Identifying Blacklight Trap Catches in the Upper Midwest

Field ID Keys

- Empty the trap frequently, preferably every other day
- Examine fresh specimens, identifying characteristics become obscure with age
- Use forewing markings to distinguish between species, hind wings to reinforce your decisions
- Ignore moths smaller in size than the diamondback moth (wingspan < 1 inch), they are not economically important in field and vegetable crops
- Ignore larger hawk moths, beetles (wingspan > 3 inches), and other night-flying insects that are attracted to the light

**European Corn Borer** (*Ostrinia nubilalis*)

Wingspan = 1 inch

**Forewing**
- females are straw-colored with wavy lines along the outer wing margin
- females have a dot and dash visible on fresh specimens (green arrows)
- males are similar to the female, but the color is much darker
- males are grayish-brown with yellowish wavy lines along the outer wing margins that are more pronounced than on the females

**Hindwing**
- Yellowish with faint brown lines on both males and females

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**Fall Armyworm** (*Spodoptera frugiperda*)

Wingspan = 1.5 inches

**Forewing**
- males are mottled gray to brown with obscure lines and spots throughout the wings
- females are similar in appearance with pinkish or white wing margins

**Hindwing**
- Grayish white

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**Yellow-striped Armyworm** (*Spodoptera ornithogalli*)

Wingspan = 1.25-1.75 inches

**Forewing**
- white spot forks to form a sideways Y (white box)
- grayish blue shading (white arrow)

**Hindwing**
- Translucent grayish-white

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**True Armyworm** (*Pseudaletia unipunctata*)

Wingspan = 1.5 inches

**Forewing**
- Sand-colored with numerous black dots
- A single white dot in the center of each forewing on fresh specimens (white box)

**Hindwing**
- grayish to brown with a tan fringe
- dark markings on hindwings distinguish the true armyworms from fall and yellow-striped armyworms

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**Corn Earworm** (*Helicoverpa zea*)

Wingspan = 1.5 inches

**Forewing**
- a robust moth with a large, hairy upper body. Wings are yellowish tan with irregular reddish brown to olive green or gray markings.
- a light colored, golden band near the wing margins

**Hindwing**
- light-colored with a dark tan to brown border

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Special thanks to the University of Wisconsin Department of Entomology Insect Research Collection for loaning some specimens used in this publication.
<table>
<thead>
<tr>
<th>Moth Species</th>
<th>Wingspan</th>
<th>Forewing</th>
<th>Hindwing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Cutworm (Agrotis ipsilon)</td>
<td>1.25 - 2 inches</td>
<td>• mottled dark brown to gray with distinctive dark markings&lt;br&gt;• small black &quot;dagger&quot; (white box)</td>
<td>• light grayish brown with darker veins on outer wing margins</td>
</tr>
<tr>
<td>Variegated Cutworm (Peridroma saucia)</td>
<td>1.5 - 2 inches</td>
<td>• brown to reddish-brown&lt;br&gt;• a kidney-shaped spot is usually distinguishable on fresh specimens (white box)</td>
<td>• grayish white with a darker-colored outer margin</td>
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<tr>
<td>Spotted Cutworm (Xestia dolosa)</td>
<td>1.5 - 1.75 inches</td>
<td>• brownish gray&lt;br&gt;• distinct beige and black markings (white box)</td>
<td>• whitish gray</td>
</tr>
<tr>
<td>Dingy Cutworm (Feltia jaculifera)</td>
<td>1 - 1.5 inches</td>
<td>• gray with black and white mottled areas</td>
<td>• white to gray&lt;br&gt;• darker shading at outer wing margin</td>
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<tr>
<td>Stalk Borer (Papaipema nebris)</td>
<td>1.25 inches</td>
<td>• dark gray to brown&lt;br&gt;• numerous white dots may or may not be visible (white box)&lt;br&gt;• a white line is visible and runs from front to back of the forewing, separating the white dots from the outer portion of the wing</td>
<td>• uniform gray to light brown</td>
</tr>
<tr>
<td>Hop Vine Borer (Hydroæia immanis)</td>
<td>1.5 - 2 inches</td>
<td>• mottled pinkish brown color&lt;br&gt;• line running from front to back (white box)</td>
<td>• Mottled and straw-colored</td>
</tr>
<tr>
<td>Cabbage Looper (Trichoplusia ni)</td>
<td>1.5 inches</td>
<td>• mottled, grayish-brown forewings with two separate, very distinct, silvery-white spots (white box)&lt;br&gt;• The shape of these spots is useful in distinguishing the cabbage looper from other adult loopers</td>
<td>• grayish brown with darker shading along the outer margin</td>
</tr>
<tr>
<td>Diamondback Moth (Plutella xylostella)</td>
<td>0.5 - 1 inch</td>
<td>• in general, diamondback moths are smaller than the other economically-important moths&lt;br&gt;• Coloration is dark gray or brown with irregular white markings which form a pattern of three white diamonds when wings are folded together at rest</td>
<td>• Gray</td>
</tr>
</tbody>
</table>

(Poto courtesy of J. A. Wyman)