SPECIMEN LABEL

REGALIA®
BIOFUNGICIDE

A plant extract to boost the plants' defense mechanisms to protect against certain fungal and bacterial diseases, and to improve plant health.

Active ingredient: Extract of *Reynoutria sachalinensis* ..... 5 %
Other ingredients: ..... 95 %
Total: ..... 100 %

EPA Reg. No.: 84059-3

GROUP P5 FUNGICIDE

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

IF SWALLOWED:	Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or if going for treatment.	

Net Contents: ☐ 1 gallon ☐ 2.5 gallons

OMRI LISTED For Organic Use

CAN BE USED IN ORGANIC PRODUCTION

Marrone Bio Innovations
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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear goggles or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

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

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

ENVIRONMENTAL HAZARDS

For Terrestrial Uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

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 exemptions pertaining to the statements on this label about personal protective equipment (PPE) and the restricted-entry interval (REI). 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
- Protective eyewear

GENERAL INFORMATION

REGALIA® Biofungicide is an extract from the plant *Reynoutria* spp. for use on edible crops. REGALIA® Biofungicide applied to actively growing plants (see DIRECTIONS FOR USE) will improve plant health, and will help make the treated portions resistant to certain plant diseases. Plant health benefits often result in greater yields at harvest. Use REGALIA® Biofungicide as a preventative rather than a curative application. Apply prior to disease infestation to protect the growing leaf tissue. See specific information for diseases controlled and use rates on edible crops.

REGALIA® Biofungicide can be used as a plant dip, soil drench, in-furrow spray, or applied through drip irrigation to control or suppress certain soil-borne diseases and to promote healthy root growth.

MODE OF ACTION

The extract obtained from *Reynoutria* spp. plant material contains active chemical compounds. The extract, when applied to the host plant, increases the plant's defense system due to a five-fold increase in phenolics and antioxidants, and strengthens cell walls. This induced resistance against important diseases is not systemic, but provides some translaminar protection. Repeat foliar applications at 7–14-day intervals to maintain induction and to protect new plant growth. The resistance induction takes place within one to two days.

Use REGALIA® Biofungicide, therefore, as a preventative treatment.

MIXING AND APPLICATION INSTRUCTIONS
– SHAKE WELL PRIOR TO USE –

REGALIA® Biofungicide is a micro-emulsion concentrate consisting of certain natural ingredients extracted from *Reynoutria* spp. Use 50-mesh nozzle screens or larger.

See AERIAL APPLICATION section for aerial application use directions.
See CHEMIGATION section for chemigation use directions.
See PRE-PLANT DIP section for pre-plant dip use directions.
See SOIL TREATMENT section for soil application use directions

Use higher water volumes with larger sized crops and extensive foliage to secure thorough coverage.

REGALIA® Biofungicide alone: Add ½ of the required amount of water to the mix tank. With the agitator running, add the REGALIA® Biofungicide to the mix tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the REGALIA® Biofungicide has completely dispersed into the mix water. Maintain agitation until all the mixture has been applied.

REGALIA® Biofungicide + tank-mixtures: Add ½–¾ of the required amount of water to the mix tank. Start the agitation before adding any tank mix partners. In general, tank-mix partners should be added in this order: wettable powders, dry flowable formulations, liquid flowable formulations, and emulsifiable formulations such as REGALIA® Biofungicide. Always allow each tank mix partner to become completely dispersed before adding the next component. Maintain continuous agitation until all components have been dispersed and throughout the application process. After all components are completely dispersed add the remainder of the water. REGALIA® Biofungicide cannot be mixed with another product with a prohibition against mixing. Use of the tank mix must be in accordance with the more restrictive label limitations and precautions. **Do not pre-mix REGALIA® Biofungicide with any other tank mix component prior to adding to the spray tank**.

Compatibility: Do not combine REGALIA® Biofungicide in the spray tank with pesticides, adjuvants, 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.

REGALIA® Biofungicide is compatible with many commonly used pesticides, fertilizers, adjuvants, and surfactants, but has not been evaluated with all potential combinations. To ensure compatibility of the tank mix combinations, evaluate prior to use as follows: Using a suitable container, add the proportional amounts of product to water. Add wettable powders first, then water dispersible granules, then 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 mix on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of the application.

AERIAL APPLICATION INSTRUCTIONS

Apply REGALIA® Biofungicide by aerial application to the Edible Crops listed at the rate of 0.5–1 quart per acre in a minimum of 5 gallons of water per acre unless specified differently in the SELECTED CROPS section. Increasing the amount of water applied per acre may improve product performance. Follow all instructions to reduce aerial drift.

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 droplets large enough to 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: 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. Number 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 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.

CHEMIGATION USE DIRECTIONS

Apply REGALIA® Biofungicide at 1–4 quarts per acre according to the instructions below unless specified differently in the SELECTED CROPS section.

CHEMIGATION

General Requirements -

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

Specific Requirements for Chemigation Systems Connected to Public Water Systems -

1) Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public 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 or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Sprinkler Chemigation -

1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Flood (Basin), Furrow and Border Chemigation -

1) Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.
2) The systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
   a. 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 backflow.
   b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
   c. 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.
   d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
   e. 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.
   f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Specific Requirements for Drip (Trickle) Chemigation -

1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Application Instructions for All Types of Chemigation -

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) Determine the treatment rates as indicated in the directions for use and make proper dilutions. Product can be applied continuously or at any time during the water application.
3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required.

