BACILLUS SUBTILUS STRAIN IAB/BS03	GROUP	BM02	FUNGICIDE

AVIV™

ACTIVE INGREDIENT:

Bacillus subtilis strain IAB/BS03* 0.08%

OTHER INGREDIENTS: 99.92%

TOTAL: **100.00%**

*Contains not less than 1 X 10^7 CFU/mL of product.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See booklet and back panel for precautionary statements, first aid and directions for use.

EPA Reg. No.: 91473-1-88783 **05132024**

EPA Establishment No.: 91473-ESP-001

Net Contents: 2.5 gallons

OMRI LISTED® For Organic Use

FOR ORGANIC PRODUCTION

SUMMIT AGRO®

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FIRST AID	
If swallowed	· Call a poison control center or doctor immediately for treatment advice. · Have person sip a glass of water if able to swallow. · Do not induce vomiting unless told to do so by the poison control center or doctor. · Do not give anything by mouth to an unconscious person.
If 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 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.

HOTLINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including general health concerns or pesticide incidents), call the National Pesticide Information Center at **1-800-858-7378**, Monday through Friday, 8:00 AM to 12:00 PM Pacific Time. In the event of a medical emergency, call your poison control center at **1-800-222-1222**.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals - CAUTION. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE):
Applicators and other handlers must wear:

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

Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R, or P filter; OR a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposures to high concentrations of microbial proteins can cause allergic sensitization.

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

User Safety Recommendations: Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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

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 exceptions pertaining to the statements on the label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

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

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

Product Information: AVIV is a broad-spectrum biological fungicide for the prevention, control or suppression of soil-borne and foliar diseases on listed agricultural crops. AVIV contains the active ingredient *Bacillus subtilis* IAB/BS03, which is a rhizosphere bacterium that quickly establishes beneficial colonies on the plant's roots and leaves. It stimulates healthier roots, accelerates plant growth and activates the defense system of the plant. AVIV is a fungicide non-specific to the crop. AVIV is most effective when applied prior to the onset of disease. Use AVIV in combination and/or rotation with chemical fungicides to enhance disease control. For use on listed outdoor field grown food crops including vegetables, herbs, small fruits, berries and fruit and nut trees. Also for use in greenhouse plug production and hydroponics operations.

Modes of Action: AVIV has multiple modes of action in preventing, controlling or suppressing plant diseases. It produces a broad-spectrum group of lipopeptides that disrupts pathogen cell wall formation. It is a competitive and fast colonizing rhizosphere bacterium, which occupies the plant's root hairs and leaves and prevents the growth and antagonistic effects of soil-borne and foliar pathogens. *Bacillus subtilis* strain IAB/BS03 is known to stimulate phytohormones, which trigger the plant's systemic resistance to disease (Induced Systemic Resistance) for prolonged periods of time. It is a fungicide non-specific to the crops.

PGPR (Plant Growth-Promoting Rhizobacteria): *Bacillus subtilis* strain IAB/BS03 is classified as a Plant Growth-Promoting Rhizobacteria (PGPR). PGPR are free-living bacteria that have beneficial effects on plants as they increase plant productivity, enhance crop fertility, growth and root development.

Integrated Pest Management: Integrating AVIV into an overall pest management strategy and following best management practices (or practices known to reduce disease development) makes it less likely that disease will be established. Specific IPM strategies developed for your crop and location may be available from the Extension Service or other local agricultural authorities.

Mixing and Application Instructions:

MIXING: Dilute AVIV with water and apply with conventional spray equipment, sprinkler irrigation or other listed application methods. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of AVIV to the tank. Finish filling the tank to the desired volume to obtain the proper spray concentration. Use spray mixture immediately. Do not allow spray mixture to stand overnight or for prolonged periods.

APPLICATION: Apply AVIV to the point of saturation of the soil or growing media. Good coverage and wetting are required. The amount of spray mixture to apply will vary depending on the type of crop. Most row crops will require up to 100 gallons of spray mixture per acre. Apply in sufficient water to achieve thorough coverage.

COMPATIBILITY: AVIV may be tank mixed with some fungicides. Use caution when tankmixing AVIV with more than one product. Consult specific product labels for additional information or restrictions concerning tank mixing. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures. It is always advisable to conduct a spray compatibility test when you plan to mix this product with another product. To determine the physical compatibility of this product with other products, use a jar test. Using a one quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry formulations first, then flowables, and then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding products to the spray tank.

AVIV has been evaluated for phytotoxicity on a variety of crops under various normal growing conditions. However, testing all crop varieties in all mixtures and combinations is not feasible. Prior to treating entire crop, test a small portion of the crop for sensitivity.

