

dogwood, are highly resistant to powdery mildew.

- Use fungicides on established trees that have suffered heavy mildew damage. Begin fungicide applications in mid-April or when the white fungal colonies are first seen on the leaves. Make additional applications every 7 to 10 days. Fungicides registered for the control of powdery mildew on flowering dogwood are 3336 50W,

3336 4.5F, Bayleton T/O, Immunox, and Halt.

For additional information, refer to Extension publications ANR-500B, *Alabama Pest Management Handbook— Volume 2*, and ANR-551, “Dogwood Diseases in Alabama.” When applying any fungicide always follow label directions and precautions.



ANR-1051

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Use chemicals **only** according to the directions on the label. Follow all directions, precautions, and restrictions that are listed.

The pesticide rates in this publication are recommended only if they are registered with the Environmental Protection Agency and the Alabama Department of Agriculture and Industries. If a registration is changed or canceled, the rate listed here is no longer recommended. Before you apply any pesticide, check with your county Extension agent for the latest information.

Trade names are used only to give specific information. The Alabama Cooperative Extension System does not endorse or guarantee any product and does not recommend one product instead of another that might be similar.

For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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ALABAMA A&M AND AUBURN UNIVERSITIES

Plant Disease Notes **Powdery Mildew On Dogwood**

Powdery mildew, which is caused by the fungus *Microsphaeria penicillata*, was seen on a single flowering dogwood in 1993. By the spring of 1994, this disease was commonly found on flowering dogwood in landscapes statewide. Since then, powdery mildew has remained the most common foliar disease of flowering dogwood in Alabama. Normally, damage to trees is cosmetic but seedling dogwoods may be badly disfigured or killed by powdery mildew. On susceptible dogwoods, the disease is equally damaging on trees in full sun as on those growing in heavy shade.

Symptoms. Feathery, white patches or colonies of the powdery mildew fungus first appear in mid- to late April on the upper leaf surfaces. Disease development may continue into early summer. On susceptible dogwoods, the leaf surfaces may be covered by the cottony growth of the causal fungus. Heavily colonized leaves are often twisted or curled and may be smaller than normal. In October, the tiny black fruiting bodies of the powdery mildew fungus may develop in colonies on the upper and lower leaf surfaces. Although powdery mildew damage appears cosmetic, this disease will slow tree growth. In addition, seedling dogwoods may be killed by severe disease outbreaks.

Persistence And Transmission.

The causal fungus of powdery mildew on dogwood survives as hyphae in buds and fruiting bodies on fallen leaves. Spores are spread by air currents to the young leaves. Powdery mildew fungi are usually most active when the days are warm and nights are cool. Frequent rainfall will suppress the spread and development of powdery mildew.

Control. Powdery mildew on dogwood is best controlled by using the following strategies:

- Planting disease resistant varieties is an effective method of avoiding outbreaks of powdery mildew in landscape plantings of flowering dogwood. Among flowering dogwoods, the cultivar ‘Cherokee Brave’ has the best resistance to powdery mildew. Other flowering dogwoods with good mildew resistance include ‘Cherokee Daybreak,’ ‘Cherokee Chief,’ and ‘Springtime.’ Flowering dogwoods that often are heavily damaged by this disease include ‘Stokes Pink,’ ‘Rubra Pink,’ ‘Pink Beauty,’ ‘Red Beauty,’ ‘First Lady,’ ‘Purple Glory,’ and ‘Pink Flame.’ When transplanting native flowering dogwoods, choose trees with healthy foliage. Other dogwoods, including cultivars of the Korean dogwood and Kousa x florida hybrid