

BETWEEN THE ROWS

April 9, 2012

BLACK CUTWORM AND TRUE ARMYWORM 2012 UPDATE

ISSUE: 23

Background

Black cutworm and true armyworm are sporadic pests in the Midwest. They do not over winter as adults, but the moths are carried north each spring by southerly winds. The moths do not cause economic damage, but the eggs they deposit eventually hatch into larvae which cause damage by feeding on young seedlings.

Universities have established insect monitoring networks in their respective states. Capture of moths in pheromone traps alert growers to possible problematic levels and can help predict when scouting should begin. Temperature impacts growth and development of black cutworm and armyworm so degree-day models have been developed to determine probable dates of crop damage and scouting schedules.

Current Situation

Reports from the southern corn belt and various counties in Illinois and Iowa indicate pheromone trap capture of both black cutworm moths and true armyworm moths are increasing and southerly winds will bring additional numbers north. Large captures of moths do not mean damage is imminent, but alert growers to the necessity of scouting fields for potential damage. Above normal temperatures in March and early April, and dry conditions have caused the early planted corn fields to begin to emerge. Corn in the one- to four-leaf stage of development is most susceptible to cutting by black cutworm larvae.

Black Cutworm

Black cutworm moths prefer laying eggs in fields with more residue or weed growth. Warm conditions have increased early weed growth of winter annuals like mouse-eared chickweed, bitter cress, shepherd's purse, yellow rocket, and pepper grass. These weeds are favorite targets for egg laying by black cutworm moths. This timing of early weed growth and early detection of moths in traps will likely enhance the chances of potential economic infestations of black cutworm in our marketing area. Seed applied insecticide (Poncho® or Cruiser®) and Bt corn hybrids can play a role in

reducing the chances of economic damage. However, these tools are not bullet proof, and scouting is still needed to protect the developing crop.



Black Cutworm Larvae



Black Cutworm Moth



True Armyworm Larvae



True Armyworm Moth

*Photos: Iowa State University,
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Some Bt corn hybrids like Yieldgard VT Triple®, Genuity® VT Double PRO®, and Genuity® VT Triple PRO® **do not** control insects like Black cutworm. However, Herculex® I, Herculex Xtra, Genuity SmartStax®, Agrisure® Viptera™ 3111, and Agrisure® Viptera™ 3110 **do** provide protection against cutworm feeding. But under heavy infestation, this control may not provide all the protection needed to avoid a rescue treatment. When a seed applied insecticide is added to genetically protected products, some additional control is added. On products without genetic protection against black cutworm, the seed applied insecticide can help against low infestations, but can be overwhelmed by moderate to heavy larvae numbers.

A rescue treatment may be necessary if 3-5% of the plants show damage and 2 or more live larvae (less than ¾ inch in length) can be found per 100 plants. Not all damaged plants will be killed. Many small plants that are cut off may re-grow as the growing point is still below the soil surface. The smaller the corn plants and larger the larvae, the more likely economic damage will occur.

The success of rescue treatments is weather dependent. Dry soil conditions can cause a decrease in performance of broadcast applications because the larvae avoid contact with applied insecticide by staying below the soil surface. Under dry soil conditions, some tillage like rotary hoeing can cause larvae movement in the soil and bring them into contact with a soil applied rescue treatment.

Rescue treatments could include insecticide products like Mustang Max®, Pounce®, Hero®, Capture®, Baythroid®, Ambush®, or Warrior® and others. Some seed applied insecticides have a warranty that could include a rebate for a rescue treatment, but may require certain products to be used to qualify for the rebate. Be sure and verify choice of rescue products with your seed insecticide supplier.

True Armyworm

True armyworms migrate from the south also in the spring. They prefer to lay eggs in grassy areas such as grass pastures, roadsides, and along fence rows. The feeding larvae may move out of these areas in search of available food sources like corn or small grain. Feeding in corn fields (usually along leaf margins) is evident during late May or early June. A seed applied insecticide does not provide any protection against true armyworm.

Bt corn hybrids also do not protect against feeding by this insect. The economic threshold for rescue treatment may occur in seedling corn if 25% of the plants are being damaged and larvae are still present.

Do not confuse true armyworm with fall armyworm, they are two different insects. True armyworm is a pest of late spring and summer, while fall armyworm is typically present late summer or fall. Nearly all Bt corn hybrids (except CRW only products) either control or suppress fall armyworm, but not true armyworm.

To view capture numbers of black cutworm and true armyworm moths, visit the North Central IPM PIPE website. (<http://apps.csi.iastate.edu/pipe/>)



Black cutworm damage



True armyworm damage