Foliar Application Use Directions – Ground and Aerial: Apply AVIV as a foliar spray by ground and by air. Mix 10 - 30 fluid ounces of AVIV per acre and apply at a sufficient spray volume to ensure complete coverage.

For high volume applications, where more than 100 gallons of water is used, apply at a rate of 10-30 fluid ounces of AVIV per each 100 gallons of water. See specific instructions for crops below.

Spray Volume Chart

Water Volume (gallons/acre)	Rate of AVIV per Application Volume (fl oz)
200	20 - 60
120	12 - 36
100	10 - 30
50	
30	
15	
10	
5	

For greenhouse applications, use the following table:

Water Volume	Rate of AVIV
(gallons)	**fl. oz per 1000 ft2**
5 - 100	0.2 - 0.7

AERIAL DRIFT REDUCTION INFORMATION

GENERAL: Avoiding spray drift at the application site is the responsibility of the applicator (specifically, see **SENSITIVE AREAS** section for the requirement regarding spray drift and honey bees). The interaction of many equipment- and weather-related factors determines 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 must be observed. Do not apply directly to aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

INFORMATION ON DROPLET SIZE: Use only medium or coarser spray nozzles according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser 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 will 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 specified pressures. For many nozzle types, lower pressure produces larger droplets. When high flow rates are needed, use higher flow rate nozzles instead of increasing pressure. 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.

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 to droplets to evaporation and wind. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.

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

WIND: Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 15 mph. 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, blooming crops or weeds that bees are visiting, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

Soil Treatment Use Directions: Apply AVIV by soil drench, in-furrow spray, or soil injection to improve plant health and to protect against certain soil-borne diseases.

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

Soil Drench Applications
Apply AVIV at a rate of 10 - 30 fluid ounces of product per acre, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application during or shortly after transplant to control soil-borne diseases, reduce transplant shock, induce disease resistance, and to promote root growth. Multiple drench applications can be made on a 10- to 14-day schedule.

Shanked-In and Injected Applications
Shank or inject AVIV at a rate of 10 – 30 fluid ounces of product per acre into the soil alone, or with most types of liquid nutrients.

In-Furrow Applications
Apply AVIV at planting as an in-furrow spray. Apply AVIV at a rate of 10 - 30 fluid ounces of product in 5 – 15 gallons of water per acre, directing the spray into the seed furrow just before the seeds are covered.

CHEMIGATION USE DIRECTIONS:

AVIV may be applied by chemigation.

Spray preparation
First prepare a suspension of AVIV in a mix tank. Fill tank ½ to ¾ the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of AVIV, and then the remaining volume of water. Then set the sprinkler to deliver a minimum of 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of AVIV into the irrigation water line so as to deliver the desired rate per acre. Inject the suspension of AVIV with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. Direct any questions on calibration to your State Extension Service Specialists, to equipment manufacturers or other experts.

Do not combine AVIV 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. AVIV has not been fully evaluated for compatibility with all adjuvants or surfactants. It is advisable to conduct a spray compatibility test if a mixture with adjuvants or surfactants is planned.

General Requirements
1) Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or 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 (RPZ), back flow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the 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 back flow.
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 back flow 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 back flow.
   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 back flow.
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. See the Spray Preparation section.

AVIV may be used in greenhouse plug production and hydroponics operations.

Application Rates for Selected Crops: Use AVIV to prevent, control or suppress a broad range of plant diseases, as well as induce the natural defense system of the treated plants listed below.

