Check for Black Spot of Roses Before June Blooms!

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What is Black Spot?

Black Spot of rose is a fungal disease caused by the pathogen *Diplocarpon rosae* (the asexual stage is named *Marssonina rosae*). It is the most damaging disease of garden roses in humid areas, particularly east of the Rockies, and can be found wherever roses are grown. Some types of roses, such as hybrid tea roses, are more likely to get this disease than others, but nearly all roses are susceptible to some degree.

The fungus grows on rose tissue, especially leaves, causing it to turn yellow and fall early. An infected plant will become weakened over time. Plants infected with Black Spot produce fewer flowers and are more likely to be damaged by over- and under-watering, winter weather, and other pests and diseases.

Black Spot Photo by Nick Goltz

How would my plant get infected?
The Black Spot fungus survives the winter on infected tissue (usually dead leaves) from the previous season. In the early spring, spores (reproductive cells) are released from this old tissue. The spores are moved to healthy leaves and new plants via wind and rain splash. Leaves closest to the ground are most likely to be infected first. Spores may also be moved to new plants by contaminated gardening equipment and insects – it's not uncommon for the fungus to come from a neighbor's bush even several houses down. To germinate and infect the new plant, the spores need to be sitting on a wet leaf surface for about 7 hours.

What can I do to prevent my roses from getting Black Spot?
Knowing a bit about the biology of this pathogen can help you protect your roses! Do whatever you can to prevent the fungus from overwintering in your garden. Rake up leaves at the end of the season and apply fresh mulch in early spring before new leaves begin to appear.
Also, do your best to minimize the amount of time that water is sitting on leaves! Remember that several hours of continuous leaf wetness are needed for germination. Don't overwater your rose bushes, water only in the morning, and aim your hose/can toward the base of the plant. You should also prune your plants each winter to provide sufficient airflow. Better airflow will allow the leaves to dry more quickly after rainstorms (giving your bushes a gentle shake when it has stopped raining can help leaves dry more quickly too)!

Oh No! I think my Roses may already have Black Spot. What should I do?
Don't panic! Start by pruning away the diseased tissue. To reduce the risk of spreading the fungus to healthy plants, be sure to clean your pruning tools with 70% rubbing alcohol or a 10% bleach solution (1 part household bleach, 9 parts tap water). Place some of the diseased tissue in a plastic zip bag to have it identified by the UConn Plant Diagnostic Laboratory (see below). If you get a confirmation that the fungus is *Diplocarpon rosae*, you may want to apply a fungicide after pruning. Products such as copper sulfate, neem oil, sulfur, or myclobutanil have been shown to be effective at controlling Black Spot. Be sure to wear protective equipment and carefully follow product label instructions, even for organic products! Monitor your plants carefully for the rest of the season and repeat the steps above as needed.

Not sure if your roses are suffering from Black Spot or something else? Submit a sample to the UConn Plant Diagnostic Laboratory for disease identification and management recommendations. Find our submission forms and submission info at https://plant.lab.uconn.edu/forms/

If you have questions about submitting a sample to check for disease, maintaining plant health, or any other horticultural topics, contact the UConn Home & Garden Education by emailing ladybug@uconn.edu or calling (877) 486-6271. You can also visit our office in Storrs or your local Cooperative Extension Center.