

Root Weevils by Lloyd Eighme, retired entomologist

There are several different root weevils that are frequently brought to clinics. Some are serious garden pests and others are of no concern to gardeners. Weevils make up one of the largest families (Curculionidae) in the order Coleoptera (Beetles). Root weevils are some that are most commonly seen and are recognized by the snout-like extension of the front of the head.

Small fruits such as strawberries are severely affected by root weevil attacks. An excellent description of three common root weevil pests is in EB 1388. The strawberry root weevil (*Otiorhynchus ovatus*), the rough strawberry root weevil (*O. rugostriatus*) and the black vine weevil (*O. sulcatus*) are similar in appearance, but different in size. All three are common in Skagit County and they have been here a long time. I remember as a boy (in the 1930's) helping my father scatter pesticide on our strawberry patch in an attempt to protect our plants from the strawberry root weevil. The material was called 'Go West' and looked like a mixture of bran and dried fruit. It smelled good, but I do not know what poison it contained. That was in Snohomish County, but I am sure the weevils were in Skagit County that far back also, because they were imported from Europe before 1900. The strawberry root weevil was seen in Massachusetts as early as 1852, on Vancouver Island in 1894 and in western Washington by 1904. The black vine weevil was in Victoria, B.C. in 1891, Orcas Island in 1901 and in Portland, Oregon by 1911. The rough strawberry weevil was in New York City by 1891, Seattle in 1914 and B.C. in 1922. Importing insect pests from all over the world is not new, is it!

Adult root weevils feed on the leaves of plants. They are slow moving and most of them do not fly. Strawberry leaves of an infested plant will have notches cut in the edges of the leaves. The weevils have sharp scissor-like jaws at the tip of the snout that cut pieces of leaf small enough to be swallowed and digested. Rhododendron leaves are frequently notched by the larger Black vine weevil. Severely damaged leaves spoil the appearance of a rhododendron plant and are a warning sign that root weevils are present and may need to be controlled. The adult weevils emerge in late May or early June so that is when you need to inspect your plants to see if the leaves are being notched. Eggs are laid in the soil 3-4 weeks after the adults emerge. All adults are females and can lay as many as 500 eggs during the early summer.

The larvae of root weevils do more damage to plants than the adults. They are c-shaped, white and legless and live in the soil where they feed on the roots of plants. It does not take very many root weevil larvae to destroy the fine roots of a young strawberry plant, killing it soon after it is planted. Even after the plant is fully grown, the larvae can kill it by destroying the roots. The damaged plants

tend to wilt easily and in warm dry weather they do not recover from wilting. Strawberry plants that are weakened by root weevils are more susceptible to diseases. The strawberry root weevil sometimes does severe damage to young evergreens in Christmas tree plantations by damaging the roots.

These weevils sometimes crawl into the house looking for a place to spend the winter. They are unwelcome guests at my house and I hope they did not leave a big family behind in my strawberry patch.



A Root Weevil from the genus Otiorhynchus