

# **CUCURBITS - DOWNY MILDEW - MICHIGAN**

## General Information

### PRODUCT INFORMATION

Read all label directions before use. All applications must be made according to the use directions that follow.

- Orondis Opti A is an oil dispersion containing oxathiapiprolin and is recommended for use by foliar application for the control or suppression of the diseases listed on the label.
- Orondis Opti A is active against selective Oomycete diseases listed on the label.
- Orondis Opti A is a systemic fungicide and moves systemically in the plant xylem. Uptake into the leaf tissue allows good translaminar movement and protection of new plant growth.
- Orondis Opti A must be applied in a regularly scheduled protective spray program in rotation with other fungicides.
- See Section 7.0 for specific crop/disease recommendations.

### RAINFASTNESS

Orondis Opti A rapidly penetrates into plant tissues and is rainfast within 30 minutes after spray residues have dried.

### MODE OF ACTION

Oxathiapiprolin, the active ingredient in Orondis Opti A, acts as an oxysterol-binding protein modulator in fungal cells.

### CROP TOLERANCE

Not all crops within a crop group, and not all varieties, cultivars, or hybrids of crops, have been individually tested for crop safety. It is not possible to evaluate for crop safety all applications of Orondis Opti A on all crops within a crop group, on all varieties, cultivars, or hybrids of those crops, or under all environmental conditions and growing circumstances. To test for crop safety, apply the product in accordance with the label instructions to a small area of the target crop to ensure that a

phytotoxic response will not occur, especially where the application is a new use of the product by the applicator.

### Integrated Pest Management (IPM)

Syngenta recommends the use of Integrated Pest Management (IPM) programs to control pests. Orondis Opti A may be used as part of an IPM program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when disease forecasting models reach locally determined action levels. Consult your state cooperative extension service, professional consultants, or other qualified authorities to determine the appropriate management, cultural practice and treatment threshold levels for the specific crop, geography and diseases.

### Resistance Management

Orondis Opti A contains the active ingredient oxathiapiprolin, which has been assigned Group U15 by the Fungicide Resistance Action Committee (FRAC). Oxathiapiprolin modulates an oxysterol-binding protein (OSBP) in fungal cells. 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. A disease management program for Orondis Opti A that includes rotation and tank mixing with fungicides with a different mode of action is essential to reduce the risk of fungicide resistance development.

As part of a resistance management strategy:

- Do not tank-mix Orondis Opti A with any fungicide for which resistance to the target disease has developed.
- Make no more than 2 sequential applications of Orondis Opti A before rotating to a fungicide with a different mode of action.
- Do not follow soil applications of Orondis with foliar applications of Orondis Opti A.
- Do not use Orondis Opti A for more than 33% of the total fungicide applications per season per crop.

For guidance on a particular crop and disease control situation, consult your state extension specialist for official state recommendations.

## APPLICATION DIRECTIONS

### Methods of Application

#### FOLIAR APPLICATION (INCLUDING AERIAL APPLICATION)

See Section 7.0 for specific foliar application instructions.

Orondis Opti A may be used with adjuvants, for example, nonionic surfactants, crop oils, methylated seed oils, and blends at typical agricultural use rates for these adjuvants.

### Application Equipment

Orondis Opti A can be applied with commonly used ground equipment, hose-end, pressurized, hand-held sprayers, air or chemigation equipment, except as otherwise directed, using sufficient water to obtain thorough coverage of plants. Maintain agitation during mixing and application to assure uniform product suspension.

#### SHIELDED SPRAYERS

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

#### AIR-ASSISTED (AIR-BLAST) FIELD CROP SPRAYERS

- Air-assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result.
- It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, that it is configured properly, and that drift potential has been minimized.
- Note: Air-assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration.

Read the specific crop use and application equipment instructions to determine if an air-assisted field crop sprayer can be used.

### Limitations, Restrictions, and Exceptions

## Additional Resistance Management Guidelines for Downy Mildew Control on Cucurbits

### Application Timing

Begin foliar applications prior to disease development and continue on a 5- to 14-day interval.

### Use Directions

Use the higher rates when disease is present, for longer application intervals, or for susceptible varieties.

For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage.

For air-assisted ground application, apply at least 10 gallons per acre.

For aerial application, apply at least 2 gallons per acre.

### Resistance Management:

- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.
- Do not follow soil applications of Orondis with foliar applications of Orondis Opti A. Use either soil applications or foliar applications but not both for disease control.
- When less than 3 applications are made in a total spray program, one or both sprays may be Orondis Opti A.

### USE RESTRICTIONS

#### Maximum Number of Applications:

Do not exceed six foliar applications per acre per year for the same crop.

Do not use for more than 33% of the total foliar fungicide applications.

Minimum Application Interval: 3 days

Pre-harvest Interval (PHI): 0 days

### Method

[Broadcast/Foliar Air](#)

[Foliage Spray](#)

Rates

[field\\_rates 0](#)

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Restricted Entry Interval

4 hours

Timings

[N.A.](#)