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Insect odds and ends

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Abstract
Last week, there were some reports of uncommon crop insect pests active in Iowa. Black cutworm larvae were reported in fields in Fremont and Ida counties. Since the cutting forecast map published in the May 11, 1998 ICM (page 69), there have been several additional moth flights across Iowa. This means that larvae of different sizes may be found during scouting. Once corn reaches growth stage V4 to V5, black cutworms can no longer cause significant damage to the field.

Keywords
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[1] Failure to green-up from alfalfa weevil activity.

**Alfalfa weevil** larvae have been reported occasionally, but to date none has reached the economic threshold. Farmers who have noted alfalfa weevil feeding should watch their fields after cutting for delayed or prevented green-up due to activity of adult alfalfa weevils and clover leaf weevils. The adults scrape green tissue from stems and eat new buds as they break, and if stubble is completely defoliated for more than 7 to 11 days, dry matter yields and forage quality can be reduced. The worksheet can help you calculate an economic threshold in terms of number of days that complete defoliation can be tolerated. This threshold is dependent upon insecticide cost, hay cutting schedule, and hay value, and it applies to any stubble defoliators present. To date, 1998 is a low-incidence year for alfalfa weevils.


**Hop vine borer** larvae were reported in a cornfield in Howard County and in a field in Winneshiek County. In one instance, about 8 percent stand loss was reported, and the producer was going to treat. This field also had leaf-feeding, 3/4-inch- long black cutworm larvae evident. Hop vine borers attack the plant by boring up from beneath the plant and hollowing out the base of the stalk. This damage is unique to the hop vine borer, and damage is first noticed as wilting or death of the central whorl of leaves. Insecticides can be useful, but once the insects enter the plant, insecticides are not effective. Asana XL has been effective if applied within 7 days of corn emergence, and for replant situations back to corn,
one of the pyrethroids (Pounce, Ambush, Asana) is advisable. The hop vine borer adult is not a strong flyer, and infestations may occur in given fields annually. Elimination of grasses in the field that serve as fall egg-laying sites is helpful, as is a crop rotation with a year or more away from corn.


One cornfield with billbug damage was reported from near the Fremont/Mills county line the week of May 12. This field is on the Missouri River bottom. The three billbug species that occasionally attack seedling corn in Iowa are the maize billbug, the southern corn billbug, and the clay-colored billbug. All three species attack corn by piercing the stems and feeding on the tender interior leaves before they emerge, resulting in leaves that are either wilted or riddled with rows of circular to linear transverse holes. Large billbug populations can significantly reduce stands. Billbugs are unusual pests in Iowa, and they may be difficult to see during scouting because they fall to the ground and become covered with soil particles. Billbugs in Iowa are nearly always associated with yellow nutsedge populations. Wet field roads on May 15 made access even by a 4-wheel drive vehicle difficult, but James Russman of the Farm Service Coop in Council Bluffs said that the field had been clean tilled, but yellow nutsedge is common in the area.

As expected, the week of May 11, 1998 brought a number of calls concerning leaf and cotyledon feeding by bean leaf beetles. See the May 18 ICM article, Early-season bean leaf beetles rarely equal economic damage, pages 77-78. The most severe damage is to beans in the VC stage with less damage to V1 soybeans. Although some insecticide treatments have been applied, research shows that there is almost never any economic benefit gained from rescue treatments because the soybean plants regrow readily. Treatment is an option only when growing points are lost, which requires huge beetle populations.

Alfalfa stubble--Economic threshold calculation (days of defoliation allowable).

<table>
<thead>
<tr>
<th>Factor</th>
<th>Example</th>
<th>Actual value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Insecticide plus application cost (dollars per acre)</td>
<td>$7.00</td>
<td></td>
</tr>
<tr>
<td>B. Value of hay (dollars per acre)</td>
<td>$80.00</td>
<td></td>
</tr>
<tr>
<td>C. Loss factor: (cutting at 1st bloom = 0.02); (cutting on 28-day interval = 0.035)</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>D. Days of complete defoliation that can be tolerated</td>
<td>4.4</td>
<td></td>
</tr>
</tbody>
</table>

To estimate (D), multiply (B) by (C) and divide into (A). The example is calculated as follows: $7.00 / ($80.00 x 0.02) = 7 / 1.6 = 4.4 days.
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