

## Plant Pathology Fact Sheet

# Phlox Powdery Mildew

by John Hartman

### Symptoms

Phlox grown in Kentucky gardens can provide summer color, but too often the health and appearance of phlox is marred by the arrival of powdery mildew disease.

Powdery mildew (*Erysiphe cichoracearum*) produces a grayish-white powdery growth on the surface of phlox leaves in summer (FIGURES 1 & 2). The disease begins in the lower leaves, and by late summer, these leaves are often dying and many of the top leaves are covered with fungus. Tiny black fruiting bodies of the overwintering stage of the fungus develop in the mildew growth.

### Disease Management

#### SANITATION

Remove and destroy the plant stalks and leaves in the fall to help slow the first arrival of the disease the next season.

#### FUNGICIDES

Several fungicides are labeled for powdery mildew diseases; look for those that can be used on phlox.



FIGURE 1. PHLOX LEAVES INFECTED WITH POWDERY MILDEW

### RESISTANT VARIETIES

The best long-term solution is to use phlox cultivars resistant to powdery mildew. Plant pathologists working in New York and Vermont evaluated phlox (*P. paniculata* and *P. maculata*) cultivar reactions to powdery mildew.

The researchers suggested that cultivars having greater than 50% leaf coverage with mildew to be undesirable as ornamentals because of the negative visual impact of foliage whitened by the disease.

The following, arranged from most resistant to most susceptible, lists the 24 phlox (23 were *P. paniculata*) cultivars evaluated in the test. The first six of these listed appeared to be quite disease tolerant, with the cultivar 'David' performing well even under severe disease pressure.



FIGURE 2. PHLOX SUSCEPTIBLE TO POWDERY MILDEW

*Less than 50% powdery mildew*

'David,' 'Windsor,' *P. maculata* 'Alpha,' 'Blue Boy,' 'Prime Minister,' 'Orange Perfection,' 'Starfire,' 'H.B. May,' 'Fairest One,' 'Bright Eyes,' 'Dorffrendl,' 'Dodo Hanbury Forbes,' 'Eva Cullum,' 'Franz Schubert,' 'Fairy's Petticoat.'

*More than 50% powdery mildew*

'Sternhimmel,' 'Adonis,' 'Mt. Fuji,' 'White Admiral,' 'Mrs R. P. Struthers,' 'Pinafore,' 'New Bird,' 'Dresden China,' 'Anja.'

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