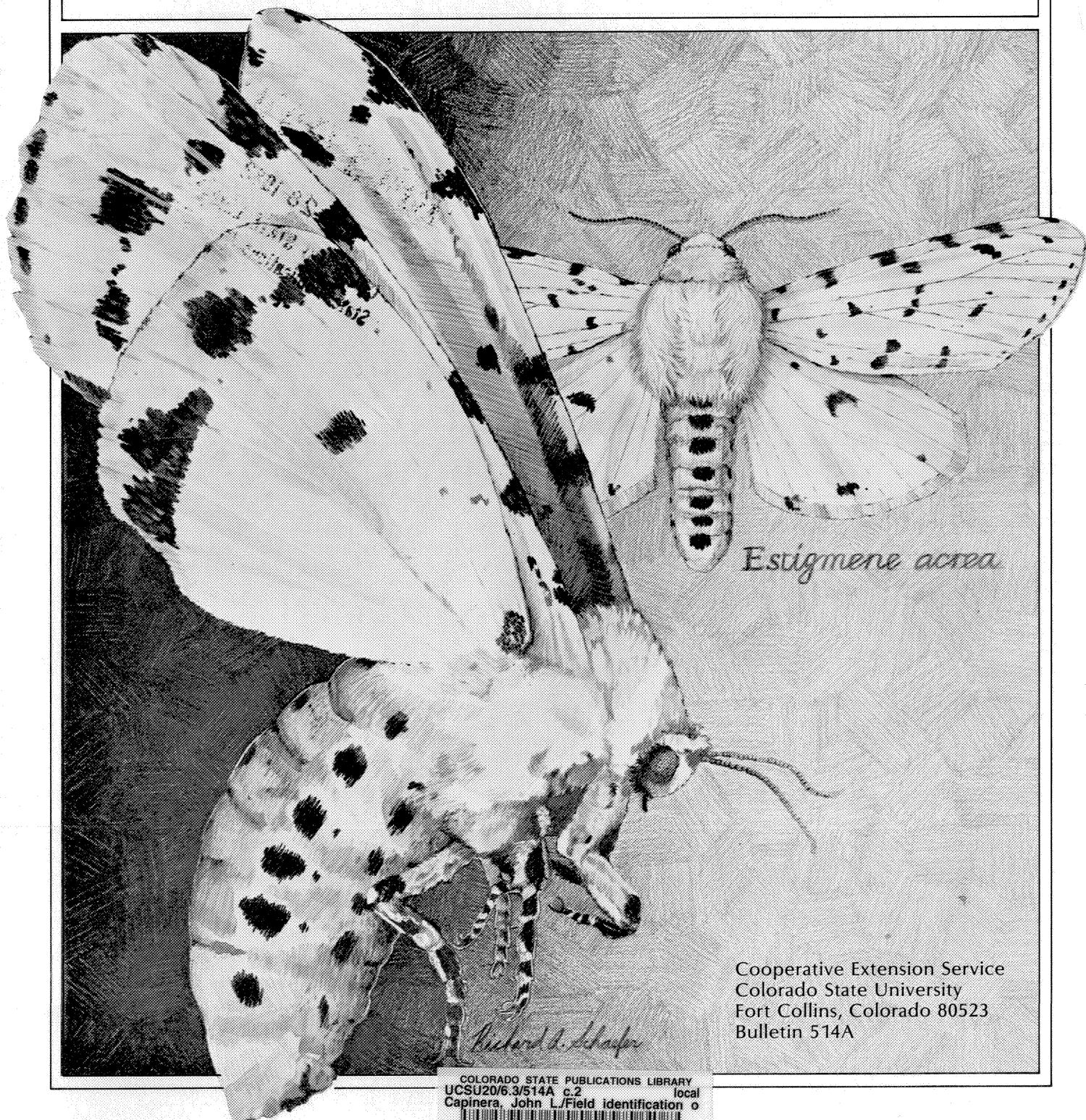


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# Field identification of adult cutworms, armyworms, and similar crop pests collected from light traps in Colorado.



*Estigmene acrea*

Cooperative Extension Service  
Colorado State University  
Fort Collins, Colorado 80523  
Bulletin 514A

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John L. Capinera and Richard A. Schaefer<sup>1</sup>

## Field identification of adult cutworms, armyworms, and similar crop pests collected from light traps in Colorado.

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July 1983      500

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List of Species; Scientific and Common Name	15
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# Introduction

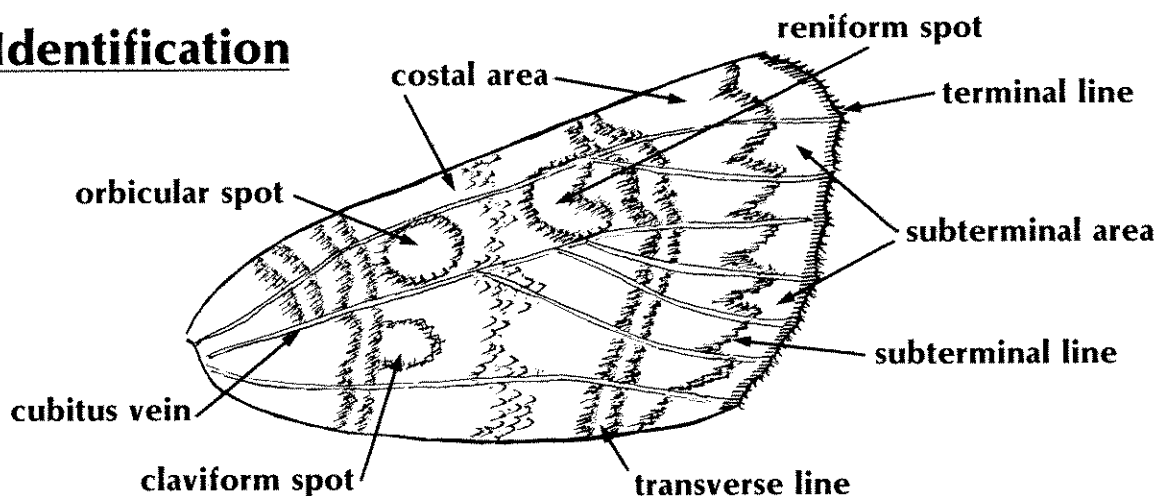
Light traps frequently are used to monitor adult populations of crop pests. Moths are the most common insect pests monitored in this manner. Light trap monitoring assists in the forecasting of impending pest problems, and in the detection of new or exotic pests. Accurate identification of pests can be difficult. Hence, this publication was developed to assist in the accurate determination of light trap specimens.