Apply 10 - 30 fluid ounces of AVIV per acre, refer to the Spray Volume Chart under the foliar application use directions for water volume rates.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Artichoke	Powdery Mildew *(Erysiphe cichoracearum) (Leveillula taurica)* Ramularia Leaf Spot *(Ramularia cynarae)*	Foliar (Ground)	10 - 30 fluid ounces	For ground applications, apply at a sufficient spray volume to ensure complete coverage. Apply this product preventatively or as the first sign of disease symptoms are visible. Reapply every 7 to 14 days. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.
		Chemigation	10 - 30 fluid ounces	Apply through irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.
Asparagus	Botrytis Blight *(Botrytis cinerea)* Rust *(Puccinia aspargi)*	Foliar (Ground)	10 - 30 fluid ounces	For ground applications, apply at a sufficient spray volume to ensure complete coverage. Apply this product preventatively when the first disease symptoms are visible. Reapply every 7 to 14 days. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.
Berries, including: Blackberry Blueberry Bushberry Caneberry Cranberry Currants Elderberry Gooseberry Huckleberry Loganberry Raspberry	Botrytis Blight *(Botrytis cinerea)* Mummy Berry *(Monilinia vaccinii-corymbosi)* Alternaria Fruit Rot *(Alternaria* spp.*)* Anthracnose Fruit Rot *(Colletotrichum acutatum)* Bacterial Canker *(Pseudomonas syringae)* Leaf Rust *(Pucciniastrum vaccinii)* 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)	10 - 30 fluid ounces	Apply at a sufficient spray volume to ensure complete coverage. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water. Mummy Berry – Begin applications at bud break stage of development. Apply preventatively and repeat on a 7- to 10-day interval or as needed. Cranberry: Do not apply to flooded fields. Botrytis Blight – Apply this product preventatively prior to or at first sign of disease symptoms. Reapply every 7 to 14 days or as needed. Bacterial Canker – Apply prior to Fall rains and repeat applications during dormancy before Spring growth. This product can be tank mixed with other registered pesticides for improved control of bacterial canker. Anthracnose Fruit Rot and Alternaria Fruit Rot on blueberries – Apply at green tip and continue on a 7- to 10-day interval.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Bulb Vegetables, including: Garlic Leek Onion (Bulb and Green) Shallot And other bulb vegetable crops	Botrytis Leaf Blight *(Botrytis squamosa)* Botrytis Neck Rot *(Botrytis* spp.*)* Onion Purple Blotch *(Alternaria porri)* Downy Mildew *(Peronospora* spp.*)* Powdery Mildew *(Erysiphe* spp.*)* Rust *(Puccinia porri)* Stemphylium Leaf Blight *(Stemphylium vesicarium)*	Foliar (Ground)	10 - 30 fluid ounces	Apply at a sufficient spray volume to ensure complete coverage. Repeat applications at 7- to 14-day intervals. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
	Fusarium spp. *Pythium* spp. *Rhizoctonia* spp.	Soil Drench	10 - 30 fluid ounces	Apply thoroughly, soaking the growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne disease and improve root growth. Multiple drench applications can be made on a 10- to 14-day interval.
		In-Furrow	10 - 30 fluid ounces	Apply in 5 – 15 gallons of water per acre, directing the spray into the seed furrow just before the seeds are covered.
		Plant Dip	10 - 30 fluid ounces	Use a pre-plant dip immediately prior to transplant.
		Chemigation	10 - 30 fluid ounces	Apply through irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.
Cereal Grains, including: Barley Buckwheat Grain Milo Oat Millet Rice Rye Sorghum Triticale Wheat	Powdery Mildew *(Erysiphe graminis)* Bacterial Blight and Streak *(Xanthomonas* spp.*)* Brown Rot, Leaf Spots & Smuts *(Ceratobasidium* spp.*) (Cercospora* spp.*) (Drechslera* spp.*)* Rice Blast *(Pyricularia grisea)* Rust *(Puccinia* spp.*)* Septoria Leaf Spot *(Septoria* spp.*)* Sheath Spot and Blight *(Rhizoctonia oryzae) (Thanatephorus cucumeris)* Stem Rot *(Sclerotium oryzae)* Smut (*Tilletia barclayana*)	Foliar (Ground)	10 - 30 fluid ounces	To optimize disease control and to maximize yields, apply in 15 – 40 gallons of water per acre. Apply preventatively or when disease symptoms first appear. Repeat applications on a 7- to 14-day interval depending upon crop growth and disease pressure. When plants are under high disease pressure, tank mix this product with another registered fungicide for more effective control. Rice: Do not apply to flooded fields.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.
Citrus Fruits, including: Calamondin Citron Citrus hybrids Grapefruit Kumquat Lemon Lime Mediterranean mandarin Orange, sour and sweet Pummelo Satsuma mandarin	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)* Postbloom Fruit Drop *(Colletotrichum acutatum)* Scab *(Elsinoe australis) (Elsinoe fawcetti)*	Foliar (Ground)	10 - 30 fluid ounces	Apply at a sufficient spray volume to ensure complete coverage. Begin application when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water. To treat Bacterial Canker *(Xanthomonas* spp.*)*, tank mix this product with another registered pesticide for more effective control.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days. To treat Bacterial Canker *(Xanthomonas* spp.*)*, tank mix this product with another registered pesticide for more effective control.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
***Brassica* (Cole), Leafy Vegetables including:** Amaranth Broccoli Broccoli Rabe Brussels Sprouts Cabbage Chinese Broccoli Chinese Cabbage (Bok Choy) Chinese Cabbage (Napa) Chinese Mustard Cabbage (Gai Choy) Cauliflower Cavalo broccolo Collards Kale Kohlrabi Mizuna Mustard Greens Mustard Spinach Rape Greens	Powdery Mildew *(Erysiphe cruciferarum) (Erysiphe polygoni)* Alternaria Leaf Spot *(Alternaria* spp.*)*	Foliar (Ground)	10 - 30 fluid ounces	Apply at a sufficient spray volume to ensure complete coverage. Begin application when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed.
	Downy Mildew *(Peronospora parasitica)* Pin Rot Complex *(Alternaria, Xanthomonas)* Xanthomonas Leaf Spot *(Xanthomonas campestris)*	Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.
