

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

June 15, 2016

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Subject: Label Amendment – Making minor label changes to clarify directions, and for

consistency of wording in the Specific Use Directions

Product Name: Elatus Fungicide EPA Registration Number: 100-1480

Application Date: 3/14/2016 Decision Number: 515171

#### Dear Adora Clark:

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.

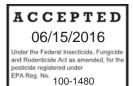
Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded 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.

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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 with FIFRA section 6. If you have any questions, please contact Nathan Mellor by phone at 703-347-8562, or via email at mellor.nathan@epa.gov.

Shaja B. Joyner, Product Manager 20

Fungicide-Herbicide Branch Registration Division 7505P



# GROUP 11 7 FUNGICIDES

# **Elatus® Fungicide**

 Active Ingredients:
 30.0%

 Azoxystrobin\*
 30.0%

 Benzovindiflupyr\*\*
 15.0%

 Other Ingredients:
 55.0%

 Total:
 100.0%

\*CAS No. 131860-33-8 \*\*CAS No. 1072957-71-1

Contains 30% of azoxystrobin active ingredient (0.30 lb) and 15% lb of benzovindiflupyr active ingredient (0.15 lb) per pound

#### KEEP OUT OF REACH OF CHILDREN.

# **CAUTION**

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1480

EPA Est.

18 pounds 882 pounds (400 kg) \_\_\_\_\_ pounds Net Weight

|  | FIRST AID  |  |  |  |  |
|--|--|--|--|--|--|
| If swallowed   | Call a poison control center or doctor immediately for treatment advice.   |  |  |  |  |
|  | Have person sip a glass of water if able to swallow.   |  |  |  |  |
|  | <ul> <li>Do not induce vomiting unless told to by a poison control center<br/>or doctor.</li> </ul>  |  |  |  |  |
|  | Do not give anything to an unconscious person.   |  |  |  |  |
| If in eyes   | <ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>  |  |  |  |  |
|  | <ul> <li>Remove contact lenses, if present, after the first 5 minutes, then<br/>continue rinsing eye.</li> </ul>                                       |  |  |  |  |
|  | Call a poison control center or doctor for treatment advice.   |  |  |  |  |
| 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.  |  |  |  |  |
|  | <ul> <li>If person is not breathing, call 911 or an ambulance, then give<br/>artificial respiration, preferably mouth-to-mouth if possible.</li> </ul> |  |  |  |  |
|  | <ul> <li>Call a poison control center or doctor for further treatment<br/>advice.</li> </ul>   |  |  |  |  |
| Have the product   | t container or label with you when calling a poison control center or  |  |  |  |  |
| 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 or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing.

# **Personal Protective Equipment (PPE)**

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

• Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or Viton®.

### **User Safety Requirements**

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

## **Engineering Control Statement**

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

# User Safety Recommendations Users should:

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

#### **Environmental Hazards**

Benzovindiflupyr and azoxystrobin are toxic to fish and aquatic invertebrates. Benzovindiflupyr is toxic to mammals. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated area.

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

The active ingredients in this product can be persistent for several months or longer.

#### **Ground Water Advisory**

Azoxystrobin has degradation products which have properties and characteristics associated with chemicals detected in ground water. 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 or irrigation water. This is especially true for poorly draining soils and soils with shallow ground water. A 15-foot level 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 benzovindiflupyr and azoxystrobin from runoff water and sediment. Do not cultivate within 15 feet of the aquatic areas to allow growth of a vegetative filter strip. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

### 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.

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 USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry 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 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof materials
- Shoes plus socks

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

#### PRODUCT INFORMATION

Elatus Fungicide is a broad-spectrum product containing two fungicides. It has preventive, systemic and curative properties and is recommended for the control of many important plant diseases. Elatus Fungicide provides excellent disease control of many leaf spots and powdery mildews. Elatus Fungicide is applied as a foliar spray and can be used in block, alternating spray or tank-mix programs with other crop protection products. All applications should be made according to the use directions that follow.

#### **ATTENTION**

Elatus Fungicide is extremely phytotoxic to certain apple varieties.

AVOID SPRAY DRIFT. Extreme care must be used to prevent injury to apple trees (and apple fruit).

DO NOT spray Elatus Fungicide where spray drift may reach apple trees.

DO NOT tank mix with undiluted fertilizer. Dilute the suspension fertilizer to 50% with water (1:1 fertilizer to water ratio) before mixing with Elatus Fungicide.

DO NOT apply to greenhouse tomatoes.

DO NOT spray when conditions favor drift beyond area intended for application. Conditions which may contribute to drift include thermal inversion, wind speed and direction, sprayer nozzle/pressure combinations, spray droplet size, etc. Contact your State Extension Agent for spray drift prevention guidelines in your area.

DO NOT use spray equipment which has been previously used to apply Elatus Fungicide to spray apple trees. Even trace amounts can cause unacceptable phytotoxicity to certain apple and crabapple varieties.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

#### **USE INFORMATION**

**Application:** Thorough coverage is necessary to provide good disease control. Make no more spray solution than is needed for application. Avoid spray overlap, as crop injury may occur.

**Adjuvants:** When an adjuvant is to be used with this product, Syngenta recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

**Use of Adjuvants:** Under certain weather conditions (particularly high temperatures), Elatus Fungicide in combination with high rates of silicone-based or oil containing (petroleum or crop) additives or adjuvants may cause injury. Do not exceed 0.125% adjuvant (v/v). Consult a Syngenta representative for more information concerning additives or adjuvants.

A tank mixture with Dimethoate may cause crop injury.

On fresh market tomatoes, do not use adjuvants or tank mix Elatus Fungicide with any EC product.

**Efficacy:** Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if the maximum amount of Elatus Fungicide has been used. If resistant isolates to Group 7 or Group 11 fungicides are present, efficacy can be reduced for certain diseases. The higher rates in the rate range and/or shorter spray intervals may be required under conditions of heavy infection pressure, with highly susceptible varieties, or when environmental conditions are conducive to disease.

