

GROUP 11 FUNGICIDE

# Estate

A broad-spectrum fungicide for control of a wide-range of plant diseases in labeled crops, ornamentals and turf.

**ACTIVE INGREDIENT:**

Azoxystrobin: methyl (E)-2-[2-[6-(2-cyanophenoxy) pyrimidin-4-yloxy]phenyl]-3-methoxyacrylate\*

**% By Weight**

50.0%

**OTHER INGREDIENTS:**

50.0%

**TOTAL:**

100.0%

Estate is a water-dispersible granule (WDG) containing 0.5 lb. azoxystrobin per pound of product.

\*IUPAC

## KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

See label booklet for complete First Aid, Precautionary Statements,  
Directions For Use, and Storage and Disposal.

EPA Reg. No. 83529-65

EPA Est. No. **CS** 70815-GA-001; **OP** 62171-MS-3;  
**MA** 83411-MN-001; **TX** 07401-TX-001

The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

**Net Contents: 1 lb. (0.45 kg)**

Manufactured For:

Sharda USA LLC 

7217 Lancaster Pike, Suite A  
Hockessin, Delaware 19707

<b>FIRST AID</b>	
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at <b>1-800-222-1222</b> .	

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

#### **CAUTION**

Harmful if swallowed. Harmful if 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
- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
- Shoes plus socks

#### **USER SAFETY REQUIREMENTS**

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.

## ENGINEERING CONTROLS

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

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

## USER SAFETY RECOMMENDATIONS

### Users must:

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

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to freshwater and estuarine/marine fish and aquatic invertebrates. Azoxystrobin can be persistent for several months or longer. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. Drift and run-off may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water or rinsate.

## GROUNDWATER ADVISORY

Azoxystrobin and a degradate of azoxystrobin are known to leach through soil to groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

## SURFACE WATER ADVISORY

This product may impact surface water quality due to run-off of rain water. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having a high potential for reaching surface water via run-off for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features, such as ponds, streams and springs, will reduce the potential loading of azoxystrobin and a degradate of azoxystrobin from run-off water and sediment. Run-off of this product also will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

Notify State and/or Federal authorities and Sharda USA LLC immediately if you observe any adverse environmental effects due to use of this product.

## DIRECTIONS FOR USE

### Application Restrictions

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

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

**Adverse crop response, decreased disease control or illegal crop residues may result if the Directions for Use, Restrictions and Precautions are not followed.**

### AGRICULTURAL USES

Use for the prevention and control of diseases of sod farm produced turf and ornamentals; fruit and nut trees; and vegetable and herb plants grown for transplanting.

#### AGRICULTURAL USE REQUIREMENTS

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

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

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
- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
- Shoes plus socks

### NON-AGRICULTURAL USES

Use for the prevention and control of diseases of turf and ornamentals in the following use areas:

- golf courses, and
- lawns and landscape areas around: athletic fields, parks, recreational areas, residential, institutional, public, commercial and industrial buildings.

### NON-AGRICULTURAL USE REQUIREMENTS

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

Do not treat areas while unprotected humans or domestic animals are present in the treatment areas. Because certain states may require more restrictive reentry intervals, consult your State Department of Agriculture for further information.

Do not allow entry into treatment area until area that was treated with **Estate** is dry.

### PRODUCT INFORMATION

When applied according to the instructions in this label, **Estate** provides broad-spectrum disease protection through systemic activity against many plant diseases. Refer to the Directions for Use section of this label for a list of specific uses and disease species. **Estate** may be used in tank mixtures with other registered products, unless specifically prohibited, and in application spray programs that dictate the rotation of different modes of action for resistance management best practices. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in the tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Because of the plant protection benefits with use of **Estate**, over-all plant quality and vigor may also be improved.

### USE RESTRICTIONS

- **DO NOT** apply more than 10 lbs. of **Estate** (5 lbs. a.i./A) per year to crops grown outdoors.
- **DO NOT** apply more than 1.1 lbs. of **Estate** (0.55 lb. a.i.) per acre per application.
- **DO NOT** feed clippings or graze animals to turf areas that have been treated with this product.
- **DO NOT** spray if conditions may cause drift outside of the application area. Conditions that may cause spray drift: wind speed and direction, thermal inversions, spray droplet size and sprayer nozzle/pressure combinations. A State extension agent will have information regarding how to avoid spray drift for your specific area.
- **DO NOT** spray if weather conditions promote drift from target area to non-target aquatic habitat areas.
- **DO NOT** spray if weather conditions promote drift from target area to apple, crabapple, or varieties or flowering cherry trees.
- Avoid spray drift of product. Avoiding spray drift is the responsibility of the applicator.
- Severe injury may result in apple or crabapple trees or fruit, or to flowering cherry trees if product is allowed to drift.
- **DO NOT** spray apple or crabapple trees, or flowering cherry trees with equipment that was previously used to apply this product as adverse crop response may result.

## USE PRECAUTIONS

- Extreme care must be used in apple, crabapple or flowering cherry trees because even trace amounts of this product may cause adverse crop response to certain varieties.
- Plant tolerance has been found to be acceptable for all crops on the label; however, it is not possible to test all tank-mix combinations under all conditions. It is required to test planned combinations on a small portion of the crop to ensure that adverse crop response will not occur as a result of application. See also specific information on adverse crop response for apple, crabapple, or apple varieties or flowering cherry trees.
- Use of **Estate** may cause adverse crop response on crabapple trees; however, it has been found that there are tolerant varieties. Refer to the **Ornamental Crabapple Species - Varieties Tolerant to Estate (Genus *Malus*)** table in this label. It is not possible to test every crabapple species or variety for tolerance to **Estate** due to the large number of species and varieties. Prior to full commercial use on plant species and varieties not listed on this label, the user must conduct small-scale testing to ensure plant safety.
- Adverse crop response may occur if this product is mixed with adjuvants containing silicone.
- **Estate** has shown some adverse crop response when mixed with products that are formulated as EC's. These effects may be enhanced if applications are made under cloudy, cool conditions and these conditions remain for several days following application.

## INSTRUCTIONS FOR PRODUCT USE

**Application:** Thorough and uniform coverage of the target crop must be achieved to obtain optimal disease control. If spray applications overlap, the crop may be injured. Mix only the amount of spray solution necessary for the application being made.

**Adjuvants:** It is required that adjuvants meeting Chemical Producers and Distributors Association (CPDA) adjuvant certification program standards are used.

**Efficacy:** In cases where environmental conditions promoting infestation are extended, and the maximum number of applications of this product allowed in the instructions below have been met, use another fungicide registered for use in the desired crop. The efficacy of this product may be reduced if infestations resistant to Group 11 fungicides are already present. When conditions favor disease infestation, when severe disease pressure is present or for crops that may be more susceptible to disease, use the higher use rate and shorter spray interval listed.

## SPRAY DRIFT

### Aerial Applications:

- When applying aerially to crops, do not release spray at a height greater than 10 ft. above the crop canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select nozzles that deliver medium to coarse spray droplets in accordance with ASABE Standard S-572.1.
- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

### Groundboom Applications:

- When using ground application equipment, apply with nozzle height no more than 4 feet above the ground or crop canopy.
- Applicators are required to select nozzles that deliver medium to coarse spray droplets in accordance with ASABE Standard S-572.1.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Azoxystrobin can affect non-target plant species outside the treatment area. To limit adverse effects to non-target plants, the applicator must avoid making applications when wind can facilitate off-site movement of azoxystrobin in the direction of areas such as forested areas, riparian areas, wetlands, and areas that serve as habitat for desirable and protected animal species.

### SPRAY DRIFT ADVISORIES

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

#### Importance of Droplet Size:

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage.

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** sections of this label.

#### **Controlling Droplet Size - Groundboom**

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures required for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- **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.

#### **Controlling Droplet Size - Aircraft**

- **Number of Nozzles** - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations. AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.
- **Nozzle Type** - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- **Boom Length** - Longer booms increase drift potential. Therefore, a shorter boom length is required.
- **Application Height** - Application more than 10 ft. above the canopy increases the potential for spray drift.

#### **BOOM HEIGHT**

Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom must remain level with the crop and have minimal bounce.

#### **WIND**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS. Note: Local terrain can influence wind patterns. Every applicator needs to be familiar with local wind patterns and how they affect spray drift.

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.



## TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature 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.

## SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

**Integrated Pest Management:** Use this product as part of an integrated pest management (IPM) program. The **CROP USE DIRECTIONS** section below provides specific IPM recommendations. Consult State or local agricultural extension authorities or other agronomy experts for IPM strategies appropriate for your specific area and crop.

## RESISTANCE MANAGEMENT

For resistance management, **Estate** contains a Group 11 fungicide/bactericide. Any fungal/bacterial population may contain individuals naturally resistant to **Estate** and other Group 11 fungicides/bactericides. A gradual or total loss of pest control may occur over time if these fungicides/bactericides are used repeatedly in the same fields. Appropriate resistance management strategies must be followed.

To delay fungicide/bactericide resistance, take one or more of the following steps:

- Rotate the use of **Estate** or other Group 11 fungicides/bactericides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide/bactericides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide/bactericide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide/bactericide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal/bacterial populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance management and/or IPM recommendations for specific crops and pathogens.

- For further information or to report suspected resistance, contact Sharda USA LLC at <http://www.shardausa.com/contact>. You can also contact your pesticide distributor or university extension specialist to report resistance.

### MIXING INSTRUCTIONS

Be sure to clean all spray equipment thoroughly prior to mixing. Only prepare the amount of spray mixture needed for the application. Be sure to agitate the spray solution thoroughly both before application and maintain agitation during application. After application is finished, thoroughly rinse the tank with clean water. Dispose of the rinsate by applying to an area that has already been treated.

#### Applications of Estate Alone (no tank mix):

1. Fill the tank with approximately 1/2 the total amount of clean water to be used.
2. Begin agitation and add the specified amount of **Estate**. Allow time for product to mix.
3. If desired and required, add an adjuvant.
4. While maintaining agitation, add the remaining amount of water.
5. Once this product has been completely dispersed into the water, begin the application.
6. Agitation must be maintained until all of the tank has been sprayed.
7. **DO NOT** leave mixture in the tank overnight or for extended periods of time

#### Applications of Estate in Tank Mixtures

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

#### Compatibility

This product is typically compatible with products specified for tank mixture on this label. **DO NOT** combine this product with other pesticides, fertilizers, or surfactants until compatibility is confirmed, either through use of compatibility charts or your own testing. Follow all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label or other tank mix partner label. In particular, *no total dosage rate listed in any label may be exceeded and the most restrictive label precautions and limitations must be followed*. Do not use any product which prohibits mixing with this product.

Conduct a jar test to determine physical compatibility of **Estate** with another product.

1. Add the proportional labeled amounts of the products to 1 qt. of water in a quart-sized jar. Components must be added in the following sequence:
  - a) Wettable powders, dry flowables and water dispersible granules (including **Estate**);

- b) Liquid flowables (including suspo-emulsions and aqueous suspensions);
  - c) Emulsifiable concentrates (EC's); and
  - d) Additives and adjuvants.
2. Thoroughly mix and let rest for at least 20 minutes.
  3. If the mixture remains mixed or can be easily remixed, the mixture is considered physically compatible. If compatibility is confirmed, be sure to use the same tank mix sequence of adding components to the spray tank.

This product may be incompatible with fertilizers when used during in-furrow applications that are mixed at low water volumes. Compatibility can be adversely affected by water quality and cold temperature. It is advised to conduct a physical compatibility jar test as described above prior to making any application.

**Estate** has shown some adverse crop response when mixed with products that are formulated as EC's. These effects may be enhanced if applications are made under cloudy, cool conditions and these conditions remain for several days following application. Adverse crop response may occur if this product is mixed with adjuvants containing silicone.

#### **APPLICATION INSTRUCTIONS**

Apply **Estate** before signs of disease development at rates and application timings given in the **DIRECTIONS FOR USE** section of this label. Under heavy pest pressure, with highly sensitive varieties or if environmental conditions promote development of disease, use the higher rates and shorter spray intervals listed. Adequate disease control may not be exhibited, if using **Estate** when signs of disease are already present or as a rescue treatment.

#### **Application Equipment**

Apply **Estate** using typical ground or aerial application equipment. Calibrate and adjust equipment properly prior to spray to maximize canopy penetration and coverage of crop for optimal disease control. For additional information on application spray equipment and calibration, consult sprayer manufacturer and/or State specifications. Refer to current State agricultural specifications for specific local specifications and spray schedules.

