

Bug Biz

Pest Management and Insect Identification Series

WIREWORMS

IMPORTANCE AND TYPE OF INJURY

Wireworms are found throughout North America and most of the world. They are among the most difficult pests to control and the most destructive and most widespread pests of corn, sod, small grains, sugarcane, potatoes, root crops and vegetables.

In Louisiana, they occur in vegetable areas, primarily where new sites are planted to vegetable crops after lying in sod or weeds for several years. Wireworms attracted to these grassy areas remain in the soil until the life cycle is completed; they can cause serious injury to vegetable crops for one to six years. Wireworms also thrive in intensely managed and cultivated vegetable areas. They injure plants by feeding on the roots and tubers or by

tunneling the stems of growing plants (tomatoes, eggplants). Serious injury is caused by their habit of feeding on newly planted seeds (peas, beans, etc.).

DESCRIPTION

The most observed form is the larval stage. The larva is wormlike and cylindrical, about 1/2 to 1 1/2 inches long, with a shiny, hard, yellowish-brown skin. The adults are beetles, commonly called click beetles, which vary from black to gray or brown and are about 1/2 to 1 inch or more in length. The adults are nondescript (see drawing) and are usually not associated with the larval stage or the injury caused.



Wireworm on corn



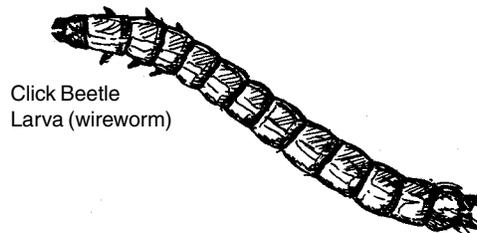
Wireworm on peanut

LIFE HISTORY AND HABITS

Many different species attack cultivated crops. They usually spend the winter in the larval or adult stage in the soil. In early spring the adults emerge and fly about. The joint between the thorax and abdomen is loose and flexible, and, when beetles are placed or fall on their backs, they snap this region against the ground and throw themselves into the air. They continue this popping or snapping action until they land on their feet and then scurry off. This feature has amused those who have seen it and has given the beetle the nickname of click beetle, snapping beetle or ship-jacks.

The adults live 10 to 12 months. Most of this time, and all of the other stages, is spent in the soil. The egg stage lasts from a few days to a few weeks. The larvae hatching from these eggs spend from one to six years in the soil feeding on roots or seeds of plants. In hot weather, the larvae bore down in the soil and are hard to find, even in heavily infested fields. At maturity, the larva forms a cell in the soil in which it pupates. The adult develops a few weeks later and remains in the soil until the following spring.

Although there is only one generation a year, you can find nearly all sizes of larvae in the soil at any one time because of the overlapping of generations. Larvae move only short distances in the soil, and adults often remain and lay their eggs in the areas where they developed.



Click Beetle
Larva (wireworm)

METHODS OF CONTROL

Cultural controls are difficult to apply to wireworms because of the long life cycles. In colder climates, summer plowing followed by winter cultivation will help to expose and destroy adults and larvae. Crop rotation with non-infested plants on a two-year basis is effective for some species. But, some species prefer cultivated land, and here crop rotation is valueless.

In small home gardens, trapping for wireworm larvae has been effective for evaluating wireworm numbers. Baits (like fermented corn, peas, beans, cull potatoes or stiff flour dough) placed 2 to 4 inches deep at intervals of 10 feet in a garden (several locations per acre) actively attract wireworms. Covered with tile or boards, these baits dug up after a week are good indications of wireworm numbers.

Chemical control measures are effective, inexpensive and easy to apply. They do not require keeping the land out of production. Applying pesticides as dust, granules or sprays and lightly working them into the ground one to two weeks before planting will control wireworms effectively.

For additional information, contact your county agricultural agent.



Adult Click Beetle

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