**Integrated Pest Management (IPM):** Elatus Fungicide should be integrated into an overall disease and pest management strategy whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. Consult your local agricultural authorities for additional IPM strategies established for your area. Elatus Fungicide may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

#### **Resistance Management**

## GROUP 11 7 FUNGICIDES

Elatus Fungicide contains two fungicides - azoxystrobin, a strobilurin fungicide in Group 11 and benzovindiflupyr, a succinate dehydrogenase inhibitor (SDHI) in Group 7. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. Consult your local or state agricultural authorities for resistance management strategies that are complementary to those in this label. Resistance management strategies may include rotating and/or tank mixing with products having different modes of action or limiting the total number of applications per season. Syngenta encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label. Elatus Fungicide should not be alternated or tank mixed with any fungicide to which resistance has already developed.

As part of a resistance management strategy:

- Apply no more than 2 sequential applications unless otherwise stated in the crop section.
- When tank mixing or alternating, use an effective partner one that provides satisfactory disease control when used alone at the mixture rate.
- Apply early to keep fungal populations low.
- Incorporate integrated pest management (IPM) practices into your program which can help reduce disease development and spread.

**Rotational Crops:** Please see the following table for the crop rotational restrictions:

| Rotational Crops                             | Planting Time From Last Elatus Fungicide Application |
|--|--|
| Canola                                       |  |
| Cereals (wheat, barley, triticale, rye, oat) |  |
| Corn   |  |
| Corn, Sweet                                  |  |
| Cotton                                       |  |
| Cucurbits vegetables                         |  |
| Legumes, dry, subgroup 6C                    | 0 days   |
| Fruiting vegetables                          |  |
| Peanuts                                      |  |
| Potatoes                                     |  |
| Soybean                                      |  |
| Tomatoes                                     |  |
| Tuberous and corm vegetable subgroup         |  |
| Buckwheat and Millet                         | 360 days   |
| All other crops Intended for Food and Feed   | 180 days   |

**Crop Tolerance:** Plant tolerance has been found to be acceptable for all crops on the label, however, not all possible tank-mix combinations have been tested under all conditions. When possible, it is recommended to test the combinations on a small portion of the crop to ensure that a phytotoxic response will not occur as a result of application. See precautions regarding apple phytotoxicity.

**Greenhouse Use:** To help manage fungicide resistance, do not use Elatus Fungicide for commercial transplant production. Do not apply to greenhouse tomatoes.

**Spray Drift Management:** To avoid spray drift, do not apply when conditions favor drift beyond the target area. The interaction of many equipment- and weather-related factors determines the potential for spray drift. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

#### MIXING AND APPLICATION METHODS

# **Spray Equipment**

#### Nozzles

- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles should be the same size and uniformly spaced across the boom.
- Calibrate sprayer before use.
- It is suggested that screens be used to protect the pump and to prevent nozzles from clogging.

- Screens placed on suction side of pump should be 16-mesh or coarser.
- Do not place a screen in the recirculation line.
- Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles.
- Check nozzle manufacturer's recommendations.

#### **Pump**

- Use a pump with capacity to:
  - (1) Maintain 35-40 psi at nozzles.
  - (2) Provide sufficient agitation in tank to keep mixture in suspension this requires recirculation of 10% of tank volume per minute.
- Use a jet agitator or liquid sparge tube for agitation.
- Do not air sparge.

For more information on spray equipment and calibration, consult sprayer manufacturer's and state recommendations. For specific local directions and spray schedules, consult the current state agricultural recommendations.

# **Mixing Instructions**

- Elatus Fungicide is a wettable granule (WG) formulation.
- Do not tank mix with undiluted fertilizer. Dilute the suspension fertilizer to 50% with water (1:1 fertilizer to water ratio) before mixing with Elatus Fungicide.
- 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 pesticide rinsate by application to an already treated area.

#### **Elatus Fungicide Alone (No Tank Mix)**

- Add ½-¾ of the required amount of water to the spray or mixing tank.
- With the agitator running, add Elatus Fungicide to the tank.
- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after Elatus Fungicide has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

**Elatus Fungicide + Tank Mixtures:** Elatus Fungicide is usually compatible with all tank-mix partners listed on this label. Do not mix with undiluted fertilizer. To determine the physical compatibility of Elatus Fungicide with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 qt 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 proven, use the same procedure for adding required ingredients to the spray tank.

Tank Mixtures: All directions for use, crops/sites, use rates, dilution rates, precautions, and limitations which appear on the tank-mix product label must be observed. The label dosage for the tank-mix partner is not to be exceeded, and the most restrictive label precautions and limitations are to be followed.

## Mixing in the Spray Tank

- DO NOT tank mix with undiluted fertilizer. Dilute the suspension fertilizer to 50% with water (1:1 fertilizer to water ratio) before mixing with Elatus Fungicide.
- 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 Elatus Fungicide to the spray tank.
- Allow Elatus Fungicide to completely disperse.
- Spray the mixture with the agitator running.

### **Application Instructions**

Elatus Fungicide may be applied with all types of spray equipment commonly used for making ground and aerial applications. Proper adjustments and calibration of spraying equipment to give good canopy penetration and coverage is essential for good disease control.

#### **Ground Application – Broadcast Spray**

- Apply in a minimum of 10 gallons of water per acre, unless specified otherwise.
- Do not apply through any ultra-low volume (ULV) spray system.
- Thorough coverage is necessary to provide good disease control.

#### **Ground Application – In-Furrow or Banded Application**

• To calculate the total ounces per acre when the rate is given as oz product per 1000 linear feet, use the following equation:

| 43,560 ft <sup>2</sup><br>Acre | divided by row width | (ft) | = the number of              | linear feet<br>Acre         |
|--------------------------------|----------------------|------|------------------------------|-----------------------------|
| Linear feet<br>Acre            | divided by 1000 ft   | Χ    | oz product<br>1000 linear ft | = <u>oz product</u><br>Acre |

• Refer to directions in crop sections for gallons per acre and timing.

## **Ground Application Precautions**

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH PONDS.

- Do not apply within 15 ft of bodies of water such as lakes, reservoirs, rivers, permanent streams, natural ponds, marshes or estuaries.
- Shut off the sprayer when row ends.
- Do not cultivate within 15 ft of aquatic areas in order to allow growth of a vegetative filter strip.
- Do not apply when weather conditions favor drift to aquatic areas. Do not apply when gusts or sustained winds exceed 10 mph.
- Do not apply during a temperature inversion. Mist or fog may indicate the presence of an inversion in humid areas.
- For perennial crops such as blueberries and grapes: Spray last three rows
  windward of aquatic areas using nozzles on one side only, with spray directed away
  from aquatic areas. Adjust or turn off top nozzles to prevent spray going over the
  tops of plants. Shut off nozzles on the side away from the field/vineyard when
  spraying the outside row. Shut off nozzles when turning at ends of row or passing
  gaps in the rows.