#### **Ground Application**

Apply using a water volume that provides complete coverage for most effective disease control. Efficacy may be reduced if thorough and complete coverage is not obtained.

#### **Aerial Application**

Apply using a minimum of two gallons of water per acre. Efficacy may be reduced if thorough and complete coverage is not obtained.

#### **Nozzles**

To achieve best results, follow the nozzle manufacturer's specifications. Use nozzles that are the same size and space them evenly across the boom to provide uniform and accurate applications. Screens must be used to protect the pump and prevent

clogging in the nozzles. To prevent clogged nozzles, use 50-mesh or coarser screens between the pump and the spray boom and, if necessary, at the nozzles. Suction-side screens must be 16-mesh or coarser. Do not use screens in the recirculation line.

### **Sprinkler and Drip Chemigation Systems Directions for Use**

**Spray Preparation:** Flush entire system with water and begin with a thoroughly cleaned injector system and tank.

**Micro and Drip Irrigation Systems:** Apply **Estate** to bedded, field-grown ornamentals or to potted ornamentals for soilborne disease control through drip or micro-irrigation systems. Before the drip application, ensure the potting media or soil have adequate moisture capacity.

Shut off the drip irrigation system after 6 hours from initiation of application, or once the fungicide mixture is depleted, whatever comes first. In order to maximize efficacy, delay any scheduled irrigation for at least 24 hours after a drip application with this product.

**Sprinkler Irrigation:** This product may be applied through the following types of sprinkler irrigation systems: center pivot, lateral move, end tow, side [wheel] roll, motorized boom, traveler, big gun, solid set, or hand move irrigation systems.

**DO NOT** make applications through any other type of irrigation system, unless specifically listed on this label.

When applying through continuous-move or center-pivot equipment, set equipment to distribute 1/2 acre-inch or less during treatment using the least amount of water that allows for good coverage and distribution. When using stationary systems (such as hand lines, solid set, or wheel lines that are not continuous-move), inject the product during the last 20 to 30 minutes of the set.

**DO NOT** make application when wind speeds are greater than 10 to 15 mph to avoid drift or poor coverage of product.

Adverse crop response, decreased disease control or illegal crop residues may result if there is poor distribution of product. To optimize efficacy and control, it is important that there is thorough and uniform coverage. Maintain agitation and distribution of solution throughout the application period.

- 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.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must 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.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 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.

- 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.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. 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 must the need arise.

**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.

### **Specific Instructions for 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, back-flow 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 must be discharged into a reservoir tank prior to pesticide introduction. There must 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.

### **TURF APPLICATION DIRECTIONS**

**Estate** may be used for the control of leaf blight, stem blight, leaf spots, mildew, molds, patch diseases, and rusts of turfgrass known to cause diseases of the plant foliage, stems and roots. This product may be applied in the

following turf: golf courses, lawns and landscape areas around athletic fields, parks, recreational areas, residential, institutional, public, commercial and industrial buildings and sod farms.

### **Integrated Pest Management (IPM)**

Implementing effective turf management practices that provide for healthy and vigorous turf is the goal and the basis of an effective IPM program. Using techniques, such as cultural practices (choosing a turf variety suited for region/climate; proper nutrient management; cutting height, thatch management, and moisture/water management) along with an effective fungicide spray program can result in promoting good plant health and vigor subsequently reducing the plant's susceptibility to disease. Proper identification and early detection of disease are also keys in best management practices. Diagnostic kits are available commercially or consult services at your local extension office to help in identifying disease for early treatment. **Estate** must be included in an over-all integrated disease management plan.

### **Resistance Management**

**Do not** make more than two sequential applications of **Estate** for the control of gray leaf spot or *Pythium* spp. For all other diseases when Gray Leaf Spot and *Pythium* spp. are not present, **do not** make more than three sequential applications of **Estate**.

### **Application Directions**

Apply **Estate** before signs of disease are present. Make application, using specified amount of **Estate** in 2 to 4 gallons of water per 1,000 ft.<sup>2</sup> (87 to 174 gallons/A). Refer to use tables for specific application intervals. Use 0.2 ounce of **Estate** per 1 to 2 gallons of water for spot treatments.

### **Use Restriction for Turfgrass:**

- **DO NOT** make aerial applications to golf courses.

### **Soil Injection Application**

For the control of ectotrophic root diseases (including summer patch and take-all patch), **Estate** may be applied through liquid fertilizer injector systems specifically listed for use with pesticides. Make applications at 0.2 to 0.4 ounce of product in 30 to 150 gallons of water per 1,000 ft<sup>2</sup>. For optimum control, injection hole spacing must be 1-inch x 1-inch, with a one-inch injection depth for optimum results. Do not inject at depths greater than 2 inches. Make applications according to typical disease control broadcast spray program timings.

### **Establishing Turfgrass from Seed or in Overseeding of Dormant Turfgrass**

Applications of **Estate** may be used for control of diseases in turfgrass established from seed or in overseeding of dormant turfgrass. This product may be used before or after seeding or at seedling germination or emergence in the following turfgrasses: bentgrass, bluegrass (including *Poa trivialis*), fescue, and ryegrass. For optimum results, make application during seeding.

**Dollar Spot** - **Estate** will not control Dollar Spot. For control of Dollar Spot, mix **Estate** with Daconil®, Banner Maxx®, Secure® or another registered product labeled to control Dollar Spot. Refer to the Tank Mixing instructions above.

### Directions for Application for Turf Diseases

Target Diseases	Use Rate (Oz. Product/ 1,000 Sq. Ft.)	Application Interval (Days)	Application Instructions*
Anthracnose ( <i>Colletotrichum cereale</i> )	0.2 - 0.4	14 - 28	Apply as a preventative application at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease, before signs of disease are present. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.
Bermudagrass Decline ( <i>Gaeumannomyces graminis</i> )	0.4	28	Apply as a preventative application at 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease, before signs of disease are present. Continue applications at 28-day intervals as determined by resistance management practices in your area.
Brown Patch ( <i>Rhizoctonia solani</i> ) Brown Ring Patch ( <i>Waitea circinata</i> )	0.2 - 0.4	14 - 28	Apply at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.
Cool Weather Brown Patch Yellow Patch ( <i>Rhizoctonia cerealis</i> )	0.2 - 0.4	14 - 28	Apply at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application in the fall or when conditions are conducive to development of disease. Follow with a second application 14 to 28 days later.

(continued)

**Directions for Application for Turf Diseases (continued)**

Target Diseases	Use Rate (Oz. Product/ 1,000 Sq. Ft.)	Application Interval (Days)	Application Instructions*
Fairy Ring <i>(Lycoperdon spp., Agrocybe pediades, Arachnion spp., Bovista spp., and Vascellum spp.)</i>	0.4	28	Apply as a preventative application at 0.4 ounce of product per 1,000 ft. <sup>2</sup> or immediately upon signs of fairy ring symptoms. Include a wetting agent at the specified rate. Follow application immediately with 1/8 to 1/4 inches of irrigation. Following a curative application for fairy ring, symptoms may take 14 to 21 days to disappear.  If necessary, repeat application after 28 days. Reseeding may be necessary for areas where turf is thin or severe damage occurred.
Fusarium Patch <i>(Microdochium nivale)</i>	0.2 - 0.4	14 - 28	Apply as a preventative application at 0.2 to 0.4 ounce of product per 1,000 ft. <sup>2</sup> . Make initial application when conditions are conducive to development of disease, before signs of disease are present. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.
Gray Leaf Spot <i>(Pyricularia grisea)</i>	0.2 - 0.4	14 - 28	Apply at 0.2 to 0.4 ounce of product per 1,000 ft. <sup>2</sup> . Make initial application when conditions are conducive to development of disease, before signs of disease are present. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.

(continued)



**Directions for Application for Turf Diseases (continued)**

Target Diseases	Use Rate (Oz. Product/ 1,000 Sq. Ft.)	Application Interval (Days)	Application Instructions*
Gray Snow Mold Typhula Blight ( <i>Typhula incarnata</i> , <i>T. ishikariensis</i> )	0.4	10 - 28	Apply two applications at 0.4 ounce of product per 1,000 ft. <sup>2</sup> 10 to 28 days apart just before snow cover in late fall. Under heavy disease pressure, tank mixing with another snow mold fungicide may improve control.
Leaf and Sheath Spot ( <i>Rhizoctonia zeae</i> )	0.4	14 - 28	Apply at 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.
Leaf Rust, Stem Rust, Stripe Rust ( <i>Puccinia</i> spp.)	0.2 - 0.4	14 - 28	Apply at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease, before signs of disease are present. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.
Leaf Spot ( <i>Bipolaris</i> spp.)	0.2 - 0.4	14 - 21	Apply at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease. Continue applications at 14- to 21-day intervals as determined by resistance management practices in your area.

(continued)

**Directions for Application for Turf Diseases (continued)**

Target Diseases	Use Rate (Oz. Product/ 1,000 Sq. Ft.)	Application Interval (Days)	Application Instructions*
Melting Out <i>(Drechslera poae)</i>	0.2 - 0.4	14 - 21	Apply at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease. Continue applications at 14- to 21-day intervals as determined by resistance management practices in your area.
Necrotic Ring Spot <i>(Leptosphaeria korrae)</i>	0.2 - 0.4	14 - 28	Apply at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.
Pink Patch <i>(Limonomyces roseipellis)</i>	0.2 - 0.4	14 - 28	Apply at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.
Pink Snow Mold <i>(Microdochium nivale)</i>	0.4	10 - 28	Apply two applications at 0.4 ounce of product per 1,000 ft. <sup>2</sup> 10 to 28 days apart just before snow cover in late fall. Under heavy disease pressure, tank mixing with another snow mold fungicide may improve control.
Powdery Mildew <i>(Erysiphe graminis)</i>	0.2 - 0.4	14 - 28	Apply at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease, before signs of disease are present. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.

(continued)

**Directions for Application for Turf Diseases (continued)**

Target Diseases	Use Rate (Oz. Product/ 1,000 Sq. Ft.)	Application Interval (Days)	Application Instructions*
Pythium Blight, Pythium Root Rot ( <i>Pythium aphanidermatum</i> , <i>Pythium</i> spp.)	0.2 - 0.4	10 - 14	For use on both established and newly-seeded turf. Apply as a preventative application at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease, before signs of disease are present. Continue applications at 10- to 14-day intervals as determined by resistance management practices in your area. During extended periods of conditions that favor disease development, use a 10-day application interval.
Pythium Root Dysfunction ( <i>Pythium volutum</i> )	0.4	21 - 28	Apply as a preventative application at 0.4 ounce of product per 1,000 ft <sup>2</sup> when average daily soil temperatures are between 55°F to 70°F. To facilitate movement of application into root zone, irrigate with 0.1 to 0.2 inches of water within 24 hours after treatment. Continue applications at 21- to 28-day intervals as determined by resistance management practices in your area.
Red Thread ( <i>Laetisaria fuciformis</i> )	0.2 - 0.4	14 - 28	Apply at 0.2 to 0.4 ounce of product per 1,000 ft <sup>2</sup> . Make initial application when conditions are conducive to development of disease. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.

(continued)

**Directions for Application for Turf Diseases (continued)**

Target Diseases	Use Rate (Oz. Product/ 1,000 Sq. Ft.)	Application Interval (Days)	Application Instructions*
Rhizoctonia Large Patch ( <i>Rhizoctonia solani</i> )	0.2 - 0.4	14 - 28	Apply one or two applications at 0.2 to 0.4 ounce of product per 1,000 ft. <sup>2</sup> in the fall when conditions are conducive to development of disease. Make the second application 14 to 28 days after the first. If disease pressure is high or conditions persist, spring applications may also be necessary.
Southern Blight ( <i>Sclerotium rolfsii</i> )	0.2 - 0.4	14 - 28	Apply at 0.2 to 0.4 ounce of product per 1,000 ft. <sup>2</sup> . Make initial application when conditions are conducive to development of disease. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.
Summer Patch ( <i>Magnaporthe poae</i> )	0.2 - 0.4	14 - 28	Apply at 0.2 to 0.4 ounce of product per 1,000 ft. <sup>2</sup> . Make initial application when conditions are conducive to development of disease. Continue applications at 14- to 28-day intervals as determined by resistance management practices in your area.
Take-All Patch ( <i>Gaeumannomyces graminis</i> )	0.2 - 0.4	28	Make two applications of 0.2 to 0.4 ounce of product per 1,000 ft. <sup>2</sup> 28 days apart in the fall when conditions are conducive to development of disease, before signs of disease are present. Repeat with two applications 28 days apart in the spring.
Zoysia Patch ( <i>Rhizoctonia solani</i> , <i>Gaeumannomyces crustans</i> )	0.2 - 0.4	14 - 28	Apply one or two applications at 0.2 to 0.4 ounce of product per 1,000 ft. <sup>2</sup> 14 to 28 days apart approximately one month before zoysia grass dormancy.

