Black Cutworm Scouting Advisory—2008

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Abstract
A significant flight of black cutworm adults (moths) arrived in Iowa the weekend of April 18, based on pheromone trap capture data across the state. This insect is an occasional pest of seedling corn that sometimes causes significant damage in a few fields. This year trap cooperators monitored 66 traps in 47 counties. Based upon their reported data, we anticipate that first cutting of seedling corn should occur May 17-18 across southern Iowa, May 18-20 across central Iowa, and May 22-23 across northern Iowa, as indicated on the map below.

Keywords
Entomology

Disciplines
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Black Cutworm Scouting Advisory—2008

May 16, 2008

By Marlin E. Rice, Rich Pope, and Jon Tollefson, Department of Entomology

A significant flight of black cutworm adults (moths) arrived in Iowa the weekend of April 18, based on pheromone trap capture data across the state.

This insect is an occasional pest of seedling corn that sometimes causes significant damage in a few fields. This year trap cooperators monitored 66 traps in 47 counties. Based upon their reported data, we anticipate that first cutting of seedling corn should occur May 17-18 across southern Iowa, May 18-20 across central Iowa, and May 22-23 across northern Iowa, as indicated on the map below.
Projected date of first cutting*:
black cutworm

May 23 May 23 May 22
May 20 May 20 May 18
May 18 May 18 May 17

*300 base-50°F accumulation after
a significant moth flight

These dates represent the earliest possible cutting dates, based on actual accumulated degree days through May 12 and average temperatures for future days. However, it is possible that the cutting period may stretch over two to three weeks because moths lay eggs over an extended period, and the emergence of later planted corn would still be susceptible to cutting.

In fact, one noted exception to projected cutting dates is that while there was a statewide flight the weekend of April 18, there was an additional distinct flight of moths in southern and central Iowa about ten days later. Therefore, cutting from larvae generated from the second flight may occur a week or so later in the southern half of Iowa.

As a reminder, pheromone traps do not predict the amount of cutting in a field nor the counties where cutting will occur. Each year, one of our concerns is that radio advertisements may predict a cutworm "outbreak" in your county just because moths were trapped there in April. Neither the traps nor our predictions based on the trap catches can predict the amount of cutworm injury in a field. Therefore, scout and be diligent.

Scouting of seedling corn near the first cutting date is the only reliable method to determine whether a problem exists. Then, insecticides can be applied if needed. However, corn hybrids with Herculex® I or Herculex® Xtra should provide significant protection from black cutworm, but fields should still be monitored because some minor cutworm damage can still occur.

Scout fields several days before the first cutting date projection. By doing so, you may be able to find "hot spots" based upon leaf feeding, thereby getting a head start on
management decisions. Stop scouting when the field is sprayed or when plants have five fully developed leaves (stage V5). Cutworms have difficulty in cutting plants in the V5 stage because of the larger stalk diameter, although occasionally they chew into the side of the stalk and kill a larger plant.

Look for cutworm injury on corn leaves. Dingy cutworms also feed on young corn leaves but rarely cut corn. If leaf feeding is detected, try to find the cutworms to determine whether they are black or dingy. Very large cutworms found during the earliest black cutworm cutting dates are often dingy cutworms because dingy cutworms overwinter in Iowa as partially grown larvae. Also, fields with winter annual weeds are more likely to have cutworms than clean fields, and soybean stubble is more attractive to the moths than corn stubble.

If you find leaf feeding and only black cutworms, then mark off 100 plants in a row with stakes or flags, and scout these same plants for cutting over a period of several days at several locations across the field. Then you can monitor the cutworm activity and determine whether they are cutting plants and the percent cut plants.

In light of sizable changes in the harvest value of corn grain, economic thresholds for black cutworm have been reexamined, and a full discussion of these thresholds is presented in a companion article: Black Cutworm Thresholds: What has Changed with the Price of Corn and New Control Methods?

Several insecticides are labeled for black cutworms in corn. Several years ago, research showed that after application, rotary hoeing in dry soils increases the effectiveness of Lorsban®, but that the pyrethroids (such as Ambush®, Pounce®, or Warrior®) should not be incorporated into the soil as this decreases performance.

**Insecticides and rates labeled for black cutworms in corn**

<table>
<thead>
<tr>
<th>Insecticide</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambush</td>
<td>6.4-12.8 oz/acre</td>
</tr>
<tr>
<td>Warrior</td>
<td>1.92-3.2 oz/acre</td>
</tr>
<tr>
<td>Asana XL</td>
<td>5.8-9.6 oz/acre</td>
</tr>
<tr>
<td>Baythroid 2</td>
<td>0.8-1.6 oz/acre</td>
</tr>
<tr>
<td>Discipline 2EC</td>
<td>2.1-6.4 oz/acre</td>
</tr>
<tr>
<td>Capture 2EC</td>
<td>2.1-6.4 oz/acre</td>
</tr>
<tr>
<td>Hero</td>
<td>2.6-6.1 oz/acre</td>
</tr>
<tr>
<td>Product</td>
<td>Application Rate</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Mustang Max</td>
<td>1.28-2.8 oz/acre</td>
</tr>
<tr>
<td>Lorsban 4E</td>
<td>1-2 pt/acre</td>
</tr>
<tr>
<td>Nufos 4E</td>
<td>1-2 pt/acre</td>
</tr>
<tr>
<td>Penncap-M</td>
<td>4 pt/acre</td>
</tr>
<tr>
<td>Pounce 3.2EC</td>
<td>4-8 oz/acre</td>
</tr>
<tr>
<td>Sevin XLR Plus</td>
<td>2 qt/acre</td>
</tr>
</tbody>
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**Category:** Insects and Mites, Pesticide Education

**Crop:** Corn

**Tags:** black cutworm, black cutworm scouting, Corn