PRE-PLANT DIP USE DIRECTIONS

REGALIA® Biofungicide can be applied as a pre-plant dip for improved plant health and suppression of certain soil-borne diseases. Apply REGALIA® Biofungicide in 1–4 quarts product per 100 gallons of water as a pre-plant dip immediately prior to transplanting, unless specified differently in the SELECTED CROPS section**.**

SOIL TREATMENT USE DIRECTIONS

REGALIA® Biofungicide can be applied by soil drench, in-furrow spray, or soil injection to improve plant health and to protect against certain soil-borne diseases.

In general, REGALIA® Biofungicide can be applied by the following methods, unless specified differently in the SELECTED CROPS section:

Soil Drench Applications:

Apply REGALIA® Biofungicide at a concentration of 1–3 quarts per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of REGALIA® Biofungicide during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10–14-day interval.

Shanked-In and Injected Applications:

REGALIA® Biofungicide can be shanked-in or injected into the soil alone, or with most types of liquid nutrients.

In-Furrow Applications:

At planting, apply REGALIA® Biofungicide as an in-furrow spray at the rate of 1–4 quarts per acre or 2.2–8.8 fluid ounces per 1000 feet of row according to the chart below. Apply REGALIA® Biofungicide in 5–15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.

Rate	In-Furrow Application Rates Product per Acre (fl. oz.)					
	30” Rows	32” Rows	34” Rows	36” Rows	38” Rows	40” Rows
2.2 fl. oz. per 1000 ft. row	38.3	36.0	33.8	32.0	30.3	28.7
8.8 fl. oz. per 1000 ft. row	153.2	144.0	135.2	128.0	121.2	114.8

30” = 17,424 row ft./acre, 32” = 16,315 row ft./acre, 34” = 15,374 row ft./acre,
36” = 14,520 row ft./acre, 38” = 13,754 row ft./acre, 40” = 13,068 row ft./acre.

APPLICATION RATES FOR SELECTED CROPS

REGALIA® Biofungicide used as specified will improve plant health, and induce the defense system of the treated plants listed below towards the diseases specified below.

The general recommended use rate for REGALIA® Biofungicide applied alone or as an alternate spray is 2–4 quarts per 100 gallons of water (0.5–1.0% v/v dilution of REGALIA® Biofungicide) applied at 50–100 gallons of water per acre. When tank mixed with another fungicide, the use rate for REGALIA® Biofungicide is 1–4 quarts in 100 gallons of water applied at 50–100 gallons of water per acre. Use higher water volumes with larger sized crops and extensive foliage in order to secure thorough coverage. See specific application recommendations pertaining to each crop for additional details.

For greenhouse application on the crops and diseases listed, the recommended use rate for REGALIA® Biofungicide is 2–4 quarts in 100 gallons of water (0.5–1.0% v/v dilution of REGALIA® Biofungicide) sprayed until just before point of runoff. When tank mixed with another fungicide, the use rate for REGALIA® Biofungicide is 1–4 quarts in 100 gallons of water. Repeat at 7–14-day intervals as needed. See specific application recommendations for each crop for additional details.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Artichoke	Powdery Mildew (*Erysiphe cichoracearum*) (*Leveillula taurica)* Ramularia Leaf Spot (*Ramularia cynarae*)	Foliar (Ground)	1–4 quarts per acre	For ground applications, apply this product in 50–100 gallons of water per acre. Apply this product preventatively or when the first disease symptoms are visible and reapply every 7–14 days.
		Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply this product preventatively or when the first disease symptoms are visible and reapply every 7–14 days.
		Chemigation	1–4 quarts per acre	For chemigation applications for improved plant growth, apply this product through drip irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Asparagus	Botrytis Blight (*Botrytis cinerea*) Rust (*Puccinia aspargi*)	Foliar (Ground)	1–4 quarts per acre	For ground applications, apply this product in 50–100 gallons of water per acre. Apply this product preventatively or when the first disease symptoms are visible and reapply every 7–14 days.
		Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply this product preventatively or when the first disease symptoms are visible and reapply every 7–14 days.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Bushberries and Caneberries Blueberry Blackberry (all varieties) Cranberry Currant Elderberry Gooseberry Huckleberry Juneberry Ligonberry Loganberry Raspberry (red and black) Salal and other berry crops	Mummy Berry (*Monilinia vaccinii-corymbosi*) Alternaria Fruit Rot (*Alternaria* spp.) Anthracnose Fruit Rot (*Colletotrichum acutatum*) Bacterial Canker (*Pseudomonas syringae*) Botrytis Blight (*Botrytis cinerea*) Leaf Spot and Blotch (*Mycosphaerella* spp.) (*Septoria* spp.) Phomopsis Leaf Spot, Twig Blight, and Fruit Rot (*Phomopsis* spp.) Powdery Mildew (*Microsphaera alni*) Spur Blight (*Didymella* spp.) (*Phoma* spp.)	Foliar (Ground)	1–4 quarts per acre	For ground applications, apply this product in 50–100 gallons of water per acre. Mummy Berry – Initiate application at bud break stage of development. Apply this product preventatively and repeat on a 7–10-day interval or as needed. For best performance, tank mix this product with other registered fungicides for Mummy Berry control. Botrytis Blight – Apply this product preventatively when the first disease symptoms are visible and reapply every 7–14 days. Bacterial Canker – Apply this product prior to Fall rains and repeat applications during dormancy before Spring growth. This product can be tank mixed with another registered fungicide for improved control of bacterial canker. Anthracnose Fruit Rot and Alternaria Fruit Rot on blueberries – Initiate application at green tip and continue applications on a 7–10-day.
		Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 5 gallons of water per acre.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Bulb Vegetables Onion (Bulb and Green) Garlic Leek Shallot and other bulb vegetable crops	Botrytis Leaf Blight (*Botrytis squamosa*) Botrytis Neck Rot (*Botrytis* spp.) Downy Mildew (*Peronospora* spp.) Onion Purple Blotch (*Alternaria porri*) Powdery Mildew (*Erysiphe* spp.) Rust (*Puccinia porri*) Stemphyllium Leaf Blight (*Stemphylium vesicarium*)	Foliar	1–4 quarts per acre	For foliar applications, apply this product preventatively in 50–100 gallons of water per acre. Repeat applications at 7–14-day intervals. Under moderate to heavy disease pressure, tank mix this product with another fungicide.

