**EXECUTIVE RESEARCH AND EXTENSION** 

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### Problem: Powdery Mildew of Lilac (Microsphaera syringae)



### Host Plants: Lilac

**Description:** Powdery mildew produces a white powdery substance that grows on the upper leaf surfaces of the lower leaves. These leaves and then others, may become twisted, distorted, then wilt and die as a result of having been infected with powdery mildew.

Powdery mildew is favored by high relative humidity at night (which favors fungal spore formation), low relative humidity during the day (which favors spore dispersal), and temperatures of 70 to 80 degrees. Powdery mildews are parasitic fungi that can only utilize the nutrients of a live host plant. Although the powdery mildews seldom kill their hosts, the fungi reduce the amount of photosynthesis taking place, increase respiration and transpiration, and cause slower growth.

**Recommendations:** If powdery mildew occurs in the late summer or fall, it is usually not necessary to apply a fungicide, since the plant will have stored sufficient energy to flower and put on foliage the following spring.

But when powdery mildew attacks in the spring or early summer, it may be necessary to spray an appropriate fungicide in order to control the disease.

A fungicide can be applied as soon as the first symptoms appear, with follow-up sprays every 7 to 14 days while conditions are favorable for growth and spread of this disease. Labeled products include chlorothalonil (Daconil, Ortho Garden Disease Control, Fertilome Broad-Spectrum Lawn and Garden Fungicide, others), myclobutanil (Immunox, Monterey Fungi-Max, F-Stop Lawn & Garden Fungicide), propiconazole (Banner Maxx, Bonide Infuse RTS, Fertilome Liquid Systemic Fungicide II) and copper containing fungicides (Bonide Copper Fungicide, Monterey Liqui-Cop, Natural Guard Copper Soap Fungicide).

Another approach is to use antitranspirants, which can be applied to the leaves to prevent infection for up to 30 days. When applying antitranspirants or fungicides, read the label carefully to make sure you are applying the right product at the right time and under the right environmental conditions.

It is important to properly space lilac plantings so as to maximize air circulation. Avoid planting lilac in protected areas, a walled corner, for instance, where airflow would be reduced. To prevent the occurrence of powdery mildew, prune lilacs regularly to promote good air circulation.

### **References:**

- 1. <u>Powdery Mildew Trees & Shrubs</u>, University of Wisconsin Extension Service, Wisconsin Horticulture
- 2. <u>Powdery Mildews</u>, Colorado State University Extension, No. 2.902

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