

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

July 3, 2018

Mr. Matthew C. Flanery Regulatory Specialist Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419

Subject: Label Amendment – Change Primary Brand Name and Add Uses Product Name: Heritage SC EPA Registration Number: 100-1539 Application Date: August 31, 2017 Decision Number: 532949

Dear Mr. Flanery:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

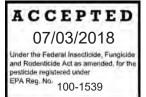
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with FIFRA section 6. If you have any questions, please contact BeWanda Alexander by phone at (703)347-0313, or via email at <u>alexander.bewanda@epa.gov</u>.

Shaga Blogner

Shaja B. Joyner, Product Manager 20 Fungicide-Herbicide Branch Registration Division 7505P

Enclosure



[Master Label]

# AZOXYSTROBIN GROUP 11 FUNGICIDE

#### Heritage® SC

Broad-spectrum fungicide for prevention and control of diseases of turf and ornamentals, and transplants of fruit and nut trees, vines, and vegetable and herb plants

| Active Ingredient:                                |        |
|---|--------|
| Azoxystrobin: methyl (E)-2-{2-[6-(2-cyanophenoxy) |        |
| pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate*      |        |
| Other Ingredients:                                | 77.1%  |
| Total:  | 100.0% |

Heritage SC is a suspension concentrate (SC) formulation that contains 2.08 lb of azoxystrobin per gallon.

\*IUPAC

# KEEP OUT OF REACH OF CHILDREN.

# CAUTION

See additional precautionary statements and directions for use inside booklet. Reformulation is prohibited. See individual container labels for repackaging limitations.

EPA Reg. No. 100-1539 EPA Est.

Net Contents

|  | FIRST AID   |  |  |  |
|--|---|--|--|--|
| If swallowed   | Call a poison control center or doctor immediately for treatment                                    |  |  |  |
|  | advice.   |  |  |  |
|  | <ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>                            |  |  |  |
|  | <ul> <li>Do not induce vomiting unless told to by a poison control center<br/>or doctor.</li> </ul> |  |  |  |
|  | <ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>                         |  |  |  |
| If on skin or  | Take off contaminated clothing.   |  |  |  |
| clothing   | Rinse skin immediately with plenty of water for 15-20 minutes.                                      |  |  |  |
|  | Call a poison control center or doctor for treatment advice.  |  |  |  |
| If inhaled   | Move person to fresh air.   |  |  |  |
|  | • If person is not breathing, call 911 or an ambulance, then give                                   |  |  |  |
|  | artificial respiration, preferably mouth-to-mouth if possible.                                      |  |  |  |
|  | Call a poison control center or doctor  |  |  |  |
| If in eyes   | Hold eye open and rinse slowly and gently with water for 15-20                                      |  |  |  |
|  | minutes. Remove contact lenses, if present, after the first 5                                       |  |  |  |
|  | minutes, then continue rinsing eye.   |  |  |  |
|  | Call a poison control center or doctor for treatment advice.  |  |  |  |
| Have the product container or label with you when calling a poison control center or |   |  |  |  |
| doctor, or going f   | doctor, or going for treatment.   |  |  |  |
| HOT LINE NUMBER  |   |  |  |  |
| For 24-Hour Medical Emergency Assistance (Human or Animal) or                        |   |  |  |  |
| Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),                      |   |  |  |  |
|  | Call  |  |  |  |
|  | 1-800-888-8372  |  |  |  |

#### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if swallowed. Harmful if absorbed through the skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist or vapor. 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)

Some materials that are chemically resistant to this product are listed below.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate; butyl rubber; nitrile rubber; neoprene rubber; natural rubber; polyethylene; polyvinyl chloride (PVC); or Viton<sup>®</sup> (all ≥14 mils)
- 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.

# User Safety Recommendations Users should:

- 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**

Azoxystrobin is toxic to freshwater and estuarine/marine fish and aquatic invertebrates. Azoxystrobin can be persistent for several months or longer.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or regional office of the EPA.

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated 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 ground water 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 runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff 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 runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

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

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

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

#### DIRECTIONS FOR USE

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

# FAILURE TO FOLLOW THE USE DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

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.

#### AGRICULTURAL USES

Apply Heritage SC to prevent and control diseases of turf produced on sod farms; and, ornamentals, fruit and nut trees, and vegetable and herb plants (grown for transplants) produced in commercial greenhouses and nurseries, including lath houses, shade houses and other outdoor growing structures.

# 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 barrier laminate; butyl rubber; nitrile rubber; neoprene rubber; natural rubber; polyethylene; polyvinyl chloride (PVC); or Viton (all ≥14 mils)
- Shoes plus socks

**Exception:** If the product is applied as a soil drench or soil-injected or soilincorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area immediately if there will be no contact with anything that has been treated.

#### NON-AGRICULTURAL USES

Apply Heritage SC to prevent and control diseases on turf and ornamentals grown on golf courses, lawns and landscaped areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

#### 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 Heritage SC is dry.

#### PRODUCT INFORMATION

Heritage SC is a broad-spectrum, systemic fungicide with preventative and curative properties for the control of pathogens causing foliar, stem, and root diseases, including leaf and stem blights, leaf spots, patch diseases, mildews, anthracnose, fairy rings, molds, and rusts of turfgrass, ornamentals, fruit and nut trees, vines, and vegetable and herb plants listed on this label.

Heritage SC is a member of Syngenta's Plant Performance<sup>™</sup> product line that can improve plant vigor and quality in addition to controlling disease. These additional benefits are due to positive effects on plant physiology, which can vary according to plant species and growing environment.

All applications of Heritage SC must be made according to the use directions that follow.

#### USE RESTRICTIONS

**DO NOT** graze or feed clippings from treated turf areas to animals.

**DO NOT** apply Heritage SC to golf course turf by air.

**CHEMIGATION: DO NOT** apply this product to Turf through any Irrigation/Chemigation system (Chemigation to Ornamental plants is allowed).

#### ΡΗΥΤΟΤΟΧΙCITY

**DO NOT** apply Heritage SC to apple or certain crabapple or cherry trees (including flowering or ornamental varieties, such as Yoshino) due to potential phytotoxicity.

**DO NOT** use spray equipment that has been used to apply Heritage SC for application to these sensitive crops due to possible phytoxicity.

**DO NOT** apply Heritage SC where spray drift may reach apple or specific varieties of crabapple and cherry trees due to potential phytoxicity.

#### **USE PRECAUTIONS**

**Adjuvants:** When an adjuvant is to be used with this product, use an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification program.

**PLANT SAFETY:** Heritage SC has been shown to be safe when applied to the plants listed on this label when applied according to listed application methods, rates, and timings. Neither the manufacturer nor the seller has determined whether or not Heritage SC can be used safely on ornamental and nursery plants not specified on this label. The user should conduct small-scale testing on target plants to ensure plant safety prior to large-scale commercial use on species or varieties not listed on this label.

#### SPRAY DRIFT MANAGEMENT

#### 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.
- 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 ½ 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.

#### SPRAY DRIFT Groundboom Applications

- When using ground application equipment, apply with nozzle height no more than 4 feet above the ground or crop canopy.
- 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 recommended 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 recommended.
- 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 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.

#### **RESISTANCE MANAGEMENT**

# AZOXYSTROBIN GROUP 11 FUNGICIDE

Heritage SC contains Azoxystrobin, a Group 11 fungicide. Any fungal population may contain individuals naturally resistant to Azoxystrobin and other Group 11 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly on the same turf or plants. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of Azoxystrobin or other Group 11 fungicides (strobilurins, including pyraclostrobin and trifloxystrobin) within a growing season sequence with different fungicide groups that control the same pathogens.
- Use tank mixtures with fungicides 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 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 applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal 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 Syngenta representatives at 1-800-334-9481 or visit the Fungicide Resistance Action Committee (FRAC) on the web at <u>www.frac.info</u>. You can also contact your pesticide distributor or university extension specialist to report resistance.

**DO NOT** apply more than two sequential Heritage SC applications for Gray Leaf Spot and *Pythium* spp. control. For all other diseases when Gray Leaf Spot and *Pythium* spp. are not present, **DO NOT** apply more than three sequential applications of Heritage SC.

Since pathogens differ in their potential to develop fungicide resistance, use the resistance management strategies for each disease given in the **SPECIFIC USE DIRECTIONS** section in this label.

#### **MIXING INSTRUCTIONS**

Heritage SC is a suspension concentrate (SC) formulation.

- Prepare no more spray mixture than is required for the immediate operation.
- Thoroughly clean spray equipment before using this product.
- Agitate the spray solution before and during application.
- Rinse spray tank thoroughly with clean water after each day's use and dispose of the rinse water by application to a previously treated area.

#### Heritage SC Alone (No Tank Mix)

- Add  $\frac{1}{2}$ - $\frac{2}{3}$  of the required amount of water to the spray or mixing tank.
- With the agitator running, add Heritage SC to the tank.
- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after Heritage SC has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

#### Heritage SC + 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.

Heritage SC is generally compatible with most tank-mix partners. To determine the physical compatibility of Heritage SC with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 quart of water. Add wettable powders and water dispersible granular products first, then liquid flowables, and

emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been shown, use the same procedure for adding required ingredients to the spray tank.

Heritage SC has demonstrated some phytotoxic effects when mixed with products that are formulated as ECs. These effects are enhanced if applications are made under cool, cloudy conditions and these conditions remain for several days following application. In addition, adjuvants that contain some form of silicone have also contributed to phytotoxicity.

- Add  $\frac{1}{2}$ - $\frac{2}{3}$  of the required amount of water to the spray or mixing tank.
- With the agitator running, add the tank-mix partner(s) into the tank in the same order as described above.
- Allow the material to completely dissolve and disperse into the mix water. Continue agitation while adding the remainder of the water and Heritage SC to the spray tank.
- Allow Heritage SC to completely disperse in the tank.
- Spray the tank mixture with the agitator running.

#### **APPLICATION INSTRUCTIONS**

Apply Heritage SC prior to disease development at the rates and timings given in this label for optimal control. Apply at the higher rates in the rate range and/or shorter spray intervals under conditions of heavy infection pressure, highly susceptible varieties or when environmental conditions are conducive for disease development.

Heritage SC may be applied with various types of spray equipment commonly used for making ground and aerial applications. For ground applications, apply Heritage SC in a volume of water sufficient to provide good plant canopy penetration. For aerial applications, apply Heritage SC in a minimum of two gallons of water per acre. Ground application is preferred as it typically provides better canopy penetration and coverage.

Proper adjustment and calibration of spraying equipment are essential for good canopy penetration for optimal disease control. If you have questions about calibration, contact a State Extension Service specialist, the equipment manufacturer or other experts.

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

**Spray Preparation:** Thoroughly clean chemical tank and injector system. Flush system with clean water.

#### **Use Precautions for Sprinkler and Drip Irrigation Applications:**

**Drip and Micro Irrigation:** Heritage SC may be applied through drip and micro irrigation systems to potted ornamentals or to bedded, field-grown ornamentals for soil-borne disease control. The soil or potting media should have adequate moisture capacity prior to drip application.

Terminate drip irrigation at fungicide depletion from the main feed supply tank or after 6 hours from start, whichever is shorter. For maximum efficacy, subsequent irrigation (water only) should be delayed for at least for 24 hours following drip application.

**Sprinkler Irrigation:** Heritage SC may be applied to potted ornamentals or to bedded, field-grown ornamentals through sprinkler irrigation systems including center pivot, motorized boom, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system except as specified on this label.

Apply with center-pivot or continuous-move equipment distributing ½ acre-inch or less during treatment. In general, use the least amount of water required for proper distribution and coverage. If stationary systems (solid set, hand lines or wheel lines other than continuous-move) are used, this product should be injected into no more than the last 20-30 minutes of the set.

- **DO NOT** apply when winds are greater than 10-15 mph to avoid drift or wind skips.
- Plant injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform treated water.
- Thorough coverage of foliage is required for good control.
- Good agitation should be maintained during the entire application period.

If you have questions about calibration, contact the State Extension Service specialist, equipment manufacturers or other experts.

#### **Specific Instructions for All Irrigation Systems**

- 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, quickclosing 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 should 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 should 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.