Bulb Vegetables (continued)	*Fusarium* spp. *Pythium* spp. *Rhizoctonia* spp.	Soil Drench	1–3 quarts per 100 gallons	For soil drench applications, apply this product at a concentration of 1–3 quarts per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10–14-day interval.
		In-Furrow	1–4 quarts per acre 2.2–8.8 fl. oz. per 1000 ft. row	For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 1–4 quarts per acre or 2.2–8.8 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5–15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.
		Chemigation	1–4 quarts per acre	For chemigation applications, apply this product through irrigation at the rate of 1–4 quarts per acre immediately after transplant and at 14-day intervals or begin 14 days after transplant when plant dip or soil drench applications are used.
		Plant Dip	1–4 quarts per 100 gallons	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product in a 0.25–1% v/v suspension (1–4 quarts this product per 100 gallons water) as a pre-plant dip immediately prior to transplanting.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Cereal Grains Buckwheat Grain Amaranth Milo Millets	Powdery Mildew (*Erysiphe graminis*) Bacterial Blight and Streak (*Xanthomonas* spp.) Brown Rot, Leaf Spots & Smuts (*Ceratobasidium* spp.) (*Cercospora* spp.) (*Cochliobolus* spp.) (*Drechslera* spp.)	Foliar (Ground)	1–2 quarts per acre	For ground applications to optimize disease control and to maximize yields, apply this product in 15–40 gallons of water per acre. It is important to apply this product at the flag leaf stage to maximize yield. Apply this product preventatively or when the first disease symptoms appear. Repeat applications in 7–14-day intervals depending upon crop growth and disease pressure. When the plants are under high disease pressure, tank mix this product with another fungicide for more effective control.

Cereal Grains (continued)	Rust (*Puccinia* spp.) Septoria Leaf Spot (*Septoria* spp.) Sheath Spot and Blight (*Rhizoctonia oryzae)* (*Thanatephorus cucumeris*) Stem Rot (*Sclerotium oryzae*) Smut (*Tilletia barclayana*)	Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 5 gallons water per acre. It is important to apply this product at the flag leaf stage to maximize yield. Apply this product preventatively or when the first disease symptoms appear. Repeat applications in 7–14-day intervals depending upon crop growth and disease pressure. When the plants are under high disease pressure, tank mix this product with another registered fungicide for more effective control.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Citrus Crops Orange Grapefruit Lemon Tangelo Tangerine Pummelo and other citrus crops	Bacterial Canker (*Xanthomonas* spp.) Alternaria Brown Spot *(Alternaria alternata)* Bacterial Blast (*Pseudomonas syringae*) Black Spot (*Guignardia citricarpa)* *(Phyllosticta citricarpa*) Greasy Spot (*Mycosphaerella citri*) Melanose *(Diaporthe citri)*	Foliar (Ground)	1–4 quarts per acre	For ground applications, apply this product preventatively in 50–100 gallons of water per acre. For improved performance, use this product in a tank mix or rotational program with other registered fungicides. Repeat applications at 7–14-day intervals. Dilute applications: this product can be applied by ground equipment to tree crops in dilute applications of 100–400 gallons of water. Apply this product at a rate of 2–4 quarts per acre when applied alone, or at 1–4 quarts per acre when tank mixed with another fungicide. Avoid excessive amounts of water that result in the runoff of spray material.
	Postbloom Fruit Drop (*Colletotrichum acutatum)* Scab *(Elsinoe australis)* *(Elsinoe fawcetti)*	Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 5 gallons water per acre. For improved performance, use this product in a tank mix or rotational program with other registered fungicides. Repeat applications at 7–14-day intervals.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Cole Crops (Brassicas) Broccoli Broccoli Rabe Brussels Sprouts Cabbage Chinese Broccoli Chinese Cabbage (Bok Choy) Chinese Cabbage (Napa) Chinese Mustard Cabbage (Gai Choy) Cauliflower Cavalo Collards Kale Kohlrabi Mizuna Mustard Greens Mustard Spinach Rape Greens Turnip and other cole crops	Powdery Mildew (*Erysiphe cruciferarum*) (*Erysiphe polygoni*) Alternaria Leaf Spot (*Alternaria* spp.) Downy Mildew (*Peronospora parasitica*) Pin Rot Complex (*Alternaria/Xanthomonas*) Xanthomonas Leaf Spot (*Xanthomonas campestris*)	Foliar (Ground)	0.5–4 quarts per acre	For ground applications, apply this product at 1–4 quarts per 50 gallons of water. For concentrated ground applications, apply this product at 0.5–1.5 quarts per acre in 10–25 gallons of water per acre. Repeat applications at 7–14-day intervals. Under moderate to heavy disease pressure, tank mix this product with another fungicide.
		Foliar (Aerial)	0.5–1.5 quarts per acre	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Repeat applications at 7–14-day intervals. Under moderate to heavy disease pressure, tank mix this product with another fungicide.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Cucurbits **Includes all types and hybrids of:** Chayote Chinese waxgourd Cucumber Citron melon Gherkin Pumpkin Watermelon **Edible Gourd:** Chinese okra Cucuzza Hyotan	Powdery Mildew (*Erysiphe cichoracearum*) (*Sphaerotheca fuliginea)* Anthracnose *(Colletotrichum lagenarium)* Alternaria Blight (*Alternaria cucumerina*) Cercospora Leaf Spot (*Cercospora citrulina*) Downy Mildew (*Pseudoperonospora cubensis*) Gummy Stem Blight (*Didymella bryoniae*)	Foliar (Ground)	1–4 quarts per acre	For ground applications, apply this product preventatively in 25–100 gallons of water per acre or when the first symptoms of disease are visible. Increase water volume as plant size increases. Repeat applications in 7–14-day intervals depending upon crop growth and disease pressure. When greenhouse cucurbits are under high disease conditions, use the shorter spray interval. Downy Mildew – Tank mix this product with another fungicide labeled for Downy Mildew control and re-apply at a 7-day interval or according to the label directions of the tank mix partner. Phytophthora Blight – Apply this product in combination with labeled rates of a copper fungicide or with another fungicide labeled for Phytophthora Blight control.

