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 females, 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

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

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

True Armyworm (Pseudalezia unipuncta)
Wingspan = 1.5 inches
Forewing
- Sandy-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

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

Special thanks to the University of Wisconsin Department of Entomology Insect Research Collection for loaning some specimens used in this publication.
**Black Cutworm** (Agrotis ipsilon)

Wingspan = 1.25 - 2 inches

**Forewing**
- mottled dark brown to gray with distinctive dark markings
- small black "dagger" (white box)

**Hindwing**
- light grayish brown with darker veins on outer wing margins

**Variegated Cutworm** (Paridrama saucia)

Wingspan = 1.5 - 2 inches

**Forewing**
- brown to reddish-brown
- a kidney-shaped spot is usually distinguishable on fresh specimens (white box)

**Hindwing**
- grayish white with a darker-colored outer margin

**Spotted Cutworm** (Xestia dolosa)

Wingspan = 1.5 - 1.75 inches

**Forewing**
- brownish gray
- distinct beige and black markings (white box)

**Hindwing**
- whitish gray

**Dingy Cutworm** (Feltea juculifera)

Wingspan = 1 - 1.5 inches

**Forewing**
- gray with black and white mottled areas

**Hindwing**
- white to gray
- darker shading at outer wing margin

**Stalk Borer** (Papapaema nebris)

Wingspan = 1.25 inches

**Forewing**
- dark gray to brown
- numerous white dots may or may not be visible (white box)
- 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

**Hindwing**
- uniform gray to light brown

**Hop Vine Borer** (Hydroesia immansis)

Wingspan = 1.5 - 2 inches

**Forewing**
- mottled pinkish brown color
- line running from front to back (white box)

**Hindwing**
- Mottled and straw-colored

**Cabbage Looper** (Trichoplusia ni)

Wingspan = 1.5 inches

**Forewing**
- mottled, grayish-brown forewings with two separate, very distinct, silvery-white spots (white box)
- The shape of these spots is useful in distinguishing the cabbage looper from other adult loopers

**Hindwing**
- grayish brown with darker shading along the outer margin

**Diamondback Moth** (Plutella xylostella)

Wingspan = 0.5 - 1 inch

**Forewing**
- In general, diamondback moths are smaller than the other economically-important moths
- 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

**Hindwing**
- Gray

(Photocourtesy of J. A. Wyman)