#### DIRECTIONS FOR TURF

#### **APPLICATION DIRECTIONS**

For optimum disease control, apply Heritage SC preventatively. Begin applications when conditions are favorable for disease infection prior to the appearance of disease symptoms.

Mix Heritage SC with the required amount of water, and apply as a dilute spray in 2-4 gallons of water per 1,000 square feet (87-174 gallons per acre). Repeat applications at specified intervals. For spot treatments, use 0.4 oz of Heritage SC per 1-2 gallons of water.

**For use with soil injection applications:** Heritage SC may be applied through a liquid fungicide injector for the control of ectotrophic root diseases such as summer patch and take-all patch. Use Heritage SC only in liquid injection equipment specifically designated for pesticide use.

Apply Heritage SC at 0.4-0.8 fl oz per 1,000 sq ft. Use a spray carrier volume of 30-150 gallons of water per 1,000 sq ft. Use an injection hole spacing of 1 inch by 1 inch for optimum control. Use a one-inch depth for optimum results. Do not use an injection depth greater than 2 inches. For application timing, follow disease control strategies used for normal broadcast spray programs.

For use in the establishment of turfgrass from seed or in over-seeding of dormant turfgrass: Heritage SC may be used for control of certain turfgrass diseases associated with turfgrass establishment from seed. Heritage SC may also be used during over-seeding of dormant turfgrass.

Heritage SC may be safely applied before or after seeding or at seedling germination and emergence to ryegrass, bentgrass, bluegrass, and fescue turfgrass types. Optimum application timing is during seeding. See **Application Directions** section.

**Dollar Spot:** Heritage SC does not control Dollar Spot. During periods of Dollar Spot pressure, always mix Heritage SC with chlorothalonil (e.g., Daconil®-branded products) or another Dollar Spot control fungicide. Heritage SC is compatible in tank mixes with many other fungicides that control Dollar Spot.

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.

#### INTEGRATED PEST (DISEASE) MANAGEMENT

Turf management practices that result in healthy, vigorous turfgrass are the foundation of a good IPM program. Use management practices known to reduce disease development, such as choice of turf varieties, nutrient management, appropriate mowing height, thatch management, proper watering, and soil drainage, with the use of fungicides to increase plant vigor and reduce susceptibility to disease.

Immunoassay detection kits and extension service diagnostic services can assist in the early, accurate identification of causal organisms and selection of the proper fungicide when required.

#### Table 1: DIRECTIONS FOR USE TO CONTROL LISTED TURF DISEASES

**RESTRICTION: DO NOT** apply more than 7.11 fl oz of product/1,000 sq ft (2.4 gallons of product/Acre) per year.

| Target Diseases   | Use Rate<br>(fl oz product<br>per<br>1,000 sq ft) | Application<br>Interval<br>(days) | Application Instructions   |
|---|---|-----------------------------------|--|
| Anthracnose<br>(Colletotrichum<br>graminicola)  | 0.4-0.8   | 14-28                             | Use preventatively.  |
| Bermudagrass Decline<br>(Gaeumannomyces<br>graminis var. graminis)  | 0.8   | 28                                | Use preventatively.  |
| Brown Patch<br>( <i>Rhizoctonia solani</i> )  | 0.4-0.8   | 14-28                             | Apply when conditions are favorable for disease development.   |
| Brown Ring Patch ( <i>Waitea</i> circinata var. circinata)  | 0.4-0.8   | 14-28                             | Apply when conditions are favorable for disease development.   |
| Cool Weather Brown Patch<br>Yellow Patch<br>( <i>Rhizoctonia cerealis</i> )                                     | 0.8   | 28                                | Make one or two applications in fall or when<br>conditions are favorable for disease<br>development.   |
| Fairy Ring<br>(Lycoperdon<br>spp.,Arachnion spp.,<br>Bovista spp., Vascellum<br>spp., and Agrocybe<br>pediades) | 0.4-0.8   | 14-28                             | Apply preventatively or as soon as possible<br>after fairy ring symptoms develop. Apply only<br>in 4 gallons of water per 1,000 sq ft (174 gal/A).<br>Add the specified rate of a wetting agent to the<br>final spray. Fairy ring symptoms may take 2 to<br>3 weeks to disappear following curative<br>applications, and reapplication may be required<br>in some cases. Severely damaged or thin turf<br>may require reseeding. |
| Fusarium Patch<br>( <i>Microdochium nivale</i> )  | 0.4-0.8   | 14-28                             | Use preventatively.  |
| Gray Leaf Spot<br>(Pyricularia grisea)  | 0.4-0.8   | 14-28                             | Begin applications before disease is present<br>and continue applications while conditions are<br>favorable for disease development.   |
| Gray Snow Mold<br>Typhula Blight<br><i>(Typhula incarnate)</i>  | 1.4   | single<br>application             | Make a single application of 1.4 fl oz or two<br>applications of 0.8 fl oz, spaced 10-28 days<br>apart in late fall just before snow cover. Tank   |
|   | 0.8   | 10-28                             | mixing with another snow mold fungicide, such<br>as chlorothalonil (e.g., Daconil-branded<br>products), may enhance control under severe<br>disease pressure.  |
| Leaf Rust<br>Stem Rust<br>Stripe Rust<br><i>(Puccinia</i> spp.)   | 0.4-0.8   | 14-28                             | Begin applications when conditions are favorable for disease infection, prior to disease symptom development.  |
| Leaf Spot<br>( <i>Bipolaris</i> spp.)   | 0.4-0.8   | 14-21                             | Apply when conditions are favorable for disease development.   |
| Melting Out<br>( <i>Drechslera poae</i> )   | 0.4-0.8   | 14-21                             | Apply when conditions are favorable for disease development.   |
| Necrotic Ring Spot<br>(Leptosphaeria korrae)  | 0.8   | 14-28                             | Apply when conditions are favorable for disease development.   |
| Pink Patch<br>(Limonomyses roseipellis)   | 0.4-0.8   | 14-28                             | Apply when conditions are favorable for disease development.   |

| Target Diseases   | Use Rate<br>(fl oz product<br>per<br>1,000 sq ft) | Application<br>Interval<br>(days) | Application Instructions  |
|---|---|-----------------------------------|---|
| Pink Snow Mold<br>(Microdochium nivale)   | 1.4   | single<br>application             | Make a single application of 1.4 fl oz or two<br>applications of 0.8 fl oz, spaced 10-28 days<br>apart in late fall just before snow cover. Tank  |
|   | 0.8   | 10-28                             | mixing with another snow mold fungicide, such<br>as chlorothalonil (e.g., Daconil-branded<br>products) may enhance control under severe<br>disease pressure.  |
| Powdery Mildew<br>(Erysiphe graminis)   | 0.4-0.8   | 14-28                             | Begin applications when conditions are favorable for disease infection, prior to disease symptom development.   |
| Pythium Blight<br>Pythium Root Rot<br><i>(Pythium<br/>aphanidermatum,<br/>Pythium</i> spp.) | 0.8   | 10-14                             | Use preventatively. Begin applications when<br>conditions are favorable for disease infection,<br>prior to disease symptom development. During<br>periods of prolonged favorable conditions, treat<br>on the 10-day application interval. For use on<br>newly seeded as well as established turf. |
| Pythium Root Dysfunction ( <i>Pythium volutum</i> )   | 0.8   | 21-28                             | Use preventatively. Begin applications when conditions are favorable for disease infection, prior to disease symptom development.   |
| Red Thread<br>( <i>Laetisaria fuciformis</i> )  | 0.4-0.8   | 14-28                             | Apply when conditions are favorable for disease development.  |
| Rhizoctonia Large Patch<br>(Rhizoctonia solani)   | 0.8   | 14-28                             | Make one or two applications in fall or when<br>conditions are favorable for disease<br>development. Spring applications may also be<br>required in some locations or when disease<br>pressure is high.   |
| Leaf and Sheath Spot (Rhizoctonia zeae)   | 0.8   | 14-28                             | Apply when disease conditions are favorable for disease development.  |
| Southern Blight<br>(Sclerotium rolfsii)   | 0.4-0.8   | 14-28                             | Apply when conditions are favorable for disease development.  |
| Spring Dead Spot<br>(Ophiospharella korrae, O.<br>herpotricha, O. narmari)                  | 0.4-0.8   | 14-28                             | Apply 1 or 2 applications approximately one<br>month prior to bermuda grass dormancy.<br>Irrigate treated area with 1/8" to 1/4" of water<br>immediately after application if possible.<br>Reapply 14 to 28 days later.   |
| Summer Patch<br>( <i>Magnaporthe poae</i> )   | 0.4-0.8   | 14-28                             | Apply when conditions are favorable for disease development.  |
| Take-all Patch<br>(Gaeumannomyces<br>graminis var. avenae)                                  | 0.8   | 28                                | Begin applications when conditions are<br>favorable for disease infection, prior to disease<br>symptom development. Make two applications,<br>28 days apart in the spring and two<br>applications 28 days apart in the fall.  |
| Zoysia Patch<br>(Rhizoctonia solani,<br>Gaeumannomyces<br>incrustans)                       | 0.4-0.8   | 14-28                             | Apply 1 or 2 applications approximately one<br>month prior to zoysia grass dormancy.<br>Reapply 14 to 28 days later.  |

| FI oz Product per<br>1,000 sq ft | Oz ai per<br>1,000 sq ft | Pints Product<br>per Acre | Gal Product<br>per Acre |
|----------------------------------|--------------------------|---------------------------|-------------------------|
| 0.4                              | 0.10                     | 1.09                      | 0.136                   |
| 0.6                              | 0.15                     | 1.63                      | 0.204                   |
| 0.8                              | 0.20                     | 2.17                      | 0.272                   |
| 1.4                              | 0.35                     | 3.81                      | 0.476                   |

#### Table 2: Heritage SC Rate Conversion Chart for Turf

#### Table 3: Amount of Heritage SC to Mix 100 Gallons for Turf Applications

| Product Use Rate        | Spray Volume gal per 1,000 sq ft (pints product) |         |         |
|-------------------------|--|---------|---------|
| (fl oz per 1,000 sq ft) | 2.0 gal  | 3.0 gal | 4.0 gal |
| 0.4                     | 1.2  | 0.76    | 0.57    |
| 0.8                     | 2.4  | 1.57    | 1.2     |
| 1.4                     | 4.23   | 2.78    | 2.07    |

#### DIRECTIONS FOR ORNAMENTALS

Heritage SC controls listed pathogens that cause foliar, aerial, and root diseases, including: leaf, tip, and flower blights; leaf spots; downy mildew; powdery mildew; anthracnose; and rusts of ornamental plants.

Heritage SC may be used to control certain diseases of plants grown in container, bench, flat, plug, bed production or field-grown ornamentals in greenhouses, shadeand lath-houses, outdoor nurseries, retail nurseries, interiorscapes, and other landscape areas.

# PLANT SAFETY

Heritage SC has been shown to be safe when applied to the ornamental plants listed in **Tables 4 and 5** when applied according to listed application methods, rates, and timings. Due to the large number of species and varieties of ornamental and nursery plants, it is impossible to test every one for tolerance to Heritage SC. Neither the manufacturer nor the seller has determined whether or not Heritage SC can be used safely on ornamental and nursery plants not specified on this label. The user should conduct small-scale testing to ensure plant safety prior to large-scale commercial use on species or varieties not listed on this label.

#### PHYTOTOXICITY

**DO NOT** apply Heritage SC to apple or certain crabapple or cherry trees (including flowering or ornamental varieties, such as Yoshino) due to potential phytotoxicity (see **Table 6** for complete list). **DO NOT** use spray equipment that has been used to apply Heritage SC for use in these sensitive crops due to possible phytotoxicity.

**DO NOT** tank-mix Heritage SC with other fungicides, insecticides, herbicides, fertilizers, or adjuvants unless local experience indicates that the tank mix is safe to ornamental plants.