Corn, including: Sweet Corn Field Corn Popcorn Silage Corn Seed Corn	Anthracnose Leaf Blight *(Colletotrichum graminicola)* Eye Spot *(Aureobasidium zeae)*	Foliar (Ground)	10 - 30 fluid ounces	Apply in 15 – 40 gallons per acre. Begin application when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed.
	Gray Leafspot *(Cercospora zeae-maydis)* Rusts *(Puccinia* spp.*)* Northern Leaf Blight *(Cochiliobus carbonum)* Southern Leaf Blight *(Cochiliobus heterostrophus)*	Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.
Cotton	Alternaria Leaf Spot, Boll Rot *(Alternaria* spp.*)* Anthracnose, Boll Rot *(Anthracnose* spp.*)*	Foliar (Ground)	10 - 30 fluid ounces	Apply in 15 – 40 gallons per acre. Begin application when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed.
	Ascochyta Blight, Boll Rot *(Ascochyta* spp.*)* Cercospora Blight and Leaf Spot *(Cercospora* spp.*)* Diplodia Boll Rot *(Diplodia* spp.*)* Hard Lock, Boll Rot *(Fusarium* spp.*)* Leaf Spot *(Corynespora cassiicola)* Phoma Blight, Boll Rot *(Phoma* spp.*)* Rust *(Puccinia* spp.*) (Phykopsora* spp.*)* Stemphylium Leaf Spot *(Stemphylium* spp.*)*	Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Cucurbit Vegetables **Includes all types and hybrids of:** Chayote Chinese Waxgourd Cucumber Citron Melon Gherkin Pumpkin Watermelon **Edible Gourd:** Chinese Okra Cucuzza Hyotan ***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**	Powdery Mildew *(Erysiphe cichoracearum) (Sphaerotheca fuliginea)* Anthracnose *(Colletotrichum lagenarium)* Alternaria Leaf Spot *(Cercospora citrulina)* Downy Mildew *(Pseudoperonospora cubensis)* Gummy Stem Blight *(Didymella bryoniae)* Phytophthora Blight *(Phytophthora capsici)*	Foliar (Ground)	10 - 30 fluid ounces	Apply at a sufficient spray volume to ensure complete coverage at the first sign of disease symptoms are visible. Reapply on a 7- to 14-day interval depending on plant growth and disease pressure. Use shorter spray intervals for greenhouse cucurbits when under high disease pressure. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.
	Fusarium spp. *Phytophthora* spp. *Pythium* spp. *Rhizoctonia* spp.	Soil Drench	10 - 30 fluid ounces	Apply thoroughly soaking the growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne disease and improve root growth. Multiple drench applications can be made on a 10- to 14-day interval.
		In-Furrow	10 - 30 fluid ounces	Apply at 5 – 15 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.
		Plant Dip	10 - 30 fluid ounces	Use a pre-plant dip immediately prior to transplant.
		Chemigation	10 - 30 fluid ounces	Apply through irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Fruiting Vegetables, including: Eggplant Okra Pepper Tomato Tomatillo Ground Cherry	Bacterial Blight *(Xanthomonas* spp.*)* Bacterial Spot *(Xanthomonas* spp.*)* Bacterial Speck *(Pseudomonas syringae)* Black Mold *(Alternaria alternata)* Early Blight *(Alternaria solani)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage. Reapply on a 7- to 10-day interval depending on plant growth and disease pressure. Use shorter spray intervals for greenhouse cucurbits when under high disease pressure. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
	Gray Mold *(Botrytis cinerea)* Late Blight *(Phytophthora capsici)* Powdery Mildew *(Erysiphe* spp.*) (Leveillula taurica) (Oidiopsis taurica) (Sphaerotheca* spp.*)* Target Spot *(Corynespora cassiicola)*	Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.
	Fusarium spp. *Phytophthora* spp. *Rhizoctonia* spp. *Verticllium* spp.	Soil Drench	10 - 30 fluid ounces	Apply thoroughly soaking the growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne disease and improve root growth. Multiple drench applications can be made on a 10- to 14-day interval.
		In-Furrow	10 - 30 fluid ounces	Apply at 5 – 15 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.
		Plant Dip	10 - 30 fluid ounces	Use as a pre-plant dip immediately prior to transplant.
		Chemigation	10 - 30 fluid ounces	Apply through irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.
Grapes	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 (Ground)	10 - 30 fluid ounces	Apply preventively at a sufficient spray volume to ensure complete coverage. Repeat applications at 7- to 14-day intervals depending on crop growth and disease pressure. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
Grass Seed	Powdery Mildew *(Erysiphe gramminis) (Oidium* spp.*) (Podosphaera* spp.*) (Sphaerotheca* spp.*)* Rust *(Puccinia* spp.*)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage or when environmental conditions are conducive to rapid disease development. Reapply on a 7-day interval or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
Hops	Downy Mildew *(Pseudoperonosperora humili)* Powdery Mildew *(Sphaerotheca macularis)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage or when environmental conditions are conducive to rapid disease development. Reapply on a 7-day interval or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Leafy Vegetables, including: Arugula Celery Chervil Cilantro Corn Salad Cress Dandelion Dock Edible-leaved Chrysanthemum Endive Fennel Head Lettuce Leaf Lettuce Parsley Purslane Radicchio Rhubarb Spinach Swiss Chard Watercress	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)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage or when environmental conditions are conducive to rapid disease development. Reapply on a 7- to 14-day interval or as needed. Cress: Do not apply to flooded fields For concentrated ground applications, apply this product at 1 – 3 quarts per acre in a minimum of 10 gallons of water per acre. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
