

Control of Root Weevils On Ornamentals And in Homes



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Control of Root Weevils On Ornamentals And in Homes

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Several species of small beetles known as root weevils cause severe damage to strawberries, cane fruits, and ornamentals and occasionally invade houses. Of these, the so-called strawberry root weevils, genus *Brachyrhinus*, occur in all sections of Oregon. The obscure root weevil, *Sciopithes obscurus*, is present throughout western Oregon. Since control measures used against the strawberry root weevils and the obscure root weevil are somewhat different, it is important to be able to distinguish between them.

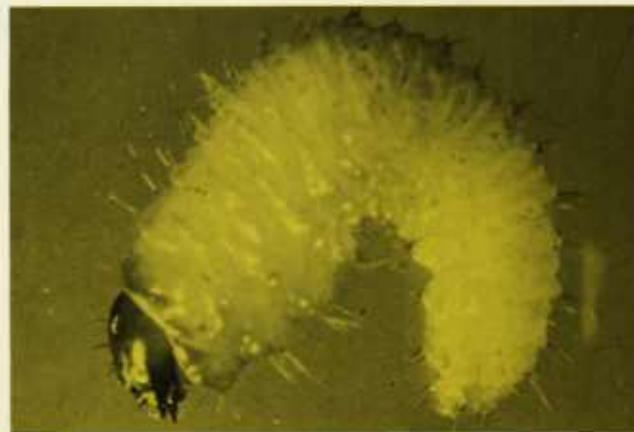
Strawberry Root Weevils (*Brachyrhinus* Spp.)

Strawberry root weevils are dark brown to black and from 1/5 to 2/5 inch in length. They have a distinct snout. Adults feed on leaves, producing a scalloped or notched effect along the margins. This feeding detracts from the appearance of the plants, but usually does not cause serious injury.

Severe damage may result from larvae feeding on roots. The larvae are whitish, legless grubs, 1/4 to 1/2 inch long when full-grown. Adults lay eggs in the soil around the crown of plants from which the larvae hatch and work down to the roots. When the larvae are small, they feed on the fibrous roots. As they grow, they feed on larger roots, sometimes girdling them.

Among the most frequently injured woody plants are azalea, rhododendron, yew, camellia, viburnum, arborvitae, and rose. Often plants are killed outright. Root weevil larvae also injure non-woody plants, including tuberous begonia, lily-of-the-valley, primrose, peony, and others.

COVER: Adult of strawberry root weevil commonly found on ornamentals or invading homes. (Color photographs are by Kenneth Gray, Pacific Supply Cooperative.)



Larval stage of root weevil.



Typical injury caused by adult weevils on rhododendron.

Control at time of planting

Treating the soil with an insecticide at the time of planting is one of the best ways to prevent the larvae from doing damage. Insecticides should be applied either as sprays, dusts, or granules on the surface and then thoroughly worked into the soil to a depth of six inches. This method will protect plants from damage by larvae for three or four years. Use one of the insecticides at the rate suggested in the table on the next page.

Treating established plants

If a preplanting soil treatment has not been made, aldrin, chlordane, or dieldrin may be used to kill adults before they lay eggs. Spray, dust, or granular insecticides should be applied at the time adults emerge from the soil, usually during late May and June.

The insecticide should be applied evenly over the surface of the soil around the plants. One to two gallons of spray per 100 square feet are needed for good soil coverage. A one-pound coffee can with small nail holes punched in the bottom makes a convenient shaker for even distribution of granules. If possible, work some of the insecticide into the top few inches of soil. Be sure the insecticide is worked into the soil and *not in the mulch that may be around plants*. This treatment kills adult weevils and helps prevent larval injury.

The number of applications needed depends on the severity of the infestation and the number of susceptible plants nearby. More than one application may be needed if there is evidence of continued feeding or if the weevils themselves are found.