This key is designed for field use. Magnification is required only in the separation of a few species; a hand lens is adequate. Wing characteristics are used for most species separations. Forewings, and

dorsal views of wings, are described unless otherwise stated. The forewing characteristics used in this key are illustrated in Fig. 1.

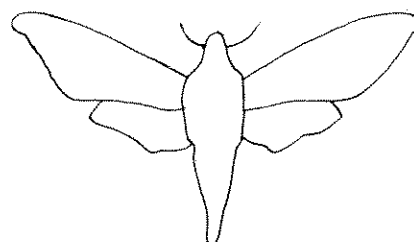
Included in this key are a variety of pest and non-pest species commonly recovered from light traps. However, there are many other species, not included in this key, that commonly occur in light traps; these generally are not pests. Some species are variable in appearance, so they may appear in more than one place in the key. When attempting to identify moths, select specimens in good condition. If specimens are badly damaged, erroneous identifications may be obtained.

## Moth Identification

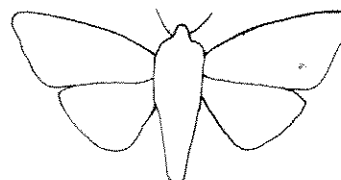


**Figure 1** Diagram of forewing, showing characters used to separate species.

- 1a** Forewing  $1\frac{1}{2}$  length of hind wing (Fig. 2); forewing usually pointed; wing span usually greater than 5 cm ..... 2
- 1b** Forewing only slightly longer than hind wing (Fig. 3); forewing usually broadly rounded; wing span usually less than 5 cm ..... 7
- 2a (1a)** Abdomen orange or yellow, or with large orange or yellow spots ..... 3
- 2b** Abdomen without orange or yellow coloration, or large orange or yellow spots ..... 5
- 3a (2a)** Ground color of forewing white; wing span 4 to 6 cm; numerous black spots usually scattered over fore and hind wing; hind wing orange in males, white in females; abdomen orange dorsally



**Figure 2** Moth with forewing length at least  $1\frac{1}{2}$  times length of hind wing.



**Figure 3** Moth with forewing only slightly longer than hind wing length; forewing not  $1\frac{1}{2}$  times length of hind wing.



with a black dot on each segment.

**Saltmarsh Caterpillar**, *Estigmene acrea* (Drury)

(See plate 1)

Larvae feed on a wide variety of crops including sugarbeet, bean, vegetables and grasses.

[Several other species of no economic importance may key to this point, but they tend to have fewer spots, less orange on the abdomen, and generally are smaller; among the most common is yellow woollybear, *Diacrisia virginica* (Fabricius).]

3b Ground color of forewing grey-brown; wing span 8 cm or greater ..... 4

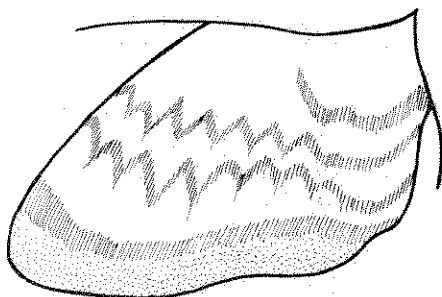


Figure 4 Tomato hornworm hind wing showing two narrow, irregular dark bands.

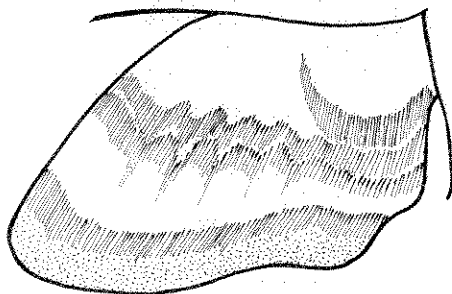


Figure 5 Tobacco hornworm hind wing showing two narrow bands fused into one broad, irregular dark band.

4a (3b.) Two irregular, narrow dark bands centrally located on hind wing (Fig. 4).

**Tomato Hornworm**, *Manduca quinquemaculata* (Haworth)

(See plate 2)

Larvae feed on tomato, eggplant, pepper and potato.

4b Two narrow bands fused into one indistinct, broad band centrally located on hind wing (Fig. 5).

**Tobacco Hornworm**, *Manduca sexta* (Linnaeus)

(See plate 3)

Larvae feed on tomato, eggplant, pepper and potato.

5a (2b) Hind wing orange, rose or pink centrally ..... 6

5b Hind wing grey centrally.

