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## PLANT DISEASE CONTROL NOTES

EXTENSION DIVISION • VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

ORNAMENTAL AND FLOWER DISEASES  
POWDERY MILDEW OF ROSES

Control Series 86

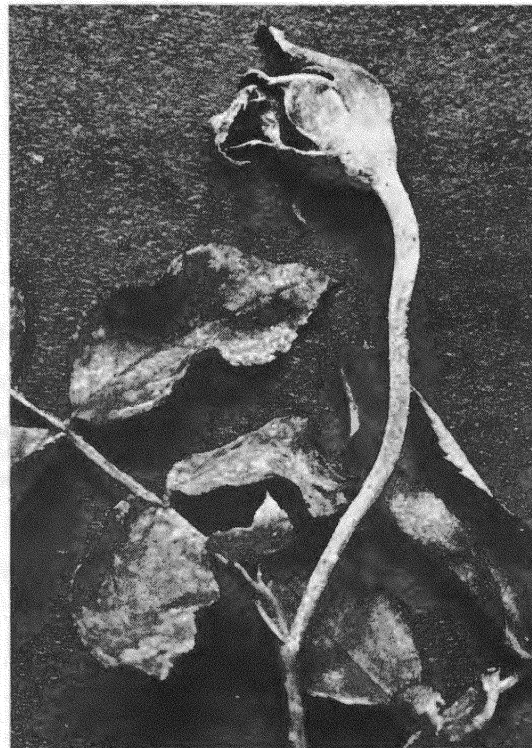
Revised  
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The fungus disease powdery mildew occurs on both greenhouse and out-of-doors rose varieties, but some are more susceptible than others. Certain climbers are highly sensitive.

**SYMPTOMS:** In the spring, the leaves, buds, and stems are covered with a white powdery coating. On highly susceptible varieties the new growth is stunted and curled and may become dry and drop. The buds are frequently malformed and may fail to open properly.

**DISEASE CYCLE:** The white fuzzy growth on the leaf surface contains spores of the fungus *Sphaerotheca pannosa*. The spores are carried by the wind to young leaves, causing more infections. Although it appears to be confined to the surface, the fungus has root-like organs in the cells of the leaflets. Only roses are infected by the fungus *Sphaerotheca pannosa*. Mildew diseases of other plants do not spread to roses. Unlike most fungi, the mildew spores do not germinate readily when wet. However, the disease develops rapidly during warm humid weather.

**PREVENTION:** It is difficult to prevent infection by the powdery mildew fungus, but frequent applications of fungicides throughout the growing season minimize serious damage. New growth is especially susceptible to powdery mildew and is constantly being subjected to fungus spores during the growing season.



*Rose leaflet and flower bud showing the white powdery fungus growth typical of powdery mildew disease.*

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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.