

Rose Anthracnose

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Anthracnose is the common name of a disease that is caused by a group of fungi that produce similar symptoms in a wide range of host plants, including many kinds of trees and shrubs. On roses, the fungus, *Sphaceloma rosarum*, causes anthracnose, producing a variety of symptoms characterized by spots on the leaves of infected plants. If left untreated, this disease can cause severe defoliation.

Symptoms

- Small reddish-purple discolorations appear on leaf veins.
- Spots eventually turn dark with a thin, brown margin around the border.
- Leaf spots have smooth, distinct edges, unlike the feathery borders of black spot.
- Over time, the center of the leaf spots may turn gray and fall out, leaving shot-hole lesions (Fig. 1).
- Leaves turn yellow, wither, and fall prematurely.
- In severely infected plants, cankers can develop on canes or stems and girdle (encircle) the entire stem, resulting in dieback (branches die, beginning at the tips and progressing toward the trunk).
- Plants weakened by continuous defoliation and dieback are more susceptible to infection by other pathogens and to environmental stress.

Cause

The fungus *Sphaceloma rosarum* causes anthracnose of roses by infecting actively growing tissue.



Figure 1. Initial symptoms are purple to black spots with a brown border. The centers of the spots become gray and fall out, leaving a shot hole in the leaf. Source: Texas Plant Disease Diagnostic Laboratory.

Resilient spores may survive the winter in leaf spots, cankers, or fallen plant debris. From there, wind and spring rains spread the spores to young leaves, initiating infection and causing symptoms (Fig. 2). New spores produced in microscopic structures in the lesions on the leaves and canes spread to neighboring healthy plants by means of wind and water. Spores can also spread through gardening or pruning practices or by insects moving from plant to plant.

Environmental Factors

Cool temperatures and high humidity favor infection and disease development. In Texas, anthracnose symptoms generally cease in the summer with the onset of dry conditions and high temperatures.

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Figure 2. Runoff during rainy periods can deposit spores on the tips or edges of leaves and cause marginal scorching. Source: Texas Plant Disease Diagnostic Laboratory.

Control

- Avoid planting roses that are susceptible to the disease, such as climbing, wild, and rambler roses, as well as some hybrid and shrub varieties.
- Avoid overhead watering, and space and prune plants to allow for good air circulation. This helps the foliage dry quickly and prevents

stagnant, humid conditions that promote fungal growth.

- Clean and sanitize gardening tools between plants to prevent mechanical transmission of the disease.
- Regularly inspect rose gardens for symptoms since later stages of anthracnose can be confused with insect damage.
- Prune infected plants to remove unsightly branches and canes and to reduce spores that can cause new infections.
- Clear away and dispose of infected plant parts and fallen debris to prevent re-infection the following spring.
- Use fungicides such as those containing copper or sulfur to manage anthracnose. Conventional fungicides (products containing chlorothalonil, myclobutanil, or propiconazole) can be effective. Refer to product labels for proper rates and usage.

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