### **Aerial Application**

- Use only on crops where aerial applications are indicated.
- Thorough coverage is necessary to provide good disease control.
- Apply in a minimum of 2 gallons of water per acre unless specified otherwise.
- Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.
- Do not apply directly to humans or animals.
- Do not apply through any ultra-low volume (ULV) spray system.

#### **Aerial Spray Precautions**

Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish ponds.

- Do not apply by air within 150 ft of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish ponds.
- For aerial applications, mount the spray boom on the aircraft so as to minimize the drift caused by wing tip vortices. Use the minimum practical boom length, which must not exceed 75% of wing span or rotor diameter.

- Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orientating nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Release spray at the lowest height consistent with pest control and flight safety. Do not make applications more than 10 feet above the crop canopy.
- Risk of exposure to aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
- Do not apply when weather conditions favor drift to aquatic areas. Do not apply when gusts or sustained winds exceed 10 mph.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic area. Avoid spraying during conditions of low humidity and/or high temperatures.
- Do not apply during a temperature inversion. Mist or fog may indicate the presence of an inversion in humid areas.

#### **ATTENTION**

Elatus Fungicide is extremely phytotoxic to certain apple varieties.

AVOID SPRAY DRIFT. Extreme care must be used to prevent injury to apple trees (and apple fruit).

DO NOT spray Elatus Fungicide where spray drift may reach apple trees.

DO NOT spray when conditions favor drift beyond area intended for application. Conditions which may contribute to drift include thermal inversion, wind speed and direction, sprayer nozzle/pressure combinations, spray droplet size, etc. Contact your State Extension Agent for spray drift prevention guidelines in your area.

DO NOT use spray equipment which has been previously used to apply Elatus Fungicide to spray apple trees. Even trace amounts can cause unacceptable phytotoxicity to certain apple and crabapple varieties.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

## **Application Through Irrigation Systems (Chemigation)**

- Use only on crops where chemigation is specified on this label.
- Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of the product in water.
- Apply in 0.1-0.25 inches/acre. Excessive water may reduce efficacy.

- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
- 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.
- 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.

## **Operating Instructions**

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

#### **Center Pivot Irrigation Equipment**

**Notes:** (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating Elatus Fungicide through center pivot systems because of non-uniform application.

Determine the size of the area to be treated.

- Determine the time required to apply ½-½ inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying Elatus Fungicide through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80-95% of the manufacturer's rated capacity.
- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Elatus Fungicide required to treat the area covered by the irrigation system.
- Add the required amount of Elatus Fungicide and sufficient water to meet the injection time requirements to the solution tank.
- Make sure the system is fully charged with water before starting injection of the Elatus Fungicide solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the Elatus Fungicide solution has cleared the sprinkler head.

### Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

- Determine the acreage covered by the sprinklers.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20- to 30-minute interval. When applying Elatus Fungicide through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of Elatus Fungicide required to treat the area covered by the irrigation system.
- Add the required amount of Elatus Fungicide into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Stop injection equipment after treatment is completed. Continue to operate the system until the Elatus Fungicide solution has cleared the last sprinkler head.

#### 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 shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

- 3. The pesticide injection pipeline must contain a functional, automatic, quickclosing 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.

# **Overview of Key Information**

| On  | Maximum Product Rate/A/ Application | Maximum<br>Total | Pre-Harvest<br>Interval (PHI) | Minimum<br>Re-Treatment |
|---|-------------------------------------|------------------|-------------------------------|-------------------------|
| Crop*   | (oz/A)                              | oz/A/Year        | (days)                        | Interval (days)         |
| Blueberries (lowbush only)  | 7.3                                 | 7.3              | 365                           | 10                      |
| Rapeseed Subgroup 20A (Canola)                                    | 7.3                                 | 7.3              | 30                            | na                      |
| Cereals   | 4.9                                 | 9.8              | Feekes 10.5.4                 | 14                      |
| Corn  | 4.9                                 | 9.8              | 7                             | 14                      |
| Corn, sweet   | 7.3                                 | 14.6             | 7                             | 14                      |
| Cottonseed Subgroup 20 (Cotton)                                   | 7.3                                 | 14.6             | 45                            | 14                      |
| Cucurbit Vegetables Crop<br>Group 9                               | 7.3                                 | 29.2             | 1                             | 7                       |
| Fruiting Vegetable Crop<br>Group 8-10<br>(tomatoes/peppers)       | 7.3                                 | 29.2             | 0                             | 7                       |
| Grape and Small Fruit<br>Vine Climbing (Subgroup<br>13-07F)       | 7.3                                 | 21.9             | 21                            | 14                      |
| Pea and Bean, Dried<br>Shelled, Except Soybean,<br>Subgroup (6C)  | 6                                   | 12               | 14                            | 14                      |
| Peanuts   | 9.5<br>7.3                          | 21.9             | 30                            | 21<br>14                |
| Potatoes  | 9.5 (in-furrow)                     | 10               | na                            | na                      |
| Soybean (forage, hay, hulls, and seed)                            | 4.9                                 | 9.8              | 14                            | 14                      |
| Vegetables, Tuberous<br>and Corm Subgroup 1C<br>(except potatoes) | 7.3                                 | 14.6             | 14                            | 14                      |

<sup>\*</sup>For specific crops in a group and use directions, refer to the Specific Directions for Use.

For best performance, the addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oil concentrate (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended unless otherwise stated in the specific crop section.

For resistance management, make no more than two sequential applications of a Group 7 fungicide unless otherwise specified in the Directions for Use.

#### SPECIFIC DIRECTIONS FOR USE

|                |   | Use Rate Oz |   |
|----------------|---|-------------|---|
| Crop           | Target Diseases                               | Product/A   | Remarks   |
| Blueberries    | Septoria leaf spot                            | 7.3         | Apply only in the non-cropping year of  |
| (lowbush only) | (Septoria spp.) Leaf rust (Thekopsora minima) |             | production (i.e. vegetative or sprout phase of production). Apply at first sign of diseases.    |
|                |   |             | Optional language if label has a rate range: If disease pressure is high, use the highest rate. |

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Elatus Fungicide can be applied by ground or air.