		In-Furrow	10 - 30 fluid ounces	Apply at 5 – 15 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.
Legumes, succulent or dried (not including soybean or peanut): Chickpea Dry Bean Garbanzo Bean Garden Pea Green Bean Lentil Lima Bean Pea Shell Bean Snap Bean Split Pea And other legume crops	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 (Ground)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage or when environmental conditions are conducive to rapid disease development. Reapply on a 7-day interval or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
	Fusarium spp. *Phytophthora* spp. *Pythium* spp. *Rhizoctonia* spp.	In-Furrow	10 - 30 fluid ounces	Apply at 5 – 15 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Herbs and Spices, including: Angelica Balm Basil Borage Burnet Chamomile Catnip Chervil Chive Cilantro Clary Coriander Costmary Curry Dillweed Horehound Hyssop Lavender Lemongrass Lovage Marjoram Nasturtium Parsley (dried) Rosemary Sage Savory (summer and winter) Sweet Bay Tansy Tarragon Thyme Wintergreen Woodruff Wormwood	Downy Mildew *(Peronospora* spp.*)* Powdery Mildew *(Erysiphe* spp.*)* Rust *(Puccinia menthae)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage or at first sign of disease symptoms. Reapply on a 7- to 10-day interval depending on plant growth and disease pressure. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.
Mints Peppermint	Downy Mildew (*Peronospora* spp.) Powdery Mildew (*Erysiphe* spp.) Rust (*Puccinia menthae*)	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage or at first sign of disease symptoms. Reapply on a 7- to 10-day interval depending on plant growth and disease pressure. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.
Oil Seed Crops, including: Canola Castor Flax Rapeseed Safflower Sesame Sunflower (does not include cotton, peanut or soybean)	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)	10 - 30 fluid ounces	To optimize disease control and maximize yields, apply this product preventatively in 15 – 40 gallons of water per acre. Consult your local Extension Specialist or Crop Consultant regarding the optimum timing of fungicide applications.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Olive	Olive Knot *(Pseudomonas savastanoi)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage. Repeat application at 7- to 14-day intervals or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
Ornamental Plants **Herbaceous Ornamentals** Flowering Plants Foliage Plants **Woody Ornamentals** Broadleaves, Shrubs and trees Conifers, Shrubs and trees	Anthracnose *(Colletotrichum* spp.*)* Bacteria *(Erwinia* spp.*) (Pseudomonas* spp.*) (Xanthomonas* spp.*)* Black Spot of Rose *(Diplocarpon rosae)* Blossom Blight *(Monilinia* spp.*)* Downy Mildew *(Peronospora* spp.*) (Plasmopara viburni)* Gray Mold *(Botrytis cinerea)* Leaf Spot *(Alternaria* spp.*) (Cercospora* spp.*) (Entomosporium* spp.*) (Myrothecium* spp.*) (Septoria* spp.*)* Powdery Mildew *(Erysiphe* spp.*) (Oidium* spp.*) (Podosphaera* spp.*) (Sphaerotheca* spp.*)* Rust *(Puccinia* spp.*)* Scab *(Venturia* spp.*)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage and repeat on 7- to 14-day intervals, or as needed. Use this product to control certain diseases of container, bench, flat, plug, bed, or field-grown ornamentals in greenhouses, shade houses, outdoor nurseries, retail nurseries, and other landscape areas. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
	Fusarium spp. *Phytophthora* spp. *Pythium* spp.	Soil Drench	10 - 30 fluid ounces	Apply thoroughly soaking the growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soilborne disease and improve root growth. Multiple drench applications can be made on a 10- to 14-day interval.
	Rhizoctonia spp.	Plant Dip	10 - 30 fluid ounces	Use as a pre-plant dip immediately prior to transplant.
	Verticillium spp.	Chemigation	10 - 30 fluid ounces	Apply through irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.
Peanut	Aspergillus Crown Rot *(Aspergillus niger)* Rhizoctonia Foliar Blight, Peg, and Root Rot *(Rhizoctonia solani)* White Mold *(Sclerotium rolfsii)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage and repeat on 7- to 14-day intervals, or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
	Aspergillus Crown Rot *(Aspergillus niger)* *Fusarium* spp. *Phytophthora* spp. *Pythium* spp. *Rhizoctonia* spp. *Verticillium* spp. White Mold *(Sclerotium rolfsii)*	Soil Drench	10 - 30 fluid ounces	Apply thoroughly soaking the growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne disease and improve root growth. Multiple drench applications can be made on a 10- to 14-day interval.
		In-Furrow	10 - 30 fluid ounces	Apply at 5 – 15 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Pome Fruits, including: Apple Crabapple Loquat Mayhaw Pear Pear, oriental Quince	Powdery Mildew *(Podosphaera leucotricha)* Alternaria Blotch *(Alternaria mali)* Apple Scab *(Venturia inaequalis)* 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 juniper-virginianae)* Fire Blight *(Erwinia amylovora)* Flyspeck *(Zygophiala jamaicensis)* Sooty Blotch *(Geastrumia polystigmati) (Leptodontium elatius) (Peltaster fructicola)* White Rot *(Botryosphaeria dothidea)*	Foliar (Ground)	10 - 30 fluid ounces	Apply at a sufficient spray volume to ensure complete coverage. Begin applications when conditions are conducive to disease development. Repeat applications on 3- to 10-day intervals or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water. Use high label rate and shorter spray intervals when conditions are conducive to rapid disease development. To treat Fire Blight (*Erwinia amylovora*), tank mix this product with another registered pesticide for more effective control.
