

Rose disorder: Blackspot

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Symptoms and effects

Blackspot is common and potentially serious throughout Wisconsin. The symptoms that positively identify this disease are spots visible especially on the upper sides of leaves. These spots are always black and circular with a fringed edge. They may vary in size from $\frac{1}{8}$ to $\frac{1}{2}$ inch in diameter. If your roses have spots with different characteristics, blackspot probably is not the problem. The number of spots per leaf varies, and so do the number of spots required to cause a leaf to drop off. Leaf drop commonly follows infection, and the leaves may yellow before they drop. Premature leaf fall from blackspot makes roses more susceptible to winter kill.

Physiological problems from other undetermined disorders have been blamed on blackspot. The trained observer can make an accurate field diagnosis, but if you are in doubt, submit some leaves to your county Extension office, and they will pass the sample to a diagnostic laboratory.

Cause

The fungus *Diplocarpon rosae* causes blackspot in roses. This fungus overwinters in leaves and on stems. Blackspot usually does not occur before late June, but heavy dews, warm weather, high humidity, and rains increase the chance for infection as the season progresses.

Some rose gardens have a history of blackspot, while others have been fairly free of it. If blackspot infests a rose bed heavily one year, the disease will probably recur the next season.

Varieties differ in susceptibility. Recently more rose varieties resistant to blackspot have come out. Often you can find this information printed on the tag that accompanies the plant.

Control

Since blackspot is common throughout Wisconsin, all rose growers should be aware of control measures. These can be modified to fit individual circumstances.

Cultural

Maximize air movement around each plant. In gardens with no history of blackspot, try removing the lower 6 inches of leaves after mid-June, growing roses in sunny areas, and picking off diseased leaves as they occur. Clean up diseased leaves in fall and spring, and incorporate the remaining debris into the soil.



Blackspot of rose

Chemical

Many chemicals are approved for blackspot control. Base your selection on:

- (1) materials available;
- (2) need for control of additional diseases such as powdery mildew or rust;
- (3) concern over a visible residue remaining on flowers and foliage (powders are more likely than liquids to leave a visible residue);
- (4) method of application (dust, aerosol, or spray); and
- (5) other uses of the chemical.

Captan—Probably less effective than other chemicals listed. Does not control powdery mildew.

Carbamates (maneb, Dithane M-45, Manzate 200, and Polyram)—No powdery mildew control.

Chlorothalonil (Daconil 2787)—Some powdery mildew suppression.

Glyodin—Probably less effective, but one of the few liquid formulations available.

Sulfur—Offers some powdery mildew control. May cause burns when applied during hot periods.

Thiophanate-methyl (Cleary 3336, Domain, Fungo, and Topsin M)—Systemic fungicides that also control Botrytis and powdery mildew.

Triforine (Funginex)—Liquid fungicide that also controls powdery mildew and suppresses rust disease. Leaves no visible residue.

Begin chemical applications in mid-June in gardens prone to blackspot, or at the first sign of the disease. Apply the treatment according to label recommendations, making sure lower leaves are covered, at approximately 7-day intervals. If the disease has already started, it may help to shorten the spray intervals. You may lengthen intervals between applications during dry weather and low dew periods.

The chemicals mentioned are often included in commercial rose pesticide formulations. Check the pesticide label to determine its chemical composition. Lime sulfur as a dormant application may help reduce carryover inoculum in seriously diseased rose gardens. However, lime sulfur is odorous and will stain painted surfaces.

Note: The availability of fungicides changes periodically. New products are pending at the time of this publication, and some older fungicides may soon be dropped.

References to products in this publication are for your convenience and are not an endorsement of one product over other similar products. You are responsible for using chemicals according to the manufacturer's current label directions. Follow directions exactly to protect the environment and people from chemical exposure.



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