- 1) Do not apply more than 7.3 fl oz/A/year of Elatus Fungicide.
- 2) Do not apply more than 0.068 lb ai/A/year of benzovindiflupyr-containing products.
- 3) Do not apply more than 0.75 lb ai/A/year of azoxystrobin-containing products.
- 4) Do not apply within 1 year of harvest (365 day PHI).

| -              |                        | Use Rate     |  |
|----------------|------------------------|--------------|--|
|                |                        | Oz product/A |  |
| Crop           | Target Diseases        | (lb ai/A)    | Remarks                                    |
| Rapeseed       | Alternaria black spot  | 7.3          | For Phoma control, apply during the        |
| Subgroup       | (Alternaria brassicae) |              | rosette stage between 2nd true leaf and    |
| 20A (Canola)   | Black leg/Phoma        |              | bolting.                                   |
|                | (Leptosphaeria         |              |  |
| For listing of | maculans)              |              | For Alternaria, make an application at     |
| crops in this  | Cercospora leaf spot   |              | the end of flowering/early pod set. For    |
| group, see     | (C. brassicicola)      |              | other foliar diseases, apply at first sign |
| below          | Head rot               |              | of disease.                                |
|                | (Rhizoctonia solani)   |              |  |
|                | Leaf spot and pod rot  |              | For head rot, apply at 50% flowering.      |
|                | (Alternaria alternata) |              |  |
|                | Powdery mildew         |              | Make no more than one Elatus               |
|                | (Erysiphe polygoni)    |              | Fungicide application per year.            |
|                | Suppression of:        |              | T 180 6 8 6                                |
|                | Southern blight        |              | The addition of a spreading/penetrating    |
|                | (Sclerotium rolfsii)   |              | type adjuvant such as organo-silicon       |
|                |                        |              | blends with either non-ionic surfactants   |
|                |                        |              | (NIS) or vegetable based crop oils         |
|                |                        |              | (COC); or vegetable based COC (not         |
|                |                        |              | mineral); or NIS with at least 90%         |
|                |                        |              | concentration is recommended.              |

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Elatus Fungicide can be applied by ground, air, or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

**Complete list of Oilseed subgroup 20A:** Borage, crambe, cuphea, echium, flax seed, gold of pleasure, hare's ear mustard, lesquerella, lunaria, meadowfoam, milkweed, mustard seed, oil radish, poppy seed, rapeseed, sesame, sweet rocket and cultivars and/or hybrids of these

- 1) Do not apply more than 7.3 oz/A/year of Elatus Fungicide.
- 2) Do not apply more than 0.068 lb ai/A/year of benzovindiflupyr-containing products.
- 3) Do not apply more than 0.045 lb ai/A/year of azoxystrobin-containing products.
- 4) Do not apply within 30 days of harvest (30 day PHI).

|           |                                   | Use Rate  |   |
|-----------|-----------------------------------|-----------|---|
|           |                                   | Oz        |   |
| Crop      | Target Diseases                   | Product/A | Remarks   |
| Cereals   | Leaf Rust                         | 4.9       | Apply Elatus Fungicide prior to disease development.  |
|           | (Puccinia recondita               |           | Make applications no closer than 14 days apart.       |
| Wheat     | f.sp. tritici)                    |           |   |
| Barley    | Stripe Rust                       |           | Apply 4.9 oz/A in the spring for suppression of early |
| Oats      | (P. striiformis)                  |           | season diseases.                                      |
| Triticale | Stem Rust                         |           |   |
| Rye       | (P. graminis)                     |           | For disease control on the flag leaf, apply 4.9 oz/A  |
|           | Crown Rust ( <i>P. coronata</i> ) |           | from Feekes 8 - 10.5 (Zadok's 59).                    |
|           | Septoria Leaf and                 |           | The addition of a spreading/penetrating type adjuvant |
|           | Glume Blotch                      |           | such as organo-silicon blends with either non-ionic   |
|           | (Septoria spp.                    |           | surfactants (NIS) or vegetable based crop oils        |
|           | Stagonospora                      |           | (COC); or vegetable based COC (not mineral); or       |
|           | nodorum)                          |           | NIS with at least 90% concentration is                |
|           | Tan Spot                          |           | recommended.  |
|           | (Pyrenophora tritici-             |           |   |
|           | repentis)                         |           |   |
|           | Net Blotch                        |           |   |
|           | (Pyrenophora teres)               |           |   |
|           | Powdery Mildew                    |           |   |
|           | (Blumeria spp.)                   |           |   |
|           | Barley scald                      |           |   |
|           | (Rhynchosporium                   |           |   |
|           | secalis)                          |           |   |
|           | Spot Blotch                       |           |   |
|           | (Cochliobolus sativus)            |           |   |
|           | Black point                       |           |   |
|           | (C. sativus, Alternaria           |           |   |
|           | spp.) Helminthosporium leaf       |           |   |
|           | •                                 |           |   |
|           | spot (Dreschlera avenae)          |           |   |
| -         | (Diescrilera averlae)             |           |   |

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Elatus Fungicide can be applied by ground, air, or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 9.8 oz/A/year of Elatus Fungicide.
- 2) Do not apply more than 0.092 lb ai/A/year of benzovindiflupyr-containing products.
- 3) Do not apply more than 0.4 lb ai/A/year of azoxystrobin-containing products.
- 4) Do not apply within 7 days of harvest for forage and hay (7 day PHI).
- 5) Do not apply after Feekes 10.5 (full flower).