\*Do not make more than two sequential applications of **Estate** for the control of gray leaf spot or *Pythium* spp. For all other diseases when Gray Leaf Spot and *Pythium* spp. are not present, do not make more than three sequential applications of **Estate**.

### Rate Conversion Chart for Turf for Estate

	0.20 Oz. Product/1,000 Ft. <sup>2</sup>	0.30 Oz. Product/1,000 Ft. <sup>2</sup>	0.40 Oz. Product/1,000 Ft. <sup>2</sup>
Ounces of A.I./1,000 ft. <sup>2</sup>	0.10	0.15	0.20
Ounces of Product/Acre	8.70	13.10	17.40
Pound of Product/Acre	0.50	0.80	1.10

### Amount of Estate to add to 100 Gallons of water for Turf Applications

Spray Volume (Gallons/1,000 Ft. <sup>2</sup> )	Estate Use Rate	
	0.20 Ounce	0.40 Ounce
2.0	10 oz. of product	20 oz. of product
3.0	6.7 oz. of product	13.3 oz. of product
4.0	5 oz. of product	10 oz. of product

### ORNAMENTAL APPLICATION DIRECTIONS

**Estate** may be used to control the following diseases of ornamental plants - leaf, tip and flower blights; leaf spots; downy and powdery mildew; anthracnose; and rusts that cause aerial, foliar and root diseases. This product may also be used in bench, container, flat, plug, bed or field-grown ornamentals in greenhouses, interior landscapes, shade or lath houses, outdoor nurseries, retail nurseries or other landscape areas.

### Integrated Pest Management (IPM)

Implementing effective management practices that provide for healthy and vigorous plants is the goal and the basis of an effective IPM program. Using techniques, such as cultural practices (choosing disease-resistant varieties and varieties suited for region/climate; proper nutrient management; plant population, pruning, plant debris management and moisture/water management) along with an effective fungicide spray program can result in promoting good plant health and vigor subsequently reducing the plant's susceptibility to disease. Proper identification and early detection of disease are also keys in best management practices. Diagnostic kits are available commercially or consult services at your local extension office to help in identifying disease for early treatment. **Estate** must be included in an overall integrated disease management plan.

### Resistance Management

Alternate with a different non-Group 11 fungicide after three sequential applications of **Estate** to help prevent resistance. For Example: A spray program with three sequential **Estate** applications followed by two non-Group 11 fungicide applications. **DO NOT** rotate **Estate** with any strobilurin fungicide.

## Application Directions

**Estate** may be applied to the foliage or soil as a banded spray (targeted at the foliage or crown of plant), a drench, or a soil broadcast. Applications must be made to run-off for thorough and uniform coverage and optimum control. Consult the use table for specific use directions and diseases. Always read and follow label directions. Applications may be repeated at intervals listed following resistance management practices in your area. Unless otherwise restricted, the use of an adjuvant at specified label rates may improve coverage. For heavy disease pressure or under environmental conditions that favor development of disease, use the higher use rates listed and shorter retreatment interval. Adequate disease control may not be exhibited, if using **Estate** when signs of disease are already present or as a rescue treatment.

## Use Precaution for Ornamentals

- Use of **Estate** may cause adverse crop response on crabapple trees; however, it has been found that there are tolerant varieties, refer to the **Ornamental Crabapple Species - Varieties Tolerant to Estate (Genus Malus)** table in this label. It is not possible to test every crabapple species or variety for tolerance to **Estate** due to the large number of species and varieties. Prior to full commercial use on plant species and varieties not listed on this label, the user must conduct small-scale testing to ensure plant safety.

## Use Restrictions for Ornamentals

- **DO NOT** apply more than 600 gallons spray volume per acre for foliar applications.
- **DO NOT** apply more than 2 pints of spray solution per square foot for crown and drench applications.
- **DO NOT** mix **Estate** with adjuvants, fertilizers, fungicides, herbicides, or insecticides unless local information and experience is available to confirm that tank mixture combination will not cause adverse crop response to ornamental plants.
- **DO NOT** make applications of **Estate** to apple or cherry trees (including flowering and ornamental varieties, such as Yoshino) due to possible adverse crop response. (See the **Plants Sensitive to Estate** table for complete list.)
- **DO NOT** spray apple or crabapple trees, or flowering cherry trees with equipment that was previously used to apply this product due to potential adverse crop response.
- **DO NOT** spray if weather conditions promote drift from target area to apple, crabapple, or varieties or flowering cherry trees.

## Drench Application

**Estate** may be used as a preventative drench treatment for the control of soilborne crown diseases and seedling diseases of ornamental plants (including container-grown) before signs of disease are present. Thorough and uniform coverage of the crown, root ball and root zone is essential for good control. Apply as a drench application before disease develops so that roots are healthy and can optimize performance through product uptake and systemic translocation of product. **Estate** has been seen to provide suppression in some foliar diseases on plants treated with drench applications because of the systemic nature of the product. Caution must be exercised when making drench applications of **Estate** to small bedding plants, as adverse crop response can result. It is advisable to test a small quantity of plants to confirm safety.

### Use through Sprinkler and Drip Irrigation Systems

**Estate** may be used as a preventative treatment for soilborne disease control in bedded, field-grown ornamental or potted ornamentals applied through drip, sprinkler or other micro-irrigation systems. Before the drip application, ensure the potting media or soil have adequate moisture capacity. Shut off the drip irrigation system after 6 hours from initiation of application, or once the fungicide mixture is depleted, whatever comes first. In order to maximize efficacy, delay any scheduled irrigation for at least 24 hours after a drip application with this product.

When used according to the label directions, **Estate** will provide control (or suppression as listed) of the below-listed ornamental plant diseases.

DISEASE	Use Rates and Instructions
	Ounces Product per 100 Gallons
<b>CONIFER BLIGHTS</b>	
Phomopsis Blight ( <i>Phomopsis juniperovora</i> )	Apply 1 - 4 oz. at 7- to 28-day intervals.
Tip Blight ( <i>Sirococcus strobilinus</i> )	Apply 1 - 4 oz. at 7- to 28-day intervals.
<b>FLOWER BLIGHTS</b>	
Anthraxnose ( <i>Colletotrichum</i> spp., <i>Elsinoë</i> spp.)	Apply 1 - 4 oz. at 7- to 28-day intervals.
Botrytis Blight ( <i>Botrytis cinerea</i> )	Apply 4 - 8 oz. at 7- to 21-day intervals (suppression only). Do not apply more than 24 oz./acre.
<b>LEAF BLIGHTS/LEAF SPOTS</b>	
Alternaria Leaf Spot ( <i>Alternaria</i> spp.)	Apply 1 - 8 oz. at 7- to 28-day intervals.
Anthraxnose ( <i>Colletotrichum</i> spp., <i>Elsinoë</i> spp.)	Apply 1 - 8 oz. at 7- to 28-day intervals.
Cercospora Leaf Spot ( <i>Cercospora</i> spp.)	Apply 1 - 4 oz. at 7- to 28-day intervals.
Cylindrocladium Leaf Spot/Stem Canker ( <i>Cylindrocladium</i> spp.)	Apply 4 - 8 oz. at 7- to 14-day intervals.
Downy Mildew (including <i>Peronospora</i> spp., <i>Plasmopara</i> spp., <i>Bremiella</i> spp., <i>Bremia</i> spp.)	During periods of active plant growth and prior to dormancy or severe infection, apply 2 - 4 oz. at 7- to 21-day intervals. For herbaceous seedlings, use lower use rates.
Entomosporium Leaf Spot ( <i>Entomosporium</i> spp.)	Apply 1 - 4 oz. at 7- to 28-day intervals.
Iris Leaf Spot ( <i>Mycosphaerella</i> spp.)	Apply 2 - 4 oz. at 7- to 21-day intervals.

(continued)

DISEASE	Use Rates and Instructions
	Ounces Product per 100 Gallons
<b>LEAF BLIGHTS/LEAF SPOTS (continued)</b>	
Leaf Spot ( <i>Cladosporium</i> spp.)	Apply 1 - 4 oz. at 7- to 28-day intervals.
Rose Black Spot ( <i>Diplocarpon rosea</i> )	Apply 4 - 8 oz. at 7- to 14-day intervals. Under heavy disease pressure or if disease signs are already present, apply at the highest listed use rate and shortest application interval. <b>Estate</b> may be tank-mixed with another product registered for control of rose black spot. Do not apply more than 24 oz./A per application.
Myrothecium Leaf Spot ( <i>Myrothecium</i> spp.)	Apply 2 - 4 oz. at 7- to 21-day intervals.
Scab ( <i>Venturia inaequalis</i> , <i>Sphaceloma poinsettiae</i> , <i>Elsinoë australis</i> )	Apply 1 - 4 oz. at 10- to 28-day intervals. Do not make applications to apple trees. For applications to crabapples, see the <b>Tolerant Varieties of Ornamental Crabapple Species (Genus <i>Malus</i>)</b> table.
Marssonina Leaf Spot ( <i>Marssonina</i> spp.)	Apply 1 - 4 oz. at 14- to 28-day intervals.
<b>POWDERY MILDEW</b>	
<i>Erysiphe</i> spp., <i>Microsphaera</i> spp., <i>Sphaerotheca</i> spp., <i>Oidium</i> spp., <i>Podosphaera</i> spp., <i>Uncinula</i> spp.	Apply 1 - 4 oz. at 7- to 28-day intervals. Do not apply more than 2 sequential applications before rotating to a different class of fungicide.
<b>RUSTS</b>	
Needle Rust ( <i>Melampsora occidentalis</i> )	Apply 1 - 4 oz. at 7- to 28-day intervals.
Other Rusts ( <i>Phragmidium</i> spp., <i>Puccinia</i> spp., <i>Gymnosporangium</i> spp., <i>Coleosporium</i> spp., <i>Uromyces</i> spp.)	Apply 1 - 4 oz. at 7- to 28-day intervals.
<b>SHOOT/STEM DISEASES</b>	
Aerial/Shoot Blight ( <i>Phytophthora</i> spp.)	Apply 1 - 4 oz. at 7- to 28-day intervals.



**Soilborne Diseases Controlled - Directed Spray**

Pathogen		Use Rates and Instructions
		Ounces Product per 100 Gallons
<i>Fusarium</i> spp. <i>Rhizoctonia solani</i>	<i>Sclerotium rolfsii</i> <i>Sclerotinia</i> spp.	Apply 1 - 4 oz. at 7- to 21-day intervals.

**Soilborne Diseases - Drench and Drip Irrigation**

See **Drench Application** section of **ORNAMENTAL DIRECTIONS FOR USE** for additional information on drench applications.

Pathogen Controlled	Use Rate (Ounces Product/100 Gallons)	Application Information
<i>Fusarium</i> spp. <i>Rhizoctonia solani</i> <i>Sclerotium rolfsii</i>	0.2 - 1.0 oz.	Make application of 1 to 2 pints of solution/square foot surface area at 7- to 28-day intervals.
<i>Sclerotinia</i> spp.	1.0 oz.	Make application of 1 to 2 pints of solution/square foot surface area at 7- to 28-day intervals. For control of <i>Sclerotinia</i> , apply by drench only.

**Soilborne Diseases - Banded Applications**

Pathogen Controlled	Use Rate (Ounces Product/1,000 Row-Foot)	Application Information
<i>Fusarium</i> spp. <i>Rhizoctonia solani</i> <i>Sclerotium rolfsii</i> <i>Sclerotinia</i> spp.	0.2 - 0.4 oz.	Apply as a banded spray (less than or equal to 7 in. in width) directed to the soil using either single or multiple spray nozzles that are adjusted to provide thorough and uniform coverage of lower stems and the soil surface.  For resistance management purposes, applications that come into contact with the foliage are considered foliar applications.  <b>Restrictions:</b> The maximum application rate is 0.35 oz./1,000 row-feet when applications are applied to crops grown using 22-inch row spacing.

