



Powdery Mildew

About Powdery Mildew

Powdery mildew is a common fungus disease on many vegetables. There are different species of powdery mildew fungi and each species only attacks specific plants. Powdery mildews generally do not require moist conditions to establish and grow, and normally do well under warm conditions. Thus, they are more prevalent than many other leaf-infecting diseases under dry summer conditions.



Damage

Powdery Mildew is easily recognized by patches of white/gray powder like growth. Infection begins as discrete, usually circular powdery white spots. Spots expand to create a bigger circle of mildew. Powdery mildew causes reduced plant vigor, stunting and distortion of leaves, buds, growing tips and fruit. It can cause death of affected tissue and premature leaf drop.

Solutions

Prevention is the best method of control.

Cultural control

1. Use resistant vegetable varieties, or avoid the more susceptible varieties,
2. Plant in sunny areas,
3. Provide good air circulation, and
4. Avoid using excess fertilizer. Slow release fertilizers can be a good option.

Chemical control Many fungicides are available for treatment of powdery mildew. Make sure the label says it is for Powdery Mildew, and follow instructions. Chemicals are most effective when combined with cultural controls.

Table 1. Host Plants and Control Measures for Powdery Mildew.

Vegetable	Controls
Artichoke, eggplant, peppers, tomatillo, tomatoes	Rarely required; fungicides if necessary
Beans, black-eyed peas, cucurbits, okra	Resistant varieties for some; fungicides if necessary
Beets	Tolerant varieties
Broccoli, Brussels sprouts, cauliflower, and other cole crops; radicchio, radishes, turnips	Not usually required
Carrots, parsley, parsnips	Tolerant varieties
Cucumbers, endive, lettuce, melons, potato, pumpkin, squash	Resistant varieties of lettuce, cucumber; water sprays; fungicides if necessary on squash and pumpkin
Peas	Resistant varieties; sprinkler irrigation

Prepared by Frank Zalom, Mark A Bell and Masooma Azam May 28, 2008

Reference: Statewide IPM Program, Agriculture and Natural Resources, University of California <http://www.ipm.ucdavis.edu/index.html>

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