The following table indicates suggested rates of application for the insecticide formulations most commonly available. Concentrations of granules, dusts, or emulsifiable concentrates other than those listed may be available from pesticide dealers. If these are used, follow the manufacturer's recommendations for applying granules or mixing the dilute spray.

Insecticide Required for 100 Square Feet of Surface Area For Preplanting Treatment

Insecticide	Granules or dust	Emulsifiable concentrate or	
		wetttable powder	
Aldrin	4 oz.— 5%	5 teaspoons—25.0%	
Chlordane	4 oz.—10%	5 teaspoons—44.0%	
Dieldrin	4 oz.— 5%	6 teaspoons—18.6%	

Obscure Root Weevil (*Sciopithes obscurus*)

In western Oregon the obscure root weevil may be found at times feeding voraciously on foliage of woody perennials. The foliage of rhododendron and viburnum often is damaged heavily by this insect. The obscure root weevil is similar in general size and shape to the common strawberry root weevil, but it is predominately gray in color. The



Adult obscure root weevil. Found in western Oregon, this weevil causes extensive damage to plant foliage.

adult weevil ties together the edges of a leaf and lays its eggs in this fold. The larvae hatching from these eggs are similar to strawberry root weevil larvae in appearance and cause the same kind of damage to roots.

Control of larvae

Aldrin, dieldrin, and chlordane are not effective against larvae of the obscure root weevil. However, DDT incorporated into the soil at time of transplanting will help prevent damage from obscure root weevil larvae. Use 4 ounces of 10% DDT dust or 1 ounce of 50% DDT wettable powder per 100 square feet of surface area. DDT is not effective against larvae of the strawberry root weevils.

Control of adults

Adults of the obscure root weevil begin to emerge during early June. They can be controlled by applications of malathion, diazinon, or DDT to the foliage and on the ground around the plants. To prepare the spray use 1 tablespoonful per gallon of water of any one of the following insecticides: *DDT 50% wettable powder, or DDT 25% emulsifiable concentrate, or malathion 57% emulsifiable concentrate, or diazinon 25% emulsifiable concentrate. Dusts containing these insecticides may be used if this method of application is preferred. These dusts usually contain 4% or 5% of the insecticide.*

Control Where Both Kinds of Weevil Are Present

Frequently, adults of strawberry root weevils and of the obscure root weevil will be found on the same plants. Adults of both kinds of weevils can be killed with malathion or diazinon spray or dust. Killing the adults prevents their laying eggs and thus reduces larval damage. Spraying or dusting two or three times during the period June to mid-August often gives adequate control. Because adults emerge over a long period of time, some may escape the treatment. For this reason soil treatment to control larvae is desirable.

Root Weevils—A Household Pest

Adult strawberry root weevils

Root weevils frequently migrate into homes during the summer and fall months. They may cause alarm, but do no damage and will not infest stored foods or damage household furnishings or the building. Adult weevils can be killed with any of the common household insecticide aerosols if the mist from the aerosol comes in direct contact with the insect. Often the best procedure for eliminating them from a dwelling is to sweep them up with a broom or vacuum cleaner.

The nuisance of strawberry root weevils migrating into homes can be alleviated by treating grassy areas or shrubbery around the home with chlordane, aldrin, dieldrin, diazinon, or malathion when the weevils are migrating toward the home. Obscure root weevils are seldom household pests.

PESTICIDES CAN BE USED SAFELY

The pesticides suggested in this leaflet can be used safely if reasonable precautions are observed.

Follow the manufacturer's precautions on the pesticide label. These are not intended to frighten the user, but to impress upon him the need for careful use of all pesticides.

- Store pesticides in a safe place, out of reach of children.
- Destroy empty containers or those without labels.
- Do not keep pesticides in beverage bottles or other containers which previously have been used for food or drink.
- When mixing and using pesticides, avoid getting them on your skin. Wash your hands after spraying.
- Do not use household sprays near an open flame.
- If household sprays get on asphalt tile floors, wipe up immediately.