



ENTFACT-436

WALNUT SCALE

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Walnut scales are 1/8" long scales that are nearly circular, flat, and gray with a reddish brown spot. They occur throughout the US on a wide variety of deciduous trees and shrubs and only rarely on some conifers. They are generally not abundant but some severe infestations have been seen on red maple. Crawlers are active in mid June and in late August to early September in Kentucky.

In general, controls will be more effective if the scale population on a plant is first physically reduced by pruning out heavily infested and sickly branches. In some cases, large sized scales can be scrubbed off with a stiff brush. Horticultural oil sprays kill primarily by smothering, so they will be less effective against scales crowded together or occurring in layers the plant. Insecticidal soaps provide a new alternative. They are very effective against both active and settled crawlers. Oils and soaps are safe to use and are especially good choices for sensitive areas, such as where people are present soon after treatment. Because of their short residual, they help to conserve beneficial species.

Horticultural spray oils kill all stages of scales that are present at the time of application, and often give good control. Most trees and shrubs can tolerate application of light (summer oil) even during the summer months. Refer to the product label for guidelines on plant sensitivity and any temperature restrictions. Oil products labeled as summer, superior or Volck oil are of the highest grade and may be used on tolerant plants during either the growing season or the dormant season, but at different spray concentrations.

An alternative to oil sprays are contact insecticides applied during the growing season when the crawler stages of the scales are present. The presence of crawlers can sometimes be determined by sharply tapping an infested twig or branch over a white paper. Crawlers are often orange, brown or purple and appear as moving specks of dust. Because of their waxy protective covering, other stages of scales are not readily controlled by contact insecticides. Contact insecticide sprays will not reach crawlers that have settled under old scales.

Insecticides registered for scale crawler control on outdoor plants include: Cygon (dimethoate), Dursban (chlorpyrifos), Diazinon, Malathion, Orthene (acephate) and Sevin (carbaryl). Although resistance to insecticides may occur in some cases, failure of contact sprays is more often the result of not timing the applications to coincide with crawler activity. Even when sprays are timed for optimum effect, complete control may not be achieved by single applications if crawler activity is spread over an extended period of time, or if populations are heavy and crawlers are under old scale shells. Thorough spray coverage is essential for good control.

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