

SCALE, MEALYBUGS AND ADELGIDS

Best Practices

IDENTIFICATION

Scales, mealybugs and adelgids attack a large variety of vegetation and are commonly found on indoor plants as well as trees, shrubs and vegetables. They can move from plant to plant and spread viruses, bacteria and fungi while they feed. **Scales** look like raised scabs or bumps 1/16th to 1/8th inch in diameter and can be white, black, brown, gray or tan. "Armored" scales hatch, crawl a few days, then permanently stop as they lose their legs and develop the cover that gives them their characteristic appearance. "Soft" scales, a little larger with smooth or cottony covers can move a little while longer before settling in one spot to feed for life.

Mealybugs and adelgids are 1/4th to 3/16th of an inch long ovals that are clearly segmented and look like greasy or waxy, white cotton fluff. When disturbed they can move slowly and are usually found near crevices between stems and leaves. They secrete sticky honeydew that makes the leaves look shiny. One mealybug can produce an egg sac containing up to 600 eggs about every 30 days.

DAMAGE

All three pierce into plants and feed on their sap. This activity weakens the plant and creates discolored spots, streaking or scarring on leaves, as well as causes them to turn a yellow, bronze or curl. This damage can lead to leaf drop and eventually kill the plant. On annual vegetables the loss of leaves could affect production, and trees heavily infested with armored scale can look water stressed and ultimately die. The excretion of honeydew can lead to the growth of sooty mold.

SOLUTIONS – Best Practices

Identify: If plants develop honeydew, discolored spots, or appear to yellow or wilt closely inspect the leaves, top and bottom, and determine which species of pest is present.

Monitor/Establish Threshold: Inspecting your plants regularly is essential for early detection. The easiest way to successfully rid plants of pests is to catch them early.

Prevention: Weak, under-potted, and stressed plants are more likely to become infested with these pests. Keeping your plants properly watered, fertilized, and healthy overall is the best way to avoid attracting them.

Control: On outdoor plants forcefully spraying with water can help reduce populations. For houseplants, isolating the infected plant will help prevent spread. In the case of mealybugs simply wiping with rubbing alcohol can remove them. For larger infestations coating leaves with a spray of equal parts water and dish-washing soap (not detergent) can smother pests. This technique can also be employed using neem oil or horticultural oil, or insecticidal soap. Multiple applications, around every 10 days, will probably be necessary. Prune infested leaves, twigs, and branches and remove them from your property. Introducing lacewings or ladybugs, natural predators of these pests, can help reduce populations. In severe infestations synthetic systemic insecticides can be invaluable. Regardless of method/product used ALWAYS read and follow package instructions, and NEVER spray when beneficial insects are present.

FURTHER RESEARCH

<http://extension.oregonstate.edu/gardening/how-detect-houseplant-and-greenhouse-pests>

<https://greenmethods.com/pests/scale-mealybugs/>

<http://www.ipm.ucdavis.edu/>

<http://ipmguidelines.org/home/content/book2/ch06/default.asp>

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www.portlandnursery.com