

## Plant Pathology Fact Sheet

# Black Spot of Rose

By John Hartman and Paul Bachi

Black spot is the most common and serious disease of roses in Kentucky. Black spot is a problem both in greenhouse production and outdoor plantings. Roses in the landscape are subject to this disease annually.

### Symptoms

Nearly circular black spots with feathery or irregular margins form on the upper leaf surface. Individual spots vary in size from 1/10 to 1/2 inch, but several spots may coalesce to produce larger irregular lesions. A yellow halo may form around the spots, then the entire leaf turns yellow and drops off. Defoliation weakens plants and reduces flower production and quality.

Canes may also become infected. Lesions appear as raised purple-red irregular blotches, later becoming blackened and blistered.

### Cause

Black spot is caused by the fungal organism, *Diplocarpon rosae*. Wet conditions of at least 7 hours with temperatures between 60° to 80° F are required for infection. Symptoms



appear in as little as three days or up to two weeks after infection, depending on weather conditions.

### Disease Management

1. Proper sanitary practices are essential, because the black spot fungus overwinters on infected plant material. Gather and destroy fallen leaves. Remove old infected canes by cutting them back as severely as possible without cutting too close to the graft.
2. Plant roses far enough apart to allow good air circulation between plants.

3. Do not wet the leaves or flowers when watering.
4. Protective fungicide sprays should be applied as soon as the growing season starts. Continue the sprays at 7 to 12 day intervals until fall. During wet seasons, use the shorter intervals between sprays; longer intervals may be adequate during dry weather.

Products containing one or more of the following fungicides are suggested: captan, chlorothalonil, fenarimol, mancozeb, mancozeb + thiophanate-methyl, maneb, myclobutanil, propiconazole, trifloxystrobin, or triforine.

(Revised 12-04)