AGRONOMIC ALERT
Technology Development by MONSANTO

Black Cutworm Cutting Dates – Indiana

Adult black cutworm (BCW) moth activity has peaked in some Indiana trap locations. Growing Degree Days (GDDs) can be used to predict larval development, and when the first cutting of plants may begin. BCW damage can result in stand loss, and scouting is needed to determine if economic thresholds have been met.

Cutting Date

Scouting is key for proper management of BCW. Cutting dates do not provide information on the amount of larval damage or which fields will most likely be targeted for feeding by larvae. BCW larvae are expected to begin damaging corn after 300 GDDs (50 degree F base) have accumulated after an intense capture. Last week, traps in Knox and Marshall counties had intense BCW moth captures between May 6th and May 12th according to Purdue Cooperative Extension Service cooperators. Scouting fields well before 300 GDDS have accumulated (from the time of intense captures) is recommended. A GDD calculator is available at www.weather.com by clicking the *Agriculture News & Forecast* section under Weather News within the navigation bar. Keeping track of actual GDDs may be the best way to help keep scouting ahead of economic damage. Southern counties should also pay special attention to scouting for BCW larvae and may accumulate GDDs sooner than northern counties.

Table 1. Possible Black Cutworm Cutting Dates for Two Indiana Counties.

County	300 GDD May Have Accumulated By:
Knox	May 24th
Marshall	May 31st

Sources: The Weather Channel Interactive, Inc. 2010. Growing Degree Days Calculator. [Online] http://www.weather.com.
(Actual GDDs may differ from Growing Degree Days Forecast).

Trap Count Data from J. Obermeyer. 2010. Thanks to the black cutworm pheromone trap cooperators. Pest & Crop (May 14th, 2010; Issue 7). Purdue University Cooperative Extension.

Identification

Black cutworm larvae vary from light gray to black and are about

Figure 1. Black cutworm has four tubercles on the back of each body segment.

1.5 inches long when fully grown. Numerous convex skin granules make the larvae appear shiny and "greasy".

Dingy cutworm (DCW) is another larvae that may be present in fields. However, this cutworm usually feeds on leaves and does not cause cutting problems in fields. Larger cutworms found at the beginning of BCW cutting dates are often DCW because DCW overwinters in a larvae stage. BCW can be distinguished from DCW by the four tubercles on the top of each body segment.

Scouting

The fields should be walked a couple of days before the predicted cutting date or weekly until the V5 growth stage. Economic injury is more likely in fields that are in the 1- to 4-leaf growth stage, planted late, or have winter annual weed pressure. Plants cut by BCW below the soil may be partially pulled under the soil and can appear as if angled out of the ground surface. These plants wilt and discolor as they die. In addition to cut or missing plants, leaf feeding is an early indication of BCW. When scouting, larvae can be measured for

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length (see below) and can be found by digging in soil near a damaged plant. A minimum of 50 plants in five areas in each field (a total of 250 plants per field) should be examined for damage. Plant population should also be noted as this could affect economic threshold percentages.

Economic Threshold

Economic thresholds are dependent on the size of the larvae. If larvae are less than 3/4 inch in length, treatment should be considered if 2 to 3 percent of the plants are wilted or cut. If cutworms are more than 1 inch in length, treatment should be considered if 5 percent of the plants are cut.

Corn clipped below ground is more likely to die. If corn is clipped above ground, it may survive, but it 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

An insecticide rescue treatment is recommended when thresholds are met. Follow label directions and make sure that

insecticide treatments comply with insect resistant management requirements.

Growers who have chosen Genuity® Smartstax™ corn products have a mode of action which protects against black cutworm. Traits from these corn products are complimented with Acceleron™ seed treatment products and includes clothianidin insecticide to provide additional suppression for

In addition to cutting, corn plants damaged by black cutworm may have foliar feeding or appear wilted.

black cutworm. Use of these new technologies has the potential to reduce the risk of stand loss from BCW in 2011.

Sources: A. Sisson, L. Jesse, and E. Hodgson. 2010. Black cutworm scouting advisory 2010. Iowa State University. [Online] http://www.extension.iastate.edu (verified 12 May 2010).

M. Rice and R. Pope. May 7,2001. Early cutworm scouting for southern Iowa (IC-486(8)). Iowa State University.

K. Cook, et. al. 2004. Black cutworm. University of Illinois. [Online] http://ipm.illinois.edu (verified 29 April 2010).

J. Obermeyer. 2010. Thanks to the black cutworm pheromone trap cooperators. Pest & Crop (May 14th, 2010; Issue 7). Purdue University Cooperative Extension.