# **VEGETABLE TRANSPLANT - BASIL, FRESH (FOLIAR DISEASES)**

### General Information

#### PRODUCT INFORMATION

- Segovis is a foliar protectant fungicide for control of downy mildews and diseases caused by Phytophthora spp.
- Segovis can also be applied as a drench to ornamental plants grown in containers and in-ground for control of root and stem diseases caused by Phytophthora spp.
- Segovis can be used to treat vegetable transplants for sale only to residential consumers commercially grown in containers, benches, flats, plugs, liners and beds indoors in greenhouses and outdoors in shade houses, lath houses, other outdoor growing structures and nurseries.
- Segovis should be applied prior to disease development and rotated with other effective fungicides having a different mode of action.
- Segovis can be applied to commercial landscapes of business and office complexes, shopping complexes, institutional buildings, airports and cemeteries.

### **PLANT SAFETY**

Segovis has been shown to be safe when applied at the specified rates to ornamental plants. However, due to the large number of genera, species and varieties of ornamental and nursery plants, it is impossible to test every one for tolerance to Segovis. Neither the manufacturer nor the seller has determined whether Segovis can be used safely on genera, species, or varieties of ornamental and nursery plants not specified on this label. The user should conduct small scale testing at the specified rates to ensure plant safety prior to broad scale commercial use on plant genera and species not listed in this label. When using an adjuvant or tank-mix partner, the user should conduct small scale testing at the specified rates to ensure plant safety prior to broad scale commercial use.

# Integrated Pest (Disease) Management (IPM)

- Segovis 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.

- Segovis 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

Segovis contains the active ingredient oxathiapiprolin, which inhibits the oxysterol-binding protein (OSBP). Repeated use of products for control of specific plant pathogens may lead to selection of resistant strains of fungi and result in a reduction of disease control. 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.

A disease management program that includes rotation and/or tank-mixing with fungicides with a different mode of action is essential to reduce the risk of fungicide resistance development.

- Segovis must not be alternated or tank-mixed with any fungicide to which resistance has already developed.
- Unless otherwise specified in the specific use directions, make no more than 2 sequential applications of Segovis before rotating to a fungicide with a different mode of action.
- Do not follow soil applications of Segovis to ornamentals with foliar applications of Segovis or other oxathiapiprolin-containing products. Different application methods (foliar and soil) must not be combined when protecting a crop during a growing season.
- For guidance on a particular crop and disease control situation, consult your state extension specialist or official state recommendations.

### APPLICATION DIRECTIONS

### Methods of Application

Apply Segovis at the rates specified in Sections 6.0, and 7.0. Applications can be made by ground or via chemigation as specified. See Section 4.4 for chemigation instructions.

### FOLIAR APPLICATIONS - ORNAMENTALS AND VEGETABLE PLANTS

Apply Segovis prior to disease development to achieve best disease control. See Sections 6.1, and 7.0 for specific foliar application instructions.

### DRENCH APPLICATIONS - ORNAMENTALS ONLY

- Segovis may be applied by drench to container, bench, flat, plug, liner, and bedgrown ornamentals in nurseries, forest nurseries, greenhouses, lath and shade houses or other ornamental production structures. Apply according to the use directions in Section 6.2.
- Prepare the Segovis drench solution according to table below.
- Apply enough drench solution to thoroughly wet the root zone of the plants without leaching through the container. For plants grown in flats or beds apply 1–2 pt of drench solution per sq ft. For plants grown in containers, refer to the suggested drench volumes listed below. For container sizes not listed, adjust volume appropriately.
- Make no more than 2 sequential drench applications of Segovis before switching to another effective non-Group U15 fungicide.

### SOIL APPLICATIONS - ORNAMENTALS ONLY

- Apply in a manner that ensures the product solution adequately saturates the target crop root/crown zone.
- Apply using drip application, surface band, or directed application or in-furrow application. See Section 4.4 for drip irrigation information.
- Apply surface band or directed applications in a 4- to 12-inch band.
- If the application method does not move the product to the target root/crown disease zone, the application must be followed with irrigation or cultivation to correctly place the product for disease control.

Refer in the label for Soil Application Rates for Segovis Product per 1,000 feet of row

(based on plant spacing).

# **Application Equipment**

Segovis may be applied with application equipment commonly used for greenhouse and nursery crop production.

- See Section 4.4 for information about chemigation equipment.
- Proper adjustments and calibration of spraying equipment to give good canopy penetration and coverage is essential for good disease control.
- To ensure accuracy, calibrate sprayer before each use.
- For information on spray equipment and calibration, consult spray equipment manufacturers and/or state recommendations

Application through Irrigation Systems (Chemigation)

# APPLICATION DIRECTIONS FOR IRRIGATION SYSTEMS (CHEMIGATION)

- Apply this product only through overhead, hand held, micro-irrigation systems (e.g., drip, trickle, spaghetti tubes and micro sprinklers) and motorized calibrated irrigation systems. Do not apply this product through any other type of irrigation system.
- Plant injury and/or poor disease control can result from non-uniform distribution of treated water.
- 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.
- Motorized Calibrated Irrigation
- 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 Segovis through irrigation equipment, use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of Segovis required to treat the area covered by the irrigation system.
- Add the required amount of Segovis 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 Segovis solution has cleared the last sprinkler head.

### **OPERATING INSTRUCTIONS**

1. The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination

from backflow.

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

### 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.

### **RESTRICTIONS AND PRECAUTIONS**

### **Use Restrictions**

- Do not exceed the annual maximum rates of Segovis per acre specified in Sections 6.0, and 7.0.

### Use Precautions

- Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if maximum amount of Segovis has been used.
- The higher rates in the rate range and/or shorter spray intervals may be required under conditions of heavy infection pressure, highly susceptible varieties, or when environmental conditions conducive to disease exist.

# Spray Drift Management

- AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.
- The interaction of many equipment- and weather-related factors determines the potential for spray drift.

Limitations, Restrictions, and Exceptions

### VEGETABLE TRANSPLANT USE DIRECTIONS

Vegetable transplants can be treated with Segovis prior to retail sale only to residential consumers.

**Application Timing** 

Begin foliar applications prior to disease development.

**Use Directions** 

Use the higher application rate when disease is present.

Apply in at least 15 gallons per acre, increasing the spray volume as the plants grow larger to ensure thorough coverage of the foliage.

### Resistance Management:

- Make no more than 2 applications per crop.
- Refer to Section 3.2 for additional information.

### **USE RESTRICTIONS**

- 1) Maximum Single Application Rate: 2.4 fl oz/A
- 2) Minimum Application Interval: 5 days
- 3) Maximum Annual Rate:

- a) Plants Grown Outdoors in Nurseries (including outdoor growing structures):
- i) Do not apply greater than 4.8 fl oz/A (0.0625 lb ai/A of oxathiapiprolin-containing products) to a single crop.
- ii) When multiple crops are produced in the same production area, do not apply greater than 0.25 lb ai/A/year of oxathiapiprolin-containing products.
- b) Plants Grown in Greenhouses:
- i) Do not apply greater than 4.8 fl oz/A (0.0625 lb ai/A of oxathiapiprolin-containing products) to a single crop.

Method

**Foliar application** 

Restricted Entry Interval

4 hours

**Timings** 

Prior to disease development.