### Soilborne Diseases - In-furrow Applications

Pathogen Controlled or Suppressed	Use Rate (Ounces Product/1,000 Row-Feet)	Application Information
<i>Fusarium</i> spp. <i>Rhizoctonia solani</i> <i>Sclerotium rolfsii</i> <b>Suppression Only:</b> <i>Pythium</i> spp.	0.2 - 0.3 oz.	The spray nozzle must be mounted to direct application in the furrow. Make application before the bulb, corm, seed or seed pieces are covered by the soil. Use the higher rate when weather conditions are conducive for disease development. Make application in 3 to 15 gallons of water per 1,000 row-feet.

### Soilborne Diseases - Broadcast Applications

Pathogen Controlled	Use Rate (Ounces Product/Acre)	Application Information
<i>Fusarium</i> spp. <i>Rhizoctonia solani</i> <i>Sclerotium rolfsii</i> <i>Sclerotinia</i> spp.	2 - 16 oz.	Make application as a preventative broadcast application. Before making application by overhead irrigation, ensure the potting media or soil have adequate moisture capacity.

### Foliar and Soil Diseases - Drench and Drip Applications

Disease/Pathogen Suppressed	Use Rate (Ounces Product/100 Gallons)	Application Information
Rusts Powdery Mildew <i>Pythium</i> spp.	0.45 - 1.0 oz.	Make application of 1 to 2 pints of solution/square foot surface area at 7- to 28-day intervals.

### Plant Safety

Crop safety is expected when this product is applied according to listed application methods, rates, and timings to the plants listed in **Plants Tolerant to Estate Listed by Botanical Name** and **Ornamental Crabapple Species - Varieties Tolerant to Estate (Genus *Malus*)** tables. Due to the large number of species and varieties of ornamental and nursery plants, it is not possible to test every one for tolerance to **Estate**. The manufacturer or the seller have not determined whether or not **Estate**

may be used safely on ornamental and nursery plants not listed on this label. The user must conduct small-scale crop safety testing to ensure plant safety before making full-scale applications on varieties not listed on this label.

**Plants Tolerant to Estate Listed by Botanical Name**

<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
<i>Abelia</i> spp.	Abelia
<i>Abies fraseri</i>	Fir, Fraser
<i>Abies procera</i>	Fir, Noble
<i>Acer palmatum</i>	Maple, Japanese
<i>Acer saccharum</i>	Maple, Sugar
<i>Ageratum</i> spp.	Floss Flower
<i>Ageratum</i> spp.	Pussy's Foot
<i>Aglaonema</i> spp.	Evergreen, Chinese
<i>Ajuga reptans</i>	Bugle
<i>Ajuga reptans</i>	Bugleweed
<i>Antirrhinum</i> spp.	Snap-Dragon
<i>Aphelandra</i> spp.	Zebra Plant
<i>Artemisia</i> spp.	Mugwort
<i>Artemisia</i> spp.	Wormwood
<i>Aster</i> spp.	Aster
<i>Aster</i> spp.	Starwort
<i>Aucuba japonica</i>	Aucuba, Japanese
<i>Aucuba japonica</i>	Laurel, Japanese
<i>Begonia</i> spp.	Begonia (except Rieger begonia)
<i>Berberis thunbergii</i>	Barberry
<i>Betula nigra</i>	Birch, River
<i>Bougainvillea</i> spp.	Bougainvillea
<i>Brassaia actinophylla</i>	Rubber Tree

(continued)

**Plants Tolerant to Estate Listed by Botanical Name (continued)**

<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
<i>Brassaia actinophylla</i>	Umbrella Tree
<i>Buddleia davidii</i>	Buddleia
<i>Buddleia davidii</i>	Butterfly Bush
<i>Buxus sempervirens</i>	Boxwood
<i>Caladium</i> spp.	Caladium
<i>Camellia japonica</i>	Camellia
<i>Caryota urens</i>	Palm, Sago
<i>Catharanthus roseus</i>	Vinca
<i>Ceanothus sanguineus</i>	Lilac, Wild
<i>Ceanothus</i> spp.	Ceanothus
<i>Ceanothus</i> spp.	Lilac, California
<i>Ceanothus</i> spp.	Snowball
<i>Cedrus atlantica</i>	Cedar, Atlas
<i>Cedrus</i> spp.	Cedar, White
<i>Cercis occidentalis</i>	Redbud, Western
<i>Chamaecyparis pisifera</i>	Cypress, Sawara
<i>Chamaecyparis</i> spp.	Cypress, Leyland
<i>Chamaedorea elegans</i>	Palm, Parlor
<i>Chrysanthemum</i> spp.	Chrysanthemum
<i>Clethra alnifolia</i>	Clethra
<i>Clethra</i> spp.	White Alder
<i>Cornus florida</i>	Dogwood
<i>Cornus</i> spp.	Dogwood
<i>Cornus</i> spp.	Dogwood, Pink
<i>Cortaderia selloana</i>	Grass, Pampas

**Plants Tolerant to Estate Listed by Botanical Name (continued)**

<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
<i>Cotoneaster adpressus</i>	Cotoneaster, Creeping
<i>Cotoneaster horizontalis</i>	Cotoneaster, Variegated Rockspray
<i>Cyclamen</i> spp.	Cyclamen
<i>Cyperus</i> spp.	Cyperus
<i>Delphinium</i> spp.	Larkspur
<i>Dianthus caryophyllus</i>	Carnation
<i>Dianthus</i> spp.	Pink
<i>Dieffenbachia</i> spp.	Dumb-Cane
<i>Dietes iridoides</i>	Iris, African
<i>Dietes iridoides</i>	Iris, Butterfly
<i>Digitalis</i> spp.	Foxglove
<i>Epipremnum</i> spp.	Pothos
<i>Erica darleyensis</i>	Heather
<i>Euonymus alata</i>	Euonymus, Dwarf Winged
<i>Euonymus alatus</i>	Burning Bush
<i>Euonymus japonicus</i>	Euonymus, Evergreen
<i>Euphorbia</i> spp.	Poinsettia
<i>Fatsia japonica</i>	Fatsia, Japanese
<i>Fatsia japonica</i>	Paper Plant
<i>Ficus</i> spp.	Fig
<i>Forsythia viridissima</i>	Forsythia
<i>Gaillardia</i> spp.	Blanket Flower
<i>Gardenia jasminoides</i>	Gardenia
<i>Geranium</i> spp.	Cranesbill
<i>Gerbera jamesonii</i>	Daisy, Gerber

**Plants Tolerant to Estate Listed by Botanical Name (continued)**

<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
<i>Gerbera jamesonii</i>	Daisy, Transvaal
<i>Hedera algeriensis</i>	Ivy, Algerian
<i>Hedera helix</i>	Ivy, English
<i>Hibiscus moscheutos</i>	Hibiscus
<i>Hibiscus rosa-sinensis</i>	Hibiscus
<i>Hibiscus syriacus</i>	Rose of Sharon
<i>Hosta</i> spp.	Hosta
<i>Hydrangea macrophylla</i>	Hydrangea, French
<i>Hydrangea</i> spp.	Hydrangea
<i>Ilex</i> spp.	Holly
<i>Ilex</i> spp.	Winterberry
<i>Ilex</i> spp.	Yaupon
<i>Impatiens</i> spp.	Balsam
<i>Impatiens</i> spp. <sup>1,2</sup>	Impatiens <sup>1,2</sup>
<i>Iris xiphium</i>	Iris (Bulbous, Spanish, Dutch)
<i>Itea virginica</i>	Willow, Virginia
<i>Juniperus procumbens</i>	Juniper
<i>Juniperus scopulorum</i>	Juniper
<i>Juniperus</i> spp.	Juniper
<i>Juniperus virginiana</i>	Cedar, Red
<i>Lagerstroemia indica</i>	Crapemyrtle
<i>Laurus nobilis</i>	Laurel
<i>Lilium</i> spp.	Lily, Asiatic
<i>Liriope muscari</i>	Lily-Turf
<i>Lobularia maritima</i>	Sweet Alyssum

**Plants Tolerant to Estate Listed by Botanical Name (continued)**

<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
<i>Magnolia grandiflora</i>	Magnolia, Southern
<i>Magnolia soulangiana</i>	Magnolia, Saucer
<i>Magnolia</i> spp.	Magnolia
<i>Malus</i> spp.	Crabapple <sup>3</sup>
<i>Nandina domestica</i>	Nandina
<i>Nerium oleander</i>	Oleander
<i>Nerium oleander</i>	Rose-Bay
<i>Pelargonium</i> spp.	Geranium
<i>Pennisetum alopecuroides</i>	Grass
<i>Peperomia</i> spp.	Rubber Plant, Baby
<i>Petunia</i> spp.	Petunia <sup>2</sup>
<i>Phalaris</i> spp.	Grass, Dwarf Pampas
<i>Philodendron</i> spp.	Philodendron
<i>Phlox</i> spp.	Phlox
<i>Phoenix dactylifera</i>	Palm, Date
<i>Phoenix roebelenii</i>	Palm, Robellini
<i>Photinia glabra</i>	Photinia, Red-Tip
<i>Picea abies</i>	Spruce, Norway
<i>Picea glauca</i>	Spruce, White
<i>Picea pungens</i>	Spruce, Blue
<i>Pieris japonica</i>	Andromeda, Japanese
<i>Pinus mugo</i>	Pine, Mugo
<i>Pinus nigra</i>	Pine, Black
<i>Pinus</i> spp.	Pine
<i>Pinus strobus</i>	Pine, Eastern White

(continued)

**Plants Tolerant to Estate Listed by Botanical Name (continued)**

<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
<i>Pinus sylvestris</i>	Pine, Scotch
<i>Pittosporum</i> spp.	Laurel, Australian
<i>Pittosporum tobira</i>	Japanese Pittosporum
<i>Plectranthus</i> spp.	Coleus
<i>Plectranthus</i> spp.	Ivy, Swedish
<i>Populus</i> spp.	Aspen Trees
<i>Populus trichocarpa</i>	Poplar
<i>Potentilla</i> spp.	Cinquefoil
<i>Primula</i> spp.	Primrose
<i>Prunus pumila</i>	Sand cherry
<i>Prunus</i> spp.	Plum, Flowering
<i>Prunus</i> spp.	Plum, Purple-Leaf
<i>Pseudotsuga</i> spp.	Fir, Douglas
<i>Pyrus calleryana</i>	Pear, Bradford's
<i>Quercus falcata</i>	Oak, Red
<i>Quercus palustris</i>	Oak, Pin
<i>Rhaphiolepis indica</i>	Hawthorn, Indian
<i>Rhododendron</i> spp.	Azalea, Glacier
<i>Rhododendron</i> spp.	Azaleas
<i>Rhododendron</i> spp.	Rhododendron
<i>Rosa</i> spp.	Rose
<i>Rosmarinus</i> spp.	Rosemary (Prostrate)
<i>Rudbeckia hirta</i>	Black-Eyed Susan
<i>Salvia</i> spp.	Sage
<i>Schlumbergera</i>	Cactus, Holiday



**Plants Tolerant to Estate Listed by Botanical Name (continued)**

<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
<i>Sedum</i> spp.	Orpine
<i>Sedum</i> spp.	Stonecrop
See Fir, Douglas; Fir, Fraser; and Pine, Scotch	Christmas Trees
<i>Sempervivum</i> spp.	House Leek
<i>Sempervivum</i> spp.	Live-Forever
<i>Setaria</i> spp.	Ribbon Grass
<i>Spathiphyllum floribundum</i>	Lily, Peace
<i>Spiraea bumalda</i>	Spirea
<i>Spiraea japonica</i>	Spirea
<i>Syagrus romanzoffianum</i>	Palm, Queen
<i>Tagetes</i> spp.	Marigold
<i>Taxus baccata</i>	Yew, Spreading
<i>Thuja plicata</i>	Cedar, Western Red
<i>Thujopsis</i> spp.	Arborvitae
<i>Thymus serpyllum</i>	Thyme, Creeping
<i>Tsuga heterophylla</i>	Hemlock, Western
<i>Tsuga</i> spp.	Hemlock
<i>Verbena</i> spp.	Verbena
<i>Verbena</i> spp.	Vervain
<i>Viburnum</i> spp.	Viburnum
<i>Vinca</i> spp.	Periwinkle
<i>Viola</i> spp.	Viola
<i>Viola</i> spp. <sup>1</sup>	Pansy <sup>1</sup>
<i>Weigela florida</i>	Weigela, Pink
<i>Yucca</i> spp.	Yucca

**Plants Tolerant to Estate Listed by Botanical Name (continued)**

BOTANICAL NAME	COMMON NAME
<i>Zinnia</i> spp.	Zinnia

<sup>1</sup>Do not apply more than 2 oz./100 gallons on these species.

