



Wheat Insect Management

False Wireworms



False Wireworm Larva ©



False Wireworm Beetle (*Eleodes hispilabris* (Say))©



False Wireworm Beetle (*Eleodes suturalis* (Say))©



False Wireworm Beetle (*Eleodes tricostata* (Say))©



Scalloped False Wireworm Beetle (*Embaphion muricatum* Say)©

Introduction

False wireworms are the larvae of darkling beetles in the family Tenebrionidae. There are several species that occur west of the Mississippi River, including several species in the genus *Eleodes*. In Kansas, they occur primarily in the western two-thirds of the state.

Description

False wireworms are the larvae of several species of darkling beetles (Family Tenebrionidae). Adults are large (about 1 inch in length), dark-colored, long-legged beetles that often can be seen running over the ground and hiding under litter in continuous wheat fields. Adults vary in appearance and size. Most species have antennae with eleven segments. Adults have 5 tarsal segments on the first 2 pairs of legs and only 4 tarsal segments on the third pair. The wing covers may be ridged, smooth or granulate, and are fused together so the adults can't fly. When disturbed, the adults have a peculiar habit of placing their head near the ground and elevating their abdomen in the air as if they were trying to stand on their head. The larvae closely resemble wireworms in appearance, slender with noticeable segments, but they have longer legs and antennae than true wireworm larvae. The larvae range from yellowish-brown to nearly black, depending on the species.

Life History

False wireworms overwinter as partially grown larvae or adults. Adults become active in the spring and lay their eggs in the soil. Larvae from these eggs hatch and mature by the end of the summer. A second egg-laying period occurs late in the summer. These eggs hatch and the partially grown larvae from this second generation will overwinter along with the surviving adults. The larvae feed on seeds, roots and underground stems of their hosts. With wheat, they usually attack the seed before germination. In dry soils, one larva may follow the drill row and destroy several seeds by eating out the germ causing bare patches in the field. Characteristic damage is seed with the ends nibbled on and the germ removed. Losses can be severe when persistent dry weather in the fall delays sprouting. Additional damage may occur the following spring. False wireworms pupate in earthen cells in the soil. The adults can live up to three years.

Management Practices

To detect problems before planting, sample five to 10 places in a field by sifting 1 square foot of soil dug to a depth of 4 inches through a piece of hardware cloth with 1/4-inch mesh. An average density of one larva per 3 square feet, suggests an infestation of economic importance. Although a wide range of plants serve as food, crop rotation out of wheat to other cultivated crops for at least two years may reduce damage relative to continuous wheat. Piles of decomposing straw and vegetation provide attractive shelter for adults and should be removed. False wireworms can be a perennial problem and fields with a history of damage should be planted with treated seed. Treating wheat seed with insecticides has been an inexpensive and effective means of controlling damage from these insects. Other chemical control procedures are not known to be effective.

Phillip E. Sloderbeck, J.P. Michaud, and R. Jeff Whitworth, July 2007

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The following management information is from: [MF-745 Phillip E. Sloderbeck, J.P. Michaud, and Robert J. Whitworth, Wheat Insect Management 2006, Kansas State University, January 2007.](#)

Seed Treatments for False Wireworms

False wireworms may be controlled with Lindane in a formulation labeled for this purpose and applied as a planter-box seed treatment. Follow label directions on rates, method of application and safety precautions. Do not feed treated seed or contaminate grain not being used for seed.

Note: Imidacloprid (Gaucho) and Thiamethoxam (Cruiser) are not labeled for false wireworm control, and reportedly do not adequately control these pests. Thus, if false wireworms are the target, Lindane seed treatments are a better choice.

This publication was prepared to help producers manage insect populations with the best available methods proven practical under Kansas conditions. Pesticide label directions and restrictions are subject to change, and some may have changed since this publication was written. Kansas State University entomologists assume no responsibility for product performance, personal injury, property damage, or other types of loss resulting from the handling or use of the pesticides listed. Remember, it is illegal to use a pesticide in a manner that is inconsistent with the label. The user bears responsibility for correct use. Always read and follow label directions carefully.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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