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.

| COMMON NAME                     | BOTANICAL NAME        |
|---------------------------------|-----------------------|
| Abelia                          | Abelia spp.           |
| Andromeda, Japanese             | Pieris japonica       |
| Arborvitae                      | Thujopsis spp.        |
| Aspen Trees                     | Populus spp.          |
| Aster                           | Aster spp.            |
| Aucuba, Japanese                | Aucuba japonica       |
| Azalea, Glacier                 | Rhododendron spp.     |
| Azaleas                         | Rhododendron spp.     |
| Balsam                          | Impatiens spp.        |
| Barberry                        | Berberis thunbergii   |
| Begonia (except Rieger begonia) | Begonia spp.          |
| Birch, River                    | Betula nigra          |
| Black-Eyed Susan                | Rudbeckia hirta       |
| Blanket Flower                  | Gaillardia spp.       |
| Bougainvillea                   | Bougainvillea spp.    |
| Boxwood                         | Buxus sempervirens    |
| Buddleia                        | Buddleia davidii      |
| Bugle                           | Ajuga reptans         |
| Bugleweed                       | Ajuga reptans         |
| Burning Bush                    | Euonymus alatus       |
| Butterfly Bush                  | Buddleia davidii      |
| Cactus, Holiday                 | Schlumbergera         |
| Caladium                        | Caladium spp.         |
| Camellia                        | Camellia japonica     |
| Carnation                       | Dianthus caryophyllus |
| Ceanothus                       | Ceanothus spp.        |
| Cedar, Atlas                    | Cedrus atlantica      |
| Cedar, Red                      | Juniperus virginiana  |
| Cedar, Western Red              | Thuja plicata         |

#### **TABLE 4: Tolerant Plants Listed by Common Name**

| COMMON NAME                              | BOTANICAL NAME                                  |  |
|--|---|--|
| Cedar, White                             | Cedrus spp.                                     |  |
| Christmas Trees                          | See Fir, Douglas; Fir, Fraser; and Pine, Scotch |  |
| Chrysanthemum                            | Chrysanthemum spp.                              |  |
| Cinquefoil                               | Potentilla spp.                                 |  |
| Clethra                                  | Clethra alnifolia                               |  |
| Coleus                                   | Plectranthus spp.                               |  |
| Cotoneaster, Creeping                    | Cotoneaster adpressus                           |  |
| Cotoneaster, Variegated Rockspray        | Cotoneaster horizontalis                        |  |
| Crabapple (See Table 5 for variety list) | Malus spp.                                      |  |
| Cranesbill                               | Geranium spp.                                   |  |
| Crapemyrtle                              | Lagerstroemia indica                            |  |
| Cyclamen                                 | Cyclamen spp.                                   |  |
| Cyperus                                  | Cyperus spp.                                    |  |
| Cypress, Sawara                          | Chamaecyparis pisifera                          |  |
| Cypress, Leyland                         | Chamaecyparis spp.                              |  |
| Daisy, Gerber                            | Gerbera jamesonii                               |  |
| Daisy, Transvaal                         | Gerbera jamesonii                               |  |
| Dogwood                                  | Cornus spp.                                     |  |
| Dogwood                                  | Cornus florida                                  |  |
| Dogwood, Pink                            | Cornus spp.                                     |  |
| Dumb-Cane                                | Dieffenbachia spp.                              |  |
| Euonymus, Dwarf Winged                   | Euonymus alata                                  |  |
| Euonymus, Evergreen                      | Euonymus japonicus                              |  |
| Evergreen, Chinese                       | Aglaonema spp.                                  |  |
| Fatsia, Japanese                         | Fatsia japonica                                 |  |
| Fig                                      | Ficus spp.                                      |  |
| Fir, Douglas                             | Pseudotsuga spp.                                |  |
| Fir, Fraser                              | Abies fraseri                                   |  |
| Fir, Noble                               | Abies procera                                   |  |
| Floss Flower                             | Ageratum spp.                                   |  |
| Forsythia                                | Forsythia viridissima                           |  |
| Foxglove                                 | Digitalis spp.                                  |  |
| Gardenia                                 | Gardenia jasminoides                            |  |
| Geranium                                 | Pelargonium spp.                                |  |
| Grass                                    | Pennisetum alopecuroides                        |  |
| Grass, Dwarf Pampas                      | Phalaris spp.                                   |  |
| Grass, Pampas                            | Cortaderia selloana                             |  |
| Hawthorn, Indian                         | Rhaphiolepsis indica                            |  |
| Heather                                  | Erica dareyensis                                |  |
| Hemlock                                  | Tsuga spp.                                      |  |

| COMMON NAME                    | BOTANICAL NAME                |
|--------------------------------|-------------------------------|
| Hemlock, Western               | Tsuga heterophylla            |
| Hibiscus                       | Hibiscus moscheutos           |
| Hibiscus                       | Hibiscus rosa-sinensis        |
| Holly                          | <i>llex</i> spp.              |
| Hosta                          | Hosta spp.                    |
| House Leek                     | Sempervivum spp.              |
| Hydrangea                      | Hydrangea spp.                |
| Hydrangea, French              | Hydrangea macrophylla         |
| Impatiens <sup>1,2</sup>       | Impatiens spp. <sup>1,2</sup> |
| Iris (Bulbous, Spanish, Dutch) | Iris xiphium                  |
| Iris, African                  | Dietes iridiodes              |
| Iris, Butterfly                | Dietes iridiodes              |
| Ivy, Algerian                  | Hedera algeriensis            |
| Ivy, English                   | Hedera helix                  |
| Ivy, Swedish                   | Plectranthus spp.             |
| Japanese Pittosporum           | Pittosporum tobira            |
| Juniper                        | Juniperus procumbens          |
| Juniper                        | Juniperus scopulorum          |
| Juniper                        | Juniperus spp.                |
| Larkspur                       | Delphinium spp.               |
| Laurel                         | Laurus nobilis                |
| Laurel, Australian             | Pittosporum spp.              |
| Laurel, Japanese               | Aucuba japonica               |
| Lilac, California              | Ceanothus spp.                |
| Lilac, Wild                    | Ceanothus sanguineus          |
| Lily, Asiatic                  | Lilium spp.                   |
| Lily, Peace                    | Spathiphyllum floribundium    |
| Lily-Turf                      | Liriope muscari               |
| Live-Forever                   | Sempervivum spp.              |
| Magnolia                       | Magnolia spp.                 |
| Magnolia, Saucer               | Magnolia soulangiana          |
| Magnolia, Southern             | Magnolia grandiflora          |
| Maple, Japanese                | Acer palmatum                 |
| Maple, Sugar                   | Acer saccharum                |
| Marigold                       | <i>Tagetes</i> spp.           |
| Mugwort                        | Artemisia spp.                |
| Nandina                        | Nandina domestica             |
| Oak, Pin                       | Quercus palustris             |
| Oak, Red                       | Quercus falcata               |
| Oleander                       | Nerium oleander               |
| Orpine                         | Sedum spp.                    |

| COMMON NAME          | BOTANICAL NAME          |
|----------------------|-------------------------|
| Palm, Date           | Phoenix dactylifera     |
| Palm, Parlor         | Chamaedora elegans      |
| Palm, Queen          | Syagrus romanzoffianum  |
| Palm, Robellini      | Phoenix roebelenii      |
| Palm, Sago           | Caryota urens           |
| Pansy <sup>1</sup>   | Viola spp. <sup>1</sup> |
| Paper Plant          | Fatsia japonica         |
| Pear, Bradford's     | Pyrus calleryana        |
| Periwinkle           | Vinca spp.              |
| Petunia <sup>2</sup> | Petunia spp.            |
| Philodendron         | Philodendron spp.       |
| Phlox                | Phlox spp.              |
| Photinia, Red-Tip    | Photinia glabra         |
| Pine                 | Pinus spp.              |
| Pine, Black          | Pinus nigra             |
| Pine, Eastern White  | Pinus strobus           |
| Pine, Mugo           | Pinus mugo              |
| Pine, Scotch         | Pinus sylvestris        |
| Pink                 | Dianthus spp.           |
| Plum, Flowering      | Prunus spp.             |
| Plum, Purple-Leaf    | Prunus spp.             |
| Poinsettia           | Euphorbia spp.          |
| Poplar               | Populus trichocarpa     |
| Pothos               | Epipremnum spp.         |
| Primrose             | Primula spp.            |
| Pussy's Foot         | Ageratum spp.           |
| Redbud, Western      | Cercis occidentalis     |
| Rhododendron         | Rhododendron spp.       |
| Ribbon Grass         | Setaria spp.            |
| Rose of Sharon       | Hibiscus syriacus       |
| Rose                 | Rosa spp.               |
| Rose-Bay             | Nerium oleander         |
| Rosemary (Prostrate) | Rosmarinus spp.         |
| Rubber Plant, Baby   | Peperomia spp.          |
| Rubber Tree          | Brassaia actinophylla   |
| Sage                 | Salvia spp.             |
| Sand cherry          | Prunus pumila           |
| Snap-Dragon          | Antirrhinum spp.        |
| Snowball             | Ceanothus spp.          |
| Spirea               | Spirea budalda          |

| COMMON NAME      | BOTANICAL NAME        |
|------------------|-----------------------|
| Spirea           | Spirea japonica       |
| Spruce, Blue     | Picea pungens         |
| Spruce, Norway   | Picea abies           |
| Spruce, White    | Picea glauca          |
| Starwort         | Aster spp.            |
| Stonecrop        | Sedum spp.            |
| Sweet Alyssum    | Lobularia maritima    |
| Thyme, Creeping  | Thymus serphyllum     |
| Umbrella Tree    | Brassaia actinophylla |
| Verbena          | Verbena spp.          |
| Vervain          | Verbena spp.          |
| Viburnum         | Viburnum spp.         |
| Vinca            | Catharanthus roseus   |
| Viola            | Viola spp.            |
| White Alder      | Clethora spp.         |
| Weigela, Pink    | Weigela florida       |
| Willow, Virginia | Itea virginica        |
| Winterberry      | llex spp.             |
| Wormwood         | Artemisia spp.        |
| Yaupon           | llex spp.             |
| Yew, Spreading   | Taxus baccata         |
| Yucca            | Yucca spp.            |
| Zebra Plant      | Aphelandra spp.       |
| Zinnia           | Zinnia spp.           |

<sup>1</sup> Do not exceed 2 fl oz/100 gallons on these species. <sup>2</sup> Heritage SC may occasionally cause discoloration of flowers when applied directly to blooms of certain plant species. Not all varieties and colors have been evaluated.

#### TABLE 5: Tolerant Varieties of Ornamental Crabapple Species (Genus Malus)

| Callaway                      | Golden Raindrops                                   | Mary Potter    | Selkirk        |
|-------------------------------|--|----------------|----------------|
| Carmine (M.<br>atrosanguinea) | Нора   | Molten Lava    | Sentinel       |
| Candymint Sargent             | Indian Magic                                       | New Centennial | Silver Moon    |
| Christmas Holly               | Island   | Ormiston Roy   | Silverdrift    |
| David                         | Jackii <i>(M. baccata</i> var.<br>jackii)          | Pink Satin     | Sinai Fire     |
| Dolgo                         | Japanese Flowering<br>Crabapple<br>(M. floribunda) | Prairie Maid   | Sugar Tyme     |
| Donald Wyman                  | Katherine  | Prairiefire    | Van Eseltine   |
| Dorothea                      | Lancelot   | Profusion      | White Angel    |
| Doubloons                     | Louisa   | Ralph Shay     | Wild crabapple |

|          |   |           | (M. coronaria) |
|----------|---|-----------|----------------|
| Eleyi    | <i>Malus x zumi</i> var.<br>Calocarpa                 | Red Baron | Winter Gold    |
| Evereste | M. sargentii  | Red Jade  |                |
| Eyelynn  | Manchurian<br><i>(M. baccata</i> var.<br>mandshurica) | Sargent   |                |

# TABLE 6: Plants Sensitive to Heritage SC(Do not apply Heritage SC to these species or varieties.)

| COMMON NAME                                      | BOTANICAL NAME                        |
|--|---------------------------------------|
| Crabapple - Flame variety                        | Malus spp. 'Flame'                    |
| Crabapple – Brandywine variety                   | Malus spp. 'Brandywine'               |
| Crabapple – Novamac variety                      | Malus spp. 'Novamac'                  |
| Cherry, Flowering – Yoshino variety              | Prunus x yedoensis                    |
| Leatherleaf Fern and Other Ferns for cut foliage | Rumohra adianformis and other species |
| Privet   | Ligustrum spp.                        |

# INTEGRATED PEST (DISEASE) MANAGEMENT (IPM)

Heritage SC should be integrated into an overall disease management strategy that includes selection of varieties with disease tolerance, optimum plant populations, proper fertilization, winter and/or spring pruning, plant debris management and proper timing and placement of irrigation. Immunoassay detection kits and diagnostic services can assist in the early and accurate identification of causal organisms and corresponding selection of the proper fungicide when required.

