

WIREWORMS Coleoptera: Elateridae, Pacific Coast Wireworm *Limonius canus*, Sugarbeet Wireworm *L. californicus*, Great Basin Wireworm *Ctenicera pruinina*

DESCRIPTION

Adults are slender, tan or nearly black, and from 8 to 12 mm long. They are often called click beetles because of their habit of snapping or clicking when placed on their backs. Adults of the Great Basin wireworm are more robust, usually darker, and have pronotal flanges. **Larvae** are hard, segmented, 8 to 12 mm long, and dark yellow or brown. They have three pairs of legs and the last abdominal body segment is elongated and "keyhole-shaped" (*Limonius* spp. have a small keyhole and *Ctenicera* spp. have large keyhole).

ECONOMIC IMPORTANCE

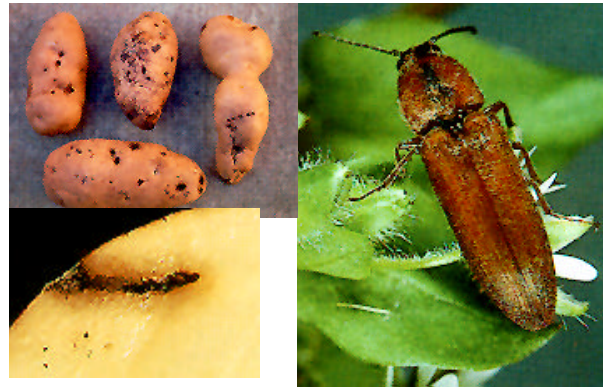
Larvae feed beneath the soil on seedlings, bulbs, roots, and tubers. Damage to seedlings may be so serious that replanting is necessary. They tunnel or scar maturing tubers and bulbs making a large part of the crop unmarketable. This damage causes the greatest financial loss to growers. Few crops escape damage, but potatoes, corn, onions, beans, peas, sugarbeets, and carrots are particularly susceptible. The Great Basin wireworm causes serious losses in dry-land small grain and field crops such as mint during early spring in the Columbia and Snake River Basins of Washington, Oregon, and Idaho. This species predominates in desert land being brought into cultivation and irrigation, but is gradually replaced by *Limonius* spp.

DISTRIBUTION AND LIFE HISTORY

Wireworms occur throughout the northwest and Canada. These pests overwinter as larvae or as recently developed adults, which do not emerge from the soil until the following spring, usually from early May to June. Adults migrate within fields or to new fields, mate, and burrow into the soil to deposit eggs. Eggs are laid singly, but close together, about 2 to 12 cm deep in the soil. Eggs hatch in three to four weeks and larvae move through the soil in search of food. Larvae usually feed in the soil for two to five years before pupating. In the northwest, most wireworms (*Limonius* spp.) take three years to complete their life cycles. Mature larvae pupate in July and August and become adults about three weeks later but do not emerge until the following spring.

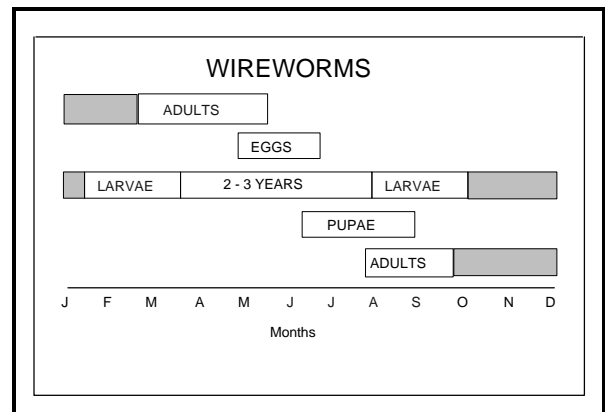


Wireworm larva



Larval feeding damage

Adult



MANAGEMENT AND CONTROL

Wireworms have few natural enemies. Plowing infested fields in the summer when wireworms are in the pupa stage can reduce their populations. Crop rotation can help keep populations low: three or four years of alfalfa (not clover) followed by one year of potatoes and one to two years of other crops such as corn, beans, or sugarbeets. Preplant soil incorporated insecticides are commonly used to prevent damage, but selection and application of the proper insecticide depends on the crop and the wireworm species. Some fields may not need treated every year.

[Return to Insect List](#)