<sup>2</sup>When applied directly to blooms of certain plant species, **Estate** may cause discoloration of flowers. All varieties and colors have not been evaluated.

<sup>3</sup>See the **Ornamental Crabapple Species - Varieties Tolerant to Estate (Genus *Malus*)** table.

**Ornamental Crabapple Species - Varieties Tolerant to Estate (Genus *Malus*)**

Callaway	Golden Raindrops	Mary Potter	Selkirk
Carmine ( <i>M. atrosanguinea</i> )	Hopa	Molten Lava	Sentinel
Candy mint Sargent	Indian Magic	New Centennial	Silver Moon
Christmas Holly	Island	Ormiston Roy	Silverdrift
David	Jackii ( <i>M. baccata</i> var. <i>jackii</i> )	Pink Satin	Sinai Fire
Dolgo	Japanese Flowering Crabapple ( <i>M. floribunda</i> )	Prairie Maid	Sugar Tyme
Donald Wyman	Katherine	Prairiefire	Van Eseltine
Dorothea	Lancelot	Profusion	White Angel
Doubloons	Louisa	Ralph Shay	Wild crabapple ( <i>M. coronaria</i> )
Eleyi	<i>Malus x zumi</i> var. <i>Calocarpa</i>	Red Baron	Winter Gold
Evereste	<i>M. sargentii</i>	Red Jade	
Evelynn	Manchurian ( <i>M. baccata</i> var. <i>mandshurica</i> )	Sargent	

**Plants Sensitive to Estate****(DO NOT make applications of Estate to these varieties or species.)**

<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
<i>Ligustrum</i> spp.	Privet
<i>Malus</i> spp. 'Brandywine'	Crabapple - Brandywine variety
<i>Malus</i> spp. 'Flame'	Crabapple - Flame variety
<i>Malus</i> spp. 'Novamac'	Crabapple - Novamac variety
<i>Prunus x yedoensis</i>	Cherry, Flowering - Yoshino variety
<i>Rumohra adiantiformis</i> and other species	Leatherleaf Fern and other Ferns for cut foliage

**COMMERCIAL PRODUCTION ROSES and CONIFERS INCLUDING CHRISTMAS TREES**

**Estate** may be applied to control listed diseases in conifers (including Christmas trees) and production roses grown commercially both outdoor and indoor production and in landscaping. See the **ORNAMENTALS DIRECTIONS FOR USE** section for additional information on use in landscapes.

### Directions for Conifer and Commercial Rose Production

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Application Information
<b>Conifers including Christmas Trees</b>	Diplodia Tip Blight <i>(Diplodia pinea)</i> Lophodermium Needlecast <i>(Lophodermium pinastri)</i> Swiss Needlecast <i>(Phaeocryptopus gaeumannii)</i>	3.2 - 8.0 (0.10 - 0.25)	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>            Do not make more than four sequential applications of <b>Estate</b> before rotating with a fungicide that is not in Group 11. Do not apply more than eight applications of <b>Estate</b> per acre per year.</p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 21-day intervals following the resistance management practices in your area.</p> <p><b>Restriction:</b></p> <ul style="list-style-type: none"> <li>Do not apply more than 4.0 pounds of <b>Estate</b> /acre (2.0 lbs. a.i./A) per year.</li> </ul>

(continued)

**Directions for Conifer and Commercial Rose Production (continued)**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Application Information
<p><b>Roses (Commercial Production only)</b></p>	<p>Downy Mildew (<i>Peronospora sparsa</i>)</p> <p>Powdery Mildew (<i>Sphaerotheca pannosa</i>)</p> <p>Rust (<i>Phragmidium mucronatum</i>, <i>P. tuberculatum</i>, and other <i>Phragmidium</i> spp.)</p> <p>Septoria Leaf Spot (<i>Septoria rosea</i>)</p> <p>Alternaria Leaf Spot (<i>Alternaria alternata</i>)</p>	<p>1.6 - 8.0 (0.05 - 0.25)</p>	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>            Do not make more than four sequential applications of <b>Estate</b> before rotating with a fungicide that is not in Group 11. Do not apply more than eight applications of <b>Estate</b> per acre per year.</p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 21-day intervals following the resistance management practices in your area.</p> <p><b>Restriction:</b></p> <ul style="list-style-type: none"> <li>Do not apply more than 4.0 pounds of <b>Estate</b>/acre (2.0 lbs. a.i./A) per year.</li> </ul>

## PLANTS GROWN FOR FRUIT AND NUTS

**Estate** may be applied to (non-bearing) fruit and nut plants grown for transplant. **DO NOT** harvest within 12 months of application. **Note:** Plants are considered non-bearing if they do not produce fruit or nuts that is able to be harvested for one year after application.

### Directions for Use - Almonds

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
Almonds	Alternaria Leaf and Fruit Spot <i>(Alternaria alternata)</i> Anthracnose <i>(Colletotrichum acutatum)</i> Leaf Blight <i>(Seimatosporium lichenicola)</i> Leaf Rust <i>(Tranzschelia discolor)</i> Scab <i>(Cladosporium carpophilum)</i> Shothole <i>(Wilsonomyces carpophilus)</i>	3.2 - 8.0 (0.1 - 0.25)	0.075 - 0.18	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Alternate with a different non-Group 11 fungicide <i>after two sequential applications of Estate</i> to help prevent resistance.</p> <p>Applications may be made by air (minimum 15 GPA), ground or chemigation. Make initial application before disease develops. Continue applications at intervals determined by resistance management practices in your area.</p> <p>For applications made by air: Apply at growth stages prior to and including 5 weeks after petal fall only. Add an adjuvant at specified rates, if desired.</p> <p>For anthracnose, scab and shothole: Make initial application before disease develops and continue at 7- to 14-day intervals as determined by resistance management practices in your area.</p>

*(continued)*

**Directions for Use - Almonds (continued)**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
Almonds	Alternaria Leaf and Fruit Spot <i>(Alternaria alternata)</i> Anthracnose <i>(Colletotrichum acutatum)</i> Leaf Blight <i>(Seimatosporium lichenicola)</i> Leaf Rust <i>(Tranzschelia discolor)</i> Scab <i>(Cladosporium carpophilum)</i> Shothole <i>(Wilsonomyces carpophilus)</i>	3.2 - 8.0 (0.1 - 0.25)	0.075 - 0.18	<b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Pre-Harvest Interval (PHI): 28 days</li> <li>• Do not make more 5 applications a year.</li> <li>• Do not make more than 8 oz. product/A (0.25 lb. a.i./A) in a single application.</li> </ul>
	Brown Rot Blossom Blight <i>(Monilinia laxa, M. fructicola)</i>	6.4 - 8.0 (0.2 - 0.25)	0.15 - 0.18	Make initial application at early bloom and continue through petal fall. <b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Pre-Harvest Interval (PHI): 28 days</li> <li>• Do not make more 5 applications a year.</li> <li>• Do not make more than 8 oz. product/A (0.25 lb. a.i./A) in a single application.</li> </ul>

**Directions for Use - Bananas and Plantains**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<b>Bananas Plantains</b>	Black Sigatoka <i>(Mycosphaerella fijiensis)</i>  Yellow Sigatoka <i>(Mycosphaerella musicola)</i>	2.9 - 4.3 (0.09 - 0.135)	0.07 - 0.1	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be used as part of an overall disease management program that includes canopy management (for example - removal of suckers, proper plant spacing, selection of varieties with disease tolerance, removal of plant debris in which inoculum overwinters, and good surface water drainage).</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of Estate to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 12- to 14-day intervals following the resistance management practices in your area.</p>

*(continued)*



**Directions for Use - Bananas and Plantains**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<b>Bananas Plantains</b>	Black Sigatoka <i>(Mycosphaerella fijiensis)</i>  Yellow Sigatoka <i>(Mycosphaerella musicola)</i>	2.9 - 4.3 (0.09 - 0.135)	0.07 - 0.1	<p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.08 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 8 applications per year at the highest application rate of 4.3 oz. product/A (0.135 lb. a.i./A) or 12 applications at the lowest application rate of 2.9 oz. product/A (0.09 lb. a.i./A) per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Berries, Bushberry Subgroup**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<p><b>Berries Bushberry Subgroup</b></p> <p>Blueberry Currant Elderberry Gooseberry Huckleberry Lingonberry Juneberry Salal</p> <p>Including all cultivars and/or hybrids of these.</p>	<p>Alternaria Leaf Spot and Fruit Rot (<i>Alternaria</i> spp.)</p> <p>Anthrachnose Fruit Rot (<i>Colletotrichum gloeosporioides</i>)</p> <p>Botryosphaeria Canker (<i>Botryosphaeria</i> spp.)</p> <p>Mummyberry (<i>Vaccinium</i> spp.)</p> <p>Phomopsis Stem canker (<i>Phomopsis vaccinii</i>)</p> <p>Powdery Mildew (<i>Sphaerotheca</i> spp.)</p> <p>Septoria Blight (<i>Septoria</i> spp.)</p>	<p>3.2 - 8.0 (0.1 - 0.25)</p>	<p>0.08 - 0.18</p>	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>            Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of Estate to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 14-day intervals following the resistance management practices in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 0.75 lb. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 3 applications at the highest application rate 8.0 oz. product/A (0.25 lb. a.i./A) or 7 applications at the lowest application rate 3.2 oz. product/A (0.1 lb. a.i./A) per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Berries, Caneberry Subgroup**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<p><b>Berries Caneberry Subgroup</b></p> <p>Blackberry Bingleberry Boysenberry Dewberry Lowberry Marionberry Olallieberry Youngberry Loganberry Red and black raspberry Including cultivars and/or hybrids of these.</p>	<p>Anthracnose <i>(Sphaceloma necator)</i> <i>(Elsinoë veneta)</i></p> <p>Botryosphaeria Canker <i>(Botryosphaeria dothidea)</i></p> <p>Colletotrichum Rot <i>(Colletotrichum gloeosporioides)</i></p> <p>Leaf Spot <i>(Septoria rubi)</i> <i>(Sphaerulina rubi)</i></p> <p>Powdery Mildew <i>(Sphaerotheca macularis)</i></p> <p>Rosette or double blossom of blackberries <i>(Cercospora rubi)</i></p> <p>Spur Blight <i>(Didymella applanata)</i></p>	<p>3.2 - 8.0 (0.1 - 0.25)</p>	<p>0.08 - 0.18</p>	<p><b>Integrated Pest Management:</b> <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b> Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of Estate to help prevent resistance.</i></p> <p>Applications may be made by air in a minimum of 3 gallons of water per acre and by ground in a minimum 10 gallons of water per acre.</p> <p>Make application at onset of disease. Continue applications at 7- to 14-day intervals following the resistance management practices in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications at the highest application rate 8.0 oz. product/A (0.25 lb. a.i./A) or 15 applications at the lowest application rate 3.2 oz. product/A (0.1 lb. a.i./A) per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Berries, Caneberry Subgroup**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<p><b>Citrus Fruit</b>                      Calamondin                      Citron                      Grapefruit                      Kumquat                      Lemon                      Lime                      Mandarin                      Orange                      (sour and sweet)                      Pummelo                      Satsuma                      mandarin                      Tangerine                      Including all cultivars and/or hybrids of these.</p>	<p>Albinism  <i>(Alternaria alternata</i>  <i>pv. citri)</i>                      Alternaria Leaf and Fruit Spot  <i>(Alternaria citri)</i>                      Cercospora Leaf Spot  <i>(Cercospora spp.)</i>                      Diplodia Stem-end Rot  <i>(Diplodia natalensis)</i>                      Greasy Spot  <i>(Mycosphaerella citri)</i>                      Melanose  <i>(Diaporthe citri)</i>                      Penicillium Decays                      Green Mold, Whisker Mold, Suppression of Blue Mold  <i>(Penicillium spp.)</i>                      Phomopsis Stem-end Rot  <i>(Phomopsis citri)</i></p>	<p>6.4 - 8.0                      (0.2 - 0.25)</p>	<p>0.15 - 0.18</p>	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of Estate to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired. It is required to add a horticultural spray oil to improve control of greasy spot.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 21-day intervals following the resistance management practices in your area. Use the higher application rate for heavy disease pressure and outbreaks.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not apply more than four applications of <b>Estate</b> or other Group 11 product per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Berries, Caneberry Subgroup**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<p><b>Citrus Fruit</b>                      Calamondin                      Citron                      Grapefruit                      Kumquat                      Lemon                      Lime                      Mandarin                      Orange                      (sour and sweet)                      Pummelo                      Satsuma                      mandarin                      Tangerine                      Including all cultivars and/or hybrids of these.</p>	<p>Post-bloom Fruit Drop (PFD)                      (<i>Colletotrichum acutatum</i>)                      Powdery Mildew (<i>Erysiphe</i> spp.)                      Scab (<i>Elsinoë fawcettii</i>)</p>	<p>6.4 - 8.0                      (0.2 - 0.25)</p>	<p>0.15 - 0.18</p>	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of <b>Estate</b> to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired. It is required to add a horticultural spray oil to improve control of greasy spot.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 21-day intervals following the resistance management practices in your area. Use the higher application rate for heavy disease pressure and outbreaks.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not apply more than four applications of <b>Estate</b> or other Group 11 product per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Grapes**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
Grapes	Black Rot <i>(Guignardia bidwellii)</i> Downy Mildew <i>(Plasmopara viticola)</i> Phomopsis Cane and Leaf Spot <i>(Phomopsis viticola)</i> Powdery Mildew <i>(Uncinula necator)</i> <b>Suppression Only:</b> Botrytis Bunch Rot <i>(Botrytis cinerea)</i>	5.1 - 8.0 (0.16 - 0.25)	0.11 - 0.18	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of <b>Estate</b> to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 10- to 14-day intervals following the resistance management practices in your area.</p> <p><b>ATTENTION:</b>  <b>Estate</b> causes adverse crop response to certain apple varieties. <b>DO NOT</b> spray this product where spray drift may reach apple trees. See additional information in this label for other adverse crop response information.</p> <p><b>AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.</b></p>