#### **RESISTANCE MANAGEMENT**

# AZOXYSTROBIN GROUP 11 FUNGICIDE

**DO NOT** make more than three (3) sequential applications of Heritage SC before alternating with a fungicide of a different mode of action. A sound resistance management program would include blocks of three Heritage SC applications separated by blocks of two alternate fungicide applications. **DO NOT** alternate Heritage SC with other strobilurin fungicides.

# **APPLICATION DIRECTIONS**

Apply Heritage SC as a foliar or soil broadcast, drench, or banded spray targeted at the foliage or crown of the plant. Apply to the point of runoff to ensure complete coverage of the target plant. Good coverage and wetting of foliage is necessary for best control. Refer to the label for specific use directions for control of certain diseases. Repeat applications at specified intervals using an appropriate resistance management program.

Apply Heritage SC at listed use rates. The addition of an adjuvant at the specified use rate may enhance coverage on hard-to-wet plant foliage. Under light to moderate disease pressure, use the lower listed rates and shorter listed application interval. Under environmental conditions conducive to severe disease development, use the higher rates and shorter listed application interval. Use of Heritage SC as a "rescue" (late curative or eradicant) treatment may not result in satisfactory disease control.

**DO NOT** tank-mix Heritage SC with other fungicides, insecticides, herbicides, fertilizers, or adjuvants unless local experience indicates that the tank mix will not injure ornamental plants.

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.

#### **Drench Application**

Heritage SC may be applied to control soil-borne, seedling, and crown diseases of ornamentals as a preventative drench treatment prior to infection. Good coverage of the pre-infection area (root zone, root ball, and crown) is necessary for satisfactory control. Heritage SC may be applied by drench to container-grown ornamentals. Make a drench application prior to infection as healthy roots are necessary to optimize product uptake and systemic translocation to optimize disease protection. Due to the systemic activity of Heritage SC, suppression of certain foliar diseases has been observed in plants treated with drench applications.

Use caution before applying Heritage SC as a drench to small bedding plants in the seedling/plug stage due to possible phytotoxicity. A limited quantity of plants should be tested prior to full-scale application.

**RESTRICTION: DO NOT** apply greater than 2 pints of solution per square foot for drench and crown applications.

#### Chemigation: Use through Sprinkler and Drip Irrigation Systems

Heritage SC may be applied through sprinkler, drip, or other micro irrigation systems to potted ornamentals or to bedded, field-grown ornamentals for soil-borne disease control. Apply Heritage SC as a preventative treatment. The soil or potting media should have adequate moisture capacity prior to drip application.

Terminate irrigation at fungicide depletion from the main feed supply tank or after 6 hours from start, whichever is shorter. For maximum efficacy, subsequent irrigation (water only) should be delayed for at least for 24 hours following application.

# SPECIFIC DIRECTIONS FOR USE

When used in accordance with the label directions, Heritage SC will provide control of the diseases of ornamental plants in the following tables.

#### TABLE 7: Foliar Plant Diseases Controlled – Broadcast Application

Under severe disease conditions or if disease is already present, apply Heritage SC at the highest listed rate and shortest application interval.

# **RESTRICTION: DO NOT** exceed 600 gallons spray volume per acre for foliar applications.

|  | Application Instructions  |   |  |
|--|---|---|--|
| DISEASE (Pathogen)   | (fl oz product<br>per 100 gallons)  | (fl oz product<br>per 50 gallons)   |  |
| CONIFER BLIGHTS  |   |   |  |
| Phomopsis Blight   | Apply 2.0-7.7 fl oz   | Apply 1.0-3.8 fl oz   |  |
| (Phomopsis juniperovora)   | every 7-28 days.  | every 7-28 days.  |  |
| Tip Blight   | Apply 2.0-7.7 fl oz   | Apply 1.0-3.8 fl oz   |  |
| (Sirococcus strobilinus)   | every 7-28 days.  | every 7-28 days.  |  |
| LEAF BLIGHTS/LEAF SPOTS  |   |   |  |
| Alternaria Leaf Spot   | Apply 2.0-15.3 fl oz  | Apply 1.0-7.7 fl oz   |  |
| (Alternaria spp.)  | every 7-28 days.  | every 7-28 days.  |  |
| Anthracnose  | Apply 2.015.3 fl oz   | Apply 1.0-7.7 fl oz   |  |
| (Colletotrichum spp., Elsinoe spp.)  | every 7-28 days.  | every 7-28 days.  |  |
| Cercospora Leaf Spot   | Apply 2.0-7.7 fl oz   | Apply 1.0-3.8 fl oz   |  |
| (Cersospora spp.)  | every 7-28 days.  | every 7-28 days.  |  |
| Cylindrocladium leaf spot/stem canker  | Apply 7.7-15.3 fl oz  | Apply 3.8-7.7 fl oz   |  |
| (Cylindrocladium spp.)   | every 7-14 days.  | every 7-14 days.  |  |
| Downy Mildew<br>(including <i>Peronospora</i> spp.,<br><i>Plasmopara</i> spp., <i>Bremiella</i> spp.,<br><i>Bremia</i> spp.) | Apply 3.8-7.7 fl oz<br>every 7-21 days during<br>periods of active plant<br>growth and prior to<br>dormancy or severe<br>infection. Use lower<br>use rates for<br>herbaceous seedlings. | Apply 1.9-3.8 fl oz<br>every 7-21 days during<br>periods of active plant<br>growth and prior to<br>dormancy or severe<br>infection. Use lower<br>use rates for<br>herbaceous seedlings. |  |
| Entomosporium Leaf Spot  | Apply 2.0-7.7 fl oz   | Apply 1.0-3.8 fl oz   |  |
| (Entomosporium spp.)   | every 7-28 days.  | every 7-28 days.  |  |
| Iris Leaf Spot   | Apply 3.8-7.7 fl oz   | Apply 1.9-3.8 fl oz   |  |
| ( <i>Mycosphaerella</i> spp.)  | every 7-21 days.  | every 7-21 days.  |  |
| Leaf spot  | Apply 2.0-7.7 fl oz   | Apply 1.0-3.8 fl oz   |  |
| ( <i>Cladosporium</i> spp.)  | every 7-28 days.  | every 7-28 days.  |  |
| Rose Blackspot   | Apply 7.7-15.3 fl oz  | Apply 3.8-7.7 fl oz   |  |
| ( <i>Diplocarpon rosea</i> )   | every 7-14 days.  | every 7-14 days.  |  |

|  | Application   | Instructions  |
|--|---|---|
| DISEASE (Pathogen)   | (fl oz product<br>per 100 gallons)  | (fl oz product<br>per 50 gallons)   |
|  | RESTRICTION: Heritage<br>with another rose blacks<br>exceed 24 fl oz/A per cal  | pot fungicide. Do not   |
| Myrothecium leaf spot<br>( <i>Myrothecium</i> spp.)  | Apply 3.8-7.7 fl oz<br>every 7-21 days.   | Apply 1.9-3.8 fl oz<br>every 7-21 days.   |
| Scab<br>(Venturia inaequalis, Sphaceloma<br>poinsettiae, Elsinöe australis)  | Apply 2.0-7.7 fl oz<br>every 10-28 days. <b>Do</b><br><b>not</b> apply to apple<br>trees. For crabapples,<br>see <b>Table 12</b> for<br>tolerant varieties. | Apply 1.0-3.8 fl oz<br>every 10-28 days. <b>Do</b><br><b>not</b> apply to apple<br>trees. For crabapples,<br>see Table 12 for<br>tolerant varieties.  |
| Marssonina Leaf Spot<br>(Marssonina spp.)  | Apply 2.0-7.7 fl oz<br>every 14-28 days.  | Apply 1.0-3.8 fl oz<br>every 14-28 days.  |
| POWDERY MILDEW   |   |   |
| Erysiphe spp., Microsphaera spp.,<br>Sphaerotheca spp., Oidium spp.,<br>Podosphaera spp., Uncinula spp.  | Apply 2.0-7.7 fl oz<br>every 7-28 days. Do<br>not make more than 2<br>sequential applications<br>before rotating to<br>another class of<br>fungicide.       | Apply 1.0-3.8 fl oz<br>every 7-28 days. Do<br>not make more than 2<br>sequential applications<br>before rotating to<br>another class of<br>fungicide. |
| RUSTS  |   |   |
| Needle Rust<br>(Melampsora occidentalis)   | Apply 2.0-7.7 fl oz<br>every 7-28 days.   | Apply 1.0-3.8 fl oz<br>every 7-28 days.   |
| Other Rusts<br>( <i>Phragmidium</i> spp., <i>Puccinia</i> spp.,<br><i>Gymnosporangium</i> spp., <i>Coleosporium</i><br>spp., <i>Uromyces</i> spp.) | Apply 2.0-7.7fl oz<br>every 7-28 days.  | Apply 1.0-3.8 fl oz<br>every 7-28 days.   |
| FLOWER BLIGHTS   | 1   |   |
| Anthracnose<br>(Collectotrichum spp., Elsinoe spp.)  | Apply 2.0-7.7 fl oz<br>every 7-28 days.   | Apply 1.0-3.8 fl oz<br>every 7-28 days.   |
| Botrytis Blight<br>( <i>Botrytis cinerea</i> )   | Apply 7.7-15.3 fl oz<br>every 7-21 days. For<br>suppression only. Do<br>not exceed 24 fl<br>oz/acre.  | Apply 3.8-7.7 fl oz<br>every 7-21 days. For<br>suppression only. Do<br>not exceed 24 fl<br>oz/acre.   |
| SHOOT/STEM DISEASES  |   |   |
| Aerial/Shoot Blight<br>(Phytophthora spp.)   | Apply 2.0-7.7 fl oz<br>every 7-28 days.   | Apply 1.0-3.8 fl oz<br>every 7-28 days.   |

| TABLE 8: | Soilborne | Diseases | Controlled - | <b>Directed Spray</b> |
|----------|-----------|----------|--------------|-----------------------|
|----------|-----------|----------|--------------|-----------------------|

|   | Application Instructions                |   |
|---|---|---|
|   | (fl oz product (fl oz product           |   |
| Pathogen  | per 100 gallons)                        | per 50 gallons)                         |
| <i>Fusarium</i> spp.<br><i>Rhizoctonia solani</i><br><i>Sclerotium rolfsii</i><br><i>Sclerotinia</i> spp. | Apply 2.0-7.7 fl oz<br>every 7-21 days. | Apply 1.0-3.8 fl oz<br>every 7-21 days. |

#### **TABLE 9:** Soil-borne Diseases Controlled – Drench and Drip Irrigation See Drench Application section of ORNAMENTAL DIRECTIONS FOR USE for additional drench directions.

| Pathogen  | <b>Use Rate</b><br>(fl oz product<br>per 100 gallons) | Application Instructions   |
|---|---|--|
| Fusarium spp.<br>Rhizoctonia solani<br>Sclerotium rolfsii | 0.8-3.8 fl oz   | Apply 1-2 pints of the solution per square foot surface area every 7-28 days.  |
| Sclerotinia spp.  | 3.8 fl oz   | Apply 1-2 pints of the solution per square foot<br>surface area every 7-28 days. Apply for control<br>of Sclerotinia by drench application only. |

#### TABLE 10: Soil-borne Diseases Controlled – Banded Applications

| Pathogen  | Use Rate<br>(fl oz product<br>per 1,000 row feet) | Application Instructions  |
|---|---|---|
| Fusarium spp.<br>Rhizoctonia solani<br>Sclerotium rolfsii<br>Sclerotinia spp. | 0.8-1.6 <sup>1</sup> fl oz                        | Apply as a banded spray, 7 inches or less in width, directed to the soil using single or multiple spray nozzles adjusted to provide thorough coverage of lower stems <sup>2</sup> and the soil surface. |

<sup>1</sup>When applications are applied to crops grown using 22-inch row spacing, the maximum application rate is 0.35 fl oz per 1,000 row feet.

<sup>2</sup>Applications that come into contact with the foliage are considered foliar applications for resistance management.