Cucurbits (continued) ***Mormordica* spp.:** Balsam apple Balsam pear Bitter melon Chinese cucumber **Muskmelon:** Cantaloupe Casaba Crenshaw melon Golden pershaw melon Honeydew melon Honey balls Mango melon Persian melon Pineapple melon Santa Claus melon Snake melon **Summer Squash:** Crookneck squash Scallop squash Straightneck squash Vegetable marrow Zucchini **Winter Squash:** Acorn squash Butternut squash Calabaza Hubbard squash Spaghetti squash and other cucurbit crops	Phytophthora Blight *(Phytophthora capsici*)	Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Repeat applications in 7–14-day intervals depending upon crop growth and disease pressure. Downy Mildew – Tank mix this product with another fungicide labeled for Downy Mildew control and re-apply at a 7-day interval or according to the label directions of the tank mix partner. Phytophthora Blight – Apply this product in combination with labeled rates of a copper fungicide or with another fungicide labeled for Phytophthora Blight control.
	Fusarium spp. *Phytophthora* spp. *Pythium* spp. *Rhizoctonia* spp. *Verticillium* spp.	Soil Drench	1–3 quarts per 100 gallons	For soil drench applications, apply this product at a concentration of 1–3 quarts per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10-14-day interval.
		In-Furrow	1–4 quarts per acre 2.2–8.8 fl.oz. per 1000 ft. row	For in-furrow applications at planting, apply this product as an in-furrow spray at the rate of 1–4 quarts per acre or 2.2–8.8 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5–15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.
		Plant Dip	1–4 quarts per 100 gallons	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product in a 0.25–1% v/v suspension (1–4 quarts this product per 100 gallons water) as a pre-plant dip immediately prior to transplanting.
		Chemigation	1–4 quarts per acre	For chemigation applications for improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation at the rate of 1–4 quarts per acre immediately after transplant and at 14-day intervals or begin 14 days after transplant when plant dip or soil drench applications are used.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Fruiting Vegetables Tomato Pepper Eggplant Ground Cherry Okra Tomatillo and other fruiting vegetable crops	Bacterial Blight (*Xanthomonas* spp.) Bacterial Spot (*Xanthomonas* spp.) Bacterial Speck (*Pseudomonas syringae*) Black Mold (*Alternaria alternata*) Early Blight (*Alternaria solani*) Gray Mold (*Botrytis cinerea*) Late Blight (*Phytophthora infestans*) Phytophthora Blight (*Phytophthora capsici*) Powdery Mildew *(Erysiphe* spp.) (*Leveillula taurica)* (*Oidopsis taurica*) (*Sphaerotheca* spp.) Target Spot (*Corynespora cassiicola*)	Foliar (Ground)	1–3 quarts per acre	For ground applications, apply this product preventatively in 25–100 gallons of water per acre. Increase water volume as plant size increases. Repeat applications at 7–10-day intervals. Tank mix this product with other registered fungicides for improved disease control under heavy pressure. Phytophthora Blight – Apply this product in combination with labeled rates of a copper fungicide or with another fungicide labeled for Phytophthora Blight control.
		Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 10 gallons of water per acre. Repeat applications at 7–10-day intervals. Tank mix this product with other registered fungicides for improved disease control under heavy pressure. Phytophthora Blight – Apply this product in combination with labeled rates of a copper fungicide.
	Fusarium spp. *Phytophthora* spp. *Pythium* spp. *Rhizoctonia* spp. *Verticillium* spp.	Soil Drench	1–3 quarts per 100 gallons	For soil drench applications, apply this product at a concentration of 1–3 quarts per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10–14-day interval.
		In-Furrow	1–4 quarts per acre 2.2–8.8 fl. oz per 1000 ft. row	For in-furrow applications, at planting, apply this product as an in-furrow spray at the rate of 1–4 quarts per acre or 2.2–8.8 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5–15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.