Root and Tuber Vegetables, including: Beet Carrot Cassava Ginger Ginseng Horseradish Potato Radish Sweet potato Turnip Yam	Bacterial Leaf Blight *(Xanthomonas campestris)* Black Root Rot / Black Crown Rot *(Alternaria* spp.*)* Downy Mildew *(Peronospora* spp.*)* Early Blight *(Alternaria* spp.*)* Gray Mold *(Botrytis cinerea)* Late Blight *(Phytophthora infestans)* Powdery Mildew *(Erysiphe* spp.*)* White Mold *(Sclerotinia sclerotiorum)* Clubroot *(Plasmodiophora brassicae)* Common Scab *(Streptomyces scabies)* *Fusarium* spp. *Phytophthora* spp. *Pythium* spp. *Rhizoctonia* spp. *Verticillium* spp.	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively at a sufficient spray volume to ensure complete coverage and repeat on 5- to 10-day intervals, or as needed. Begin applications soon after emergence or transplant and when conditions are conducive to disease development. Use higher rates and shorter intervals when conditions favor rapid disease development. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
		Soil Drench	10 - 30 fluid ounces	Apply thoroughly soaking the growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne disease and improve root growth. Multiple drench applications can be made on a 10- to 14-day interval.
		In-Furrow	10 - 30 fluid ounces	Apply at 5 – 15 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.
		Chemigation	10 - 30 fluid ounces	Apply through irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Soybean	Aerial Web Blight *(Rhizoctonia solani)* Alternaria Leafspot *(Alternaria* spp.*)* Anthracnose *(Colletotrichum truncatum)* Asian Soybean Rust *(Phakopsora pachyrhizi)*	Foliar (Ground)	10 - 30 fluid ounces	To optimize disease control and maximize yields, apply this product preventatively in 15 – 40 gallons of water per acre. Consult your local Extension Specialist or Crop Consultant regarding the optimum timing of fungicide applications. To treat Asian Soybean Rust *(Phakopsora pachyrhizi)*, tank mix this product with another registered fungicide for more effective control.
	Brown Spot *(Septoria glycines)* Cercospora Blight *(Cercospora kikuchii)* Frogeye Leaf Spot *(Cercospora sojina)* Pod and Stem Blight *(Diaporthe* spp.*)* Septoria Brown Spot *(Septoria glycines)* White Mold *(Sclerotinia sclerotiorum)*	Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days. To treat Asian Soybean Rust *(Phakopsora pachyrhizi)*, tank mix this product with another registered fungicide for more effective control.
	Fusarium spp. *Phytophthora* spp. *Pythium* spp. *Rhizoctonia* spp.	In-Furrow	10 - 30 fluid ounces	Apply at 5 – 15 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.
Stone Fruits, including: Apricot Cherry, sweet and tart Nectarine Peach Plum Plumcot Prune plum	Alternaria Spot/Fruit Rot *(Alternaria alternata)* Anthracnose *(Colletotrichum* spp.*)* Bacterial Canker *(Pseudomonas* spp.*)* Bacterial Spot *(Pseudomonas* spp.*)* Brown Rot Blossom Blight and Fruit Rot *(Monilinia* spp.*)* Cercospora Leaf Spot *(Cercospora* spp.*)* Cherry Leaf Rot *(Blumeriella jaapii)* Gray Mold *(Botrytis cinerea)* Jacket Rot, Green Fruit Rot *(Botrytis cinerea, Monilinia* spp.*, Sclerotinia sclerotiorum)* Powdery Mildew *(Podosphaera* spp.*) (Sphaerotheca pannosa)* Rust *(Tranzschelia discolor)* Rusty Spot *(Podosphaera leucotricha)* Scab *(Cladosporium carpophilium)* Shot Hole *(Wilsonomyces carpophilus)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventively at a sufficient spray volume to ensure complete coverage when conditions are conducive to disease development. Apply on a 7- to 10-day spray interval or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water. Bacterial Blight – Apply postharvest before Fall rains. Brown Rot Blossom Blight – Apply at early bloom and repeat on a 7-day schedule through petal fall or as needed. Powdery Mildew – Begin applications at popcorn stage and repeat on a 7- to 10-day interval or as needed. Scab - Begin applications at petal fall and repeat on a 7- to 10-day interval or as needed.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Strawberry	Anthracnose *(Colletotrichum* spp.*)* Gray Mold *(Botrytis cinerea)* Leaf Spot *(Mycosphaerella fragariae)* Phomopsis Leaf Blight *(Phomopsis obscurans)* Powdery Mildew *(Sphaerotheca macularis)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventively at a sufficient spray volume to ensure complete coverage when conditions are conducive to disease development. Apply on a 7- to 10-day spray interval or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
	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.	Soil Drench	10 - 30 fluid ounces	Apply thoroughly soaking the growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne disease and improve root growth. Multiple drench applications can be made on a 10- to 14-day interval.
		Plant Dip	10 - 30 fluid ounces	Use as a pre-plant dip immediately prior to transplant.
		Chemigation	10 - 30 fluid ounces	Apply through irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.
Sugar Beets	Powdery Mildew *(Erysiphe betae) (Erysiphe polygoni)* Leaf Spot *(Cercospora beticola)* Ramularia *(Ramularia* spp.*)* Rust *(Uromyces betae)*	Foliar	10 - 30 fluid ounces	Apply preventatively in 15 – 40 gallons of water per acre by ground or air. Consult your local Extension Specialist or Crop Consultant for optimum timing of fungicide applications.
Sugarcane	Brown Rust *(Puccinia melanocephela)* Orange Rust *(Puccinia kuehnii)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively in 15 – 40 gallons of water per acre by ground. Consult your local Extension Specialist or Crop Consultant for optimum timing of fungicide applications.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 – 14 days.
Tobacco	Blue Mold *(Peronospora tabacina)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventatively in a minimum of 50 gallons of water per acre. Consult your local Extension Specialist or Crop Consultant for optimum timing of fungicide applications.
	Fusarium spp. *Phytophthora* spp. *Pythium* spp. *Rhizoctonia* spp. *Verticillium* spp.	Plant Dip	10 - 30 fluid ounces	Use as a pre-plant dip immediately prior to transplant.

