

Common Rose Diseases

By Paula Flynn

Several common disease problems detract from a rose's natural beauty. Disease organisms can cause unsightly leaves, poor flower production, and even death of leaves, canes, or entire plants. What you should do about the disease depends on whether it is caused by a fungus, virus, or a bacterium.

Black spot

Black spot is a fungal disease that can be identified by the roughly circular black spots that appear on the upper surface of leaves. Infected leaves eventually turn yellow and fall prematurely. Canes also may be infected and typically show a reddish-purple discoloration of tissue that later becomes blackened. These lesions usually do not kill the rose canes, but they do allow the fungus to survive over the winter.



Leaves are most susceptible when they are still expanding. The black spot fungus needs leaves to be wet for seven continuous hours in order to infect.

Powdery mildew

Powdery mildew is a widespread fungal disease of roses. Infected plants have whitish-gray powdery patches of fungus on the leaves, flower buds, or twigs. Leaves become distorted and eventually fall prematurely. Heavily infected flower buds usually fail to open properly. Powdery mildew spores are easily spread by wind to nearby healthy plants.



Several weather conditions encourage powdery mildew, including:

- little or no rainfall,
- temperature range of 70–80°F,
- nights with high relative humidity, and
- days with low relative humidity.

Tips for preventing and controlling fungal diseases

Several cultural practices can help reduce the possibility of black spot, powdery mildew, and other fungal problems in your rose garden.

- Plant roses in well drained soil in full sunlight.
- Do not crowd plants together. Allow 2 to 3 feet between hybrid teas, grandifloras, polyanthas, and floribundas. Give miniatures 9 to 12 inches between plants.
- Prune infected canes; rake and discard diseased leaves.
- Give roses adequate fertilizer to maintain plant vigor, but avoid excess fertilization.
- Avoid wetting leaves when irrigating.
- Use fungicide sprays with care. Control is mainly achieved by protective sprays.
- Products labeled for rose disease control are readily available to homeowners at garden centers. Follow label instructions for rates and timing.
- Select roses that are resistant to foliar diseases. Check plant descriptions in catalogs and garden centers for disease resistance information.

Rose Mosaic

Rose Mosaic is a viral disease. The symptoms are varied, but often include one of the following leaf patterns:

- yellow (chlorotic) line patterns,
- yellowing that occurs in circles (ringspots), or
- irregular areas of yellow and dark green tissue, giving mottled appearance. Stunted plant growth also may occur.



Virus diseases are seldom lethal, but they may cause stunted growth. Infected plants are weakened, which makes them more susceptible to winter injury or other problems.

Rose mosaic is spread when infected plants are used for grafting. Neither insects nor pruning shears are known to carry the virus from one plant to another. Thus, the best way to avoid virus problems is to purchase healthy plants from a reputable supplier.

Roses with virus diseases cannot be “cured.” Control options include removing symptomatic plants or tolerating them if their growth is acceptable.

Crown Gall

Crown gall is a bacterial disease that can affect many different woody plants, including roses.

The bacteria enter through wounds, especially on root and crown tissue. Rough, woody galls develop and interfere with the flow of nutrients and water. Galls may enlarge to an inch or more in diameter.



To prevent crown gall, avoid injury to the roots and crown of the plant when planting and when working around plants. Although pruning out galls may be feasible, in most cases infected plants need to be discarded. Also discard the surrounding soil to ensure that all of the infected plant tissue is removed.

Prepared by Paula Flynn, extension plant pathologist, and Diane Nelson, communication specialist. Photos by Paula Flynn and The American Phytopathological Society. Design by Micki Nelson.

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Disease-resistant roses

Some roses are considered to be resistant to black spot and powdery mildew. A few are listed below.

Shrub roses—

- Rosa rugosa* ‘Alboplena’
- Rosa rugosa* ‘Belle Poitevine’
- Rosa rugosa* ‘Blanc Double de Coubert’
- Rosa rugosa* ‘Frau Dagmar Hastrup’
- Rosa* × *calocarpa*

Climbing roses—

- ‘William Baffin’

In addition, ‘Nearly Wild’, ‘Carefree Beauty’, and the other 75 plus rose cultivars introduced by Griffith Buck are considered to have good disease resistance.

For more information

If you want to learn more about horticulture through training and volunteer work, ask your ISU Extension office for information about the ISU Extension Master Gardener program.

Questions also may be directed to ISU Extension Hortline by calling 515-294-3108 during business hours (10 a.m.—12 noon, 1 p.m.—4:30 p.m. Monday—Friday), or by contacting your local ISU Extension office.

Check these Web sites

ISU Extension publications

<https://store.extension.iastate.edu/>

ISU Horticulture

<http://www.hort.iastate.edu>

ISU Plant Disease Clinic

<https://hortnews.extension.iastate.edu/pidc>