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EC05-1572 Corn Insects I

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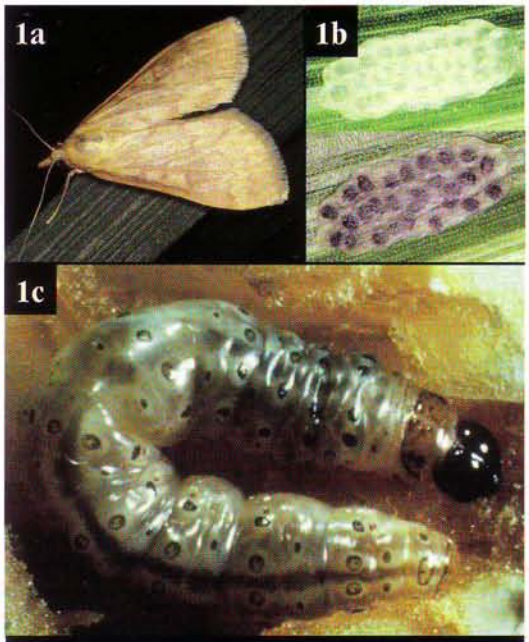
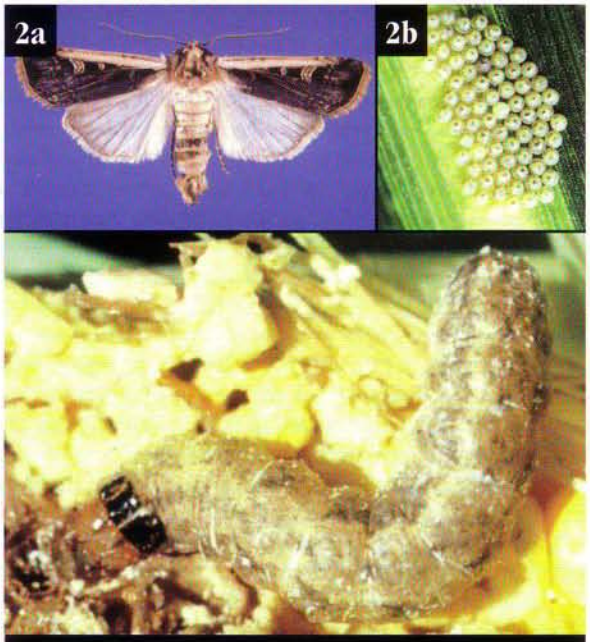
Corn Insects I

UNL Department of Entomology
Robert Wright, Terry DeVries and Jim Kalisch

University of Nebraska Lincoln EXTENSION
EC05-1572



1. European Corn Borer



2. Western Bean Cutworm

3. Corn Earworm

7. Black Cutworm

4. Armyworm

5. Fall Armyworm

4. Armyworm 5. Fall Armyworm 3. Corn Earworm 2. Western Bean Cutworm

6. Common Stalk Borer

For more information on Nebraska corn insect identification and management, visit the University of Nebraska–Lincoln Department of Entomology Web site at entomology.unl.edu

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Insects	Identification
European corn borer *Ostrinia nubilalis (Hubner)*	***Adult:*** Females are yellowish brown to tan with dark wavy bands across the wings, about a 1-inch wingspan. Males are similar in appearance, but smaller and darker. Both are triangular-shaped when wings are held at rest. ***Egg:*** White when first laid, later turning black prior to hatch; size of a pinhead; 15-60 eggs per egg mass; flat, oval eggs overlap like fish scales; laid on the underside of corn leaves. ***Larva:*** Whitish-grey with small brown to black spots on body and a shiny black head; about 1 inch long at maturity. First generation larvae occur in late June to early July and attack the vegetative growth stages of the corn plant and feed on corn leaves at whorl stage, producing a "shot-hole" appearance. Also may bore into leaf midribs, causing them to break, and later may bore into corn stalk. Second generation larvae occur in August and September and attack corn in reproductive growth stages; feed on pollen and leaf collars or sheaths before boring into ear shanks, stalks and cobs; and cause broken stalks and dropped ears, reducing grain yield.
Western bean cutworm *Richia albicosta (Smith)*	***Adult:*** Forewings have a brownish background, a light tan stripe on the leading edge, a prominent small white "eyespot" and white kidney shaped spot, pale white hind wings, and about a 1.5 inch wingspan. Adults occur in July and August and seek pre-tassel stage corn to lay their eggs. ***Egg:*** Shiny white when first laid on the upper sides of corn leaves, later turning bluish black prior to hatch; individual eggs are the size of a pinhead with 5-200 eggs per egg mass. ***Larva:*** Young larvae are dark brown with faint diamond markings on their backs; mature larvae are gray to pinkish brown with 3 short white stripes on the prothoracic shield just behind the head; about 1.5 inches long at maturity. Feeding damage occurs July through September. Young larvae feed on green silks, pollen or tassels, later moving to the ear where they chew holes through the husk and consume the developing kernels.
Corn earworm *Helicoverpa zea (Boddie)*	***Larva:*** Body varies from yellowish to tan, green, brown or pink; microspines visible with hand lens. Head is dark yellowish brown or orange, about 1.5 inches long at maturity. Feeding damage may occur from July through September. First generation larvae feed on whorl stage corn causing defoliation. Second generation larvae feed on silks and developing kernels.
Armyworm *Pseudaletia unipuncta (Haworth)*	***Larva:*** Young larvae are pale green and looper-like; mature larvae are smooth and greenish to reddish brown with a black stripe down the back and along the side alternating with two orange or yellow stripes; about 1.5 inches long at maturity. Head capsule is yellow brown with a brown netlike pattern of dark lines. Feeding damage may occur any time during the growing season, but primarily from June through August. Larvae feed on corn leaves, causing defoliation; most active during night, may be hard to find in day.
Fall armyworm *Spodoptera frugiperda (J. B. Smith)*	***Larva:*** Light tan or green to black, smooth skinned with three yellow-white lines along the back and a wider dark stripe on each side of the yellow-white lines; below the dark stripe on each side is a wide, wavy yellow stripe with red splotches; head is dark brown with a prominent white inverted Y on the front; about 1.25 inches long at maturity. Feeding damage may occur July through September; feeds on corn leaves, causing defoliation; also may feed on the tassel, ear and developing kernels.
Common stalk borer *Papaipema nebris (Guenee)*	***Larva:*** Early stages are purplish to black with five prominent longitudinal white stripes at the front and rear ends of the body, stripes are interrupted at mid-body by a solid, dark purple to black area; later stages are cream-colored or dirty gray without distinctive markings; about 1.75 inches long at maturity. Feeding damage may occur June through early July. They feed within the developing corn whorl and tunnel into the stalk; may cause death of the growing point.
Black cutworm *Agrotis ipsilon (Hufnagel)*	***Larva:*** Black to pale gray, pebbly texture on abdominal segments; four knot-like tubercles on each abdominal segment are unequal in size; brown head capsule; about 1.5 inches long at maturity. Feeding damage may occur April through June. Young stages eat small shot-holes in leaves of seedling corn. Later stages cut seedlings at or below the soil surface; also may tunnel into the stalk.

Photo Credits: Figs. 3, 4, 5 and 6 courtesy of Marlin Rice, Iowa State University; all other photos courtesy of UNL Entomology Department.

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