|                |  | Use Rate        |  |
|----------------|--|-----------------|--|
| Crop           | Target Diseases                        | Oz<br>Product/A | Remarks  |
| Corn           | Anthracnose leaf blight                | 4.9             | Begin applications prior to disease onset when   |
|                | (Colletotrichum                        |                 | conditions are conducive for disease. Apply Elatus   |
| Field          | graminicola)                           |                 | Fungicide no closer than 14 days apart.  |
| Popcorn        | Gray leaf spot                         |                 | For registance management, make no mare than 2   |
| including      | (Cercospora sorghi) Northern corn leaf |                 | For resistance management, make no more than 2 applications before alternating to a non-Group 7 or |
| cultivars,     | blight                                 |                 | Group 11 fungicide.  |
| varieties,     | (Setosphaeria turcica)                 |                 | Croup i i idiigicide.  |
| and/or hybrids | Northern corn leaf spot                |                 | The addition of a spreading/penetrating type adjuvant  |
| of these and   | (Cochliobolus                          |                 | such as organo-silicon blends with either non-ionic  |
| others in this | carbonum)                              |                 | surfactants (NIS) or vegetable based crop oils   |
| group          | Rust, common                           |                 | (COC); or vegetable based COC (not mineral); or  |
|                | (Puccinia sorghi)                      |                 | NIS with at least 90% concentration is   |
|                | Rust, Southern                         |                 | recommended.   |
|                | (P. polysora)                          |                 |  |
|                | Southern corn leaf                     |                 |  |
|                | blight (Cochliobolus                   |                 |  |
|                | heterostrophus)                        |                 |  |
|                | Eye spot                               |                 |  |
|                | (Aureobasidium zeae)                   |                 |  |
|                | Physoderma brown                       |                 |  |
|                | spot                                   |                 |  |
|                | (P. maydis)                            |                 |  |
|                | Yellow Leaf Blight                     |                 |  |
| Annlingtion -  | (Phyllosticta maydis)                  |                 | and he would be seen in the left   |

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. In field corn, Elatus Fungicide can be applied by ground, air, or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy. For sweet corn, apply by ground or chemigation only.

- 1) Do not apply more than 9.8 oz/A/year of Elatus Fungicide per year.
- 2) Do not apply more than 0.092 lb ai/A/year of benzovindiflupyr-containing products.
- 3) Do not apply more than 2.0 lb ai/A/year of azoxystrobin-containing products.
- 4) Do not apply within 7 days of harvest (7-day PHI).

|             |   | Use Rate        |   |
|-------------|---|-----------------|---|
| Crop        | Target Diseases   | Oz<br>Product/A | Remarks   |
| Corn, sweet | Anthracnose leaf blight (Colletotrichum graminicola) Gray leaf spot (Cercospora sorghi) Northern corn leaf blight (Setosphaeria turcica) Northern corn leaf spot (Cochliobolus carbonum) Rust, common (Puccinia sorghi) Rust, Southern (P. polysora) Southern corn leaf blight (Cochliobolus heterostrophus) Eye spot (Aureobasidium zeae) Physoderma brown spot (P. maydis) Yellow Leaf Blight (Phyllosticta maydis) | 5 - 7.3         | Begin applications prior to disease onset when conditions are conducive for disease. Apply Elatus Fungicide no closer than 14 days apart.  For resistance management, make no more than 2 applications before alternating to a non-Group 7 or Group 11 fungicide.  The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended. |

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. In field corn, Elatus Fungicide can be applied by ground or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 14.6 oz/A/year of Elatus Fungicide.
- 2) Do not apply more than 0.136 lb ai/A/year of benzovindiflupyr-containing products.
- 3) Do not apply more than 2.0 lb ai/A/year of azoxystrobin-containing products.
- 4) Do not apply within 7 days of harvest (7-day PHI).

|                                       |  | Use Rate  |   |
|---------------------------------------|--|-----------|---|
|                                       |  | Oz        |   |
| Crop                                  | Target Diseases  | Product/A | Remarks   |
| Cottonseed<br>Subgroup 20<br>(Cotton) | Ascochyta blight (A. gossypii) Rust (Puccinia schedonnardi) (P. cacabata) Rhizoctonia leaf, stem diseases (R. solani) Target spot (Corynespora cassiicola) | 5 – 7.3   | For postemergent protection of Rhizoctonia damping off, apply Elatus Fungicide in a 3-7 inch band over the top of the plant.  For foliar diseases, make an application at the onset of disease or when conditions are conducive for disease. Do not apply closer than a 14-day interval.  For resistance management, make no more than 2 applications before alternating to a non-Group 7 or Group 11 fungicide.  The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.  Optional language if label has a rate range: If disease pressure is high, use the highest rate. |

Application: For best results, sufficient water volume must be used to provide thorough coverage. Elatus Fungicide can be applied by ground, air, or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 14.6 oz/A/year of Elatus Fungicide.
- 2) Do not apply more than 0.136 lb ai/A/year of benzovindiflupyr-containing products.
  3) Do not apply more than 0.44 lb ai/A/year of azoxystrobin-containing products.
- 4) Do not apply within 45 days of harvest (45-day PHI).

|                |                              | Use Rate  |   |
|----------------|------------------------------|-----------|---|
|                |                              | Oz        |   |
| Crop           | Target Diseases              | Product/A | Remarks   |
| Cucurbit       | Alternaria Leaf Blight       | 5 – 7.3   | Begin applications prior to disease onset when                          |
| Vegetables     | (A. cucumerina)              |           | conditions are conducive for disease. Apply Elatus                      |
| Crop Group     | Alternaria Leaf Spot         |           | Fungicide on a 7- to 14-day schedule.                                   |
| 9:             | (A. alternata)               |           |   |
|                | Anthracnose                  |           | For belly rot control, the first application should be                  |
| For listing of | (Colletotrichum              |           | made at the 1- to 3-leaf crop stage with a second                       |
| crops in this  | orbiculare)                  |           | application just prior to vine tip or 10-14 days later,                 |
| group, see     | Belly Rot                    |           | whichever occurs first.   |
| below          | (Rhizoctonia solani)         |           |   |
|                | Cercospora Leaf Spot         |           | No more than two applications of Elatus may be                          |
|                | (C. citrullina)              |           | applied on a 7-day interval. All other applications                     |
|                | Downy Mildew                 |           | must be applied no closer than a 14-day interval.                       |
|                | (Pseudoperonospora           |           | For resistance management, do not apply more                            |
|                | cubensis)                    |           | than 2 consecutive applications before switching to                     |
|                | Gummy Stem Blight            |           | a non-Group 7 fungicide.  |
|                | (Didymella bryoniae)         |           | T 180 6 8 6 6 6 6   |
|                | Myrothecium Canker           |           | The addition of a spreading/penetrating type                            |
|                | (M. roridum)                 |           | adjuvant such as organo-silicon blends with either                      |
|                | Phoma Blight                 |           | non-ionic surfactants (NIS) or vegetable based                          |
|                | (P. exigua)                  |           | crop oils (COC); or vegetable based COC (not                            |
|                | Phyllosticta Leaf Spot       |           | mineral); or NIS with at least 90% concentration is                     |
|                | (P. cucurbitacearum)         |           | recommended.  |
|                | Plectosporium Blight         |           | Ontional language if label has a rate range. If                         |
|                | (P. tabacinum)               |           | Optional language if label has a rate range: If                         |
|                | Powdery Mildew               |           | disease pressure is high, use the highest rate.                         |
|                | (Sphaerotheca                |           | Ontional language if label has a single rate and                        |
|                | fuliginea, Erysiphe          |           | Optional language if label has a single rate and                        |
|                | cichoracearum)               |           | interval range: If disease pressure is high, use the shortest interval. |
|                | Septoria Leaf Blight         |           | Shortest interval.  |
|                | (S. cucurbitacearum)<br>Scab |           | Ontional language if label has a rate range and                         |
|                |                              |           | Optional language if label has a rate range and                         |
|                | (Cladosporium)               |           | interval range: If disease pressure is high, use the                    |
|                | cucumerinum) Target Spot     |           | shortest interval and highest rate.                                     |
|                | • .                          |           |   |
|                | (Corynespora cassiicola)     |           |   |
|                | Suppression of:              |           |   |
|                | Southern blight              |           |   |
|                | (Sclerotium rolfsii)         |           |   |
| Oamanlata liat |                              |           | haveta (fruit): Chinaga waygaurd (Chinaga                               |