*(continued)*

**Directions for Use - Grapes (continued)**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<b>Grapes</b>	Black Rot <i>(Guignardia bidwellii)</i> Downy Mildew <i>(Plasmopara viticola)</i> Phomopsis Cane and Leaf Spot <i>(Phomopsis viticola)</i> Powdery Mildew <i>(Uncinula necator)</i> <b>Suppression Only:</b> Botrytis Bunch Rot <i>(Botrytis cinerea)</i>	5.1 - 8.0 (0.16 - 0.25)	0.11 - 0.18	<b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications at the highest application rate 8.0 oz (0.25 lb. a.i./A) or 9 applications at the lowest application rate 5.1 oz. product/A (0.16 lb. a.i./A) per year.</li> <li>• Pre-Harvest Interval (PHI): 14 days</li> </ul>

**Directions for Use - Pecans**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
Pecans	Anthraxnose ( <i>Glomerella cingulata</i> ) Scab ( <i>Cladosporium caryigenum</i> )	3.2 - 6.4 (0.10 - 0.20)	0.08 - 0.15	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>            Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of Estate to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 21-day intervals following the resistance management practices in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.2 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications at the highest application rate 6.4 oz. products/A (0.2 lb. a.i./A) or 12 applications at the lowest application rate 3.2 oz. products/A (0.1 lb. a.i./A) per year.</li> <li>• Pre-Harvest Interval (PHI): 45 days</li> </ul>



**Directions for Use - Pistachios**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
Pistachios	Alternaria Late Blight <i>(Alternaria alternata)</i> Botryosphaeria Panicle and Shoot Blight <i>(Botryosphaeria dothidea)</i> Septoria Leaf Spot <i>(Septoria pistaciarum)</i>	3.2 - 8.0 (0.10 - 0.25)	0.08 - 0.18	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of <b>Estate</b> to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 21-day intervals following the resistance management practices in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make than 6 applications at the highest application rate 8.0 oz. product/A (0.25 lb. a.i./A) or 15 applications at the lowest application rate 3.2 oz. product/A (0.1 lb. a.i./A) per year.</li> <li>• Pre-Harvest Interval (PHI): 7 day</li> </ul>

**Directions for Use - Stone Fruit**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<b>Stone Fruit</b> Apricot Cherry, sweet Cherry, tart Nectarine Peach Plum Plumcot Prune	Alternaria Spot and Fruit Rot <i>(Alternaria alternata)</i> Anthracnose <i>(Colletotrichum prunicola,</i> <i>C. gloeosporioides)</i> Leaf Rust <i>(Tranzschelia discolor)</i> Powdery Mildew <i>(Sphaerotheca pannosa,</i> <i>Podosphaera clandestina)</i> Scab <i>(Cladosporium carpophilum)</i> Shot Hole <i>(Wilsonomyces carpophilus)</i>	3.2 - 8.0 (0.1 - 0.25)	0.08 - 0.18	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of <b>Estate</b> to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation.</p> <p>Begin applications at early bloom and continue through petal fall for brown rot blossom blight.</p> <p>Applications on brown rot on fruit may be made up to the day of harvest. For scab, make initial application at petal fall and continue at 7- to 14-day intervals following resistance management practices in your area. For all other diseases listed, make initial application at the onset of disease and continue at a 7- to 14-day interval. For scab control in peaches only, use 5 to 8 oz. of product/acre.</p>
	Brown Rot Blossom Blight and Fruit Rot <i>(Monilinia fructicola,</i> <i>M. laxa)</i>	6.4 - 8.0 (0.2 - 0.25)	0.15 - 0.18	

*(continued)*

**Directions for Use - Stone Fruit (continued)**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.i./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<b>Stone Fruit</b> Apricot Cherry, sweet Cherry, tart Nectarine Peach Plum Plumcot Prune	Alternaria Spot and Fruit Rot <i>(Alternaria alternata)</i> Anthracnose <i>(Colletotrichum prunicola,</i> <i>C. gloeosporioides)</i> Leaf Rust <i>(Tranzschelia discolor)</i> Powdery Mildew <i>(Sphaerotheca pannosa,</i> <i>Podosphaera clandestina)</i> Scab <i>(Cladosporium carpophilum)</i> Shot Hole <i>(Wilsonomyces carpophilus)</i>	3.2 - 8.0 (0.1 - 0.25)	0.08 - 0.18	<b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications at the highest application rate 8.0 oz. product/A (0.25 lb. a.i./A) or 15 applications the lowest application rate 3.2 oz. product/A (0.1 lb. a.i./A) per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>
	Brown Rot Blossom Blight and Fruit Rot <i>(Monilinia fructicola,</i> <i>M. laxa)</i>	6.4 - 8.0 (0.2 - 0.25)	0.15 - 0.18	

(continued)

**Directions for Use - Strawberry**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<p><b>Strawberry</b></p>	<p>Anthracnose (<i>Colletotrichum fragariae</i>)</p> <p>Powdery Mildew (<i>Sphaerotheca macularis</i>)</p> <p><b>Suppression Only:</b> Botrytis on the foliage (<i>Botrytis cinerea</i>)</p>	<p>3.2 - 8.0 (0.10 - 0.25)</p>	<p>0.08 - 0.18</p>	<p><b>Integrated Pest Management:</b> <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b> Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of <b>Estate</b> to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 10-day intervals following the resistance management practices in your area.</p> <p><b>Dip Applications at Transplant (commercially produced berries):</b> For best results, prior to treatment, remove excess soil from the transplants by washing them gently.</p>

(continued)

**Directions for Use - Strawberry (continued)**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.i./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
Strawberry	Anthracnose <i>(Colletotrichum fragariae)</i>  Powdery Mildew <i>(Sphaerotheca macularis)</i>  <b>Suppression Only:</b> Botrytis on the foliage <i>(Botrytis cinerea)</i>	3.2 - 8.0 (0.10 - 0.25)	0.08 - 0.18	Root and crown rot caused by <i>Colletotrichum</i> spp. (Suppression Only): Add 2.5 to 4.2 oz. of product per 100 gallons of water and dip plants for 2 to 5 minutes.  Treated plants must be planted as soon as possible after treatment. For continued anthracnose control, follow a foliar application regime 14 to 21 days after transplant that is consistent with resistance management practices in your area.  <b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.0 lb. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 4 applications at the highest application rate 8.0 oz. product/A (0.25 lb. a.i./A) or 10 applications at the lowest application rate 3.2 oz. product/A (0.1 lb. a.i./A) per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Tree Nuts (except Almonds, Pecans, and Pistachios)**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<p><b>Tree Nuts</b>                      Beechnut                      Brazil nut                      Butternut                      Cashew                      Chestnut                      Chinquapin                      Filbert                      Hickory                      Macadamia                      Walnut                      Almonds,                      Pecans,                      Pistachios:                      see                      information                      in the                      specific                      direction for                      use sections                      for each                      crop.</p>	<p>Alternaria Leaf and Fruit Spot  <i>(Alternaria alternata)</i>                      Anthracnose  <i>(Colletotrichum acutatum,</i>  <i>Glomerella cingulata)</i>                      Eastern Filbert Blight  <i>(Anisogramma anomala)</i>                      Late Blight  <i>(Alternaria alternata)</i>                      Scab  <i>(Cladosporium carpophilum)</i>                      Septoria Leaf Spot  <i>(Septoria pistaciarum)</i>                      Shothead  <i>(Wilsonomyces carpophilus)</i></p>	<p>3.2 - 6.4                      (0.10 - 0.20)</p>	<p>0.08 - 0.15</p>	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of <b>Estate</b> to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 21-day intervals following resistance management practices and spray program specifications in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.2 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications of this product or other strobilurin fungicide per acre per year.</li> <li>• Pre-Harvest Interval (PHI): 45 day</li> </ul>

*(continued)*

**Directions for Use - Tree Nuts (except Almonds, Pecans, and Pistachios) (continued)**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<b>Tree Nuts</b> Beechnut Brazil nut Butternut Cashew Chestnut Chinquapin Filbert Hickory Macadamia Walnut Almonds, Pecans, Pistachios: see information in the specific direction for use sections for each crop.	Blossom Blight <i>(Monilinia laxa,</i> <i>M. fructicola)</i>	6.4 (0.20)	0.15	Make initial application at early bloom and continue through petal fall for blossom blight.  <b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply more than 6 applications of <b>Estate</b> or other strobilurin fungicides per acre per year.</li> <li>• Do not apply a total of more than 1.2 lbs. a.i./A of azoxystrobin per year.</li> <li>• Pre-Harvest Interval (PHI): 45 day</li> </ul>

**Directions for Use - Tropical Fruit**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 1,000 Sq. Ft.	Application Information
<b>Tropical Fruit</b> Acerola Atemoya Avocado Biriba Canistel Cherimoya Custard apple Feijoa Guava Ilama Jaboticaba Jackfruit Longan Loquat Lychee Mango Papaya Passionfruit Pawpaw Persimmon Pulasan Pummelo (continued)	Alternaria Leaf and Fruit Spot ( <i>Alternaria</i> spp.) Anthracnose ( <i>Colletotrichum</i> spp.) Cercospora Leaf Spot ( <i>Cercospora</i> spp.) Powdery Mildew ( <i>Erysiphe</i> spp.) Rust ( <i>Puccinia</i> spp.)	3.2 - 8.0 (0.1 - 0.25)	0.08 - 0.18	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of <b>Estate</b> to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 10- to 14-day intervals following resistance management practices and spray program specification in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications at the highest application rate 8.0 oz. product/A (0.25 lb. a.i./A) or 15 applications at the lowest application rate 3.2 oz. product/A (0.1 lb. a.i./A) per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>



**Directions for Use - Tropical Fruit (continued)**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/1,000 Sq. Ft.	Application Information
<b>Tropical Fruit (continued)</b> Rambutan Sapodilla Sapote, black Sapote, mamey Sapote, white Soursoap Star apple Starfruit Sugar apple Spanish lime Tamarind Uniq fruit	Alternaria Leaf and Fruit Spot <i>(Alternaria spp.)</i> Anthracnose <i>(Colletotrichum spp.)</i> Cercospora Leaf Spot <i>(Cercospora spp.)</i> Powdery Mildew <i>(Erysiphe spp.)</i> Rust <i>(Puccinia spp.)</i>	3.2 - 8.0 (0.1 - 0.25)	0.08 - 0.18	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of <b>Estate</b> to help prevent resistance.</i></p> <p>Applications may be made by air, ground, or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 10- to 14-day intervals following resistance management practices and spray program specification in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications at the highest application rate 8.0 oz. product/A (0.25 lb. a.i./A) or 15 applications at the lowest application rate 3.2 oz. product/A (0.1 lb. a.i./A) per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

## VEGETABLE AND HERB PLANTS

For applications to vegetable and herb plants grown for transplanting.

