

(revision date:4/30/2013)

## ***Common Diseases: Powdery mildew***

*Use Integrated Pest Management (IPM) for successful plant problem management.*

### ***Biology***

White powdery growth on the surface of leaves and sometimes stems is characteristic of this easily diagnosed fungal disease. Young leaves and shoots may be stunted and distorted. Severe infections can cause leaf drop and death of young shoots. Some powdery mildew pathogens attack many different plant species, but others are specific to a limited host range. Unlike most fungal pathogens, powdery mildew fungi do not require surface moisture for infection, so this disease is often most prevalent during dry weather.

### ***Management Options***

#### **Non-Chemical Management**

- ~ Avoid overfertilizing, which encourages susceptible new growth. If necessary, switch to a slow-release or lower-nitrogen formula.
- ~ Gather and destroy all fallen leaves.
- ~ Pick off infected leaves and prune severely infected shoots to prevent spread of disease.
- ~ Plant disease-tolerant or disease-resistant varieties (see lists in PNW Plant Disease Management Handbook).
- ~ Space plantings and prune to provide good air circulation.
- ~ Watch for signs of infection during appropriate weather conditions (dry weather with warm days and cool nights).

*Select non-chemical management options as your first choice!*

#### **Chemical Management**

***IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides***

Several fungicides are effective in managing powdery mildew. However, the fungicide must be registered for the host plant. Find the list of registered pesticides for a specific host by finding the fact sheet for powdery mildew on that host. Since the fungus is limited to growing on the surface, fungicide applications after disease is visible can be effective in eradicating the problem.

*Common Diseases: Powdery mildew*

*Images*



~ Caption: *Begonia powdery mildew*  
~ Photo by: *R.S. Byther*



~ Caption: *Powdery mildew on leucothoe*  
~ Photo by: *C.R. Foss*



~ Caption: *Powdery mildew on photinia*  
~ Photo by: *R.S. Byther*



~ Caption: *Powdery mildew on leaves*  
~ Photo by: *R.S. Byther*



*~ Caption: Powdery mildew on rhododendron  
~ Photo by: C.R. Foss*



*~ Caption: Powdery mildew on rose stems and buds  
~ Photo by: R.S. Byther*



*~ Caption: Powdery mildew on rose leaves  
~ Photo by: R.S. Byther*