**Fourhorned Sphinx**, *Ceratomia amyntor* (Geyer) and other sphinx moth species

(See plate 4)

Larvae feed on elm and other non-crop plants.

6a (5a) Forewing 1 1/2 length of hind wing; forewing pointed; hind wing rose or pink centrally.

**Whiteline Sphinx**, *Hyles lineata* (Fabricius) and other sphinx moth species

(See plate 5)

Larvae feed on purslane and other non-crop plants.

6b Forewing only slightly longer than hind wing; forewing broadly rounded; hind wing usually orange centrally with two broad dark bands.

Mostly **Underwing Moths**, *Catocala* spp.

(See plate 6)

Larvae feed on deciduous trees and shrubs or other noncrop plants.

7a (1b) Hind wing orange centrally, usually with two broad dark bands.

Mostly **Underwing Moths**, *Catocala* spp.

(See plate 6)

Larvae feed on deciduous trees and shrubs or other noncrop plants.

7b Hind wing not orange centrally, usually without broad dark bands or only one band ..... 8

8a (7b) Costal area of forewing pale, contrasting strongly with darker ground color ..... 9

8b Costal area dark, or if pale, not contrasting strongly with ground color ..... 13

9a (8a) Orbicular spot triangular in shape, light-colored and contiguous with light costal area (Fig. 6); cubitus vein bordered by light area; hind wing white with broad dark band distally.

**Dingy Cutworm**, *Feltia ducens* Walker

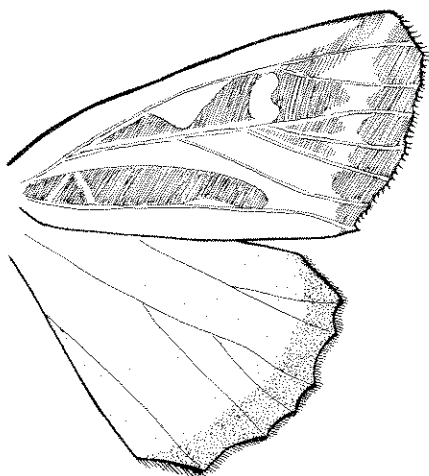
(See plate 7)

Larvae feed on corn, wheat, vegetables, clover and fruit trees.

[If specimen keying to this point lacks the light area bordering the cubitus vein, it may be a spotted cutworm... see 37a.]

9b Orbicular spot round or oval and not contiguous with light costal area; cubitus vein not bordered by light area; hind wing not bordered with broad dark band ..... 10

**Figure 6** Dingy cutworm forewing showing triangular orbicular spot and light costal area, and hind wing with dark band distally.



- 10a (9b)** Hind wing white; orbicular spot nearly round ..... 11  
**10b** Hind wing brown; orbicular spot usually oval ..... 12  
**11a (10a)** Costal tan-colored area distinct; size medium, wing span about 4 cm; cubitus vein of forewing dark.

**Western Bean Cutworm, *Loxagrotis albicosta* (Smith)**

(See plate 8)

Larvae feed on corn and bean. Adults occur in late July and early August.

- 11b** Costal grey-colored area less distinct; size small, wing span 3 cm or less; basal 2/3 of cubitus vein on forewing white.

**Small Striped Cutworm, *Euxoa niveilinea* (Grote)**

(See plate 9)

Larvae feed on corn, wheat and clover.

[A similar species which is not known to be a pest is *E. quadridentata* Grote and Robinson. The thorax of this species, immediately behind the head, is tan-colored and bordered by a black band. Small striped cutworm lacks the tan color on the anterior thorax.]

- 12a (10b)** Size medium, wing span about 4 cm; wing markings are highly variable.

**Army Cutworm, *Euxoa auxiliaris* (Grote)**

(See plate 10)

Larvae feed on broadleaf weeds, but when starved attack a wide variety of field, forage and vegetable crops — wheat and alfalfa are damaged most frequently. Adults are found in late spring and early summer, and again in late summer. This species

generally is very common.

[If a distinct black bar is running between costal area and cubitus vein (Fig. 21) and ground color is reddish-brown, specimen may be a redbacked cutworm . . . see 59b.]

- 12b** Size small, wing span about 3 cm.

**Sandhill Cutworm, *Euxoa detersa* (Walker)**

(See plate 11)

Larvae feed on corn and grasses.

This species generally is uncommon.

[If the basal 2/3 of the cubitus vein on the forewing is white, the specimen may be a small striped cutworm . . . see 11b.]

- 13a (8b)** Orbicular spot lobed (Fig. 7, 8, 9, 10, 11) and colored white or silver ..... 14

- 13b** Orbicular spot round, oval or not visible; orbicular spot not entirely white or silver ..... 17

- 14a (13a)** Orbicular spot with two hemispherical lobes of approximately equal size, broadly connected (Fig. 7).

**Bilobed Looper, *Autographa biloba* (Stephens)**

(See plate 12)

Larvae feed on weeds such as dandelion and plantain.

- 14b** Orbicular spot not consisting of two equal lobes ..... 15

- 15a (14b)** Orbicular spot smoothly elongate, not narrowly constricted; distinct curved line running from orbicular spot to posterior edge of forewing (Fig. 8); forewing with broad areas of grey and reddish-brown.

**Celery Looper, *Anagrapha falcifera* (Kirby)**

(See plate 13)

Larvae feed on celery, lettuce and sugarbeet.