### Directions for Use - Asparagus Plants

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
Asparagus	Stemphylium Purple Spot <i>(Stemphylium vesicarium)</i>	0.075 - 0.18 (0.1 - 0.25)	0.375 - 0.9	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>            Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after each application of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. Add an adjuvant at specified rates, if desired. Use a minimum of 10 gallons of water per acre spray volume.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 10-day intervals following resistance management practices and spray program specifications in your area.</p>

*(continued)*

**Directions for Use - Asparagus Plants (continued)**

Crop	Diseases	Use Rate Oz. Product/Acre (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
Asparagus	Stemphylium Purple Spot ( <i>Stemphylium vesicarium</i> )	0.075 - 0.18 (0.1 - 0.25)	0.375 - 0.9	<b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications at the highest application rate 0.25 lb. a.i./A or 15 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Pre-Harvest Interval (PHI): 100 days</li> </ul>

**Directions for Use - Brassica Head and Stem Subgroup Plants**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.i./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<p><b>Brassica Head and Stem Subgroup</b>                      Broccoli                      Chinese broccoli (gai lon)                      Brussels sprouts                      Cabbage                      Chinese cabbage (napa)                      Chinese mustard cabbage (gai choy)                      Cauliflower                      Cavalo broccolo                      Kohlrabi                      Including all cultivars and/or hybrids of these.</p>	<p>Alternaria Leaf Spot (<i>Alternaria</i> spp.)                      Downy Mildew (<i>Peronospora parasitica</i>)                      Pin Rot (<i>Alternaria</i> spp.)</p>	<p>0.08 - 0.18 (0.1 - 0.25)</p>	<p>0.4 - 0.9</p>	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after each application of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. Add an adjuvant at specified rates, if desired. Use a minimum of 10 gallons of water per acre spray volume.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 14-day intervals following resistance management practices and spray program specification in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications at the highest application rate 0.25 lb. a.i./A or 15 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Brassica Leafy Greens Subgroup Plants**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<p><b>Brassica Leafy Greens Subgroup</b>                      Broccoli                      raab                      Cabbage,                      Chinese                      Collards                      Kale                      Mizuna                      Mustard                      greens                      Mustard                      spinach                      Rape                      greens                      Including all                      cultivars                      and/or                      hybrids of                      these.</p>	<p>Black Spot                      (<i>Alternaria</i> spp.)                      Cercospora Leaf                      Spot                      (<i>Cercospora</i> spp.)                      White Rust                      (<i>Albugo candida</i>)</p>	<p>0.08 - 0.18                      (0.1 - 0.25)</p>	<p>0.4 - 0.9</p>	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after each application of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. Add an adjuvant at specified rates, if desired. Use a minimum of 10 gallons of water per acre spray volume.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 14-day intervals following resistance management practices and spray program specifications in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 0.75 lb. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 3 applications at the highest application rate 0.25 lb. a.i./A or 7 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Bulb Vegetable Plants**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.1./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<b>Bulb Vegetables</b> Garlic Leek Onion, bulb Onion, green Shallot Welsh onion	<b>Foliar Diseases</b> Cladosporium Leaf Blotch <i>(Cladosporium allii)</i> Purple Blotch <i>(Alternaria porri)</i> Rust <i>(Puccinia allii)</i> White Rot <i>(Sclerotium cepivorum)</i>	0.08 - 0.15 (0.1 - 0.20)	0.4 - 0.75	<b>Integrated Pest Management:</b> Estate must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts. <b>Resistance Management:</b> Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after each application of Estate to help prevent resistance.</i> Applications may be made by ground or chemigation. Add an adjuvant at specified rates, if desired. Make preventative applications on a 5- to 7-day interval for downy mildew. For all other diseases make initial application before disease develops and continue throughout plant production at 7- to 14-day intervals, following the resistance management practices in your area.
	Botrytis Leaf Blight <i>(Botrytis aclada)</i> Downy Mildew <i>(Peronospora destructor)</i>	0.11 - 0.18 (0.15 - 0.25)	0.55 - 0.9	

*(continued)*

**Directions for Use - Bulb Vegetable Plants (continued)**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.i./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<b>Bulb Vegetables</b> Garlic Leek Onion, bulb Onion, green Shallot Welsh onion	<b>Foliar Diseases</b> Cladosporium Leaf Blotch <i>(Cladosporium allii)</i> Purple Blotch <i>(Alternaria porri)</i> Rust <i>(Puccinia allii)</i> White Rot <i>(Sclerotium cepivorum)</i>	0.08 - 0.15 (0.1 - 0.20)	0.4 - 0.75	<b>Precautions:</b> Adverse crop response may result with silicone adjuvants mixed with <b>Estate</b> . Before using mixtures with silicone adjuvants conduct a crop safety test.  <b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications at the highest application rate 0.25 lb. a.i./A or 15 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>
	Botrytis Leaf Blight <i>(Botrytis aclada)</i> Downy Mildew <i>(Peronospora destructor)</i>	0.11 - 0.18 (0.15 - 0.25)	0.55 - 0.9	

**Directions for Use - Celery Plants**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.i./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
Celery	Early Blight ( <i>Cercospora apii</i> ) Late Blight ( <i>Septoria apicola</i> ) See <b>Leafy Vegetables</b> for additional diseases.	0.11 - 0.18 (0.15 - 0.25)	0.55 - 0.9	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>            Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after each application of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 14-day intervals following resistance management practices and spray program specifications in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications at the highest application rate 0.25 lb. a.i./A or 10 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>



**Directions for Use - Cucurbit Plants**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.1./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<p><b>Cucurbits</b> Cantaloupe Chayote Chinese-waxgourd Cucumber Gourds Honeydew Melons <i>Momordica</i> spp. (bitter melon, balsam apple) Muskmelon Pumpkin Squash Watermelon Zucchini Including cultivars and/or hybrids of these.</p>	<p>Anthraxnose (<i>Colletotrichum lagenarium</i>) Belly Rot (<i>Rhizoctonia solani</i>) Downy Mildew (<i>Pseudoperonospora cubensis</i>) Gummy Stem Blight (<i>Didymella bryoniae</i>) Leaf Spots (<i>Alternaria</i> spp., <i>Cercospora</i> spp.) Myrothecium Canker (<i>Myrothecium roridum</i>) Plectosporium Blight (<i>Plectosporium tabacinum</i>) Powdery Mildew (<i>Sphaerotheca fuliginea</i>, <i>Erysiphe cichoracearum</i>) Ulocladium Leaf Spot (<i>Ulocladium cucurbitae</i>)</p>	<p>0.08 - 0.18 (0.10 - 0.25)</p>	<p>0.4 - 0.9</p>	<p><b>Integrated Pest Management:</b> <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b> Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after each application of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make application before signs of disease are present. Continue applications at 7- to 14-day intervals following resistance management practices and spray program specifications in your area.</p> <p>Downy and powdery mildew: Make preventative applications at 5- to 7-day intervals.</p>

**Directions for Use - Cucurbit Plants (continued)**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<p><b>Cucurbits</b> Cantaloupe Chayote Chinese-waxgourd Cucumber Gourds Honeydew Melons <i>Momordica</i> spp. (bitter melon, balsam apple) Muskmelon Pumpkin Squash Watermelon Zucchini Including cultivars and/or hybrids of these.</p>	<p>Anthraxnose (<i>Colletotrichum lagenarium</i>) Belly Rot (<i>Rhizoctonia solani</i>) Downy Mildew (<i>Pseudoperonospora cubensis</i>) Gummy Stem Blight (<i>Didymella bryoniae</i>) Leaf Spots (<i>Alternaria</i> spp., <i>Cercospora</i> spp.) Myrothecium Canker (<i>Myrothecium roridum</i>) Plectosporium Blight (<i>Plectosporium tabacinum</i>) Powdery Mildew (<i>Sphaerotheca fuliginea</i>, <i>Erysiphe cichoracearum</i>) Ulocladium Leaf Spot (<i>Ulocladium cucurbitae</i>)</p>	<p>0.08 - 0.18 (0.10 - 0.25)</p>	<p>0.4 - 0.9</p>	<p>Belly rot: Make the initial application at the 1- to 3-leaf crop stage. Follow with a second application just before vine tip over or 10 to 14 days after the first application, whichever comes first. For all other listed diseases, make initial application before disease develops. Continue applications plant production at 7- to 14-day intervals as determined by resistance management practices in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not apply more than four applications of <b>Estate</b> or other Group 11 products per crop per acre per year.</li> <li>• Pre-Harvest Interval (PHI): 1 day</li> <li>• Do not tank-mix <b>Estate</b> with crop oil concentrates, MSO or silicon adjuvants, as adverse crop response may result.</li> <li>• Do not tank-mix <b>Estate</b> with Malathion, Kelthane®, Thiodan®, Phaser®, Lannate®, Lorsban®, M-Pede®, or Botran®.</li> </ul>

**Directions for Use - Herb and Spice Plants**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<p><b>Herbs &amp; Spices (Except Basil and Black Pepper)</b>                      Allspice;                      Angelica; Anise (seed); Anise, star; Annatto;                      Balm; Borage;                      Burnet;                      Camomile; Caper (buds); Caraway; Caraway, black;                      Cardamom;                      Cassia (buds);                      Catnip; Celery seed; Chervil (dried); Chive;                      Chive, Chinese;                      Cinnamon; Clary;                      Clove (buds);                      Coriander (cilantro or Chinese parsley) (leaf);                      (continued)</p>	<p>Alternaria Leaf Spot (<i>Alternaria</i> spp.)                      Corynespora Blight (<i>Corynespora cassiicola</i>)                      Downy Mildew (except Basil) (<i>Plasmopara</i> spp.,  <i>Peronospora</i> spp.)                      Dill Blight (<i>Cercosporidium punctum</i>)                      Phoma Blight (<i>Passalora puncta</i>)                      Powdery Mildew (<i>Erysiphe</i> spp.,  <i>Sphaerotheca</i> spp.)</p>	<p>0.08 - 0.18 (0.1 - 0.25)</p>	<p>0.4 - 0.9</p>	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. A minimum of 30 gallons of water per acre must be used. Add an adjuvant at specified rates, if desired.</p> <p>Make application at the onset of disease. Continue applications at 7-day intervals following resistance management practices and spray program specifications in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year. Do not make more than 6 applications at the highest application rate 0.25 lb. a.i./A or 15 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> <li>• Do not apply by air.</li> </ul>

**Directions for Use - Herb and Spice Plants (continued)**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<p><b>Herbs &amp; Spices (Except Basil and Black Pepper) (continued)</b></p> <p>Coriander (seed); Costmary; Culantro (leaf and seed); Cummin; Curry (leaf); Dill (seed); Dillweed; Fennel, common; Fennel, Florence (seed); Fenugreek; Grains of paradise; Horehound; Hyssop; Juniper (berry); Lavender; Lemongrass; Lovage (leaf and seed); Mace; (continued)</p>	<p>Alternaria Leaf Spot (<i>Alternaria</i> spp.)</p> <p>Corynespora Blight (<i>Corynespora cassiicola</i>)</p> <p>Downy Mildew (except Basil) (<i>Plasmopara</i> spp., <i>Peronospora</i> spp.)</p> <p>Dill Blight (<i>Cercosporidium punctum</i>)</p> <p>Phoma Blight (<i>Passalora puncta</i>)</p> <p>Powdery Mildew (<i>Erysiphe</i> spp., <i>Sphaerotheca</i> spp.)</p>	<p>0.08 - 0.18 (0.1 - 0.25)</p>	<p>0.4 - 0.9</p>	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>            Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. A minimum of 30 gallons of water per acre must be used. Add an adjuvant at specified rates, if desired.</p> <p>Make application at the onset of disease. Continue applications at 7-day intervals following resistance management practices and spray program specifications in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year. Do not make more than 6 applications at the highest application rate 0.25 lb. a.i./A or 15 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> <li>• Do not apply by air.</li> </ul>

Directions for Use - Herb and Spice Plants (continued)

