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Black cutworm 2007 cutting dates predicted

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Abstract
Significant numbers of black cutworm adults (moths) were captured in pheromone traps during April across Iowa. This insect is an occasional pest of seedling corn that sometimes causes significant damage in a few fields. Pheromone trap cooperators reported catching moths across the state in late March and throughout April. Based upon these trap captures, we anticipate that first cutting of seedling corn should occur May 9-10 across southern Iowa, May 18-19 across central Iowa, and May 20-21 across northern Iowa.

Keywords
Entomology, Plant Pathology

Disciplines
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Black cutworm 2007 cutting dates predicted

by Marlin E. Rice and Rich Pope, Department of Entomology

Significant numbers of black cutworm adults (moths) were captured in pheromone traps during April across Iowa. This insect is an occasional pest of seedling corn that sometimes causes significant damage in a few fields. Pheromone trap cooperators reported catching moths across the state in late March and throughout April. Based upon these trap captures, we anticipate that first cutting of seedling corn should occur May 9-10 across southern Iowa, May 18-19 across central Iowa, and May 20-21 across northern Iowa.

Scout fields several days before the first cutting and you may be able to find "hot spots" based upon leaf feeding, thereby getting a head start on management decisions. These dates represent the earliest possible cutting dates, based on normal April and May temperatures. 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 the dates given above is that there were two distinct flights of moths into southern Iowa, so cutting may occur later in some localities.

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
Seed treatments, black cutworms, and white grubs: What should you expect?

April 24, 2006
Black cutworms, dingy cutworms, and predicted cutting dates
May 16, 2005
Seed treatments may not stop cutworms
May 9, 2005
First cutting dates predicted for black cutworm
May 17, 2004
Blacks and dingys: confusing cutworms
May 17, 2004
Preventive insecticides in corn for cutworms
May 19, 2003
Black cutworm trapping is underway
May 12, 2003

may predict a cutworm "outbreak" in your county just because moths were trapped there several weeks ago. 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 have significant protection from black cutworm, but fields should still be monitored because some minor cutworm damage can still occur.

Scout the field a couple of days before cutting is predicted. 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.

The economic threshold is when cutworms average less than ¾ inch in length. An insecticide should be considered if 2 or 3 percent of the plants are wilted or cut, or if cutworms are longer than 1 inch, treatment should be applied if 5 percent of the plants are cut. If the field has a poor plant population, 20,000 or less, these thresholds should be lowered.

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, but occasionally, they chew into the side of the stalk and kill a larger plant.

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 labeled for black cutworms in corn

<table>
<thead>
<tr>
<th>Insecticide</th>
<th>Rate</th>
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</thead>
<tbody>
<tr>
<td>Ambush</td>
<td>6.4-12.8 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>Capture 2EC</td>
<td>2.1-6.4 oz/acre</td>
</tr>
<tr>
<td>Discipline 2EC</td>
<td>2.1-6.4 oz/acre</td>
</tr>
<tr>
<td>Lorsban 4E</td>
<td>1-2 pt/acre</td>
</tr>
<tr>
<td>Mustang Max</td>
<td>1.28-2.8 oz/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>
</tbody>
</table>
Pounce 3.2EC  4-8 oz/acre  
Sevin XLR Plus  2 qt/acre  
Warrior  1.92-3.2 oz/acre

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