Fruiting Vegetables (continued)		Plant Dip	1–4 quarts per 100 gallons	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product in a 0.25–1% v/v suspension (1–4 quarts this product per 100 gallons water) as a pre-plant dip immediately prior to transplanting.
		Chemigation	1–4 quarts per acre	For chemigation applications for improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation at the rate of 1–4 quarts per acre immediately after transplant and at 14-day intervals or begin 14 days after transplant when plant dip or soil drench applications are used.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Grape	Powdery Mildew (*Uncinula necator*) Angular Leaf Spot (*Mycosphaerella angulata*) Anthracnose (*Elsinoe ampelina*) Botrytis Bunch Rot (*Botrytis cinerea*) Black Rot (*Guignardia bidwellii*) Downy Mildew (*Plasmopara viticola*) Eutypa (*Eutypa lata*) Leaf Blight (*Pseudocercospora vitis*) Phomopsis Fruit Rot (*Phomopsis viticola*) Ripe Rot (*Colletotrichum gloeosporioides*) Sour Rot *(Alternaria tenuis)* *(Aspergillus spp.)* *(Botrytis cinerea)* *(Cladosporium herbarum)* *(Penicillium spp.)* *(Rhizopus arrhizus)*	Foliar	1–4 quarts per acre	For ground applications, apply this product preventatively in 50–100 gallons of water per acre or when the first disease symptoms are visible. Under high disease pressure, use in a tank mix with another registered fungicide for more effective control. Repeat applications in 7–14-day intervals depending upon crop growth and disease pressure. Dilute applications: this product can be applied by ground equipment to vine and tree crops in dilute applications of 100–400 gallons of water. Apply this product at a rate of 2–4 quarts per acre when applied alone or at 1–4 quarts per acre when tank mixed with another fungicide. Avoid excessive amounts of water that result in the runoff of spray material.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Grass Seed	Powdery Mildew (*Erysiphe graminis*) (*Oidium* spp.) (*Podosphaera* spp.) (*Sphaerotheca* spp.) Rust (*Puccinia* spp.)	Foliar (Ground)	1–4 quarts per acre	For ground applications, apply this product preventatively in 25–100 gallons of water per acre when disease symptoms are first visible or when environmental conditions are conducive to rapid disease development. Continue sprays at 7-day intervals or as needed.
		Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 5 gallons of water per acre.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Hops	Downy Mildew (*Pseudoperonospora humuli*) Powdery Mildew (*Sphaerotheca macularis*)	Foliar	1–4 quarts per acre	Apply this product preventatively when disease symptoms are first visible or when environmental conditions are conducive to rapid disease development. Continue sprays at 7-day intervals or as needed. Minimum spray volumes for hop growth stages are as follows: Emergence to Training: Apply 1–2 quarts this product per acre 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-Touch: Apply 1–2 quarts this product per acre 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: Apply 2–4 quarts of this product using a minimum of 100 gallons of water per acre. Higher water volumes may be necessary to achieve thorough coverage after side arms develop. Do not apply more than 4 quarts of product per acre per application. Apply adequate spray volume to achieve complete spray coverage. Use the higher rates when moderate to high disease pressure is present or expected. For control of Downy Mildew, tank mix this product with another fungicide labeled for Downy Mildew control and re-apply at a 7-day interval or according to the label directions of the tank mix partner.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Leafy Vegetable Crops Arugula Beet Celery Chervil Cilantro Corn Salad Cress Dandelion Dock Edible Chrysanthemum Endive Fennel Garden Peas Head Lettuce Leaf Lettuce Parsley Purslane Radicchio Rhubarb Spinach Swiss Chard Watercress and other leafy vegetable crops	Downy Mildew (*Bremia lactuca)* *(Peronospora* spp.) Bacterial Blight/Rot (*Xanthomonas* spp.) Cercospora leafspot (*Cercospora* spp.) Late Blight (*Septoria apiicola*) Pink Rot (*Sclerotinia sclerotiorum*) Powdery Mildew (*Erysiphe cichoracearum*) Sclerotinia Head and Leaf Drop (*Sclerotinia minor)* (*Sclerotinia sclerotiorum*) White Rust (*Albugo occidentalis*)	Foliar (Ground)	0.5–4 quarts per acre	For ground applications, apply this product at 0.5–4 quarts in 50–100 gallons of water per acre. For concentrated ground applications, apply this product at 0.5–1.5 quarts per acre in a minimum of 10 gallons of water per acre. Repeat applications at 7–14-day intervals.
		Foliar (Aerial)	0.5–1.5 quarts per acre	West of the Rocky Mountains – For aerial applications, apply this product at 0.5–1.5 quarts per acre in a minimum of 10 gallons of water per acre. East of the Rocky Mountains – For aerial applications, apply this product at 0.5–1 quarts per acre in a minimum of 5 gallons of water per acre. For California: For aerial application, apply this product at 1–3pints per acre in 10–20 gallons of water per acre. Repeat applications at 7–14-day intervals.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**. **Restrictions:** REGALIA® Biofungicide should be applied to healthy, actively growing plants. Do not apply REGALIA® Biofungicide to plants that are stressed due to cold weather, drought, excessive moisture, etc. Do not apply when extended cold or cold and cloudy conditions are expected.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Legumes/ Vegetables (not including soybeans and peanuts) Chick Peas Dry Beans Garbanzo Beans Green Beans Lentils Lima Beans Peas Shell Beans Snap Beans Split Peas	Bacterial Blight (*Xanthomonas campestris*) Gray Mold (*Botrytis cinerea*) Pythium (aerial blight phase) (*Pythium spp.*) Powdery Mildew (*Erysiphe* spp.) Rust *(Puccinia* spp.) (*Uromyces appendiculatus)* White Mold (*Sclerotinia sclerotiorum*)	Foliar	1–4 quarts per acre	For foliar applications, apply this product preventatively in 20–100 gallons of water per acre. For improved performance, use this product in a tank mix or rotational program with another registered fungicide. Repeat applications at 7–14-day intervals.

