

# **CUCURBIT VEGETABLES, CROP GROUP 9 - PHYTOPHTHORA BLIGHT**

## General Information

### PRODUCT INFORMATION

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

- Orondis Ultra is a suspension concentrate containing oxathiapiprolin and mandipropamid and is for use by foliar application for the control or suppression of the diseases listed on the label.
- Orondis Ultra is active against Oomycete diseases listed on the label.
- Orondis Ultra 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 Ultra must be applied in a regularly scheduled protective spray program in rotation with other fungicides.

### RAINFASTNESS

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

### MODE OF ACTION

Orondis Ultra contains two active ingredients: oxathiapiprolin, which acts as a modulator of a fungal oxysterol-binding protein, and mandipropamid, a cell wall biosynthesis inhibitor.

### 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 Ultra 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 Ultra 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 Ultra contains two active ingredients: oxathiapiprolin, which has been assigned Group U15 by the Fungicide Resistance Action Committee (FRAC), and mandipropamid, a Carboxylic Acid Amide (CAA) fungicide in Group 40. Repeated use of the same products or products containing active ingredients from the same FRAC Group 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 Ultra that includes rotation 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 Ultra with any fungicide for which resistance to the target disease has developed.
- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.
- Do not follow soil applications of oxathiapiprolin-containing products with foliar applications of Orondis Ultra or other oxathiapiprolin-containing product.
- When three or more fungicide applications are made, use Orondis Ultra (or other oxathiapiprolin-containing product) in no more than 33% of the total fungicide

applications.

- Apply a maximum of 4 sprays during one crop cycle.
- 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)

#### Application Equipment

Orondis Ultra can be applied with commonly used ground equipment, hose-end, pressurized, greenhouse and 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.

#### RESTRICTIONS AND PRECAUTIONS

##### Use Restrictions

- Orondis Ultra may be used in greenhouse production of tomatoes. Do not use in greenhouses on any other crops.
- Do not formulate this product into other end-use products.

##### 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. The applicator is responsible for considering all these factors when making application decisions.
- AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

##### Limitations, Restrictions, and Exceptions

#### CUCURBIT VEGETABLES, CROP GROUP 9

Crops (including all cultivars, varieties, and/or hybrids of these)

#### Application Timing:

For protection against fruit rot, make the first application during early fruit development, starting at 1-inch fruit.

#### Use Directions:

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

For best results, begin the disease management program with an initial treatment at planting or transplanting with a fungicide registered for this use. Apply Orondis Ultra as a foliar spray in a mixture with a copper-based fungicide (at the labeled rate) beginning at first signs of disease or based on local recommendations. Use Orondis Ultra in a program with other registered fungicides with a different mode of action. Use adjuvants as recommended above.

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 and developing fruit.

For aerial application, apply at least 5 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 oxathiapiprolin-containing products with foliar applications of oxathiapiprolin-containing products. Use either soil applications or foliar applications, but not both, for disease control.
- When 3 or more fungicide applications are made, use Orondis Ultra (or other oxathiapiprolin-containing product) in no more than 33% of the applications, or a maximum of 4 applications per planting, whichever is fewer.
- On multiple plantings in the same year, do not exceed 6 applications per acre per year.

#### USE RESTRICTIONS

##### 1) Maximum Annual Rate:

- a. Do not apply more than 0.125 lb ai/A/year of oxathiapiprolin-containing products.
  - b. Do not apply more than 0.522 lb ai/A/year of mandipropamid-containing products.
- 2) Minimum Application Interval: 7 days
  - 3) Pre-harvest Interval (PHI): 0 days

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

#### Rates

[field\\_rates 0](#)

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#### Restricted Entry Interval

4 hours

#### Timings

[Begin foliar applications prior to disease development and continue on a 7- to 10-day interval.](#)