Crops	Target Disease	Application Method	Use rate of Aviv per Acre	Application Instructions
Tree nuts, including: Almond Beech nut Brazil nut Butternut Cashew Chestnut Chinquapin Filbert (hazelnut) Hickory nut Macadamia nut Pecan Walnut, Black and English (Persian)	Walnut Blight *(Xanthomonas campestris)* Alternaria Late Blight, Alternaria Leaf Spot *(Alternaria* spp.*)* Anthracnose *(Colletotrichum* spp.*) (Gnomonia leptostyla)* Bacterial Canker *(Erwinia nigrifluens)* Botryosphaeria Blight *(Botryosphaeria dothidea)* Brown Rot *(Monilinia* spp.*)* Jacket Rot, Green Fruit Rot *(Botrytis cinerea, Monilinia* spp.*, Sclerotinia sclerotiorum)* Eastern Filbert Blight *(Anisogramma anomala)* Leaf Rust *(Tranzschelia discolor)* Scab *(Cladosporium carpophilium) (Sphaceloma perseae)* Shot Hole *(Wilsonomyces carpophilus)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventively at a sufficient spray volume to ensure complete coverage when conditions are conducive to disease development. Apply on a 7- to 10-day spray interval or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.
Tropical and Subtropical Fruits, Inedible Peel, including (excludes Olive): Avocado Banana Kiwi Mango Papaya Pineapple Plantain Pomegranate	Anthracnose *(Colletotrichum gloeosporioides)* Bacterial Blight *(Pseudomonas syringae) (Pseudomonas viridiflava)* Bacterial Canker *(Xanthomonas campestris)* Gray Mold *(Botrytis cinerea)* Scab *(Elsinoe mangiferae)* Sigatoka *(Mycosphaerella fijiensis)*	Foliar (Ground)	10 - 30 fluid ounces	Apply preventively at a sufficient spray volume to ensure complete coverage when conditions are conducive to disease development. Apply on a 7- to 10-day spray interval or as needed. For high water volume applications (more than 100 gallons of water per acre), use 10-30 fluid ounces per each 100 gallons of water.
		Foliar (Aerial)	10 - 30 fluid ounces	For aerial applications, apply this product in a minimum of 5 gallons of water per acre. Apply preventatively or when the first disease symptoms are visible and reapply every 7 to 14 days.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place. Store in original container only. Keep container tightly closed when not in use.

