Scales

Scale insects suck plant juices and are pests of many trees and shrubs. Infestations can cause yellowing or premature dropping of leaves, sticky honeydew, and blackish sooty mold. Plant parts can distort or die back, depending on the species and abundance of scales. Management includes proper plant care, conserving natural enemies, and applying low-toxicity insecticides when needed. Most plants tolerate low to moderate numbers of scales.

Damage resembles that of aphids and whiteflies.

- Abundant sticky honeydew excreted by soft scales and certain other species.
- Black sooty mold growing on the honeydew.
- Discolored, distorted, or dying leaves, twigs, or branches, especially with armored scales.

Recognize scales:

- Circular, elongate, or oval discolorations or raised areas on bark, leaves, or fruit.
- Immobile or slow-moving bodies or coverings 1/25 to 1/4 inch long that lack an obvious head or appendages and don’t resemble most other insects.

Distinguish the two most common types of scales—soft and armored.

- Armored scales are tiny and flat, have covers that usually can be removed from the body, and don’t secrete sticky honeydew. Common species include San Jose scale and California red scale.
- Soft scales are larger, excrete honeydew, and are more rounded and convex with covers that don’t lift off. Common species include black scale, lecanium scale, and brown soft scale.
- Learn the species or family name of your scale so you can identify effective controls.

To reduce problems, use an integrated program.

- Provide plants with proper cultural care, especially irrigation.
- Encourage scale natural enemies. Look for predators such as lady beetles or lacewings and parasite emergence holes in scale covers.
- Use sticky barriers or insecticide baits to selectively control scale-tending ants.
- Consider replacing problem-prone plants. Most scales are highly specific to certain plants.

What about insecticides?

- Don’t treat unless you have an intolerable or damaging problem.
- Avoid insecticides that injure natural enemies.
- For fruit trees and smaller plants, make a well-timed and thorough spray using horticultural oil during the dormant season or when scale crawlers are active in the growing season.
- For intolerable soft scale problems, especially on large trees, consider soil-applied imidacloprid. This material is not effective against some scales, including armored scales, and may cause outbreaks of cottony cushion scale.

See Pest Notes: Scales at ipm.ucanr.edu for more details.

Minimize the use of pesticides that pollute our waterways. Use nonchemical alternatives or less toxic pesticide products whenever possible. Read product labels carefully and follow instructions on proper use, storage, and disposal.

For more information about managing pests, contact your University of California Cooperative Extension office listed under the county government pages of your phone book or visit the UC IPM Web site at ipm.ucanr.edu.

What you use in your landscape affects our rivers and oceans!

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