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<p><b>Herbs &amp; Spices (Except Basil and Black Pepper) (continued)</b></p> <p>Marigold; Marjoram; Mustard (seed), Nasturtium; Nutmeg; Parsley (dried); Pennyroyal; Pepper, white; Poppy seed; Rosemary; Rue; Saffron; Sage; Savory, summer and winter; Sweet bay; Tansy; Tarragon; Thyme; Vanilla; Wintergreen; Woodruff; Wormwood</p>	<p>Alternaria Leaf Spot (<i>Alternaria</i> spp.) Corynespora Blight (<i>Corynespora cassiicola</i>) Downy Mildew (except Basil) (<i>Plasmopara</i> spp., <i>Peronospora</i> spp.) Dill Blight (<i>Cercosporidium punctum</i>) Phoma Blight (<i>Passalora puncta</i>) Powdery Mildew (<i>Erysiphe</i> spp., <i>Sphaerotheca</i> spp.)</p>	<p>0.08 - 0.18 (0.1 - 0.25)</p>	<p>0.4 - 0.9</p>	<p><b>Integrated Pest Management:</b> Estate must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b> Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. A minimum of 30 gallons of water per acre must be used. Add an adjuvant at specified rates, if desired.</p> <p>Make application at the onset of disease. Continue applications at 7-day intervals following resistance management practices and spray program specifications in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year. Do not make more than 6 applications at the highest application rate 0.25 lb. a.i./A or 15 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> <li>• Do not apply by air.</li> </ul>

Directions for Use - Basil

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
Basil	Downy Mildew ( <i>Peronospora belbahrii</i> )	0.18 (0.25)	0.9	<p><b>Plug Production:</b> Make application to emerged plants in plug production trays before disease develops. Apply thoroughly and uniformly to the plant foliage in a minimum of 3.4 gallons of water/5,000 ft.<sup>2</sup> (30 gallons per acre). Do not make more than one application during plug production phase. Rotate applications of <b>Estate</b> on a weekly basis with products that have a different mode of action using a preventative integrated pest management program. Consult your local extension service or experienced agronomist for additional information.</p> <p><b>Finish Production (plants grown for retail sale to consumers):</b> This product may be applied to plants after transplant of plugs to trays, pots or containers in which plants are grown to finish.</p> <p>Make application thoroughly and uniformly to plant foliage in a minimum of 3.4 gallons of water/5,000 ft.<sup>2</sup> (30 gallons per acre). Do not apply more than one application in the finish production phase. Rotate applications of <b>Estate</b> on a weekly basis with products that have a different mode of action using a preventative integrated pest management program. Consult your local extension service or experienced agronomist for additional information.</p>

(continued)

**Directions for Use - Basil (continued)**

<b>Crop</b>	<b>Diseases</b>	<b>Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)</b>	<b>Use Rate Oz. Product/ 5,000 Sq. Ft.</b>	<b>Application Information</b>
<b>Basil</b>	Downy Mildew ( <i>Peronospora belbahrii</i> )	0.18 (0.25)	0.9	<b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.5 lbs. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 6 applications per acre per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Leafy Vegetable Plants (except Brassica)**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<p><b>Leafy Vegetables (except Brassica)</b>                      Amaranth                      Arugula                      Cardoon                      Celery                      Celtnce                      Chervil                      Chrysanthemum, edible                      Coriander, leaves (Cilantro)                      Corn salad                      Cress                      Dandelion                      Dock                      Endive                      Fennel                      Lettuce, head and leaf                      Orach                      Parsley                      Purslane                      Radicchio                      Rhubarb                      Spinach                      Swiss Chard                      Including cultivars and/or hybrids of these.</p>	<p><b>Foliar Diseases</b>                      Alternaria Leaf Spot (<i>Alternaria sonchi</i>, <i>A. spp.</i>)                      Anthracnose (<i>Microdochium panattonianum</i>, <i>Colletotrichum dematium</i>)                      Cercospora Leaf Spot (<i>Cercospora spp.</i>)                      Septoria Leaf Spot (<i>Septoria petroselinii</i>)                      White Rust (<i>Albugo occidentalis</i>)                      Downy Mildew (<i>Bremia lactucae</i>)                      Powdery Mildew (<i>Erysiphe cichoracearum</i>)</p>	<p>0.08 - 0.18 (0.1 - 0.25)</p> <p>0.15 - 0.18 (0.2 - 0.25)</p>	<p>0.4 - 0.9</p> <p>0.75 - 0.9</p>	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after each application of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Downy and powdery mildew: make preventative applications at 5- to 7-day intervals. For all other diseases, make initial application before disease develops. Continue throughout plant production at 7- to 14-day intervals following resistance management practices in your area.</p>





**Directions for Use - Mint Plants**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
Mint (Fresh)	Powdery Mildew ( <i>Erysiphe</i> spp.) Rust ( <i>Puccinia menthae</i> )	0.08 - 0.18 (0.1 - 0.25)	0.4 - 0.9	<p><b>Integrated Pest Management:</b> Estate must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b> Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after two sequential applications of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make initial application before disease develops. Continue throughout plant production at 7- to 10-day intervals following resistance management practices in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 0.75 lb. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 3 applications at the highest application rate 0.25 lb. a.i./A or 7 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Pepper and Other Fruiting Vegetable Plants (except Cucurbits)**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<p><b>Peppers and other Fruiting Vegetables (Except Cucurbits)</b></p> <p>Bell Pepper Non-Bell Pepper Sweet Non-Bell Pepper Eggplant Groundcherry Okra Pepino Tomatillo See specific use directions for <b>Tomatoes.</b></p>	<p>Anthraxnose (<i>Colletotrichum</i> spp.) Cercospora Leaf Spot (<i>Cercospora capsici</i>) Downy Mildew (<i>Peronospora tabacina</i>) Powdery Mildew (<i>Sphaerotheca</i> spp.)</p>	<p>0.08 - 0.18 (0.1 - 0.25)</p>	<p>0.4 - 0.9</p>	<p><b>Integrated Pest Management:</b> <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b> Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after each application of Estate to help prevent resistance.</i></p> <p>Applications may be made by ground or chemigation. Add an adjuvant at specified rates, if desired.</p> <p>Make initial application before disease develops. Continue throughout plant production at 7- to 14-day intervals, following resistance management practices in your area.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply a total of more than 1.0 lb. a.i./A of azoxystrobin per year.</li> <li>• Do not make more than 4 applications at the highest application rate 0.25 lb. a.i./A or 10 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>

**Directions for Use - Tomato Plants**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
Tomatoes	Anthracnose <i>(Colletotrichum coccodes)</i> Black Mold <i>(Alternaria alternata)</i> Buckeye Rot <i>(Phytophthora spp.)</i> Early Blight <i>(Alternaria solani)</i> Powdery Mildew <i>(Oidiopsis sicula)</i> Septoria Leaf Spot <i>(Septoria lycopersici)</i> Target Spot <i>(Corynespora cassiicola)</i>	0.024 - 0.08 (0.08 - 0.10)	0.12 - 0.4	<p><b>Integrated Pest Management:</b>  <b>Estate</b> must be integrated into an overall disease management program. See additional information in this label, or consult local extension or other agronomy experts.</p> <p><b>Resistance Management:</b>                      Follow the resistance management guidelines in the <b>Resistance Management</b> section. <i>Alternate with a different non-Group 11 fungicide after each application of Estate to help prevent resistance.</i></p> <p><b>Application Directions:</b>                      Applications may be made by ground or chemigation.</p> <p>Make initial application before disease develops. Continue throughout plant production following resistance management practices in your area.</p>
	Late Blight <i>(Phytophthora infestans)</i>	0.08 (0.10)	0.4	<p>Late blight: Make applications at 5- to 7-day intervals.</p> <p>All other listed diseases: Make applications at 7- to 21-day intervals.</p>

*(continued)*

**Directions for Use - Tomato Plants (continued)**

Crop	Diseases	Use Rate Oz. Product/ 1,000 Sq. Ft. (Lb. A.I./A)	Use Rate Oz. Product/ 5,000 Sq. Ft.	Application Information
<b>Tomatoes</b>	Anthracnose ( <i>Colletotrichum coccodes</i> ) Black Mold ( <i>Alternaria alternata</i> ) Buckeye Rot ( <i>Phytophthora</i> spp.) Early Blight ( <i>Alternaria solani</i> ) Powdery Mildew ( <i>Oidiopsis sicula</i> ) Septoria Leaf Spot ( <i>Septoria lycopersica</i> ) Target Spot ( <i>Corynespora cassiicola</i> )	0.024 - 0.08 (0.08 - 0.10)	0.12 - 0.4	<p><b>Precautions:</b></p> <p>Under certain conditions (ex. high temperatures), <b>Estate</b> mixed with high rates of silicone-containing or oil-containing (petroleum or crop) adjuvants or additives may cause adverse crop response.</p> <p>Consult a Sharda USA LLC representative for additional information regarding adjuvants or additives.</p> <p>Tank mixtures with Dimethoate may cause adverse crop response.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply <b>Estate</b> until 35 days after seeding or 21 days after transplanting plugs to larger pots or containers.</li> <li>• Do not exceed 0.125% (v/v) of adjuvant.</li> <li>• Do not make more than 6 applications at the highest application rate 0.25 lb. a.i./A or 20 applications at the lowest application rate 0.1 lb. a.i./A per year.</li> <li>• Do not use adjuvants or tank mix <b>Estate</b> with any emulsifiable concentrate (EC) formulations.</li> <li>• Do not apply a total of more than 0.6 lb. a.i./A of azoxystrobin per year.</li> <li>• Pre-Harvest Interval (PHI): 0 day</li> </ul>
	Late Blight ( <i>Phytophthora infestans</i> )	0.08 (0.10)	0.4	

### Rate Conversion Chart for Estate

Oz. Product/1,000 Ft. <sup>2</sup>	Oz. Product/Acre
0.025	1
0.035	1.5
0.05	2
0.06	2.5
0.07	3
0.08	3.5
0.09	4
0.1	4.5
0.11	5
0.13	5.5
0.14	6
0.15	6.5
0.16	7
0.17	7.5
0.18	8
0.2	8.7
0.3	13.1
0.4	17.4

### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

Keep container tightly closed when not in use. Product can be stored at temperatures as low as -10°F. Do not store near seeds, fertilizers, or food stuffs. Keep away from heat and flame.

*(continued)*

## STORAGE AND DISPOSAL *(continued)*

### **Pesticide Disposal**

Open dumping is prohibited. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Thoroughly rinse the spray equipment after use. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of as described above, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

### **Container Handling**

**Non-refillable containers (50 pounds or less):** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**Non-refillable containers (Greater than 50 pounds):** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. 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 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Returnable/Refillable Containers:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.**

### **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

**BEFORE BUYING OR USING THIS PRODUCT**, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of Sharda USA LLC or the seller is authorized to vary in any way. Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product.

Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of Sharda USA LLC and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS", AND SHARDA USA LLC MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT SHARDA USA LLC HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE MANUFACTURER.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF SHARDA USA LLC OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SHARDA USA LLC AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

All trademarks are the property of their respective owners.



# Estate

A broad-spectrum fungicide for control of a wide-range of plant diseases in labeled crops, ornamentals and turf.

ACTIVE INGREDIENT:	% By Weight
Azoxystrobin: methyl (E)-2-[6-[2-(2-cyanophenoxy) pyrimidin-4-yloxy]phenyl]-3-methoxyacrylate*	50.0%
OTHER INGREDIENTS:	50.0%
TOTAL:	100.0%

Estate is a water-dispersible granule (WDG) containing 0.5 lb. azoxystrobin per pound of product.

\*IUPAC

## KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

**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 by a poison control center or doctor. • Do not give anything 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. • Call a poison control center or doctor for treatment advice. **HOTLINE NUMBER** - Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at 1-800-222-1222.

**PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION** - Harmful if swallowed. Harmful if 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. **ENVIRONMENTAL HAZARDS** - This pesticide is toxic to freshwater and estuarine/marine fish and aquatic invertebrates. Azoxystrobin can be persistent for several months or longer. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. Drift and run-off may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water or rinsate. See attached booklet for complete Environmental Hazards including Groundwater Advisory and Surface Water Advisory.

**STORAGE AND DISPOSAL** - Do not contaminate water, food, or feed by storage and disposal. **Pesticide Storage:** Keep container tightly closed when not in use. Product can be stored at temperatures as low as -10°F. Do not store near seeds, fertilizers, or food stuffs. Keep away from heat and flame. **Pesticide Disposal:** Open dumping is prohibited. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Thoroughly rinse the spray equipment after use. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of as described above, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. **Container Handling:** Non-refillable containers (50 pounds or less): Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.**

See label booklet for complete  
Precautionary Statements and Directions For Use.

Manufactured For:

Sharda USA LLC, 7217 Lancaster Pike, Suite A, Hockessin, Delaware 19707

EPA Reg. No. 83529-65

EPA Est. No. **CS** 70815-GA-001; **OP** 62171-MS-3;

**MA** 83411-MN-001; **TX** 07401-TX-001

The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

**Net Contents: 1 lb. (0.45 kg)**

OPEN HERE