Complete list of Cucurbit Vegetables Crop Group 9: Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Elatus Fungicide can be applied by ground or chemigation. A minimum of 15 gal/A for ground applications is recommended (20 for gummy stem blight). For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 29.2 oz/A/year of Elatus Fungicide.
- 2) Do not apply more than 0.272 lb ai/A/year of benzovindiflupyr-containing products.
- 3) Do not apply more than 1.5 lb ai/A/year of azoxystrobin-containing products.
- 4) Do not apply after 1 day before harvest (1 day PHI).

|   |   | Use Rate<br>Oz   |  |
|---|---|--|--|
| Crop  | Target Diseases   | Product/A  | Remarks  |
| Fruiting<br>Vegetable<br>Crop Group<br>8-10 (except | Anthracnose (Colletotrichum spp.) Cercospora Leaf Spot (C. capsici)                                     | 5 – 7.3  | Begin applications prior to disease development and continue throughout the season on a 7- to 10-day interval.   |
| tomatoes),<br>see TOMATO<br>section)                | Gray Leaf Spot (Stemphyllium solani) Powdery Mildew (Oidiopsis sicula) Rhizoctonia stem rot (R. solani) |  | No more than two applications of Elatus may be applied on a 7-day interval. All other applications must be applied no closer than a 14-day interval. For resistance management, do not apply more than 2 consecutive applications before switching to a non-Group 7 fungicide. |
| section for specific directions.                    | specific (Sclerotium rolfsii)   |  | The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.                   |
|   |   |  | Optional language if label has a rate range: If disease pressure is high, use the highest rate.  |
|   |   | Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval. |  |
|   |   |  | Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.   |

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Elatus Fungicide can be applied by ground or chemigation application. A minimum of 15 gal/A for ground applications is recommended.

Complete list of Fruiting vegetables (except for types of tomatoes) Crop Group 8-10: African eggplant, bell pepper; cocna; eggplant, garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; nonbell pepper; roselle; scarlet eggplant; sunberry

- 1) Do not apply to greenhouse peppers.
- 2) Do not apply more than 29.2 oz/A/year of Elatus Fungicide.
- 3) Do not apply more than 0.272 lb ai/A/year of benzovindiflupyr-containing products.
- 4) Do not apply more than 1.0 lb ai/A/year of azoxystrobin-containing products.
- 5) May be applied the day of harvest (0-day PHI).

|  |  | Use Rate  |  |
|--|--|-----------|--|
| Crop   | Target Diseases  | Product/A | Remarks  |
| Crop Grape and Small Fruit Vine Climbing (Subgroup 13-07F) | Target Diseases  Alternaria Rot (Alternaria alternata) Angular Leaf Spot (Mycosphearella angulata) Anthracnose (Elsinoe ampelina) Black Rot (Guignarda bidwellii) Downy Mildew (Plasmopara viticola) Leaf Blight (Pseudocercospora vitis) Phomopsis Cane and Leaf Spot (P. viticola) Powdery Mildew (Erysiphe necator) Rotbrenner (Pseudopezicula tracheiphila) Septoria Leaf Spot (S. ampelina) Suppression only: Botrytis Bunch Rot (B. cinerea) | Oz        | For powdery mildew, begin at bud break and apply on a 14-21 day interval, making no more than 2 sequential applications before alternating to another fungicide with a non-Qol (Group 11) or Group 7 mode of action.  For Phomopsis diseases, apply at bud break before shoots are 0.5 inches in length, and then again when shoots are 5-6 inches in length.  For black rot, begin when shoot length is 1-3 inches and continue on a 14-day interval.  For all other diseases, begin applications prior to disease onset when conditions are conducive for disease. Apply Elatus Fungicide on a 14-day schedule.  For resistance management, make no more than 2 applications before alternating to a non-Group 7 or Group 11 fungicide.  Optional language for adjuvant recommendation: The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.  Optional language if label has a rate range: If disease pressure is high, use the highest rate. Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.  Optional language if label has a rate range and interval range: If disease pressure is high, use the |
|  |  |           | shortest interval and highest rate.  |
|  |  |           | ATTENTION  |
|  |  |           | Elatus Fungicide is extremely phytotoxic to certain apple varieties. Refer to caution in <b>Use Precautions</b> and <b>Restrictions</b> section of label.  |

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Elatus Fungicide can be applied by ground application. A minimum of 15 gal/A for ground applications is recommended.

