A *scale* infestation

WHAT YOU SHOULD DO

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Scale is a common, annual pest on many ornamental trees and shrubs, groundcovers, herbaceous plants and houseplants. Scale is often found on azaleas, rhododendrons, fruit and nut trees, hydrangeas and crepe myrtle.

Question: My azalea trees are covered with scale and black sooty mold. How do I fix this problem?

Answer: There are thousands of species of scale, but the main two classifications are soft scale and armored scale. The presence of black, sooty mold is a clear indication that you have an infestation of soft scale, not armored scale.

Scale sounds like a disease, but scale is actually an insect. Scale is a common, annual pest on many ornamental trees and shrubs, groundcovers, herbaceous plants and houseplants. Scale is often found on azaleas, rhododendrons, fruit and nut trees, hydrangeas and crepe myrtle.

Scale does not kill the plant but causes aesthetic damage, weakens the tree and leads to the development of honeydew and sooty mold. Honeydew, a clear sticky substance, is the excrement of plant-sucking insects.

Many homeowners confuse honeydew with sap. Trees do not drip sap. If you have "sap" dripping from your tree it is honeydew and is a telltale sign of an insect infestation.

Linda Estep
Ask a Master Gardener

Sooty mold is a fungus that grows on top of honeydew and coats the leaves of your trees to the point where they can no longer absorb sunlight. This interrupts photosynthesis and the tree will not be able to produce the nutrients it needs for survival.

Black, sooty mold may be the thing you notice first; however, upon further inspection of the bark, mainly in the crotches where branches connect, and on the underside of the leaves, you will discover small, white, oval egg masses.

These are the egg sacs, or ovisacs. A white, felted covering or matted waxy threads make up these egg sacs that hide the insects from view. The sac is about 1/8 inch long and 1/16 inch thick.

The adult females are dark red with short legs and antennae and long, thread-like mouthparts. The females lay their eggs in late April and they hatch about three weeks later in early May. Once the eggs hatch, there will be reddish, tiny crawling insects around June and July. This new generation matures during the summer and produces eggs that hatch in September.

Newly hatched nymphs, called crawlers, are tiny and crawl out of the egg sac onto the bark. Crawlers soon penetrate the bark with their long, thread-like mouthparts and begin to feed by sucking out sap. They then begin excreting honeydew.

These nymphs are inconspicuous and practically free of any waxy covering. Scale overwinters as nymphs are feeding through the bark.

You may need to use a hand lens or magnifying glass to identify the presence of scale. They are difficult to detect because they are small and relatively immobile.

Okay, so now that you know what is causing your problem, the question is how to fix it. First of all, prevention starts with doing all that you can to maintain the health and vigor of your trees.

Stressed trees are more likely to experience an infestation of any kind of insect, including scale.

Check plants regularly since early detection makes it easier to manage the problem. For minor infestations, you can squish them. You can also use a gentle blast of water to dislodge eggs, nymphs or adults.

Using horticultural soap and an old toothbrush, wash affected areas thoroughly which will also remove sooty mold.

If you have a larger infestation, you can prune. Cut out the most heavily infested branches and discard. Do not toss into your compost pile.

You can apply horticultural oil such as Neem oil. Apply during the dormant season and early spring. This will control the insect in its early stages (nymphs). The oil will coat and suffocate the insects and will be effective on eggs, nymphs and adults.

Provide good coverage on the entire affected area. Be prepared to do multiple applications. Follow instructions carefully because horticultural oils must be applied in a particular temperature range.

If you have created a yard that attracts natural predators, they may provide natural pest control. These include parasitic wasps, lacewings, ladybugs and certain beetles. Ants and birds are also natural predators.

I hope this information helps you eliminate your problem with scale.

Do you have a gardening or insect question? Contact the Douglas County Master Gardeners at douglasmg@oregonstate.edu or 541-672-4461 or visit 1134 SE Douglas Ave., Roseburg. Douglas County Master Gardeners are trained volunteers who help the OSU Extension Service serve the people of Douglas County.