PLANT DISEASE CONTROL NOTES
EXTENSION DIVISION ● VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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Lawn Diseases

POWDERY MILDEW

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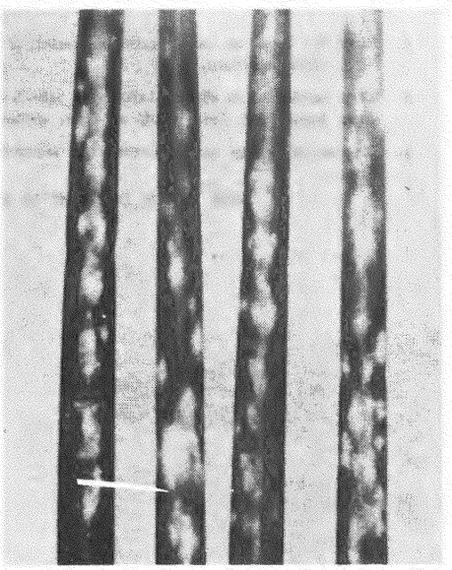

Powdery mildew is caused by the fungus *Erysiphe graminis*. The disease occurs most commonly on Bermudagrass, bluegrasses, and fescues.

SYMPTOMS.- The fungus is usually first seen as isolated wefts of fine, gray-white cobwebby growth on the upper surface of the leaves. This growth rapidly becomes more dense, and may cover the entire leaf giving it a gray-white appearance (see photograph). In cases of severe outbreaks, sections or entire grass stands may be dull white, rather than green.

DISEASE CYCLE.- The pathogen survives the winter months in dead grass leaves from the previous season, and in a dormant state in infected grass plants.

Spread by air movement, the spores germinate and the infection process begins within two hours from the time they land on the leaf.

Conditions favorable for the development of powdery mildew include: (a) reduced air circulation; (b) high atmospheric humidity, but no free water on the surfaces of the leaves; (c) low light intensity; and (d) an air temperature of 65°F.

The disease is usually more severe on turfgrass growing in shaded areas than in full natural light.

CONTROL.- *Resistant Varieties* - Various grass varieties differ in their susceptibility to powdery mildew. Merion Kentucky bluegrass, for example, is more susceptible to the powdery mildew fungus than common Kentucky bluegrass. However, selection of common Kentucky, solely because of its higher powdery mildew resistance, cannot be justified because of other disease resistance and cultural characteristics entering the picture.

Cultural Practices - Where powdery mildew is of frequent recurrence, changes to improve air movement and reduce grass shading will aid in disease reduction.

Chemical Control - For control of powdery mildew, spray 1,000 sq. ft. with 4 gal. of water containing 4 oz. (22 tablespoons) of Acti-dione-Thiram. After the disease appears, a single application of this fungicide will often give satisfactory control. However, if the outbreak is severe, 2-3 applications at 4-6 day intervals may be required for complete eradication.

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KEYS TO PROPER USE OF PESTICIDES

1. **Read the label on each pesticide container before each use. Follow instructions to the letter; heed all cautions and warnings, and note precautions about residues.**
2. **Keep pesticides in the containers in which you bought them. Put them where children or animals cannot get to them, preferably under lock and away from food, feed, seed, or other material that may become harmful if contaminated.**
3. **Dispose of empty containers in the manner specified on the label.**

SEE YOUR DOCTOR IF SYMPTOMS OF ILLNESS OCCUR DURING OR AFTER USE OF PESTICIDES.

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