

AGRONOMIC Spotlight



Black Cutworm

Black cutworm (BCW) is one of the most damaging cutworm species in the Corn Belt. In most cases, fields that harbor the greatest number of black cutworm larvae are those where corn was planted into soybean bean stubble or the field had large amounts of winter annual weed growth early in the spring.

Identification & Biology

Black cutworm larvae vary from light gray to black and are about 1.5 inches long when fully grown. Numerous convex skin granules make the larvae appear shiny and "greasy".

Black cutworm moths migrate north and lay eggs in fields with grasses or winter annual weeds, such as chickweed, Shepherd's purse, and mustards. When BCW eggs hatch, larvae can cause a great deal of damage to young corn plants by feeding on stems or leaves, clipping seedlings above or below ground level, or burrowing into stalks of larger plants (Figure 1).

Growing Degree Days (GDDs) can be an effective tool to help determine when to start scouting for BCW larvae. GDDs can be used to predict larval development and when the first cutting of plants may begin.

Scouting

Plan to scout all fields at least once a week for a 3-to 4-week period after corn emergence. Be sure to closely monitor late planted fields or areas where early weed growth has occurred.

Corn clipped below ground is more likely to die. If corn is clipped above ground, it may survive, but has a higher risk for disease infection. Wet soils often favor above ground clipping. Once corn is at the V5 or V6 growth stage, it is less susceptible to BCW damage.

Management Options

Since BCW lay their eggs in weedy areas, using a herbicide burndown or tillage for early season weed control to help prepare a clean seedbed at planting, can help reduce the risk of BCW infestations. Pre-plant or at-planting applications of soil



Figure 1. Black Cutworm Larvae feeding on corn seedling (left). Damaged corn plant (below).



insecticides can be used to help control BCW. However, these treatments have limited effectiveness because it is difficult to predict which fields are infested. Therefore, rescue treatments are often a better option when considering insecticide applications for control.

The Genuity™ SmartStax™ trait provides control of BCW. In addition, seed applied insecticides, such as Poncho® 250 which is part of the Acceleron™ seed treatment products package for corn with the Genuity™ SmartStax™, Genuity™ VT Triple PRO™, and Genuity™ VT Double PRO™, provide suppression of black cutworm.

Begin watching emerging corn seedlings carefully for early signs of cutworm feeding, such as pinholes in leaves or cut plants. A rescue treatment may be warranted if three percent of the plants are cut and larvae are still present. Check insecticide labels for rates and directions.

Sources: K. Cook, et al. 2004. Black Cutworm. Integrated Pest Management. Univ. of Illinois. www.ipm.uiuc.edu/ (verified 6/17/09).

C. Krupke and J. Obermeyer. 2009. Pheromone Traps Have Detected Black Cutworm Arrival. Purdue Univ. Pest & Crop news. Issue 2: April 3, 2009.

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