ARMYWORM TROUBLES IN 2005

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Introduction

The true armyworm *(Pseudaletia unipuncta*) causes some damage in parts of the state almost every year. True armyworm should not be confused with "fall armyworm," another corn insect pest that occurs later in the season, usually only on very late planted corn.

The true armyworm is an early season pest that attacks grass crops like small grains and corn. Armyworms climb into corn whorls and "rag" the leaves from the outer edges of the leaves in towards the midrib. When infestations are severe, only the midribs will be left behind.

Armyworm Biology

True armyworms have three generations per season. Armyworm moths lay eggs on grass in cornfields and on small grains in May and June; thus grassy weed control in corn is important in preventing armyworm infestations.

The eggs hatch in approximately 10 days, depending on temperature. This first generation of caterpillars is usually the most troublesome. They feed for 3 to 4 weeks and then pupate in the soil, emerging as adult moths in about 2 to 3 weeks. This process is repeated again producing a third generation. In September, this third generation of nearly full-grown caterpillars spends the winter in the soil. In the spring, the caterpillars finish growing and pupate in mid-April to early May. In two to three weeks the moths emerge and the eggs for the first generation are laid. One female moth can lay several hundred eggs.

Usually two scenarios can occur can unfold with armyworm infestations: 1) infestations occur throughout the corn field in July if grass weeds (foxtail, quackgrass) or sedges are present in the field when during armyworm moth flight and oviposition. As a result, the plants in scattered areas of the field will have ragged leaves from larval feeding. In the second scenario, armyworms migrate from pastures, oats, or grassy alfalfa fields and damage corn plants along the border rows of the field.

Armyworms in 2005

In 2005, several severe infestations were reported. Reports first came in from Polk County on July 22. Infestations seemed to be in pockets within the county and often seemed linked to later than normal weed control. Reports from Sauk County four days told a similar story. With in the next few days, several reports came in from St. Croix, Jackson, Pepin, Chippewa, Dunn, Burnett, Washburn, Sawyer, and Rusk Counties. In many cases, these infestations were quite severe – often only the midribs of corn plants were left behind. Producers in these areas also reported caterpillar migration to adjacent fields.

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Armyworm Management

The first step in management is to assess the population and age of the caterpillars. Check five sets of 20 plants at random. Record the number of damaged plants and the number of worms per plant. Spot treat, if possible, when you find two or more armyworms (3/4 inch or smaller) per plant on 25% of the plants or one per plant on 75% of the plants. Finding the worms while plants are still small before severe damage occurs increases the value of control. Younger worms are easier to control than those approaching maturity.

Controlling weeds early is also a key factor in preventing infestations. Delayed post emergence herbicide applications can also cause problems because by the time the herbicide has been applied, armyworms populations have become established. When the grass is finally dies off, caterpillars are forced to the corn plants. However, keep in mind that "weed-free" fields do not guarantee immunity from armyworm attack as they can migrate into corn fields from adjacent grassy fields.

References

Boerboom, C.M., E.M. Cullen, J.D. Doll, R.A. Flashinski, and C.R. Grau. 2005. Pest management in Wisconsin field crops: A guide to managing weeds, insects, and diseases in corn, soybeans, forages and small grains. UWEX Pub. no. A3646. Univ. of Wisconsin-Extension, Madison, WI.

Cullen, E.M. 2005. Advanced armyworm and outbreak pockets in western Wisconsin. Wis. Crop Manager 12(21):3-4.