EC59-1824 Plant Diseases : Black Spot of Roses

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Black Spot of ROSES

SYMPTOMS

This disease occurs from spring until fall. It appears on the leaves as black spots which have a rather radiating or "feathery" type margin. The spots may vary in size from small dots to spots of a half inch or more in diameter. They may appear on either side of the leaf but usually are more abundant on the upper surface. Leaves having black spots tend to turn yellow and drop.
Black spot is the most severe disease of roses in Nebraska. It commonly causes extensive defoliation. When this occurs early in the season, a new set of leaves is initiated which causes considerable drain on the food reserves in the roots. This results in a weakened plant with improperly matured wood. Such plants are especially subject to winter injury and to losses in storage. Defoliated plants produce fewer blossoms the following year.

The canes may also become infected. Such infections show as purplish-red, raised irregular blotches on tender immature wood, especially on soft wooded varieties.

**CAUSE**

Black spot is caused by a fungus that remains alive throughout the winter in the dead infected tissues. In the spring the fungus becomes active in the dead tissues and produces spores (fungus seeds) that are distributed about by air currents. Those which lodge upon rose plants will germinate and produce infection if there is moisture on the surface of the plant for six to eight hours. Thousands or more spores will develop from the infection spot. Moist weather or keeping the plant wet through excessive sprinkling will help black spot development.

**CONTROL**

1. Cleaning away the leaves from the rose bed in the fall of the year may help some. Mulching the bed in early spring will aid by acting as a mechanical barrier in
preventing the spores in old leaves from being splashed up from the ground. These sanitary measures are only aids in reducing the amount of initial spring infection and do not replace spraying or dusting.

2. Spraying or dusting at 7 to 14 day intervals from May to October is usually essential for most rose plantings. Sprays usually give better control than dusts because one can obtain a more thorough coverage of the plant foliage. The fungicide chemicals are protective and not curative. It is necessary to have the foliage completely coated (undersurfaces as well as upper-surfaces) with the fungicide so that when the spores lodge upon the plant they will be killed when they begin to germinate. The spores are extremely minute therefore complete coverage by the chemical is necessary to stop infection.

For most people it is better to use commercially prepared rose sprays or dusts since these preparations contain the necessary chemicals for control of the common diseases and insects.

For amateur growers who wish to mix their own materials or wish to spray or dust for black spot alone, following are suggested chemicals:

Captan - Follow manufacturers directions

Cypex - " " "

Ferbam - " " "

Maneb - " " "

Phaltan - " " "

Zineb - " " "

3. A wetting agent should be added to the spray solution if one has not already been incorporated with the fungicide. Common household detergents such as Tide, All, Vel, Dreft, etc. are perfectly satisfactory wetting agents. It is suggested that 1 teaspoon of powdered or liquid detergent be added per gallon of spray solution.
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