

Problem: Powdery Mildew on Cucurbits



Plants affected: Cucumber, muskmelon, squash, watermelon, pumpkin

Description: Powdery mildew can be caused by two fungi, *Sphaerotheca fuliginea* and *Erysiphe cichoracearum*. Symptoms start with a powdery-white film on the leaves. Leaves eventually turn brown and die as the disease progresses leaving fruit vulnerable to sunscald.

This disease thrives under conditions of high humidity, low light and warm temperatures. Succulent growth caused by over fertilization is more susceptible. The disease may overwinter in crop residue but is often transported from more southern regions during the growing season.

Recommendations: Resistance, if available, is the first line of defense. Pumpkin varieties especially, vary in the level of resistance. Plant descriptions in seed catalogs should list resistance.

Don't over-fertilize, over-water or crowd plants. Clean up plant residue in the fall. Rotate vine crops to a different part of the garden each year. Sulfur can be used for control on pumpkins if temperatures aren't too high (see label) but often causes unacceptable leaf burn on other crops. The fungicide myclobutanil (Immunox, F-Stop Lawn and Garden Fungicide, Monterey Fungi-Max) or a copper fungicide (Bonide Copper Fungicide, Monterey Liqui-Cop, Natural Guard Copper Soap Fungicide) can be used to help prevent infection, if needed.

References:

1. [Cucurbit Powdery Mildew](#), Cornell University, Cornell Vegetables
2. [Powdery Mildew of Cucurbits](#), Texas A & M University, AgriLIFE Extension Publication PLPA-Cuc009-01

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