- 15b** Orbicular spot irregularly elongate, narrowly constricted near middle; forewing mottled reddish-brown or grey-brown ..... 16

- 16a (15b)** Forewing mottled reddish-brown; orbicular spot narrowly constricted, often forming two discrete spots (Fig. 9, 10).

**Cabbage Looper, *Trichoplusia ni* (Hübner)**

(See plates 14 and 15)

Larvae feed on a variety of vegetables.

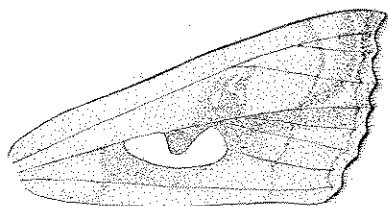
- 16b** Forewing mottled grey-brown; orbicular spot narrowly constricted, but usually not forming two discrete spots (Fig. 11).

**Alfalfa Looper, *Autographa californica* (Speyer)**

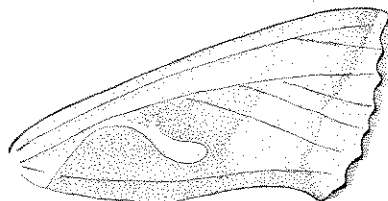
(See plate 16)

Larvae feed on alfalfa, clover, sugarbeet and occasionally other crops.

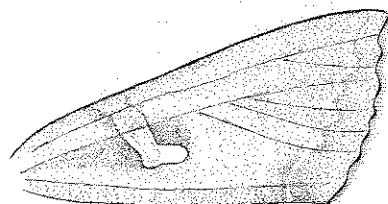
- 17a (13b) Reniform and orbicular spots on forewing not visible ..... 18
- 17b Reniform or orbicular spots on forewing visible or distinct ..... 27
- 18a (17a) Abdomen orange or yellow with distinct row of black spots dorsally; forewings white, usually with numerous black spots; hind wing of male orange, of fe-



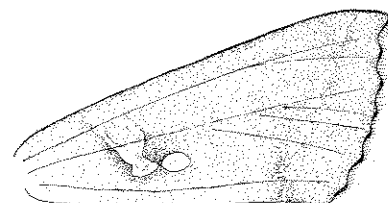
**Figure 7** Bilobed looper forewing showing two hemispherical lobes of orbicular spot.



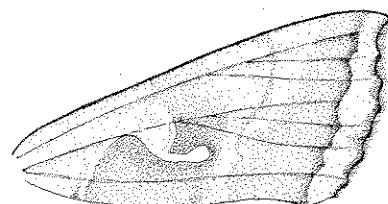
**Figure 8** Celery looper forewing showing smoothly elongate and rounded orbicular spot.



**Figure 9** Cabbage looper forewing with elongate and constricted orbicular spot.



**Figure 10** Cabbage looper forewing with orbicular spot elongation constricted to form two discrete spots.



**Figure 11** Alfalfa looper forewing showing elongate and constricted orbicular spot.

male white, both sexes with black spots.

**Saltmarsh Caterpillar, *Estigmene acrea* (Drury)**  
(See plate 1)

Larvae feed on a wide variety of crops including sugarbeet, cabbage, bean and peas.

[Several other species of no economic importance may key to this point, but they tend to have fewer spots, less orange on the abdomen, and generally are smaller; among the most common is yellow woollybear, *Diacrisia virginica* (Fabricius).]

- 18b Abdomen not orange or yellow with distinct row of black spots; color of forewings not white with black spots ..... 19

- 19a (18b) Forewings with large dark areas, often forming transverse bands (across wings) ..... 20

- 19b Forewings uniform, mottled, or with dark streaks running length of wing ... 22

- 20a (19a) Dark areas on forewing not forming transverse bands, or forming very weak bands; hind wing uniform brown.

**Green Cloverworm, *Plathypena scabra* (Fabricius)**

(See plate 17)

Larvae feed on alfalfa, clover and bean varieties.

- 20b Dark blotches on forewing forming transverse bands which cross or nearly cross wing ..... 21

- 21a (20b) Dark transverse bands present on hind wing; forewing color grey-brown.

**Forage Looper and Clover Looper, *Caenurgina erecta* (Cramer) and *C. crassiuscula* (Haworth)** [These two species are differentiated by genital-ic characters.]

(See plate 18)

Larvae feed on clover and grass. Adults are found throughout the summer.

[If ground color is yellowish, specimen may be corn earworm ... see 27a.]

- 21b Dark transverse bands not present on hind wing; forewing color varies from dark to light reddish-brown.

**Bronzed Cutworm, *Nephelodes minians* Guenée**

(See plate 19)

Larvae feed on grains and grasses, including turf grass.

- 22a (19b) Dark streak running length of forewing, often broken near middle (Fig. 12).

**Wheat Head Armyworm, *Faronta diffusa* (Walker)**

(See plate 20)

Larvae feed on grains and grasses, often attacking the ripening head of wheat.

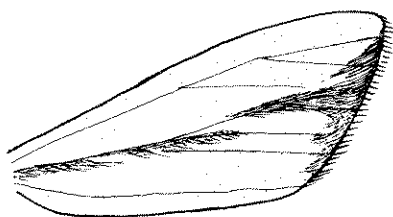
- 22b Dark streak not distinct ..... 23  
 23a (22b) Color uniform tan; forewing with indistinct dark line running to anterior wing tip; forewing with small white central spot; wing span usually greater than 3.5 cm (Fig. 13).