Pesticide Disposal: Wastes resulting from use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling:

(For plastic containers less than or equal to 5 gallons)

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

(For plastic containers greater than 5 gallons)

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap 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. If burned, stay out of smoke.

WARRANTY STATEMENT

Summit Agro USA, LLC warrants 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. To the extent consistent with applicable law, buyers and users of this product assume the risk of any use contrary to such directions. To the extent consistent with applicable law, SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTEE, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO. To the extent consistent with applicable law, the Seller's liability for any breach of warranty shall not exceed the purchase price of the material as to which a claim is made.

To the extent consistent with applicable law, Buyers and users of this product are responsible for all loss or damage from use or handling of this product which results from conditions beyond the control of Seller, or without the fault or negligence of the Seller, or from failure to follow the label.

AVIV™

ACTIVE INGREDIENT:	
Bacillus subtilis strain IAB/BS03*	0.08%
OTHER INGREDIENTS:	99.92%
TOTAL:	**100.00%**

*Contains not less than 1 X 10^7 CFU/mL of product.

KEEP OUT OF REACH OF CHILDREN
CAUTION

See booklet for directions for use.
EPA Reg. No.: 91473-1-88783 **05132024**
EPA Establishment No.: 91473-ESP-001

Net Contents: 2.5 gallons Batch No.

SUMMITAGRO®

Distributed by:
Summit Agro USA LLC
240 Leigh Farm Road, Suite 415
Durham, NC 27707
1-984-260-0407, www.summitagro-usa.com

seipasa®

Manufactured by:
Seipasa, S.A.
C/Almudevar, 2
22240 Tardienta (Huesca), SPAIN

FIRST AID	
If swallowed	· Call a poison control center or doctor immediately for treatment advice. · Have person sip a glass of water if able to swallow. · Do not induce vomiting unless told to do so by the poison control center or doctor. · Do not give anything by mouth to an unconscious person.
If 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 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.

HOTLINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including general health concerns or pesticide incidents), call the National Pesticide Information Center at **1-800-858-7378**, Monday through Friday, 8:00 AM to 12:00 PM Pacific Time. In the event of a medical emergency, call your poison control center at **1-800-222-1222**.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals - CAUTION. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE):
Applicators and other handlers must wear:
- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes and socks
- Protective eyewear

BACILLUS SUBTILUS STRAIN IAB/BS03	GROUP	BM02	FUNGICIDE

Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R, or P filter; OR a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposures to high concentrations of microbial proteins can cause allergic sensitization. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations: Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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

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 exceptions pertaining to the statements on the label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

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

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

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place. Store in original container only. Keep container tightly closed when not in use.

Pesticide Disposal: Wastes resulting from use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling:

(For plastic containers less than or equal to 5 gallons)

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

(For plastic containers greater than 5 gallons)

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap 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. If burned, stay out of smoke.

OMRI LISTED® For Organic Use

FOR ORGANIC PRODUCTION