#### TABLE 11: Soil-borne Diseases Controlled – In-furrow Application

| Pathogen  | Use Rate<br>(fl oz product<br>per 1,000 row feet) | Application Instructions  |
|---|---|---|
| Fusarium spp.<br>Rhizoctonia solani<br>Sclerotium rolfsii | 0.8-1.2 fl oz <sup>1</sup>                        | Mount the spray nozzle to allow the spray mixture to<br>be applied directly into the furrow and before the<br>propagated unit (seed, seed pieces, bulbs or corms) |
| Suppression Only:<br>Pythium spp.                         |   | are covered by soil. Apply the higher listed rate when<br>current or expected weather conditions are conducive<br>for disease development.                        |

<sup>1</sup>Apply product in 3 to 15 gallons of water per 1,000 row feet.

#### TABLE 12: Soil-borne Diseases Controlled – Broadcast Application

| Pathogen  | Use Rate<br>(fl oz product<br>per acre) | Application Instructions   |
|---|---|--|
| Fusarium spp.<br>Rhizoctonia solani<br>Sclerotium rolfsii<br>Sclerotinia spp. | 3.8-30.8 fl oz                          | Apply as a preventative broadcast application. Soil or<br>potting media should have adequate moisture<br>capacity prior to application if applied by overhead<br>irrigation. |

#### TABLE 13: Foliar and Soil Diseases Suppressed – Drench and Drip Applications

|  | Use Rate<br>(fl oz product |   |
|--|----------------------------|---|
| Disease/Pathogen                               | per 100 gallons)           | Application Instructions  |
| Rusts<br>Powdery Mildew<br><i>Pythium</i> spp. | 1.7-3.8 fl oz              | Apply 1-2 pints of the solution per square foot surface area every 7-28 days. |

# CONIFERS INCLUDING CHRISTMAS TREES AND COMMERCIAL PRODUCTION ROSES

Heritage SC may be used to control certain diseases on conifers and commercial production roses in indoor and outdoor production and landscape situations. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. See the **DIRECTIONS FOR ORNAMENTALS** section above for more detailed directions for use in landscape situations.

| Сгор  | Target Diseases   | Use Rate<br>fl oz product<br>per acre<br>(Ib ai/A) | Use Rate<br>fl oz product<br>per 0.5 A<br>(Ib ai/A) | Application Instructions  |
|---|---|--|---|---|
| Conifers<br>including<br>Christmas<br>Trees | Diplodia tip blight<br>( <i>Diplodia pinea</i> )<br>Lophodermium<br>needlecast<br>( <i>Lophodermium</i><br><i>pinastri</i> )<br>Swiss needlecast<br>( <i>Phaeocrytopus</i><br><i>gaumannii</i> )  | 6.0-15.5<br>(0.10-0.25)                            | 3.0-7.8<br>(0.10-0.25)                              | Do not apply more than 3<br>sequential applications of<br>Heritage SC before<br>alternating with a<br>fungicide that is not in<br>Group 11. Do not make<br>more than eight<br>applications of Heritage<br>SC per acre per year.<br>Begin Heritage SC<br>applications prior to<br>disease development and<br>continue throughout the<br>season at 7- to 21-day<br>intervals following the<br>resistance management |
| Specific Use R                              | estrictions: Do not ap  | polv more than 2.0                                 | ) Ib ai/A per vear.                                 | guidelines.   |
| Roses<br>(commercial<br>production)         | Downy Mildew<br>(Peronospora<br>sparsa)<br>Powdery Mildew<br>(Sphaerotheca<br>pannosa)<br>Rust<br>(Phragmidium<br>mucronatum, P.<br>tuberculatum, and<br>other<br>Phragmidium<br>spp.)<br>Septoria Leaf Spot<br>(Septoria rosea)<br>Alternaria Leaf Spot<br>(Alternaria<br>alternata) | 3.0-15.5<br>(0.05-0.25)                            | 1.5-7.8<br>(0.05-0.25)                              | <ul> <li>Do not make more than 3 sequential applications of Heritage SC before alternating with a fungicide that is not in Group 11. Do not make more than eight applications per acre per year.</li> <li>Begin Heritage SC application prior to disease development and continue throughout the season on 7- to 21-day intervals following the resistance management guidelines.</li> </ul>                      |

# TABLE 14: Specific Use Directions for Conifer and Commercial Rose Production

**Specific Use Restrictions:** Do not apply more than 2.0 lb ai/A per year.

#### PLANTS GROWN FOR FRUIT AND NUTS

Apply Heritage SC to fruit and nut plants grown for retail sale to consumers.

**Restriction: DO NOT** apply to fruit and nut plants used for commercial agricultural production.

| Crop    | Target Diseases  | Use<br>Rate<br>fl oz<br>product<br>per acre<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>1,000 sq ft | Application Instructions  |
|---------|--|--|--|---|
| Almonds | <u> </u>   | . ,  | · · · ·                                      |   |
|         | Alternaria leaf and<br>fruit spot<br>( <i>Alternaria</i><br><i>alternata</i> )<br>Anthracnose<br>( <i>Colletotrichum</i><br><i>acutatum</i> )<br>Leaf Blight<br>( <i>Seimatosporium</i><br><i>lichenicola</i> )<br>Leaf rust<br>( <i>Tranzschelia</i><br><i>discolor</i> )<br>Scab<br>( <i>Cladosporium</i><br><i>carpophilum</i> )<br>Shothole<br>( <i>Wilsonomyces</i><br><i>carpophilus</i> ) | 6.0-15.5<br>(0.1-<br>0.25)                               | 0.14-0.36                                    | Do not apply more than two sequential<br>applications of Heritage SC or other<br>Group 11 fungicides before alternation<br>with a fungicide that is not in Group 11.<br>Begin Heritage SC applications prior to<br>disease development and continue<br>throughout the disease development<br>period.<br>Applications may be made by ground, air<br>(minimum 15 GPA) or chemigation.<br>Heritage SC may be applied by air only<br>at growth stages prior to and including 5<br>weeks after petal fall. An adjuvant may<br>be added at specified rates.<br>For anthracnose, scab and shothole,<br>begin applications prior to disease<br>development and continue at 7- to 14-<br>day intervals throughout the disease<br>development period. |
|         | Brown Rot<br>Blossom Blight<br>( <i>Monilinia Iaxa, M.</i><br><i>fructicola</i> )  | 12.0 –<br>15.5<br>(0.2-<br>0.25)                         | 0.28-0.36                                    | For blossom blight, begin applications at early bloom and continue through petal fall.  |

 TABLE 15:
 Specific Use Directions for Almonds

Specific Use Restrictions:

- Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.
- Do not apply within 28 days of harvest (28-day PHI).

| Crop                 | Target Diseases  | Use Rate<br>fl oz<br>product per<br>acre<br>(Ib ai/A) | Use Rate<br>fl oz product/<br>1,000 sq ft | Application Instructions  |
|----------------------|--|---|---|---|
| Bananas<br>Plantains | Black Sigatoka<br>( <i>Mycosphaerella</i><br><i>fijiensis</i> )<br>Yellow Sigatoka<br>( <i>Mycosphaerella</i><br><i>musicola</i> ) | 5.5-8.2<br>(0.09-0.14)                                | 0.13-0.19                                 | <ul> <li>Heritage SC should be integrated into an overall disease management strategy that includes canopy management through 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.</li> <li>Follow the resistance management guidelines in the <b>Resistance</b></li> <li><b>Management</b> section. Do not apply more than two sequential applications of Heritage SC or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.</li> <li>Begin Heritage SC applications prior to disease development and continue throughout the disease development period every 12-14 days.</li> <li>Applications may be made by ground, air or chemigation. An</li> </ul> |

| <b>TABLE 16:</b> | Specific U | se Directions for | or Bananas | and Plantains |
|------------------|------------|-------------------|------------|---------------|
|------------------|------------|-------------------|------------|---------------|

Do not apply more than 1.08 lb ai/A per year of azoxystrobin-containing products.
May be applied the day of harvest (0-day PHI).

|   | •   |   | ,  | ,  |
|---|---|---|--|--|
| Crop  | Target Diseases   | Use Rate<br>fl oz<br>product<br>per acre<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>1,000 sq ft | Application Instructions   |
| Berries<br>Bushberry<br>subgroup<br>Blueberry<br>Currant<br>Elderberry<br>Gooseberry<br>Huckleberry<br>Lingonberry<br>Juneberry<br>Salal<br>including all<br>cultivars<br>and/or<br>hybrids of<br>these | Alternaria Leaf Spot<br>and Fruit Rot<br>( <i>Alternaria</i> spp.)<br>Anthracnose fruit rot<br>( <i>Colletotrichum</i><br>gloeosporoides)<br>Botryosphaeria<br>canker<br>( <i>Botryosphaeria</i><br>spp.)<br>Mummyberry<br>( <i>Monilinia</i><br>vaccinia-corymbosi)<br>Phomopsis stem<br>canker<br>( <i>Phomopsis</i><br>vaccinii)<br>Powdery mildew<br>( <i>Sphaerotheca</i><br>spp.)<br>Septoria blight<br>( <i>Septoria</i> spp.) | 6.0-15.5<br>(0.1-0.25)                                | 0.14-0.36                                    | Follow the resistance management<br>guidelines in the <b>Resistance</b><br><b>Management</b> section. Do not<br>apply more than two sequential<br>applications of Heritage SC or other<br>Group 11 fungicides before<br>alternation with a fungicide that is<br>not in Group 11.<br>Begin Heritage SC applications<br>prior to disease development and<br>continue throughout the disease<br>development period on a 7- to 14-<br>day schedule.<br>Applications may be made by<br>ground, air or chemigation. An<br>adjuvant may be added at specified<br>rates. |

Do not apply more than 0.75 lb ai/A per year of azoxystrobin-containing products. May be applied the day of harvest (0-day PHI). •

•

| Сгор  | Target Diseases  | Use Rate<br>fl oz<br>product<br>per acre<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>1,000 sq ft | Application Instructions   |
|---|--|---|--|--|
| Berries<br>Caneberry<br>subgroup<br>Blackberry<br>Bingleberry<br>Boysenberry<br>Dewberry<br>Lowberry<br>Marionberry<br>Olallieberry<br>Youngberry<br>Loganberry<br>Red and<br>black<br>raspberry<br>including all<br>cultivars<br>and/or<br>hybrids of<br>these | Anthracnose<br>(Sphaceloma<br>necator)<br>(Elsinoe veneta)<br>Botryosphaeria<br>canker<br>(Botryosphaeria<br>dothidea)<br>Colletotrichum rot<br>(Colletotrichum<br>gloeosporioides)<br>Leaf spot<br>(Septoria rubi)<br>(Sphaerulina<br>rubi)<br>Powdery mildew<br>(Sphaerotheca<br>macularis)<br>Rosette or double<br>blossom of<br>blackberries<br>(Cercosporella<br>rubi)<br>Spur blight<br>(Didymella<br>applanata) | 6.0-15.5<br>(0.1-0.25)                                | 0.14-0.36                                    | Follow the resistance management<br>guidelines in the <b>Resistance</b><br><b>Management</b> section. Do not apply<br>more than two sequential applications<br>of Heritage SC or other Group 11<br>fungicides before alternation with a<br>fungicide that is not in Group 11.<br>Begin applications at onset of disease<br>and continue as required until harvest.<br>Make applications on a 7- to 14-day<br>schedule. Use a minimum water<br>volume of 10 gallons per acre by<br>ground and a minimum of 3 gallons by<br>air. |

 TABLE 18:
 Specific Use Directions for Berries, Caneberry Subgroup

• Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.

