

Sugar Beet Root Maggot

Tetanops myopaeformis

<i>Order:</i>	Diptera (true flies)
<i>Family:</i>	Otitidae (picture-winged flies)
<i>Metamorphosis:</i>	Complete (egg-larva-pupa-adult)
<i>Mouthparts:</i>	Rasping in larvae and sponging in adults



Larva of **SUGAR BEET ROOT MAGGOT**, *Tetanops myopaeformis*, see color print, Fig. 17A, on publication B-1013.

The sugar beet root maggot is native to the region. It feeds on the tap and feeder roots of sugar beets, resulting in blackening roots at the wound and plant wilt. Infestations are heaviest in fields where sugar beets are grown continuously.

Body Form

Eggs: Eggs are not noticed, they are laid in the soil.

Larvae: The larvae are of a maggot form (blunt at the posterior and tapered at the anterior end of the insect). They do not possess legs. They are found feeding on root tissue.

Adults: Adults are about 3/8 inch long with shiny, black bodies and brown legs. The wings of the fly are clear except for a small darkened area at the base of the wings.

Life History

Larvae almost fully grown overwinter in the soil, congregating along rows where beets have been harvested. In spring, they pupate in the soil, and adults emerge in three to four weeks. Adult emergence often coincides with sugar beet planting. Females lay eggs in clusters of 10 to 20 in the soil around the base of newly emerged plants. Maggots feed on roots and require about a month to fully develop. There are up to two generations per year in Wyoming.

Plant Injury

The greatest damage occurs on young beets. This damage is caused by first-generation larvae feeding on tap and feeder roots. On young plants, the maggot may cut off the roots. On older plants, moisture accumulates at the wound. During hot weather, plants may wilt and die. In severe infestations, stand losses may be 80 to 90 percent. Loss may not be noticed until it is too late to replant.

Management

Management should be centered on the crop rotation of cultivated plants in Wyoming; sugar beet root maggot is host specific to sugar beets. The hatching larvae will not harm an alternate crop planted into an old beet field. Rotating out of sugar beets greatly reduces the fly population. New plantings of sugar beets near old beet fields may also be prone to maggot injury. Soil insecticides, often applied principally for other soil-borne plant pests, will assist in control. If flies are noticed at or soon after planting, a sampling of plants should be uprooted to determine the extent of the infestation.



Adult of **SUGAR BEET ROOT MAGGOT**, *Tetanops myopaeformis*, see color print, Fig. 17B, on publication B-1013.

Issued in furtherance of cooperative extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Glen Whipple, director, Cooperative Extension Service, University of Wyoming, Laramie, Wyoming 82071.

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