

# What's Bugging Your Roses?

I love roses, and there's nothing quite as wonderful as strolling through the garden on a spring morning to peruse their abundant new growth and witness the transformation from spindly sticks to bountiful mounds of green sporting delicious new roses. But there, out of the corner of my eye, I see, oh no! Spots....and holes in leaves, and droopy buds, and little crawly things. Yikes! What's going on with my plant?

Diagnosing a plant problem, for your roses, your indoor plants or anything else you've got growing, is often a challenge since there can be so many different causes. While pests and diseases are often the first thing a gardener looks for, the culprit may be something physical like soil quality, weather or other environmental conditions, a mechanical injury or a combination of problems. The diagnostic process is like detective work – you need to ask lots of questions and collect and analyze information to find your potential suspect. Here are some things to consider when trying to decide what's bugging your roses:

- ✓ **Know what a healthy plant looks like** – this may seem like a no-brainer, but not all roses look alike. What's the normal size of the plant? Is the foliage shiny or dull, light or deep green? Are the buds high-centered or flat? Having a clear idea of the size, color and form of a healthy plant and its blooms is a good tool for comparison.
- ✓ **Keep an open mind** and be patient – it's easy to jump to conclusions about what is ailing your plant and treat it accordingly. Don't!
- ✓ **Know your enemies** – who they are, what they look like, when they show up in the garden, and what damage they do. When trying to figure out what's plaguing your plants, having an idea of the most common pests and diseases can give you a leg up on early detection. Also, it's good to avoid "guilt by association"; just because you see a pest in the vicinity of the problem doesn't mean it's the cause.
- ✓ **Take a real good look at the plant** to get a clear idea of symptoms since the cause of the problem may not be in the part of the rose that has the problem:
  - Check every visible portion of the plant - the top and undersides of leaves, canes, buds and flowers, in addition to the damaged, infected or pest-laden parts.
  - Look for physical evidence of an injury, a change in site conditions, soil compaction, or construction injury.
  - Examine the damaged portions of the plant that may have physical evidence of a pest or disease – the beast itself or its shed skins, droppings; webbing, honeydew, sooty mold, mushrooms, white, orange or black powdery substances, cankers, discolored stem and root tissue, etc.
  - Identify symptoms like holes or chewed edges on leaves, pale green or yellow leaves, leaf spots, water-soaked areas, etc.

- Check out the area immediately around the plant – the soil, weeds, neighboring plants or trees.
- ✓ **Think about the history of the plant and its surroundings** - how long has the plant been in its current location? Has anything changed for the rose itself or near it? What's the weather been like – frosty cold, devilishly hot, super windy and dry? Did you fertilize recently, or use some chemical pesticide?
- ✓ **Consider that it may be multiple problems;** for example, a plant stressed by drought or temperature extremes may be more susceptible to attacks from pests and diseases. Or, you might observe one problem that is really a symptom for another – like ants on roses – they're just an indicator of some sucking type of pest.
- ✓ **Look for patterns** - Do other roses have the same problem? What about different types of plants? Are all the plants with the problem in the same general area or different locations? Do you see damage to the same parts of the plants (e.g., growing tips, edges of leaves) on different plants?
- ✓ **Eliminate what it's not** – narrow down your list of possible suspects by ruling out those problems you know for certain are not the cause of the problem.
- ✓ **Double-check the obvious**, it never hurts to look again for apparent problems – is the drain hole in the rose container plugged? Are the raccoons chewing holes in your drip irrigation line? Did the next-door neighbor use an herbicide near your roses?
- ✓ **Make a preliminary diagnosis** – once you've collected all your information, decide what you think the cause of the problem is.

A few things that can help with your sleuthing - look for *signs* and *symptoms* and determine whether the problem is likely caused by something *living* or *nonliving*. A *sign* is direct evidence of the cause of the injury, either the presence of the actual pest, or some part of it, while a *symptom* is the change in appearance of the plant part – spots on leaves, yellowing leaves, or deformed flower buds. Observing the mass of foamy froth on a new rose bud would be a *sign* of spittlebugs, while dry, crispy-looking leaves in the summer would be a *symptom* of spider mites.

*Living* factors that create problems in roses are disease-producing organisms (pathogens) - fungi, bacteria, viruses, nematodes, and pests - insects, mites, mollusks, rodents, etc. If something *living* is causing the damage, then you'll generally see "something is missing and something is gained," the missing might be portions of leaves, holes in buds while something gained could be aphid skins, spider mite webs, or honeydew coated leaves. With *living* factors, there's no apparent wide-spread pattern of damage, and, damage generally gets worse with time.

Very often, a problem with a plant is not related to pests or disease, even though *symptoms* may be similar; it may be the result of *nonliving* factors – mechanical (breakage, abrasions, etc), physical, environmental (temperature extremes, light, water) and chemical (nutritional deficiencies, toxicities, herbicides). Damage from *nonliving* factors may be apparent on more than one type of plants or on parts of the plants that are the same age, like new growth. Think of what happens on one of our scalding hot summer days where you find brown-edged leaves on roses and many other plants – it's a prime example of a *nonliving* factor. Usually, damage does not get worse with time.

*By Nanette Londeree, Master Rosarian*