



Melon Disease– Powdery Mildew

What is Powdery Mildew of Melons?

Powdery mildew of melons or cucurbits (*Sphaerotheca fuliginea* and *Erysiphe cichoracearum*) is a fungal disease that initially appears as pale yellow spots on leaves and stems. The spots then grow white with mycelium and spores. Heavily infected leaves will become yellow and eventually brown and brittle.

What is the Damage Caused?

Powdery mildew (PM) causes reduced yields due to smaller fruit size and fewer fruit numbers. Severe infections lead to sunburning and reduced fruit sugar content. PM also predisposes melons to other diseases.



White conidia (asexual spores) travel through wind and often infect older or shaded leaves¹

How to Manage PM in Melons?

- **Monitor:** Inspect fruits weekly beginning in mid June for onset of PM. When disease is detected, begin fungicide applications at 7-10 day intervals.
- **Cultural Management:**
 - Good nutrient management encourages healthy plants that are less susceptible to PM.
 - Employ good sanitation practices, especially weed control.
 - Plant resistant or tolerant varieties available for melons.
 - Note: Crop rotation is not effective against PM.
- **Fungicide Treatment Options:**

Contact sprays work best if applied to undersides of leaves. Apply treatments when symptoms first occur and repeat if symptoms reappear. If multiple fungicide applications are necessary, rotate between materials with different modes of action.

 - Azoxystrobin (Quadris*) at 805-1125 ml/ha (11-15.4 fl. oz/acre). Maximum one application before rotating to a fungicide with a different mode of action. Wait 4 hours after application before reentering the crop and apply at least 1 day before harvest.
 - Micronized Sulfur (Thiolux*, Microthiol*) at 4.5-6.7 kg/ha (4-6 lb/acre). Sulfur can injure plants, especially at temperatures above 35°C. Some sulfur products are not registered for use on pumpkins; refer to product labels for current registration status. Wait 24 hours after application before reentering the crop.

For more treatment options visit www.ipm.ucdavis.edu

*Commercial name. The authors make no endorsement towards commercial brands mentioned in this document nor are the absence of other brand names an implication of our disapproval.

Primary references: Statewide IPM Program, Agriculture and Natural Resources, University of California <http://www.ipm.ucdavis.edu/index.html>
Dept. of Plant Pathology – Cornell University http://vegetablemdonline.ppath.cornell.edu/factsheets/Cucurbits_PM.htm
Florida Cooperative Extension Service – University of Florida <http://plantpath.ifas.ufl.edu/takextpub/FactSheets/pp0014.pdf>
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