While in a past article I talked a bit about black spot as a fungal problem that affects roses, there are many other diseases that can damage these plants and ruin their flowers. While most of these diseases are fungal in nature, we often have to contend with some bacterial and even viral organisms. In today's article, let's take a look at powdery mildew, downy mildew, Botrytis blight; stem canker, crown gall, and rose mosaic.

**Powdery mildew** is a fungal disease that often shows up on roses when there are warm days and cool nights during the spring and fall. As its name implies, the disease appears as a white, powdery material. The infected plant portions curl and the entire plant can be affected with time causing leaf drop. Prevention is perhaps the best recommendation concerning powdery mildew. To prevent powdery mildew, plant roses in open and full sun areas with sufficient spacing to ensure good air circulation. Other cultural suggestions would include not over fertilizing and not watering at night when wet leaves may promote this disease.

**Downy mildew** is somewhat similar to powdery mildew except it produces purple to brown-colored lesions on plant parts. This disease is more common in cool, humid weather and begins on the upper parts of the plant and can be spread by rain and irrigation. Just like powdery mildew, downy mildew can be suppressed by site selection in the full sun, good air circulation and avoiding wetting the foliage.

If you have ever seen rose buds turn gray-brown and fail to open, your plant may have had *Botrytis blight*. This disease

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begins as brown spots and blotches that continue into a slimy gray-brown rot. This fungus may work its way down the stem and even produce cankers (sunken areas). Just like the other diseases, good air circulation helps discourage the disease. Also, plant sanitation involving the removal of the diseased plant parts can help limit Botrytis blight.

**Stem canker** is another disease that affects roses. This disease appears on stems as yellow to purple spots that eventually form sunken brown cankers. These cankers can grow to a point where they eventually girdle the stem. This disease can enter through wounds caused by pruning or damage. Remove and destroy infected plants and plant parts and sterilize pruning tools between cuts.

**Crown gall** is a bacterium that enters wounds in roses and produces a round woody growth on stems up to several inches in diameter. It takes a while for the crown gall to develop, and with it; general plant health also declines in time. A rose infested with crown gall needs to be removed and destroyed as there is no real cure. Also, as the crown gall organism can remain in the soil for some time, do not replant a rose in the same place.

Viruses can also infect roses causing assorted leaf discolorations such as spots or lines in various patterns. Called **rose mosaic**, virus-infected roses don’t die, but their flowering ability can be compromised. Viruses generally enter a plant at the time of grafting or when a cutting is propagated. Accordingly, there is not anything that can be done to deal with this pest.

While roses may seem to have a lot of disease issues, much of these can be reduced to manageable levels with good cultural practices as mentioned above - full sun, good air circulation and keeping the foliage dry. Otherwise, just like any plant, monitor regularly for problems and take care of them while they are small.

**Resources:**


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