Complete list of Small fruit vine climbing (except fuzzy kiwifruit) subgroup 13-07F: Amur river grape, gooseberry, grape; kiwifruit (hardy); maypop; schisandra berry

- 1) Do not apply more than 21.9 oz/A/year of Elatus Fungicide.
- 2) Do not apply more than 0.204 lb ai/A/year of benzovindiflupyr-containing products.
- 3) Do not apply more than 1.5 lb ai/A/year of azoxystrobin-containing products.
- 4) Do not apply within 21 days of harvest (21-day PHI).

| -   |  | Use Rate        |  |
|---|--|-----------------|--|
| Crop  | Target Diseases  | Oz<br>Product/A | Remarks  |
| Pea and Bean, Dried Shelled, Except Soybean, Subgroup 6C  For listing of crops in this group, see below | Alternaria Blight Alternaria Leaf spot (A. alternata) Ascochyta Blight (A. rabiei) Powdery Mildew (Leveillula taurica) Rust (Uromyces cicerisarietini) Asian Soybean Rust (Phakopsora pachyrhizi) Anthracnose (Colletotrichum spp.) Mycosphaerella blight (Mycosphaerella spp.) Cercospora leaf spot (Cercospora spp.) Downy mildew (Phytophthora nicotianae) Suppression of: Southern blight (Sclerotium rolfsii) | 5 – 6           | Begin applications prior to disease onset when conditions are conducive for disease. Apply Elatus Fungicide on a 14-day schedule.  For resistance management, make no more than 2 applications before alternating to a non-Group 7 or Group 11 fungicide.  The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.  Optional language if label has a rate range: If disease pressure is high, use the highest rate. |

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Elatus Fungicide can be applied by ground, air, or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

**Dried Shelled pea and bean (except soybean) subgroup 6C:** Dried cultivars of bean (*Lupinus*); bean (*Phaseolus*) (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean); bean (*Vigna*) (includes adzuki bean, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean); broad bean (dry); chickpea; guar; lablab bean; lentil; pea (*Pisum*) (includes field pea); pigeon pea

- 1) Do not apply more than 12 oz/A/year of Elatus Fungicide.
- 2) Do not apply more than 0.112 lb ai/A/year of a benzovindiflupyr-containing product.
- 3) Do not apply more than 1.5 lb ai/A/year of an azoxystrobin-containing product.
- 4) Do not apply within 14 days of harvest (14-day PHI).

|         |   | Use Rate                                    |  |
|---------|---|---|--|
| Crop    | Target Diseases   | Oz<br>Product/A                             | Remarks  |
| Peanuts | Early Banded Application Suppression of: Southern blight (Sclerotium rolfsii) Rhizoctonia limb rot (R. solani) Cylindrocladium black rot (C. crotalaria) White mold (Sclerotinia minor)   | 0.5 – 0.65<br>oz/1000<br>linear row<br>feet | Optional directions: For suppression of early season soil-borne diseases, apply Elatus Fungicide in a 7-10 inch banded application over the top of the peanuts shortly after emergence (approximately 14-21 days after planting). If twinrow peanuts, widen the band to cover both rows. Apply in a minimum of 10 gal water per acre. And/or Optional directions: Elatus may be applied as a broadcast spray using 9.5 oz/A. Do not apply more than 9.5 oz/A as a banded application. Refer to instructions in Application Section to calculate total oz per acre when applying in a band.   |
|         | Broadcast Application Early leaf spot   (Cercospora   arachidicola) Late leaf spot   (Cercosporidium   personatum) Web blotch   (Phoma arachidicola) Rust   (Puccina arachidis) Pepper Spot   (Leptospherulina   crassiasca) Southern stem rot   (Sclerotium rolfsii) Rhizoctonia limb rot   (R. solani) Suppression of: Cylindrocladium black rot   (C. crotalaria) White mold   (Sclerotinia minor) | 7.3 – 9.5                                   | For leaf spots and other foliar diseases, begin foliar applications 30-40 days after planting or at the first appearance of disease. Apply 7.3 oz/A on a 14 day schedule or 9.5 oz/A on a 21-28 day schedule. Check with local extension/forecasting systems to determine if an extended interval up to 21 days is suitable for your area.  For control of Southern stem rot and limb rot, broadcast Elatus Fungicide either:  a. 7.3 oz/A 3 times on a 14 day interval starting as early as 21-45 days after planting.  b. 9.5 oz/A 2 times on a 21-28 day interval beginning ca. 45-60 days after planting or when conditions are conducive for disease.  Optional language: An early (14-21 days after planting) application broadcast or in a 7-10 inch band over the row can be used for early season infections.  For resistance management, make no more than 3 applications before alternating to a non-Group 7 fungicide.  Optional language for adjuvant recommendation: The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.  Optional language if label has a rate range: If disease pressure is high, use the highest rate.  Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval. |

| interval range: If disease pressure is high, use the shortest interval and highest rate. |
|--|
| The addition of a spreading/penetrating type adjuvant may enhance efficacy.              |

**Application:** For best results, use sufficient water volume to provide thorough coverage. Elatus Fungicide may be applied by ground, air, or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 21.9 oz/A/year of Elatus Fungicide .
- 2) Do not apply more than 0.204 lb ai/A/year of a benzovindiflupyr-containing product.
- 3) Do not apply more than 0.8 lb ai/A/year of an azoxystrobin-containing product.
- 4) Do not apply within 30 days of harvest (30-day PHI).

| Crop   | Target Diseases   | Use Rate<br>Oz<br>Product/A                 | Remarks  |
|--------|---|---|--|
| Potato | Rhizoctonia canker (R. solani) Black dot (Colletotrichum coccodes) Silver scurf (Helminthosporium solani) | 0.34 – 0.5<br>oz/1000<br>linear row<br>feet | Make an in-furrow application at planting. Apply the spray in a narrow band over the seed piece. Do not apply more than 9.5 oz/A as a banded application. Refer to instructions in Application Section to calculate total oz per acre when applying in a band. |

- Do not apply more than 9.5 oz/A/year of Elatus Fungicide.
   Do not apply more than 0.089 lb ai/A/year of benzovindiflupyr-containing products.
   Do not apply more than 2.0 lb ai/A/year of azoxystrobin-containing products
   Do not apply within 14 days of harvest (14-day PHI).

