Gray Mold ***(Botrytis cinerea)***

Greasy spot ***(Mycosphaerella citri)* - suppression**

Late Blight ***(Phytophthora infestans)* – suppression**

Leaf spots – (*Alternaria* spp, *Cercospora* spp, *Entomosporium* spp, *Helminthsporium* spp, *Myrothecium* spp , *Septoria* spp.)

Onion Downy Mildew ***(Peronospora destructor)***

Onion Purple Blotch ***(Alternaria porri)***

***Phytophthora* spp**

Pin Rot *(Alternaria/Xanthomonas* complex*)* - suppression

Powdery Mildew ***(Uncinula necator, Erysiphe* spp., *Sphaerotheca* spp., *Oidiopsis taurica, Leveillula taurica, Podosphaera leucotricha)***

Powdery Mildew – *Erysiphe* spp, *Oidium spp*, *Pldosphaera* spp, *Sphaerotheca* spp

Rust – *Puccinia* spp.

Scab *(Venturia* spp.*)* - suppression

Sclerotinia head and leaf drop ***(Sclerotinia* spp.)**

Sour Rot

Target Spot (*Corynespora cassiicola*)

Walnut Blight ***(Xanthomonas campestris)***

White Mold *(Sclerotinia sclerotiorum)* – suppression

[SERENADE MAX] MAY BE USED ON LAWNS, TURF AND ORNAMENTAL TURF and Golf Courses (Fairways, GREENS, roughs, tees).

LAWNS, TURF AND ORNAMENTAL TURF, GOLF COURSES (Fairways, GREENS, Roughs, Tees):
Bluegrass, Bentgrass, Bermudagrass, Dichondra, Fescue, Orchard grass, Poa Annua, St. Augustine, Ryegrass, Zoyzia, Mixtures and other grasses or ornamental turf.

DISEASES CONTROLLED [OR SUPRESSED] [OR PREVENTED] [BY SERENADE MAX] [ON LAWNS, TURF AND ORNAMENTAL TURF and Golf Courses (Fairways, GREENS, roughs, tees).]

Lawn and Turf Diseases:
Brown patch ***(Rhizoctonia solan)i***
Dollar Spot ***(Lanzia spp, Moellerodiscus*, spp. formerly *Sclerotinia homeocarpa)***
Powdery Mildew ***(Erysiphe graminis)***
Rust ***(Puccinia spp)***
Anthracnose ***(Colletotrichum graminicola)***

STORAGE AND DISPOSAL – Home and Garden

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

CONTAINER DISPOSAL:
If empty: **Do not reuse this container. 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.**

CONDITIONS FOR SALE AND WARRANTY

Except to the extent prohibited by applicable law, AgraQuest offers this product with the following conditions: 1) buyers and users of this product assume the risk of any storage, handling or use contrary to AgraQuest's label and directions and 2) AgraQuest's liability shall in no case exceed the purchase price of the applicable AgraQuest product.

Serenade is a registered trademark of AgraQuest, Inc.

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