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 sus-
ceptibility 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.
Trade and brand names are used only for the purpose of information and the Virginia Cooperative Extension Service does not guarantee nor warrant the standard of the product, nor does it imply approval of the product to the exclusion of others which may also be suitable.

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.