## PLANT DISEASE CONTROL NOTES

EXTENSION DIVISION . VIRGINIA POLYTECHNIC INSTITUTE AND BRANZUNIVERSITY

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## ORNAMENTAL AND FLOWER DISEASES ROSE BLACKSPOT

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Both the leaves and canes of susceptible roses are infected by the blackspot fungus <u>Diplocaropon</u> rosae resulting in almost complete defoliation of bushes by early fall. During the dormant period of the year, the fungus survives in the diseased canes and leaves. If blackspot is uncontrolled and early defoliation occurs, bushes are weakened and cane dieback the following spring will be severe. Weakened plants will continue to die even after the bushes leaf out.

SYMPTOMS: On roses grown out-of-door, the leaves are infected in the summer. Small round spots ranging in size from 1/16" to 1/2" in diameter appear, generally on the upper side of the leaves. Leaf tissue adjacent to the spot turns yellow. Infected leaves characteristically turn yellow and fall prematurely. The disease is distinquished from the other leaf spots by the generally fringed margins and also by the darker and consistently black color. Spots on the canes are reddish-purple in color. Blackspot is indirectly responsible for a pale flower color often occuring in many varieties.



Blackspot on leaflet

DISEASE CYCLE: The spores of the blackspot fungus are spread by splashing water and infection takes place only when water remains on the leaves for several hours. Therefore, the disease is most serious in regions of high rainfall and high humidity. Overhead irrigation or syringing the plants during dry periods should be avoided.

SANITATION: A preventive program for blackspot should begin in the fall with a thorough clean up program. Diseased leaves on the ground should be raked and burned. All diseased canes should be pruned off cutting several inches back into healthy wood. These precautions reduce the amount of overwintering fungus.

CHEMICAL CONTROL: The fungicide program should start in the spring before the new leaves become spotted. It is especially important to protect susceptible varieties because they are more subject to cane dieback. From this time, until frost, the plants should never pass through a rainy period without a protective coating of fungicide on the leaves. During rainy weather, it may be necessary to spray the plants two times a week. When rains are infrequent, spraying at 7 to 10-day intervals is usually sufficient. Frequent fungicide application is equally important as the chemicals to be used.

	KEYS TO PROPER USE OF PESTICIDES
2.	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.  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.  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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Refer to Pest Management Guide 7 for information on chemical control.