| Сгор   | Target Diseases   | Use Rate<br>fl oz<br>product<br>per acre<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>1,000 sq ft | Application Instructions   |
|--|---|---|--|--|
| Citrus<br>Fruit<br>Calamondin<br>Citron<br>Grapefruit<br>Kumquat<br>Lemon<br>Lime<br>Mandarin<br>Orange<br>(sour and<br>sweet)<br>Pummelo<br>Satsuma<br>mandarin<br>Tangerine<br>Uniq fruit<br>including all<br>cultivars<br>and/or<br>hybrids of<br>these | Albinism<br>(Alternaria<br>alternata pv.<br>citri)<br>Alternaria leaf and<br>fruit spot<br>(Alternaria citri)<br>Cercospora leaf<br>spot<br>(Cercospora<br>spp.)<br>Diplodia stem-end<br>rot<br>(Diplodia<br>natalensis)<br>Greasy spot<br>(Mycosphaerella<br>citri)<br>Melanose<br>(Diaporthe citri)<br>Penicillium<br>Decays<br>Green mold,<br>Whisker mold,<br>suppression of<br>Blue mold<br>(Penicillium<br>spp.)<br>Phomopsis stem-<br>end rot<br>(Phomopsis<br>citri)<br>Post-bloom fruit<br>drop (PFD)<br>(Colletotrichum<br>acutatum)<br>Powdery mildew<br>(Erysiphe spp.)<br>Scab<br>(Elsinoe<br>fawcettii) | 12.0-15.5<br>(0.2-0.25)                               | 0.28-0.36                                    | Follow the resistance management<br>guidelines in the <b>Resistance</b><br><b>Management</b> section. Do not apply<br>more than two sequential applications<br>of Heritage SC or other Group 11<br>fungicides before alternation with a<br>fungicide that is not in Group 11. Do<br>not make more than four (4)<br>applications of Heritage SC or other<br>Group 11 fungicide per year.<br>Begin Heritage SC applications prior to<br>disease development and continue<br>throughout the season on 7- to 21-day<br>intervals. Under conditions that favor<br>severe disease epidemics, use the<br>higher application rates. Applications<br>may be made by ground, air or<br>chemigation. An adjuvant may be<br>added at specified rates. Use a<br>horticultural spray oil to improve control<br>of greasy spot. |

 TABLE 19:
 Specific Use Directions for Citrus Fruit

- Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.
- May be applied the day of harvest (0-day PHI).

|                                    | Target  | Use Rate<br>fl oz<br>product<br>per acre | Use Rate<br>fl oz<br>product/<br>1,000 sq ft |  |
|------------------------------------|---|--|--|--|
| Crop                               | Diseases  | (Ib ai/A)                                | •  | Application Instructions   |
| Grapes,<br>including<br>Muscadines | Black rot<br>( <i>Guignardia</i><br><i>bidwellii</i> )<br>Downy Mildew<br>( <i>Plasmopara</i><br><i>viticola</i> )<br>Phomopsis<br>cane and<br>leaf spot<br>( <i>Phomopsis</i><br><i>viticola</i> )<br>Powdery<br>mildew<br>( <i>Uncinula</i><br><i>necator</i> )<br><b>Suppression</b><br><b>Only:</b><br>Botrytis bunch<br>rot<br>( <i>Botrytis</i><br><i>cinerea</i> ) | 10.0-15.5<br>(0.16-<br>0.25)             | 0.23-0.36                                    | <ul> <li>Heritage SC should be integrated into an overall disease management strategy that includes canopy management through pruning and thinning, proper selection of varieties with disease tolerance, proper timing and placement of irrigation and removal of plant debris in which inoculum overwinters.</li> <li>Follow the resistance management guidelines in the <b>Resistance</b></li> <li><b>Management</b> section. Do not apply more than two sequential foliar applications of Heritage SC or other Group 11 fungicides before alternating with a fungicide that is not in Group 11.</li> <li>Begin Heritage SC applications prior to disease development and continue every 10-14 days throughout the disease development period.</li> <li>Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates.</li> </ul> |

 TABLE 20:
 Specific Use Directions for Grapes

- Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.
- Do not apply within 14 days of harvest (14-day PHI).

**ATTENTION:** Heritage SC is extremely phytotoxic to apple and specific varieties of crabapple and cherry trees. DO NOT spray Heritage SC where spray drift may reach apple trees. AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

| Crop   | Target<br>Diseases   | Use Rate<br>fl oz<br>product<br>per acre<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>1,000 sq ft | Application Instructions  |
|--------|--|---|--|---|
| Pecans | Anthracnose<br>( <i>Glomerella</i><br><i>cingulata</i> )<br>Scab<br>( <i>Cladosporium</i><br><i>caryigenum</i> ) | 6.0-12.0<br>(0.10-<br>0.20)                           | 0.14-0.28                                    | Follow the resistance management<br>guidelines in the <b>Resistance Management</b><br>section. Do not apply more than two<br>sequential applications of Heritage SC or<br>other Group 11 fungicides before alternation<br>with a fungicide that is not in Group 11.<br>Begin Heritage SC applications prior to<br>disease development and continue on 7- to<br>21-day intervals throughout the disease<br>development period.<br>Applications may be made by ground, air or<br>chemigation. An adjuvant may be added at<br>specified rates. |

## TABLE 21: Specific Use Directions for Pecans

Specific Use Restrictions:

• Do not apply more than 1.2 lb ai/A per year of azoxystrobin-containing products.

• Do not apply within 45 days of harvest (45-day PHI).

| Сгор       | Target Diseases  | Use Rate<br>fl oz<br>product<br>per acre<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>1,000 sq ft | Application Instructions  |
|------------|--|---|--|---|
| Pistachios | Alternaria late<br>blight<br>( <i>Alternaria</i><br><i>alternata</i> )<br>Botryosphaeria<br>panicle and<br>shoot blight<br>( <i>Botryosphaeria</i><br><i>dothidea</i> )<br>Septoria leaf spot<br>( <i>Septoria</i><br><i>pistaciarum</i> ) | 6.0-15.5<br>(0.10-<br>0.25)                           | 0.14-0.36                                    | <ul> <li>Follow the resistance management guidelines in the Resistance</li> <li>Management section. Do not apply more than two sequential applications of Heritage SC or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.</li> <li>Begin Heritage SC applications prior to disease development and continue on 7-to 21-day intervals throughout the disease development period.</li> <li>Applications may be made by ground, air or chemigation.</li> <li>An adjuvant may be added at specified rates.</li> </ul> |

 TABLE 22: Specific Use Directions for Pistachios

Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.
Do not apply within 7 days of harvest (7-day PHI).

| Сгор   | Target Diseases   | Use Rate<br>fl oz<br>product per<br>acre<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>1,000 sq ft | Application Instructions  |
|--|---|---|--|---|
| Stone<br>Fruit<br>Apricot<br>Cherry,<br>sweet<br>Cherry,<br>tart<br>Nectarine<br>Peach<br>Plum<br>Plumcot<br>Prune | Alternaria spot<br>and fruit rot<br>( <i>Alternaria</i><br><i>alternata</i> )<br>Anthracnose<br>( <i>Colletotrichum</i><br><i>prunicola</i> ,<br><i>C.</i><br><i>gloeosporioides</i> )<br>Leaf rust<br>( <i>Tranzschelia</i><br><i>discolor</i> )<br>Powdery mildew<br>( <i>Sphaerotheca</i><br><i>pannosa</i> ,<br><i>Podosphaera</i><br><i>clandestina</i> )<br>Scab<br>( <i>Cladosporium</i><br><i>carpophilum</i> )<br>Shot hole<br>( <i>Wilsonomyces</i><br><i>carpophilus</i> ) | 6.0-15.5<br>(0.10-0.25)                               | 0.14-0.36                                    | Follow the resistance management<br>guidelines in the <b>Resistance</b><br><b>Management</b> section. Do not apply<br>more than two sequential applications<br>of Heritage SC or other Group 11<br>fungicides before alternation with a<br>fungicide that is not in Group 11.<br>For brown rot blossom blight, begin<br>applications at early bloom and<br>continue through petal fall. For brown<br>rot on fruit, Heritage SC may be applied<br>to fruit up to the day of harvest. For<br>scab, begin applications at petal fall and<br>continue at 7- to 14-day intervals. For<br>all other diseases, begin application at<br>the onset of disease as a protectant<br>fungicide and continue on a 7- to 14-<br>day schedule.<br>For peaches only, 5-8 fl oz of Heritage<br>SC may be used for scab control. |
|  | Brown rot<br>blossom blight<br>and fruit rot<br>( <i>Monilinia</i><br><i>fructicola, M.</i><br><i>laxa</i> )  | 12.0-15.5<br>(0.20-0.25)                              | 0.28-0.36                                    | Applications may be made by ground, air or chemigation  |

TABLE 23: Specific Use Directions for Stone Fruit

Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.
May be applied the day of harvest (0-day PHI).

| Сгор       | Target<br>Diseases   | Use Rate<br>fl oz<br>product<br>per acre<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>1,000 sq ft | Application Instructions   |
|------------|--|---|--|--|
| Strawberry | Anthracnose<br>(Colletotrichum<br>fragariae)<br>Powdery mildew<br>(Sphaerotheca<br>macularis)<br>Suppression<br>only:<br>Botrytis on the<br>foliage<br>(Botrytis<br>cinerea) | 6.0-15.5<br>(0.10-0.25)                               | 0.14-0.36                                    | <ul> <li>Follow the resistance management guidelines in the Resistance</li> <li>Management section. Do not apply more than two sequential applications of Heritage SC or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.</li> <li>Begin Heritage SC applications prior to disease development and continue on a 7- to 10-day schedule throughout the disease development period.</li> <li>Applications may be made by ground, air or chemigation.</li> <li>An adjuvant may be added at specified rates.</li> <li>For dip applications at transplanting for commercial berry production: For suppression of root and crown rot caused by <i>Colletotrichum</i> spp., mix 2.5-4.2 fl oz of Heritage SC per 100 gallons of water.</li> <li>Dip plants for 2-5 minutes. Plant treated plants as quickly as possible. Wash transplants to remove excess soil prior to dipping. For continued anthracnose control, follow with foliar applications beginning 2-3 weeks after transplant.</li> </ul> |

 TABLE 24:
 Specific Use Directions for Strawberry

• Do not apply more than 1.0 lb ai/A per year of azoxystrobin-containing products.

|   |  | Use Rate<br>fl oz<br>product<br>per acre | Use Rate<br>fl oz<br>product/<br>1,000 sq |   |
|---|--|--|---|---|
| Crop  | Target Diseases  | (Ib ai/A)                                | ft  | Application Instructions  |
| Tree Nuts<br>Beechnut<br>Brazil nut<br>Butternut<br>Cashew<br>Chestnut<br>Chinquapin<br>Filbert<br>Hickory<br>Macadamia<br>Walnut<br>Almonds,<br>Pecans,<br>Pistachios:<br>see specific<br>use<br>instructions. | Alternaria leaf<br>and fruit spot<br>( <i>Alternaria</i><br><i>alternata</i> )<br>Anthracnose<br>( <i>Colletotrichum</i><br><i>acutatum</i> ,<br><i>Glomerella</i><br><i>cingulata</i> )<br>Eastern filbert<br>blight<br>( <i>Anisogramma</i><br><i>anomale</i> )<br>Late blight<br>( <i>Alternaria</i><br><i>alternata</i> )<br>Scab<br>( <i>Cladosporium</i><br><i>carpophilum</i> )<br>Septoria leaf spot<br>( <i>Septoria</i><br><i>pistaciarum</i> )<br>Shothole<br>( <i>Wilsonomyces</i><br><i>carpophilus</i> ) | 6.0-12.0<br>(0.10-0.20)                  | 0.14-0.28                                 | <ul> <li>Follow the resistance management guidelines in the Resistance</li> <li>Management section. Do not apply more than two sequential applications of Heritage SC or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.</li> <li>Begin Heritage SC applications prior to disease development and continue throughout the disease development period.</li> <li>Applications may be made by ground, air or chemigation.</li> <li>An adjuvant may be added at specified rates.</li> <li>For all other diseases, begin applications prior to disease development and continue at 7- to 21-day intervals throughout the disease development period.</li> </ul> |
|   | Blossom blight<br>( <i>Monilinia laxa,</i><br><i>M. fructicola</i> )   | 12.0<br>(0.20)                           | 0.28                                      | For blossom blight, begin applications<br>at early bloom and continue through<br>petal fall. <b>Do not</b> make more than six<br>applications of Heritage SC or other<br>strobilurin fungicide per acre per year.   |

# TABLE 25: Specific Use Directions for Tree Nuts (except Almonds, Pecans, and Pistachios)

Specific Use Restrictions:

• Do not apply more than 1.2 lb ai/A per year of azoxystrobin-containing products.