**Armyworm, *Pseudaletia unipuncta*** (Haworth)

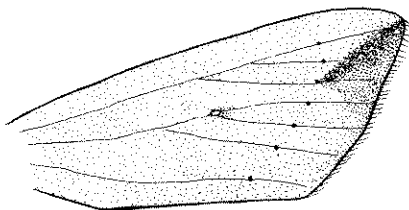
(See plate 21)

Larvae feed on grains and grasses, but when starved attack a wide variety of crops and weeds. Adults may be found from spring to autumn.

[If forewing ground color is a uniform grey with an overall streaked pattern, the specimen may be *Cucullia* spp., common weed-feeding moths.]



**Figure 12** Wheat head armyworm forewing showing broken dark streak.



**Figure 13** Armyworm forewing showing indistinct dark line at anterior angle, and small white spot centrally.

- 23b Color not uniform; forewing mottled light or dark, or with light brown veins; wing span usually less than 3.5 cm ..... 24  
 [Occasional specimens of variegated cutworm will key to this point if the reniform and orbicular spots are weak. The forewing of these specimens will be uniform dark brown, with a wing span of 4 cm or greater.]

- 24a (23b) Terminal line on forewing and hind wing faint or absent ..... 25

- 24b Terminal line on forewing and hind wing dark ..... 26

- 25a (24a) Forewing and hind wing with faint (female) to distinct (male) brown markings forming diffuse transverse bands.

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

(See plate 22)

Primarily a pest of corn, but nearly

all herbaceous plants with a stem large enough for borers to enter are attacked. Two generations occur, with adults present in June and August. Generally restricted to northeastern Colorado.

- 25b Forewing with faint brown stripes on, and parallel to, veins on forewing; hind wings white.

**Southwestern Corn Borer, *Diatraea grandiosella*** (Dyar)

(See plate 23)

Larvae feed mostly on corn and sorghum, but also attack grasses. Two generations occur, with adults present in June and August. Generally restricted to southeastern Colorado.

[Many noneconomic webworms will key to this point.]

- 26a (24b) Forewing with narrow light-colored band adjacent to terminal line when viewed from above; hind wing with dark terminal line solid when viewed from below (Fig. 14).

**Beet Webworm, *Loxostege sticticalis*** (Linnaeus)

(See plate 24)

Larvae feed on a variety of broadleaf crops and weeds, especially sugarbeet, alfalfa and vegetables.

- 26b Forewing with broader light band adjacent to terminal line when viewed from above; hind wing with dark terminal line broken when viewed from below (Fig. 15).

**Alfalfa Webworm, *Loxostege comixtalis*** (Walker)

(See plate 25)

Larvae feed on a variety of broadleaf crops and weeds, especially sugarbeet, alfalfa and vegetables. Adults are found in spring and late summer.

[Many noneconomic webworms will key to this point.]

- 27a (17b) Ground color of forewings yellowish; reniform spot on forewing distinct when viewed from above, but larger and darker when viewed from below.

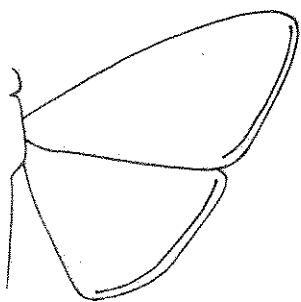
**Corn Earworm, *Heliothis zea*** (Boddie)

(See plates 26, 27 and 28)

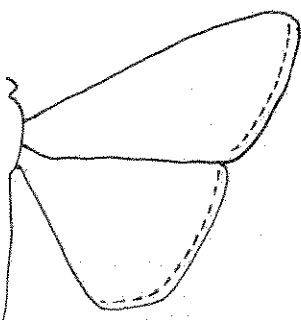
Larvae are serious pests of sweet corn, but also attack other vegetables, field corn, sorghum, soybean, small grains, alfalfa and clover.

- 27b Ground color of forewing brown, reddish-brown, grey or tan ..... 28

- 28a (27b) Ground color of forewings light grey or tan ..... 29



**Figure 14** Beet webworm with solid dark terminal line as seen from below.



**Figure 15** Alfalfa webworm with broken dark terminal line as seen from below.

- 28b Ground color of forewings brown, red-dish-brown or greyish-brown ..... 37
- 29a (28a) Forewing with dark claviform spot ..... 30
- 29b Forewing without dark claviform spot ..... 32
- 30a (29a) Forewing with strongly contrasting grey and brown areas; costal area not distinctly darker; hind wings light brown, darker brown distally.

**Striped Garden Caterpillar, *Polia legitima* (Grote)**

(See plate 29)

Larvae are general feeders, preferring grasses.

[If specimen lacks grey band in subterminal area and has a narrow black band extending distally from claviform spot, it may be speckled cutworm ... see 50b.]

- 30b Forewing with strongly contrasting tan and brown areas; costal area distinctly darkened; hind wings white or dirty white ..... 31
- 31a (30b) Forewing with claviform spot elongate, at least three times as long as wide; dark color of costal area extending back approximately to cubitus vein; hind wings white to dirty white, but not translucent.

**Dusky Cutworm, *Agrotis venerabilis* Walker**

(See plate 30)

Larvae feed on corn, alfalfa, clover,

vegetables and grasses.

[Dusky cutworm adults are present in late summer and autumn. A similar species, *Agrotis volubilis* Harvey, is present in spring and early summer. The dark black bar extends to the wing base in *A. volubilis*, but fades basally in dusky cutworm.]

- 31b Forewing with claviform spot not elongate, no more than twice as long as wide; dark color generally restricted to costal area; hind wings white and translucent.

**Palesided Cutworm, *Agrotis malefida* Guenée**

(See plate 31)

Larvae feed on a wide variety of plants.