Legumes/ Vegetables (continued) and other legume crops (including those grown for seed or oil production)	*Fusarium* spp. *Phytophthora* spp. *Pythium* spp. *Rhizoctonia* spp.	In-Furrow	1–4 quarts per acre 2.2–8.8 fl. oz per 1000 ft. row	For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 1–4 quarts per acre or 2.2–8.8 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5–15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Mint and Other Herbs/Spices Angelica Balm Basil Borage Burnet Chamomile Catnip Chervil Chive Clary Coriander Costmary Cilantro Curry Dillweed Horehound Hyssop Lavender Lemongrass Lovage Marjoram Nasturtium Parsley (dried) Peppermint Rosemary Sage Savory (summer and winter) Sweet Bay Tansy Tarragon Thyme Wintergreen Woodruff Wormwood and other herbs/spices	Downy Mildew (*Peronospora* spp.) Powdery Mildew (*Erysiphe* spp.) Rust (*Puccinia menthae*)	Foliar (Ground)	1–4 quarts per acre	For ground applications, apply this product preventatively in a minimum of 50 gallons of water per acre. Repeat applications at 7–14-day intervals.
		Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 5 gallons water per acre. Repeat applications at 7–14-day intervals.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Oil Seed Crops (not including cotton, peanut, or soybean) Castor Flax Safflower Sesame and other oil seed crops	Bacterial Pustule (*Xanthomonas* spp.) Bacterial Speck (*Pseudomonas syringe pv. glycinea*) Brown Spot (*Septoria glycines*) Cercospora Leaf Spot (*Cercospora* spp.) Downy Mildew (*Peronospora mansherica*) Pod and Stem Blight (*Diaporthe phaseolorum* var. *sojae*), (*Phomopsis longicola*) White Mold/ Sclerotinia Stem Rot (*Sclerotinia sclerotiorum*)	Foliar (Ground)	0.5–2 quarts per acre	For ground applications to optimize disease control and to maximize yields, apply this product preventatively in 15–40 gallons of water per acre. For improved performance, apply this product in a tank mix program with another registered fungicide. Consult your local Extension Specialist or Crop Consultant regarding the optimum timing of fungicide applications.
		Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 3 gallons per acre. For improved performance, apply this product in a tank mix program with another registered fungicide. Consult your local Extension Specialist or Crop Consultant regarding the optimum timing of fungicide applications.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Olive	Olive Knot (*Pseudomonas savastanoi*)	Foliar	1–4 quarts per acre	Apply this product preventatively in 50–100 gallons of water per acre. Repeat applications at 7–14-day intervals. Dilute applications: this product can be applied by ground equipment to tree crops in dilute applications of 100–400 gallons of water. Apply this product at a rate of 2–4 quarts per acre when applied alone, or at 1–4 quarts per acre when tank mixed with another fungicide. Avoid excessive amounts of water that result in the runoff of spray material.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Pome Fruits Apple Crabapple Loquat Oriental Pear Pear Quince Mayhaw and other pome fruit crops	Powdery Mildew (*Podosphaera leucotricha*) Alternaria Blotch (*Alternaria mali*) Apple Scab (*Venturia inaequalis*) Suppression only Bitter Rot (*Colletotrichum* spp.) Black Rot/ Frogeye Leaf Spot (*Botryosphaeria obtusa*) Bot Rot (*Botryosphaeria dothidea*) Brooks Spot (*Mycosphaerella pomi*) Bull's Eye Rot (*Neofabraea* spp.) Cedar-Apple Rust (*Gymnosporangium juniperi-virginianae*) Suppression only Fire Blight (*Erwinia amylovora*) Suppression only Flyspeck (*Zygophiala jamaicensis*) Sooty Blotch *(Geastrumia polystigmati)* (*Leptodontium elatius*) (*Peltaster fructicola)* White Rot (*Botryosphaeria dothidea*)	Foliar	1–4 quarts per acre	For foliar applications, apply this product in 50–100 gallons of water per acre. Begin applications when conditions are conducive to disease development but not prior to petal fall. Repeat applications on 7–10-day intervals. 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. Fire Blight – For suppression, apply 1–2 quarts of this product in 50–100 gallons of water per acre beginning at petal fall. For maximum control, use this product prior to infection events. During periods of rapid development and frequent infection periods, use spray intervals of 3–7 days. Apply in sufficient water to provide full coverage. For improved performance, use this product 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. Scab – For suppression, apply 1 quart of this product in 50–100 gallons of water per acre at green tip and through bloom when environmental conditions become favorable for primary Scab development and repeat on a 7–10-day interval or as needed. Use this product in a tank mix or rotational program with other fungicides labeled for Scab control. Following bloom, this product can be applied at 2–4 quarts per acre. Use caution when selecting spray adjuvants. Select only those adjuvants which through prior experience do not affect fruit finish when combined with this product. Dilute applications: this product can be applied by ground equipment to tree crops in dilute applications of 100–400 gallons of water. Apply this product at a rate of 2–4 quarts per acre when applied alone, or at 1–4 quarts per acre when tank mixed with another fungicide. Avoid excessive amounts of water that result in the runoff of spray material.