

Black Spot of Rose

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INTRODUCTION

Black spot is the most common and serious disease of roses in Kentucky. It is a problem in greenhouse production and outdoor plantings.

SYMPTOMS

Nearly circular black spots with feathery or irregular margins form on upper leaf surfaces (FIGURE 1). Individual spots vary in size and may expand to 1/2 inch; coalescing spots produce larger irregular lesions. Yellow halos may form around spots; entire leaves turn yellow and drop prematurely. Defoliation weakens plants and reduces flower production and quality.

Infections on canes are often inconspicuous; they first appear as raised, purple-red, irregular blotches that later become blackened and blistered.

CAUSE & DISEASE DEVELOPMENT

Black spot is caused by the fungus, *Diplocarpon rosae*, which overwinters on infected canes and fallen leaves. At least 7 hours of leaf wetness is required for infection. After infection, symptoms may appear in as little as 3 days or may take up to 2 weeks, depending on weather conditions. Fungal spores are spread via splashing water.



FIGURE 1. BLACK CIRCULAR LESIONS WITH IRREGULAR MARGINS ARE TYPICAL OF BLACK SPOT. (PHOTO: WILLIAM FOUNTAIN, UK)

DISEASE MANAGEMENT

- Plant rose cultivars that are tolerant or resistant to this disease.
- Provide sufficient spacing between plants to permit good air circulation.
- Avoid overhead irrigation that would contribute to leaf wetness and encourage disease.
- Protective fungicide sprays should be applied as soon as the growing season begins. Continue sprays at 7 to 12 day intervals until autumn; use the shorter intervals during wet seasons, but longer intervals may be adequate during dry weather.
- Once disease occurs, good sanitation practices are critical. Gather fallen leaves, and remove diseased canes well below lesions. Collect this debris and discard or destroy.