• Do not apply within 45 days of harvest (45-day PHI).

| Сгор   | Target<br>Diseases   | Use Rate<br>fl oz product<br>per acre<br>(Ib ai/A) | Use Rate<br>fl oz product/<br>1,000 sq ft | Application Instructions  |
|--|--|--|---|---|
| Tropical<br>Fruit<br>Acerola<br>Atemoya<br>Avocado<br>Biriba<br>Canistel<br>Cherimoya<br>Custard<br>apple<br>Feijoa<br>Guava<br>Ilama<br>Jaboticaba<br>Jackfruit<br>Longan<br>Loquat<br>Lychee<br>Mango<br>Papaya<br>Passionfruit<br>Pawpaw<br>Persimmon<br>Pulasan<br>Rambutan<br>Sapote,<br>black<br>Sapote,<br>black<br>Sapote,<br>white<br>Soursop<br>Star apple<br>Starfruit<br>Sugar<br>apple<br>Spanish<br>lime<br>Tamarind | Alternaria leaf/<br>fruit spot<br>( <i>Alternaria</i><br>spp.)<br>Anthracnose<br>( <i>Colletotrichum</i><br>spp.)<br>Cercospora leaf<br>spot<br>( <i>Cercospora</i><br>spp.)<br>Powdery mildew<br>( <i>Erysiphe</i> spp.)<br>Rust<br>( <i>Puccinia</i> spp.) | 6.0-15.5<br>(0.10-0.25)                            | 0.14-0.36                                 | Follow the resistance<br>management guidelines in the<br><b>Resistance Management</b> section.<br>Do not apply more than two<br>sequential applications of Heritage<br>SC or other Group 11 fungicides<br>before alternation with a fungicide<br>that is not in Group 11.<br>Begin Heritage SC applications<br>prior to disease development and<br>continue on a<br>10- to 14-day schedule throughout<br>the disease development period.<br>Applications may be made by<br>ground, air or chemigation.<br>An adjuvant may be added at<br>specified rates. |

TABLE 26: Specific Use Instructions for Tropical Fruit

- Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.
- May be applied the day of harvest (0-day PHI).

# **VEGETABLE AND HERB PLANTS**

Apply to vegetable and herb plants grown for retail sale to consumers.

**Restriction: DO NOT** apply to vegetable and herb plants used for commercial agricultural production.

| Crop      | Target Diseases   | Use Rate<br>fl oz product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>5,000 sq ft | Application Instructions  |
|-----------|---|--|--|---|
| Asparagus | Stemphyllium<br>purple spot<br>(Stemphyllium<br>vesicarium) | 0.14-0.36<br>(0.1-0.25)                                | 0.70-1.80                                    | Do not apply more than one<br>application of Heritage SC or other<br>Group 11 fungicides before<br>alternation with a fungicide that is not<br>in Group 11.<br>Begin Heritage SC applications prior<br>to disease development and<br>continue throughout plant production<br>on a 7- to 14-day schedule.<br>Applications may be made by foliar<br>sprays, including chemigation.<br>An adjuvant may be added at<br>specified rates. Use a minimum of<br>10 gallons of water per acre. |

Specific Use Restrictions:

• Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.

• Do not apply within 100 days of harvest (100-day PHI).

| Сгор   | Target<br>Diseases  | Use Rate<br>fl oz product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz product/<br>5,000 sq ft | Application Instructions   |
|--|---|--|---|--|
| Brassica<br>Head and stem<br>subgroup<br>Broccoli<br>[gai lon]<br>Brussels sprouts<br>Cabbage<br>Chinese<br>cabbage<br>[napa]<br>Chinese mustard<br>cabbage<br>[gai choy]<br>Cauliflower<br>Cavalo broccolo<br>Kohlrabi<br>including all<br>cultivars and/or<br>hybrids of these | Alternaria leaf<br>spot<br>(Alternaria<br>spp.)<br>Downy mildew<br>(Peronospora<br>parasitica)<br>Pin rot<br>(Alternaria<br>spp.) | 0.14-0.35<br>(0.1-0.25)                                | 0.70-1.75                                 | Do not apply more than one<br>application of Heritage SC or<br>other Group 11 fungicides<br>before alternation with a<br>fungicide that is not in Group<br>11.<br>Begin Heritage SC<br>applications prior to disease<br>development and continue<br>throughout plant production on<br>a 7- to 14-day schedule.<br>Applications may be made by<br>foliar sprays including<br>chemigation.<br>An adjuvant may be added at<br>specified rates. Use a<br>minimum of 10 gallons of<br>water per acre. |

# TABLE 28: Specific Use Directions for Brassica Head and Stem Subgroup Plants

Specific Use Restrictions:

• Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.

| Сгор   | Target Diseases  | Use Rate<br>fl oz<br>product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>5,000 sq ft | Application Instructions   |
|--|--|---|--|--|
| Brassica<br>Leafy greens<br>subgroup<br>Broccoli raab<br>Chinese<br>Cabbage<br>Collards<br>Kale<br>Mizuna<br>Mustard greens<br>Mustard spinach<br>Rape greens<br>including all<br>cultivars and/or<br>hybrids of these | Black spot<br>( <i>Alternaria</i><br>spp.)<br>Cercospora leaf<br>spot<br>( <i>Cercospora</i><br>spp.)<br>White rust<br>( <i>Albugo</i><br><i>candida</i> ) | 0.14-0.35<br>(0.1-0.25)                                   | 0.70-1.75                                    | Follow the resistance<br>management guidelines in the<br><b>Resistance Management</b> section.<br>Do not apply more than one<br>application of Heritage SC or other<br>Group 11 fungicides before<br>alternation with a fungicide that is<br>not in Group 11.<br>Begin Heritage SC applications<br>prior to disease development and<br>continue throughout plant<br>production on a 7- to 14-day<br>schedule.<br>Applications may be made by<br>foliar sprays including<br>chemigation.<br>An adjuvant may be added at<br>specified rates. Use a minimum of<br>10 gallons of water per acre. |

# TABLE 29: Specific Use Directions for Brassica Leafy Greens Subgroup Plants

Specific Use Restrictions:

• Do not apply more than 0.75 lb ai/A per year of azoxystrobin-containing products.

| Crop  | Target Diseases  | Use Rate<br>fl oz<br>product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>5,000 sq ft | Application Instructions   |
|---|--|---|--|--|
| Bulb<br>Vegetables<br>Garlic<br>Leek<br>Onion, bulb<br>Onion,<br>green<br>Welsh<br>onion<br>Shallot | Foliar Diseases<br>Cladosporium<br>leaf blotch<br>( <i>Cladosporium</i><br><i>allii</i> )<br>Purple blotch<br>( <i>Alternaria</i><br><i>porri</i> )<br>Rust<br>( <i>Puccinia allii</i> )<br>White rot<br>( <i>Sclerotium</i><br><i>cepivorum</i> ) | 0.14-0.28<br>(0.10-0.20)                                  | 0.70-1.40                                    | Do not apply more than one<br>application of Heritage SC or other<br>Group 11 fungicides before alternation<br>with a fungicide that is not in Group 11.<br>For downy mildew, make preventative<br>applications on a 5- to 7-day schedule.<br>For all other diseases, begin Heritage<br>SC applications prior to disease<br>development and continue throughout<br>plant production every 7-14 days.<br>Applications may be made by foliar |
|   | Botrytis leaf blight<br>(Botrytis aclada)<br>Downy mildew<br>(Peronospora<br>destructor)   | 0.20-0.35<br>(0.15-0.25)                                  | 1.00-1.75                                    | sprays including chemigation.<br>An adjuvant may be added at specified<br>rates.<br>Test mixtures of Heritage SC with<br>insecticides and silicone adjuvants for<br>crop safety before application to the<br>crop.   |

# TABLE 30: Specific Use Directions for Bulb Vegetable Plants

Specific Use Restrictions:

• Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.

| Crop   | Target Diseases   | Use Rate<br>fl oz product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>5,000 sq ft | Application Instructions  |
|--------|---|--|--|---|
| Celery | Early blight<br>(C <i>ercospora apii</i> )<br>Late blight<br>( <i>Septoria apicola</i> )<br>For additional<br>diseases, see <b>Leafy</b><br><b>Vegetables</b> . | 0.20-0.35<br>(0.15-0.25)                               | 1.00-1.75                                    | Do not apply more than one<br>application of Heritage SC or other<br>Group 11 fungicides before<br>alternation with a fungicide that is<br>not in Group 11.<br>Begin Heritage SC applications<br>prior to disease development and<br>continue throughout plant<br>production every 7-14 days.<br>Applications may be made by foliar<br>sprays including chemigation.<br>An adjuvant may be added at<br>specified rates. |

# TABLE 31: Specific Use Directions for Celery Plants

- Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products. May be applied the day of harvest (0 day PHI). •
- •

| Crop   | Target Diseases  | Use Rate<br>fl oz<br>product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>5,000 sq ft | Application Instructions   |
|--|--|---|--|--|
| Cucurbits<br>Cantaloupe<br>Chayote<br>Chinese-<br>waxgourd<br>Cucumber<br>Gourds<br>Honeydew<br>Melons<br><i>Momordica</i><br>spp.<br>(bitter<br>melon,<br>balsam<br>apple)<br>Muskmelon<br>Watermelon<br>Pumpkin<br>Squash<br>Zucchini<br>including<br>cultivars<br>and/or<br>hybrids of<br>these | Anthracnose<br>(Colletotrichum<br>lagenarium)<br>Belly Rot<br>(Rhizoctonia solani)<br>Downy Mildew<br>(Pseudoperonospora<br>cubensis)<br>Gummy Stem Blight<br>(Didymella bryoniae)<br>Leaf spots<br>(Alternaria spp.,<br>Cercospora spp.)<br>Myrothecium canker<br>(Myrothecium<br>roridum)<br>Plectosporium blight<br>(Plectosporium<br>tabacinum)<br>Powdery Mildew<br>(Sphaerotheca<br>fuliginea,<br>Erysiphe<br>cichoracearum)<br>Ulocladium leaf spot<br>(Ulocladium<br>cucurbitae) | 0.14-0.35<br>(0.10-0.25)                                  | 0.70-1.75                                    | Do not apply more than one<br>application of Heritage SC or<br>other Group 11 fungicides before<br>alternation with a fungicide that<br>is not in Group 11. Do not make<br>more than four (4) foliar<br>applications of Heritage SC or<br>other Group 11 fungicides per<br>crop per acre per year.<br>For both downy and powdery<br>mildew, make preventative<br>applications on a 5- to 7-day<br>schedule. For belly rot control,<br>make the first application at the<br>1- to 3-leaf crop stage with a<br>second application just prior to<br>vine tip over or 10-14 days later,<br>whichever occurs first. For all<br>other diseases, begin Heritage<br>SC applications prior to disease<br>development and continue<br>throughout plant production<br>every 7-14 days.<br>Applications may be made by<br>foliar sprays, including<br>chemigation.<br>An adjuvant may be added at<br>specified rates. However, do no<br>tank-mix Heritage SC with COC<br>MSO or silicon adjuvants.<br>Do not tank-mix Heritage SC<br>with malathion, methomyl,<br>chlorpyrifos, potassium laurate,<br>or dicloran. |

TABLE 32: Specific Use Directions for Cucurbit Plants

- Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.
- Do not apply within 1 day of harvest (1-day PHI).

