

ROOT WEEVILS Coleoptera: Curculionidae **Strawberry** *Otiorhynchus ovatus*,
Black Vine *O. sulcatus*, **Rough Strawberry** *O. rugosostriatus*,
Obscure *Sciopithes obscurus*, **Woods** *Nemocestes incomptus*

DESCRIPTION

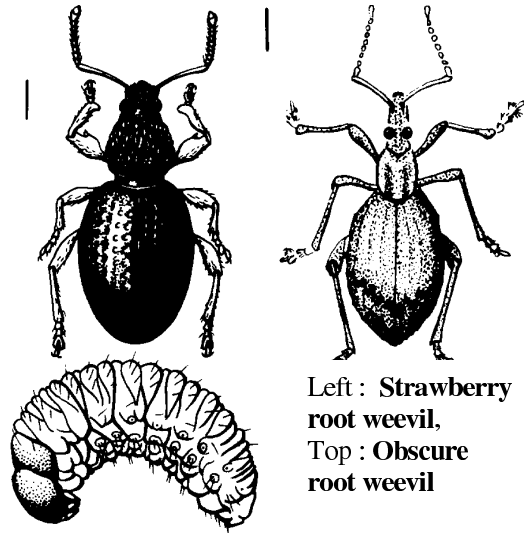
Adults are commonly called snout beetles with their mouthparts at the end of a long snout. They are oblong-oval in shape and vary in color from gray, dark brown, to black. The wing covers are oval and marked with rows of round punctures. Adults are 5 to 8 mm long. **Larvae** are legless, creamy-white with a brown head and about 7 mm long when mature.

ECONOMIC IMPORTANCE

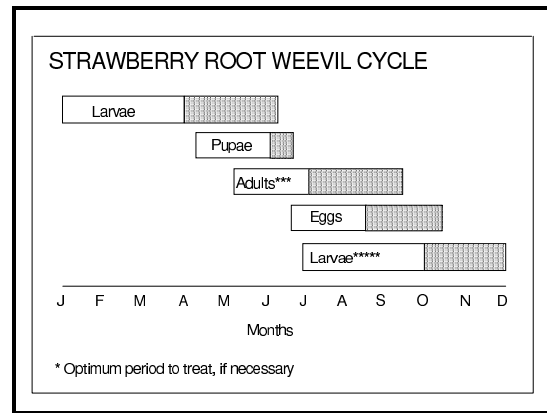
Larvae of these species feed on the roots and crowns of plants causing stunted and poor yielding plants. Their feeding injury severely shortens the life of a planting. All species feed on strawberries and other small fruits and ornamental plants. Adults feed on the foliage causing leaf notching, which is not as serious as larval injury on small fruits, but on ornamentals, notching distracts from the beauty of the plant. Obscure and woods weevils are particularly damaging on rhododendron and azalea. Black vine and strawberry root weevils are the principal pests on small fruit crops, cranberries, grapes, mint, hops, and nearly all ornamental plants.

DISTRIBUTION AND LIFE HISTORY

These pests are distributed throughout the United States and British Columbia. These species overwinter as partially mature larvae or as adults. Overwintering larvae feed on roots during the winter if temperatures are mild. Larvae do the greatest damage in March and April before pupating in earthen cells in the soil. Adults emerge in late April, May, and June and begin laying eggs. Most of the eggs are laid during the summer and early fall and individual females may lay between 150 and 200 eggs. Eggs are laid around the bases of plants and hatch in about three weeks. The obscure root weevil lays eggs on the foliage, then curls and cements the leaf over the eggs. Young larvae of all species work their way into the soil and begin feeding on the roots. They remain in the soil until the following spring. In some species, the adults overwinter.



Left : Strawberry root weevil,
 Top : Obscure root weevil



MANAGEMENT AND CONTROL

Adults are unable to fly so crop rotation is an effective method to control these pests. Crops such as corn, wheat, clover, or alfalfa may reduce the populations. Plowing and working the soil during April and May also will help reduce the population. In ornamentals and small fruits, insecticides may be needed to reduce the populations of larvae and adults. Evening applications are most effective against adults. Adults should be controlled before they begin laying eggs, and larvae should be controlled when they are small. Parasitic nematodes applied at 3 billion infective juveniles per acre control larvae, pupae and teneral adults of most weevil species.