[This species closely resembles dusky cutworm ... see 31a.]

- 32a (29b) Ground color grey; size small, wing span about 2 cm; hind wing with dark terminal line and distinct venation; forewing with faint transverse line.

**Beet Armyworm, *Spodoptera exigua* (Hübner)**

(See plate 32)

Larvae feed on sugarbeet, corn, alfalfa and vegetables.

[Some specimens of fall armyworm may key to this point, but they are larger, with a wing span of at least 2.5 cm ... see 41a. If the hind wing is brown and the lower 1/3 of the reniform spot is darkened, the specimen may be a common grass-feeding species *Apamea finitima* Guenée. This species is not known to be damaging in Colorado.]

- 32b Ground color tan; size moderate, wing span 2.75-4 cm; hind wing without dark terminal line ..... 33

- 33a (32b) Reniform spot on forewing distinct when viewed from above, and larger and more distinct when viewed from below.

**Corn Earworm, *Heliothis zea* (Boddie)**

(See plates 26, 27 and 28)

Larvae are serious pests of sweet corn, but also attack other vegetables, field corn, sorghum, soybean, small grains, alfalfa and clover.

- 33b Reniform spot distinct or visible when viewed from above, but not larger and more distinct when viewed from below ..... 34

- 34a (33b) Forewings mottled; claviform spot visible; ground color variable ..... 35

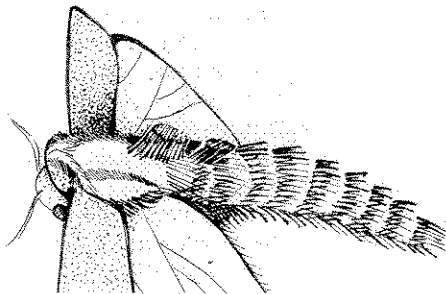
- 34b Forewings not mottled; claviform spot not visible; ground color tan ..... 36

- 35a (34a)** Eyes hairy (Fig. 26); hind wings dirty white with a dark band distally (Fig. 28); primary wing veins on forewing not light-colored.  
**Clover Cutworm**, *Scotogramma trifolii* (Hufnagel)  
 (See plate 58)  
 Larvae feed on sugarbeet, clover and vegetables. Adults are found in spring and summer.  
 [See also 64a.]
- 35b** Eyes not hairy (Fig. 27); hind wings white, darkening distally (Fig. 30); primary wing veins on forewing light-colored.  
**Pale Western Cutworm**, *Agrotis orthogonia* Morrison  
 (See plate 60)  
 Larvae feed below-ground on small grains, sugarbeet, alfalfa and vegetables. Adults are found in late summer and autumn.  
 [See also 67a.]
- 36a (34b)** Orbicular spot moderately distinct; transverse line without a row of dark dots; hind wing tan or white with faint dark bar.  
**White Cutworm**, *Euxoa scandens* (Riley)  
 (See plate 33)  
 Larvae feed on vegetables and fruit trees.  
 [Some specimens of fall armyworm may key to this point. They can be separated by the marked pattern on the forewing, and the translucent hind wing. In white cutworm the forewing pattern is uniform and the opaque hind wing is dirty white.]
- 36b** Orbicular spot indistinct; transverse line made up of a row of dark dots; hind wing white without faint dark bar.  
**Spotted-legged Cutworm**, *Agrotis vetusta* Walker  
 (See plate 34)  
 Larvae feed on weeds, vegetables and corn.
- 37a (28b)** Forewing with large tan or light brown triangle in costal area.  
**Spotted Cutworm**, *Amathes c-nigrum* (Linnaeus)  
 (See plate 35)  
 Larvae are general feeders and will attack a variety of vegetable, field and fruit crops. Weeds, especially goosefoot, are preferred over crops.  
 [If reniform spot is tan-colored and costal area lighter than ground color, specimen may be dingy cutworm . . . see 9a.]
- 37b** Distinct light triangle absent from costal area of forewing ..... 38
- 38a (37b)** Hind wings uniform white, sometimes with dark terminal line ..... 39
- 38b** Hind wings uniform brown or brown distally ..... 44
- 39a (38a)** Forewing uniform reddish-brown with reniform spot distinct.  
**Zebra Caterpillar**, *Ceramica picta* (Harris)  
 (See plate 36)  
 Larvae feed on several crops, especially sugarbeet and cabbage.
- 39b** Forewing not uniform reddish-brown; forewing with simple or complex pattern ..... 40
- 40a (39b)** Forewing with complex pattern; orbicular spot elongate or drawn into transverse line (See plates 37 and 38 for examples of complex patterns) ..... 41
- 40b** Forewing pattern not complex ..... 42
- 41a (40a)** Abdomen with large basal tuft of hairs dorsally, and often with a smaller tuft on the 2nd segment; tuft absent from 4th segment (Fig. 16); forewings less distinctly marked than yellowstriped armyworm, sometimes muted.  
**Fall Armyworm**, *Spodoptera frugiperda* (J.E. Smith)  
 (See plate 37)  
 Larvae feed on corn, grasses, vegetables, alfalfa and occasionally on fruit trees.
- 41b** Tufts usually present on 3rd and 4th basal abdominal segments (Fig. 17); forewings more distinctly marked than fall armyworm.  
**Yellowstriped Armyworm**, *Spodoptera ornithogalli* (Guenée)  
 (See plate 38)  
 Larvae feed on vegetables, corn, wheat, alfalfa, clover and occasionally on fruit trees.
- 42a (40b)** Forewing with black bar below cubitus vein contiguous with claviform spot; reniform spot relatively large and dark (Fig. 18).  
**Dusky Cutworm**, *Agrotis venerabilis* Walker  
 (See plate 30)  
 Larvae feed on corn, alfalfa, clover, vegetables and grasses.  
 [See also 31a.]
- 42b** Forewing without black bar associated with claviform spot; reniform spot relatively small and light-colored ..... 43
- 43a (42b)** Subterminal area of forewing with diffuse light band; short dark bar connecting reniform and orbicular spot (Fig. 19); forewings not mottled.  
**Granulated Cutworm**, *Agrotis annexa* (Treitschke)  
 (See plate 39)  
 Larvae feed on vegetables, corn, clover and grasses.

