I N S E C T S E R I E S

HOME & GARDEN

Root Weevils

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Quick Facts...

Root weevils are common invaders of Colorado homes. Although a nuisance, they cause no harm to humans, pets or household furnishings.

The strawberry root weevil, rough strawberry root weevil and black vine weevil are the most common root weevils in Colorado and have similar life cycles.

Only in extreme cases is insecticide treatment needed to prevent infestations in the home.

Acephate is recommended for damage-control treatments when adult root weevils threaten plant damage. Use Orthene to kill adults before they lay eggs.

Root weevils are one of the most common insects that wander into Colorado homes. While these insects can be a considerable nuisance, they cause no harm to humans, pets or household furnishings. Outdoors, root weevils occasionally feed on and damage certain woody shrubs and other perennial plants.

Life Cycle

The species of root weevils most commonly found in Colorado are the strawberry root weevil, rough strawberry root weevil and black vine weevil. As adults, all three species are small, dark snout beetles.

Figure 1: Strawberry root weevil. *(Photo from the Ken Gray collection.)*

Figure 2: Black vine weevil. *(Photo by John Capinera.)*

Largest is the black vine weevil, which may reach 1/2 inch. It has characteristic patches of yellow hairs on the wing covers. Strawberry root weevils are shiny, brownish-black and about 1/4 inch long. Rough strawberry weevils are intermediate in size.

A behavioral characteristic is that, when disturbed, root weevils drop readily to the ground. They do not fly.

The life cycles of all three root weevils are similar. Most root weevils overwinter as nearly full-grown, pale, legless larvae that feed on the roots of strawberry, raspberry, clover, spruce, Douglas-fir and many woody shrubs. A few weevils, particularly black vine weevils, overwinter as adults.

Development and pupation of root weevils is completed in the soil. Most adults emerge sometime in June. Eggs apparently are laid near the crowns of plants throughout the summer. This egg-laying is interspersed by feeding on foliage of various plants.

Root weevil feeding produces characteristic notches along leaf margins. Euonymous is one of the plants frequently damaged by adult root weevils. This damage typically is mistaken for grasshopper feeding.

Household Pests

Root weevils wander into homes most frequently during late June and July. Household migrations greatly increase during periods of hot, dry weather.

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Figure 3. Leaf notching characteristic of root weevil adults.

Figure 4. Strawberry root weevil larva. *(Photo from the Ken Gray collection.)*

Figure 5. Strawberry root weevil. *(Photo by Whitney Cranshaw.)*

Figure 6. Rough strawberry root weevil. *(Photo from the Ken Gray collection.)*

The insects apparently are attracted to the moisture of the building. Inside homes, the root weevils cause no injury to humans or household furnishings. However, they can be quite abundant and a considerable nuisance. Occasionally, root weevils damage plants in home greenhouses.

Just why these insects are attracted to homes is unclear, but perhaps the houses provide shelter during the hot summer months when the insects are relatively inactive. Moisture sources in and around homes also attract the adult weevils.

Because root weevils do no harm inside homes, the best way to handle infestations is to tolerate occasional beetles, vacuuming them as they are observed. Root weevils will move out of homes on their own, and infestations subside as rapidly as they begin.

When necessary, prevent root weevil movement into homes with barrier insecticide treatments along the outside foundation. Diazinon, Dursban and Orthene are some commonly available insecticides that may be used as barrier treatments. However, root weevils are difficult to kill with insecticides, so results are often unsatisfactory.

Spray one to two weeks before the date when strawberry root weevils were first observed in previous years. If needed, repeat applications at four-week intervals.

Insecticides are not recommended indoors for root weevil control because the insects often are widely dispersed in a home.

Control also includes sealing openings and screening windows to prevent entry. Root weevil populations can be reduced by removing plants around the outside of the home on which the insects feed. Reducing watering around building foundations may limit root weevil migrations, as the adult insects appear attracted to shade and moisture.

Plant Injury

Adult root weevil damage to plants, such as euonymous, can be severe. Acephate (Orthene) or use of pyrethroids such as permethrin or cyhalothrin is recommended for damage-control treatment. Treat as soon as leaf notching is observed. If needed, continue at three-week intervals through August.

Where root injury is important due to larval feeding, Orthene may be used to kill adults before egg-laying. Larvae may also be controlled by soil drenches of insect parasitic nematodes, particularly those of the genus *Heterorhaditis*. (See fact sheet 5.573, *Insect Parasitic Nematodes*.) Start treatments in early June. Thoroughly wet both the soil underneath the plants and the foliage.

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