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Root, Tuber & Corm Crops Potato Beet Carrot Cassava Ginger Ginseng Horseradish Radish Sweet Potato Turnip and other root crops (including those for seed production)	Bacterial Leaf Blight (*Xanthomonas campestris*) Black Root Rot / Black Crown Rot (*Alternaria* spp.) Downy Mildew (*Peronospora* spp.) Early Blight (*Alternaria solani*) Gray Mold (*Botrytis* spp.) Late Blight (*Phytophthora infestans*) Powdery Mildew (*Erysiphe* spp.) White Mold (*Sclerotinia sclerotiorum*)	Foliar	1–4 quarts per acre	For foliar applications, apply this product in 25–100 gallons of water per acre sufficient to provide thorough coverage. Begin application soon after emergence or transplant, and when conditions are conducive to disease development. Repeat on a 7–10-day interval or as needed. Use shorter intervals when conditions are conducive to rapid disease development. For suppression of Early Blight, Black Root Rot/Black Crown Rot, and Late Blight, begin application of this product in 25–100 gallons of water per acre soon after emergence when conditions are conducive to disease development. Repeat on a 5–7-day interval or as needed. For improved performance, use this product in a tank mix with other registered fungicides.
	Clubroot (*Plasmodiophora brassicae*) Common Scab (*Streptomyces scabies*) *Fusarium* spp. *Phytophthora* spp. *Pythium* spp. *Rhizoctonia* spp. *Verticillium* spp.	Soil Drench	1–3 quarts per 100 gallons	For soil drench applications, apply this product at a concentration of 1–3 quarts per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10–14-day interval.
		In-Furrow	1–4 quarts per acre 2.2–8.8 fl. oz per 1000 ft. row	For in-furrow applications at planting, apply this product as an in-furrow spray at the rate of 1–4 quarts per acre or 2.2–8.8 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5–15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.
		Chemigation	1–4 quarts per acre	For chemigation applications for improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation at the rate of 1–4 quarts per acre immediately after transplant and at 14-day intervals or begin 14 days after transplant when plant dip or soil drench applications are used.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Stone Fruits Apricot Cherry (sweet and tart) Nectarine Peach Plum Plumcot Prune and other stone fruit crops	Alternaria Spot/Fruit Rot (*Alternaria alternata*) Anthracnose (*Colletotrichum* spp.) Bacterial Canker (*Pseudomonas* spp.) Bacterial Spot (*Xanthomonas pruni*) Brown Rot Blossom Blight (*Monilinia laxa*) Brown Rot Fruit Rot (*Monilinia fruticola*) Cercospora Leaf Spot (*Cercospora* spp.) Cherry Leaf Spot (*Blumeriella jaapii*) Gray Mold (*Botrytis cinerea*) Powdery Mildew (*Podosphaera* spp.) (*Sphaerotheca pannosa)* Rust (*Tranzschelia discolor*) Rusty Spot (*Podosphaera leucotricha*) Scab (*Cladosporium carpophilum*) Shot Hole (*Wilsonomyces carpophilus)*	Foliar	1–4 quarts per acre	For foliar applications, apply this product preventatively in 50–100 gallons of water per acre. Bacterial Blight – Apply this product in 50–100 gallons of water per acre postharvest before Fall rains. Brown Rot Blossom Blight – Begin application of this product in 50–100 gallons of water per acre at early bloom, and repeat through petal fall on a 7-day interval or as needed. Powdery Mildew – Begin application of this product in 50–100 gallons of water per acre at popcorn stage, and repeat on a 7-day interval or as needed. For improved performance, use this product in a tank mix or rotational program with other registered fungicides for powdery mildew control. Scab – Begin application of this product in 50–100 gallons of water per acre at petal fall, and repeat on a 7–10-day interval or as needed. For improved performance, tank mix this product with another fungicide labeled for Scab 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 7–10-day interval or as needed. Use in a tank mix or rotational program when disease conditions are severe. Dilute applications: this product can be applied by ground equipment to tree crops in dilute applications of 100–400 gallons of water. Apply this product at a rate of 2–4 quarts per acre when applied alone, or at 1–4 quarts per acre when tank mixed with another fungicide. Avoid excessive amounts of water that result in the runoff of spray material.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Strawberry	Anthracnose (*Collectotrichum* spp.) Suppression only Botrytis (*Botrytis cinerea*) Leaf Spot (*Mycosphaerella fragariae*) Phomopsis Leaf Blight (*Phomopsis obscurans*) Powdery Mildew (*Sphaerotheca macularis*)	Foliar	1–3 quarts per acre	For foliar applications, apply this product preventatively in 50–100 gallons of water per acre at 7–14-day spray intervals or as soon as first symptoms of disease appear. Anthracnose – For suppression, apply this product preventatively in 50–100 gallons of water per acre and repeat on a 7–10-day interval or as needed. For best performance, tank mix this product with other registered fungicides for Anthracnose control. Dilute applications: this product can be applied by ground equipment to strawberries in dilute applications of 100–200 gallons of water. Apply this product at a rate of 2–3 quarts per acre when applied alone, or at 1–3 quarts per acre when tank mixed with another fungicide. Avoid excessive amounts of water that result in the runoff of spray material.