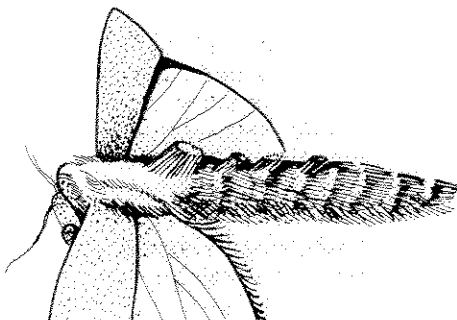


43b Subterminal area of forewing without light band; forewings mottled light brown.

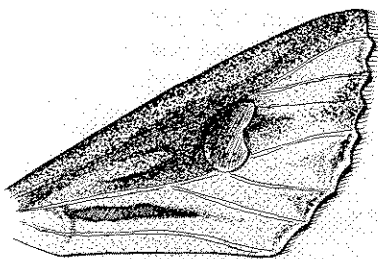
**Fall Armyworm, *Spodoptera frugiperda* (J.E. Smith)**  
(See plate 40)  
Larvae feed on corn, vegetables, al-



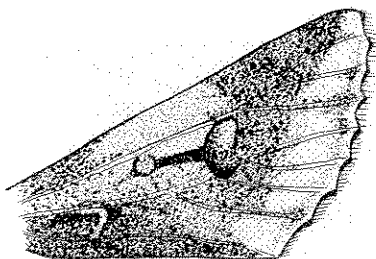
**Figure 16** Fall armyworm showing two abdominal tufts.



**Figure 17** Yellowstriped armyworm showing four abdominal tufts.



**Figure 18** Dusky cutworm forewing showing black bar below cubitus vein, and large reniform spot.



**Figure 19** Granulated cutworm forewing showing diffuse light band in terminal area, and dark bar connecting reniform and orbicular spots.

falfa and occasionally on fruit trees.  
[If the costal area is light-colored and the basal 2/3 of the cubitus vein on the forewing is white, specimen may be small striped cutworm ... see 11b.]

44a (38b) Reniform spot with white outline, outline distinctly lighter than center of spot ..... 45

44b Reniform spot not outlined with white ..... 47

45a (44a) Orbicular spot not outlined with white; indistinct broad brown band crossing center of forewing; wing span less than 3 cm; hind wing usually white basally, and diffuse brown distally.

**Bristly Cutworm, *Lacinipolia renigera* (Stephens)**  
(See plate 41)

Larvae feed chiefly on the roots of vegetables, corn, clover, grasses and flowers.

[If specimen has wing span greater than 3 cm and has a broad irregular light-colored band in the subterminal area of the forewing, the specimen may be a bertha armyworm ... see 51b.]

45b Orbicular spot strongly or weakly outlined in white; broad brown band absent from forewing; wing span greater than 3 cm; hind wing light brown basally, darker brown distally ..... 46

46a (45b) Reniform and orbicular spots with strong outline; forewing markings generally complex, sometimes with light costal area and diffuse light band in terminal area; wing markings are highly variable.

**Army Cutworm, *Euxoa auxiliaris* (Grote)**  
(See plates 42 and 43)

Larvae feed on broadleaf weeds, but when starved attack a wide variety of field, forage and vegetable crops — wheat and alfalfa are damaged most frequently. Adults are found in late spring and early summer, and again in late summer. This species generally is very common.

46b Reniform and orbicular spots with weak white outline; forewing generally uniform reddish-brown, often the reniform and orbicular spots are the only distinct markings; some specimens with black claviform and black bar connecting orbicular and reniform spots; diffuse light band absent from costal and terminal areas.

**Redbacked Cutworm, *Euxoa ochrogaster* (Guenée)**  
(See plates 44 and 45)

Larvae feed on a variety of crops, particularly grains and vegetables. This species generally is uncommon.

- 47a (44b) Hind wing uniform brown color; darkened blotches on forewing forming weak or incomplete bands; reniform and orbicular spots usually not visible.

**Green Cloverworm**, *Plathypena scabra* (Fabricius)

(See plate 17)

Larvae feed on alfalfa, clover, soybean and bean varieties.

[Hind wing color sometimes is variable. If specimen does not appear to be green cloverworm, see 47b.]

- 47b Hind wing not uniform brown ..... 48

- 48a (47b) Forewing with large irregular-shaped blotch on middle third of wing or with large spots and blotches widely distributed over forewing ..... 49

- 48b Forewing uniform, or with small spots only, or with spots localized ..... 52

- 49a (48a) Large irregular blotch centrally located on forewing and surrounding reniform spot; reniform color similar to basal and distal portion of forewing; blotch meeting posterior edge and costal area of wing.

**Bronzed Cutworm**, *Nephelodes minians* Guenée

(See plate 19)

Larvae feed on grains and grasses, including turf grass.

