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Corn insect scouting calendar for 2001

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Corn insect scouting calendar for 2001

Abstract
Knowing when to scout for potential corn pests is one of the key components to a successful pest management program. Many insect pests occur in corn across Iowa, but not all of them develop economically damaging populations. Most problems occur when corn is still young and the plant stand is more likely to suffer serious injury. This scouting calendar will help you focus your efforts on what insects to watch for during specific corn growth stages.

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Early cutworm scouting for southern Iowa

The black cutworm is an occasional pest of corn, yet it deserves our attention because of its potential for causing economic damage. Two significant flights of black cutworm adults (moths) were observed in southern Iowa on April 6 and 7 and again a week later. Trap catches indicate that eggs may have been laid in Iowa fields. Trap catch data were reported from cooperators in Iowa State University Extension's pheromone trap network. Black cutworms require 300 base 50°F degree days for larvae to be large enough to cut corn plants, so by calculating cutworm hatch and development over time, we can anticipate when to look for damage.

Leaf feeding from dingy or black cutworm.

When should scouting begin?

We predict that scouting in southern Iowa should begin the end of the first week of May. These dates represent the earliest possible cutting dates, based on normal temperatures. Next week, we will predict cutting dates for the rest of the state after more degree days have accumulated.

Do predicted cutting dates indicate a cutworm problem?

No. Pheromone traps only catch moths and they cannot predict the amount of cutting that will occur, nor can they predict 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 several weeks ago. Neither the traps nor anyone's interpretation (including our own) of the trap catches can predict the amount of cutworm injury. 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.

How should a field be scouted?

Walk 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 blacks or dingys. Very large
Cutworms found during the earliest black cutworm cutting dates are often dingy cutworms because dingys overwinter in Iowa as partially grown larvae. If the field has only dingys, then you shouldn’t have a cutting problem. 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 progression of damage (or lack of it).

**Black cutworm (top) and dingy cutworm (bottom).**

**Black cutworm has four tubercles of unequal diameter on the top of each body segment.**

**What could be confused with cutworms or their injury?**

Crane fly larvae feed on dead organic matter in no-till or conservation tillage fields but they do not cut plants. They lack legs but have hornlike projections on the tail. Canada geese feeding on seedling corn clip the top leaves and this damage may be confused with cutworm injury. Geese, however, often clip several plants in a row, eating only the top leaves and they do not cut the plant at ground level.

**Crane fly larva, which has no legs, can be confused with a cutworm.**

**What economic thresholds should be used?**

When cutworms average less than 3/4 inch in length, an insecticide should be considered if 2 or 3 percent of the plants are wilted or cut. 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.

**When can field scouting stop?**

Stop scouting when the field is sprayed or plants have five fully developed leaves (stage V5). Cutworms have difficulty 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.

**Should fields be scouted if a corn rootworm insecticide was applied at planting?**

Yes, definitely. At-planting insecticides may not provide adequate control of large cutworm...
infestations and a rescue treatment still may be needed.

**What insecticides are labeled for rescue treatments?**

The following insecticides are labeled for black cutworms with the manufacturer label rates: Ambush 2EC (6.4-12.8 oz/acre), Asana XL (5.8-9.6 oz/acre), Lorsban 4E (1-2 pints/acre), Pounce 3.2E (4-8 oz/acre), and Warrior (1.92-3.2 oz/acre). Rotary hoeing in dry soils after application increases the effectiveness of Lorsban. However, Ambush, Pounce, or Warrior should not be incorporated.

**Projected dates of first black cutworm cutting, 2001.**

<table>
<thead>
<tr>
<th>Area</th>
<th>Accumulated Degree Days (base 50) from April 7-25</th>
<th>Preliminary Scouting Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwestern Iowa</td>
<td>169</td>
<td>May 6</td>
</tr>
<tr>
<td>South central Iowa</td>
<td>170</td>
<td>May 6</td>
</tr>
<tr>
<td>Southeastern Iowa</td>
<td>187</td>
<td>May 5</td>
</tr>
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