	Black Root Rot (*Rhizoctonia* spp.) (*Pythium* spp.) (*Fusarium* spp.) (*Cylindrocarpon* spp.) Phytophthora Root Rot and Crown Rot *(Phytophthora* spp.) Verticillium Wilt *(Verticillium* spp.) *Fusarium* spp. *Pythium* spp. *Rhizoctonia* spp.	Plant Dip	1–4 quarts per 100 gallons	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product in a 0.25–1% v/v suspension (1–4 quarts per 100 gallons water) as a pre-plant dip to strawberry plants, roots and crowns immediately prior to transplanting.
		Soil Drench	1–3 quarts per 100 gallons	For soil drench applications, apply this product at a concentration of 1–3 quarts per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10–14-day interval.
		Chemigation	1–4 quarts per acre	For chemigation applications for improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation at the rate of 1–4 quarts per acre immediately after transplant and at 14-day intervals or begin 14 days after transplant when plant dip or soil drench applications are used.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Tree Nut Crops Walnut (Black and English) Almond Beech nut Brazil nut Butternut Cashew Chestnut Chinquapin Filbert Hickory nut Macadamia nut Pecan Pistachio and other tree nut crops	Walnut Blight (*Xanthomonas campestris*) Alternaria Late Blight, Alternaria Leaf Spot (*Alternaria* spp.) Anthracnose (*Collectotrichum* spp.) (*Gnomonia leptostyla*) Bacterial Canker (*Erwinia nigrifluens*) (*Pseudomonas syringae*) Botryosphaeria Blight (*Botryosphaeria dothidea*) Brown Rot (*Monilinia* spp.) Eastern Filbert Blight (*Anisogramma anomala*) Green Fruit Rot (*Botrytis cinerea*) Leaf Rust (*Tranzschelia discolor*) Scab *(Cladosporium carpophilum*) (*Sphaceloma perseae)* Shot Hole (*Wilsonomyces carpophilus*)	Foliar (Ground)	1–4 quarts per acre	For ground applications, apply this product in 50–100 gallons of water per acre. This product can be tank mixed at the lower rate with another registered fungicide under heavy disease pressure. Walnut Blight – For preventative control, apply this product in 50–100 gallons of water per acre. Repeat applications at 7–10-day intervals. Under conditions of heavy disease pressure, tank mix this product with a copper-based fungicide. Dilute applications: this product can be applied by ground equipment to tree crops in dilute applications of 100–400 gallons of water. Apply this product at a rate of 2–4 quarts per acre when applied alone, or at 1–4 quarts per acre when tank mixed with another fungicide. Avoid excessive amounts of water that result in the runoff of spray material.
		Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 10 gallons per acre.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Tropical Fruits Avocado Banana Kiwi Mango Papaya Plantain Pineapple Pomegranate and other tropical fruit crops **Tropical Fruits** (continued)	Anthracnose (*Colletotrichum gloeosporioides*) Bacterial Blight (*Pseudomonas syringae*) (*Pseudomonas viridiflava)* Bacterial Canker (*Xanthomonas campestris*) Botrytis Fruit Rot (*Botrytis cinerea*) Scab (*Elsinoe mangiferae*) Sigatoka *(Mycosphaerella fijiensis)*	Foliar (Ground)	1–4 quarts per acre	For ground applications, apply this product preventatively in 50–100 gallons of water per acre. Repeat applications at 7–14-day intervals. Dilute applications: this product can be applied by ground equipment to tree crops in dilute applications of 100–400 gallons of water. Apply this product at a rate of 2–4 quarts per acre when applied alone, or at 1–4 quarts per acre when tank mixed with another fungicide. Avoid excessive amounts of water that result in the runoff of spray material. Sigatoka–Initiate applications when leaves first appear and repeat on a 7–10-day schedule. Apply in sufficient water by ground or air to obtain thorough coverage of foliage. For improved disease control, this product may be tank mixed with oil or other fungicides registered for Sigatoka control at label rates.
		Foliar (Aerial)	0.5–1 quart per acre	For aerial applications, apply this product in a minimum of 10 gallons per acre. Repeat applications at 7–14-day intervals.
REGALIA® Biofungicide has a **pre-harvest interval (PHI)** of **0 days**. Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.				

INTEGRATED PEST MANAGEMENT (IPM)

Many conventional fungicides have been tested in an IPM regime with REGALIA® Biofungicide with very satisfactory results. One of the major objectives of IPM has been to reduce the probability of disease resistance development to a particular active ingredient.

The alternate use of (1–2 sprays) followed by a conventional, registered fungicide (1–2 sprays) has been successfully used in many crops. In addition, the use of tank mixes with a conventional fungicide has also been successful.

Follow label instructions of the particular registered product: Do not exceed amounts or treatment intervals on the label.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place. Avoid freezing.

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

Container Handling (under 5 gallons): Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

Container Handling (over 5 gallons): Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

Marrone Bio Innovations is a member of the Ag Container Recycling Council. Visit http://www.acrecycle.org/contact for information on how to arrange pick-up of this empty pesticide container.



WARRANTY

To the extent permitted by applicable law, the seller makes no warranty, expressed or implied, of merchantability, fitness or otherwise concerning use of this product. The user assumes all risks of use, storage or handling that are not in strict accordance with the accompanying directions.

Label date: February 11, 2013

Made in the U.S.A.

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