| TABLE 33: Specific Use Directions for Herb and Spice Plants (except basil and |
|---|
| black pepper)   |

| Crop   | Target Diseases   | Use Rate<br>fl oz<br>product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>5,000 sq ft | Application<br>Instructions   |
|--|---|---|--|---|
| Herbs & Spices<br>Allspice; Angelica;<br>Anise (seed); Anise,<br>star; Annatto; Balm;<br>Borage; Burnet;<br>Camomile; Caper<br>(buds); Caraway;<br>Caraway, black;<br>Cardamom; Cassia<br>(buds); Catnip; Celery<br>seed; Chervil (dried);<br>Chive; Chive, Chinese;<br>Cinnamon; Clary;<br>Clove (buds);<br>Coriander (cilantro or<br>Chinese parsley) (leaf);<br>Coriander (seed);<br>Costmary; Culantro<br>(leaf and seed); Cumin;<br>Curry (leaf); Dill (seed);<br>Dillweed; Fennel,<br>common; Fennel,<br>Florence (seed);<br>Fenugreek; Grains of<br>paradise; Horehound;<br>Hyssop; Juniper<br>(berry); Lavender;<br>Lemongrass; Lovage<br>(leaf and seed); Mace;<br>Marigold; Marjoram;<br>Mustard (seed),<br>Nasturtium; Nutmeg;<br>Parsley (dried);<br>Pennyroyal; Pepper,<br>white; Poppy seed;<br>Rosemary; Rue;<br>Saffron; Sage; Savory,<br>summer and winter;<br>Sweet bay; Tansy;<br>Tarragon; Thyme;<br>Vanilla; Wintergreen;<br>Woodruff; Wormwood | Alternaria leafspot<br>( <i>Alternaria</i> spp.)<br>Corynespora<br><i>cassiicola</i> )<br>Downy mildew<br>(except Basil)<br>( <i>Plasmopara</i><br>spp.,<br><i>Peronospora</i><br>spp.)<br>Dill blight<br>( <i>Cercosporidium</i><br><i>punctum</i> )<br>Phoma blight<br>( <i>Passalora</i><br><i>puncta</i> )<br>Powdery mildew<br>( <i>Erysiphe</i> spp.,<br><i>Sphaerotheca</i><br>spp.) | 0.14-0.35<br>(0.10-0.25)                                  | 0.70-1.75                                    | Do not apply more than<br>two sequential<br>applications of Heritage<br>SC or other Group 11<br>fungicides before<br>alternation with a<br>fungicide that is not in<br>Group 11.<br>Begin Heritage SC<br>applications at the onset<br>of disease development<br>and continue throughout<br>plant production on a 7-<br>day schedule.<br>Applications may be<br>made by foliar sprays.<br>An adjuvant may be<br>added at specified<br>rates.<br>Use a minimum of 30<br>gallons of water per<br>acre. |

- Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products. May be applied the day of harvest (0-day PHI). •
- •
- Do not apply by aerial application. •

| Сгор  | Target<br>Diseases                         | Use Rate<br>fl oz product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz product/<br>5,000 sq ft | Application Instructions   |
|-------|--|--|---|--|
| Basil | Downy mildew<br>(Peronospora<br>belbahrii) | 0.35<br>(0.25)   | 1.75                                      | <ul> <li>Plug Production*: Apply to<br/>emerged plants in plug production<br/>trays prior to disease<br/>development. Apply uniformly to<br/>foliage using a minimum of 3.4<br/>gallons of water/5,000 sq ft (30<br/>gallons/A). Make no more than<br/>one application during the plug<br/>production phase. Follow the<br/>Heritage SC application with<br/>alternative chemistries on a<br/>weekly schedule, implementing a<br/>preventative integrated disease<br/>management program.</li> <li>Finish Production**: Apply to<br/>plants following transplant of<br/>plugs to trays, pots or containers<br/>in which plants are grown to<br/>finish. Apply uniformly to foliage<br/>using a minimum of 3.4 gallons of<br/>water/5,000 sq ft (30 gallons/A).<br/>Make no more than one<br/>application during the finish<br/>production phase. Follow the<br/>Heritage SC application with<br/>alternative chemistries on a<br/>weekly schedule, implementing a<br/>preventative integrated disease<br/>management program. For<br/>specific resistance management<br/>programs, contact your state<br/>Extension specialist.</li> </ul> |

 TABLE 34:
 Specific Use Directions for Basil Plants

- Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.
- May be applied the day of harvest (0-day PHI).

\* Plug production refers to the production of a young plant grown from seed in a multi-celled germination tray for a short period of time. After growing to a desired size, the plug is then transplanted in a larger pot or container to grow to a larger size suitable to sell.

\*\* Finish production refers to the production of a finished plant grown to a desired size suitable to sell in a garden center, large format retailer, or other retailers selling plants to consumers for home and garden plantings.

| Crop  | Target Diseases  | Use Rate<br>fl oz product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>5,000 sq ft | Application Instructions   |
|---|--|--|--|--|
| Leafy<br>Vegetables<br>(except<br>Brassica)<br>Amaranth<br>Arugula<br>Cardoon<br>Celery<br>Celtuce<br>Chervil<br>Chrysanthemum,<br>edible<br>Coriander,<br>leaves<br>(Cilantro)<br>Corn salad<br>Cress<br>Dandelion<br>Dock | Foliar Diseases<br>Alternaria leaf spot<br>(Alternaria sonchi,<br>A. spp.)<br>Anthracnose<br>(Microdochium<br>panattonianum,<br>Colletotrichum<br>dematium)<br>Cercospora leaf<br>spot<br>(Cercospora spp.)<br>Septoria leaf spot<br>(Septoria<br>petroselini)<br>White rust<br>(Albugo<br>occidentalis) | 0.14-0.35<br>(0.10-0.25)                               | 0.70-1.75                                    | Do not apply more than one<br>application of Heritage SC<br>or other Group 11<br>fungicides before alternation<br>with a fungicide that is not in<br>Group 11.<br>For both downy and<br>powdery mildew, make<br>preventative applications on<br>a 5- to 7-day schedule. For<br>all other diseases, begin<br>Heritage SC applications<br>prior to disease<br>development and continue<br>throughout plant production<br>every 7-14 days.  |
| Endive<br>Endive<br>Fennel<br>Lettuce, head<br>and leaf<br>Orach<br>Parsley<br>Purslane<br>Radicchio<br>Rhubarb<br>Spinach<br>Swiss Chard<br>including<br>cultivars and/or<br>hybrids of these                              | Downy mildew<br>( <i>Bremia lactucae</i> )<br>Powdery mildew<br>( <i>Eyrisiphe</i><br><i>cichoracearum</i> )   | 0.28-0.35<br>(0.20-0.25)                               | 1.40-1.75                                    | by foliar sprays including<br>chemigation. An adjuvant<br>may be added at specified<br>rates.<br><b>ATTENTION:</b> Applications<br>of Heritage SC to leafy<br>vegetable foliage have<br>contributed to phytotoxicity<br>under certain<br>circumstances. Proceed<br>with caution with regard to<br>tank mixes and adjuvants<br>when treating all leafy<br>vegetables with Heritage<br>SC. Heritage SC must NOT<br>be tank-mixed on leaf<br>lettuce with permethrin (e.g.,<br>Pounce <sup>®</sup> 25 WP), aluminum<br>tris (e.g., Aliette <sup>®</sup> WDG),<br>lambda-cyhalothrin (e.g.,<br>Warrior II with Zeon<br>Technology <sup>®</sup> ), or another<br>product that may increase<br>the penetration of Heritage<br>SC into the leaf surface,<br>including silicone wetters. |

# TABLE 35: Specific Use Directions for Leafy Vegetable Plants (except Brassica)

- Do not apply more than 1.5 lb ai/A per year of azoxystrobin-containing products.
- May be applied the day of harvest (0-day PHI).

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| Сгор            | Target Diseases  | Use Rate<br>fl oz<br>product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>5,000 sq ft | Application Instructions   |
|-----------------|--|---|--|--|
| Mint<br>(Fresh) | Powdery mildew<br>( <i>Erysiphe</i> spp.)<br>Rust<br>( <i>Puccinia</i><br><i>menthae</i> ) | 0.14-0.35<br>(0.1-0.25)                                   | 0.70-1.75                                    | Do not apply more than two<br>sequential applications of Heritage<br>SC or other Group 11 fungicides<br>before alternation with a fungicide<br>that is not in Group 11.<br>Begin Heritage SC applications prior<br>to disease development and<br>continue throughout plant production<br>on a 7- to 10-day schedule.<br>Applications may be made by foliar<br>sprays including chemigation.<br>An adjuvant may be added at<br>specified rates. |

## **TABLE 36:** Specific Use Directions for Mint Plants

Specific Use Restrictions:

• Do not apply more than 0.75 lb ai/A per year of azoxystrobin-containing products.

• For fresh mint, may be applied the day of harvest (0-day PHI).

| Plants (except Cucurbits and Tomatoes) | TABLE 37: Specific Use Directions for Pepper and Other Fruiting Vegetable | Э |  |  |  |  |
|--|---|---|--|--|--|--|
|  | Plants (except Cucurbits and Tomatoes)                                    |   |  |  |  |  |

| Сгор  | Target Diseases   | Use Rate<br>fl oz<br>product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>5,000 sq ft | Application Instructions   |
|---|---|---|--|--|
| Peppers and other Fruiting Vegetables                             | Anthracnose<br>( <i>Colletotrichum</i><br>spp.)<br>Cercospora leaf                      | 0.14-0.35<br>(0.10-0.25)                                  | 0.70-1.75                                    | Follow the resistance<br>management guidelines in the<br><b>Resistance Management</b><br>section. Do not apply more than                     |
| Bell Pepper<br>Non-Bell<br>Pepper<br>Sweet Non-<br>Bell           | spot<br>( <i>Cercospora</i><br><i>capsici</i> )<br>Downy mildew<br>( <i>Peronospora</i> |   |  | one application of Heritage SC or<br>other Group 11 fungicides before<br>alternation with a fungicide that is<br>not in Group 11.            |
| Pepper<br>Eggplant<br>Groundcherry<br>Okra<br>Pepino<br>Tomatillo | tabacini)<br>Powdery mildew<br>(Sphaerotheca<br>spp.)                                   |   |  | Begin Heritage SC applications<br>prior to disease development and<br>continue throughout plant<br>production on a 7- to 14-day<br>schedule. |
| See specific<br>directions for<br>use for                         |   |   |  | Applications may be made by foliar sprays including chemigation.   |
| Tomatoes.   |   |   |  | An adjuvant may be added at specified rates.   |

• Do not apply more than 1.0 lb ai/A per year of azoxystrobin-containing products.

| Сгор     | Target Diseases   | Use Rate<br>fl oz product/<br>1,000 sq ft<br>(Ib ai/A) | Use Rate<br>fl oz<br>product/<br>5,000 sq ft | Application Instructions   |
|----------|---|--|--|--|
| Tomatoes | Anthracnose<br>(Colletotrichum<br>coccodes)<br>Black Mold<br>(Alternaria<br>alternata)<br>Buckeye Rot<br>(Phytophthora<br>spp.)<br>Early Blight<br>(Alternaria solani)<br>Powdery Mildew<br>(Oidiopsis sicula)<br>Septoria Leaf spot<br>(Septoria<br>lycopersici)<br>Target spot<br>(Corynespora<br>cassiicola) | 0.11-0.14<br>(0.08-0.10)                               | 0.55-0.70                                    | Do not apply more than one<br>application of Heritage SC or<br>other Group 11 fungicides<br>before alternation with a<br>fungicide that is not in Group 11.<br>Begin Heritage SC applications<br>prior to disease development<br>and continue throughout plant<br>production. For late blight, apply<br>Heritage SC at 5- to 7-day<br>intervals. For all other tomato<br>diseases, apply Heritage SC on<br>7- to 21-day intervals.<br>Applications may be made by<br>foliar sprays including<br>chemigation.   |
|          | Late Blight<br>( <i>Phytophthora</i><br><i>infestans</i> )  | 0.14<br>(0.10)   | 0.70   | Under certain environmental<br>conditions (particularly high<br>temperatures), Heritage SC in<br>combination with high rates of<br>silicone-containing or oil-<br>containing (petroleum or crop)<br>additives or adjuvants may<br>cause injury. <b>Do not</b> exceed<br>0.125% adjuvant (v/v). Consult<br>a Syngenta representative for<br>more information concerning<br>additives or adjuvants.<br>A tank mixture with Dimethoate<br>may cause crop injury.<br>Do not use adjuvants or tank mix<br>Heritage SC with any<br>emulsifiable concentrate (EC)<br>product. |

**TABLE 38: Specific Use Directions for Tomato Plants** 

- Do not apply Heritage SC until 35 days after seeding or 21 days after transplanting plugs to larger pots or containers.
- Do not apply more than 0.6 lb ai/A per year of azoxystrobin-containing products.
- May be applied the day of harvest (0-day PHI).

STORAGE AND DISPOSAL

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

## Storage

Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop up and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

## **Pesticide Disposal**

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 by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative of the nearest EPA Regional Office for guidance.

## Container Handling [less than or equal to 5 gallons]

**Non-refillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration, or by other procedures approved by state and local authorities.

#### Container Handling [greater than 5 gallons non-refillable container]

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

# Container Handling [greater than 5 gallons refillable container]

**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 person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with

the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

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

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