| Crop  | Target Diseases  | Use Rate<br>Oz<br>Product/A | Remarks   |
|---|--|-----------------------------|---|
| Soybean<br>(forage, hay,<br>hulls, and<br>seed) | Aerial blight (R. solani) Alternaria Leaf Spot (Alternaria spp.) Anthracnose (Colletotrichum truncatum) Asian Soybean Rust (Phakopsora pachyrhizi) Brown Spot (Septoria glycines) Cercospora Blight and Leaf Spot (C. kikuchii) Frogeye Leaf Spot (Cercospora sojina) Pod and Stem Blight (Diaporthe phaseolorum) Powdery Mildew (Microsphaera diffusa) Target Spot (Corynespora cassiicola) Suppression: Southern blight (Sclerotium rolfsii) | 4.9                         | Begin applications prior to disease onset when conditions are conducive for disease. Apply Elatus no closer than a 14-day interval.  For resistance management, make no more than 2 applications before alternating to a non-Group 7 or Group 11 fungicide.  The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended. |

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Elatus Fungicide can be applied by ground, chemigation, or aerial application. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 10 oz of Elatus Fungicide per acre per year.
- 2) Do not apply more than 0.092 lb ai/A/year of a benzovindiflupyr-containing product.
- 3) Do not apply more than 1.5 lb ai/A/year of an azoxystrobin-containing product.
- 4) Soybean forage may be fed or harvested at 0 day PHI.
- 5) Do not apply within 14 days of harvest (14-day PHI).

|  |   | Use Rate<br>Oz |  |
|--|---|----------------|--|
| Crop   | Target Diseases   | Product/A      | Remarks  |
| Crop Tomato Includes: Tomato, bush; Tomato, currant; Tomatillo; Tomato, tree including cultivars, varieties, and/or hybrids of these | Anthracnose (Colletotrichum spp.) Black Mold (Alternaria alternata) Early Blight (A. solani) Gray Leaf Spot (Stemphylium botryosum) Leaf Mold (Fulvia fulva) Powdery Mildew (Leveillula taurica) Septoria Leaf Spot (S. lycopersici) Target Spot (Corynespora cassiicola)  Suppression: Stem rot (Sclerotium rolfsii) | 5              | Begin applications prior to disease development and continue throughout the season on a 7- 14 day interval.  No more than two applications of Elatus may be applied on a 7-day interval. All other applications must be applied no closer than a 14-day interval. For resistance management, do not apply more than 2 consecutive applications before switching to a non-Group 7 fungicide.  Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.  Use of Adjuvants: Under certain weather conditions (particularly high temperatures) Elatus Fungicide in combination with high rates of silicone-based or oil containing (petroleum or crop) additives or adjuvants may cause injury. Do not exceed 0.125% adjuvant (v/v). Consult a Syngenta representative for more information concerning additives or adjuvants.  A tank mixture with Dimethoate may cause crop injury.  On fresh market tomatoes, do not use adjuvants or tank mix Elatus Fungicide with any EC product.  Precaution: To reduce the chance of crop injury, do |
| Applications   |   |                | injury.  On fresh market tomatoes, do not use adjuvant tank mix Elatus Fungicide with any EC product.  |

**Application:** For best results, use sufficient water volume to provide thorough coverage. Elatus Fungicide may be applied by ground or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply to greenhouse tomatoes.
- 2) Do not apply more than 29.2 oz/A/year of Elatus Fungicide.
- 3) Do not apply more than 0.272 lb ai/A/year of benzovindiflupyr-containing products.
- 4) Do not apply more than 0.6 lb ai/A/year of azoxystrobin-containing products.
- 5) May be applied the day of harvest (0-day PHI).

|  |   | Use Rate        |  |
|--|---|-----------------|--|
| Crop   | Target Diseases   | Oz<br>Product/A | Remarks  |
| Vegetables,<br>Tuberous and<br>Corm,             | Ascochyta Leaf Spot<br>(A. cynarae)<br>Black Dot  | 5 – 7.3         | Begin applications prior to disease development and continue throughout the season on a 14-day interval.   |
| Subgroup 1C  For listing of                      | (Colletotrichum<br>coccodes)<br>Brown Spot  |                 | No more than two applications of Elatus may be applied on a 7-day interval. All other applications must be applied no closer than a 14-day interval. For   |
| crops in this<br>group, see<br>below.            | (Alternaria alternata) Early Blight (Alternaria spp.) Powdery Mildew                                  |                 | resistance management, do not apply more than 2 consecutive applications before switching to a non-Group 7 fungicide.  |
| See <b>Potatoes</b> for specific use directions. | (Erysiphe cichoracearum) Rust (Uromyces betae, Puccinia helianthi) Septoria Leaf Spot (Septoria spp.) |                 | The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended. |
|  | Suppression of: Stem rot (Sclerotium rolfsii)   |                 | Optional language if label has a rate range: If disease pressure is high, use the highest rate.  |
|  |   |                 | Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.   |
|  |   |                 | Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.   |

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Elatus Fungicide can be applied by ground or aerial application. A minimum of 15 gal/A for ground applications is recommended. For aerial applications, a minimum of 10 gal/A of water is recommended.

Complete list of Tuberous and corm vegetables subgroup 1C: Arracacha, arrowroot, artichoke (Chinese and Jerusalem), canna (edible), cassava (bitter and sweet), chayote (root), chufa, dasheen (taro), ginger, leren, sweet potato, tanier, tumeric, yam (bean and true).

- 1) Do not apply more than 14.6 oz/A/year of Elatus Fungicide.
- 2) Do not apply more than 0.136 lb ai/A/year of benzovindiflupyr-containing products.
- 3) Do not apply more than 2.0 lb ai/A/year of azoxystrobin-containing products.
- 4) Do not apply within 14 days of harvest (14-day PHI).

#### **Elatus Fungicide Rate Conversion Table**

| Oz Product/Acre | Lb ai Azoxystrobin | Lb ai Benzovindiflupyr |
|-----------------|--------------------|------------------------|
| 4.9             | 0.094              | 0.045                  |
| 6.0             | 0.113              | 0.056                  |
| 7.0             | 0.131              | 0.066                  |
| 7.3             | 0.137              | 0.068                  |
| 8.0             | 0.150              | 0.075                  |
| 9.0             | 0.169              | 0.085                  |
| 9.5             | 0.178              | 0.089                  |

#### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

Store in original container only. Store in a cool, dry and well-ventilated place. Protect from excessive heat. Keep container closed when not in use. Do not store near food or feed.

## **Pesticide Disposal**

Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal Law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

# **Container Handling [Bags]**

Non-refillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

# **Container Handling [fiber drums with liners]**

Non-refillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then offer for recycling if available or dispose of liner in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

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

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For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

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