- 49b Forewing with large spots and blotches widely distributed ..... 50

- 50a (49b) Broad irregular light-colored band in subterminal area of forewing; ground color dark brown or dark reddish-brown ..... 51

- 50b Forewing lacking band; ground color light reddish-brown or grey.

**Speckled Cutworm**, *Polia subjuncta* (Grote and Robinson)

(See plate 46)

Larvae feed primarily on deciduous trees.

- 51a (50a) Wing span 4.25 cm or greater; ground color of forewing reddish-brown; reniform spot usually tan.

**Yellowheaded Cutworm**, *Apamea amputatrix* (Fitch)

(See plate 47)

Larvae feed on roots of corn, small grains and vegetables.

- 51b Wing span: less than 4.25 cm; ground color of forewing brown or grey-brown; reniform spot usually white or mostly white.

**Bertha Armyworm**, *Mamestra configurata* Walker

(See plate 48)

Larvae are general feeders, attacking the foliage of alfalfa, sugarbeets and vegetables.

- 52a (48b) Forewing with black dash usually located distal to reniform spot; reniform, orbicular and claviform spots all outlined in black; subterminal area with diffuse light band; other wing markings indistinct (Fig. 20).

**Black Cutworm**, *Agrotis ipsilon* (Hufnagel)

(See plate 49)

Larvae feed on a wide variety of field, vegetable, forage crops, grasses and weeds, but are especially damaging to corn.

- 52b Subterminal area without diffuse light band and black dash ..... 53

- 53a (52b) Ground color of forewing uniform brown, reddish-brown, or grey-brown; reniform and orbicular spot distinct; other markings indistinct ..... 54

- 53b Forewing with more complex pattern; ground color not uniform brown ..... 55

- 54a (53a) Reniform and orbicular spot with narrow black border.

**Well-marked Cutworm**, *Spaelotis clandestina* (Harris)

(See plate 50)

Larvae feed on corn, small grains, vegetables and fruit trees.

- 54b Reniform and orbicular spot with narrow light border.

**Redbacked Cutworm**, *Euxoa ochrogaster* (Guenée)

(See plate 44)

Larvae feed on a variety of crops, particularly grains and vegetables.

- 55a (53b) Forewing with black claviform below cubitus vein (Fig. 18) or black bar between costal area and cubitus vein (Fig. 21) .. 56

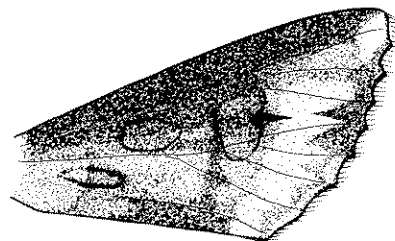


Figure 20 Black cutworm forewing showing black dash and diffuse light band.

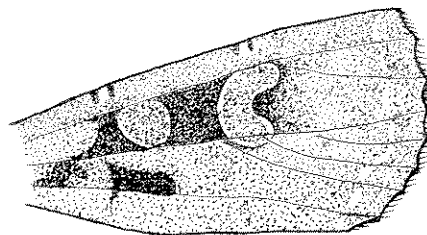


Figure 21 Redbacked cutworm forewing showing black bar between subcostal area and cubitus vein.

- 55b Forewing without distinct black marks ..... 60
- 56a (55a) Forewing with distinct black claviform below cubitus vein; region between costal area and cubitus vein darkened but not a distinct black bar ..... 57
- 56b Forewing with distinct black bar running between costal area and cubitus vein; claviform variable ..... 59
- 57a (56a) Ground color of forewing dark brown; cubitus vein not surrounded with light band.

**Black Army Cutworm, *Actebia fenica* (Tauscher)**

(See plate 51)

Larvae feed on a wide variety of plants.

- 57b Ground color of forewing light brown or tan; cubitus vein with light band on each side ..... 58

- 58a (57b) Area of forewing posterior to claviform spot without distinct markings; anterior edge of forewing darker than posterior edge (Fig. 18).

**Dusky Cutworm, *Agrotis venerabilis* Walker**

(See plate 30)

Larvae feed on corn, alfalfa, clover, vegetables and grasses.

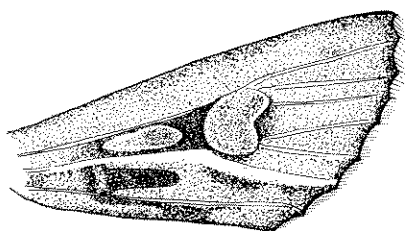
[See also 31a.]

- 58b Area of forewing posterior to claviform spot with distinct markings; anterior edge of forewing not darker than posterior edge (Fig. 22).

**Claybacked Cutworm, *Agrotis gladiaria* Morrison**

(See plate 52)

Larvae feed on grains, grasses, clover and vegetables.



**Figure 22** Claybacked cutworm forewing showing markings posterior to claviform spot.

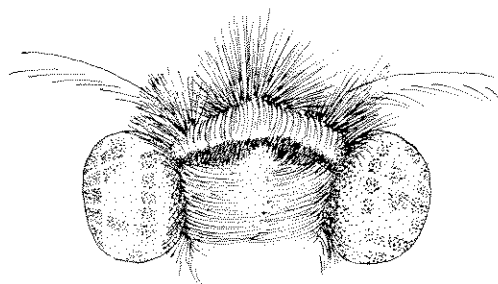
- 59a (56b) Dark stripe present on top of head between eyes (Fig. 23); forewing markings variable; ground color brown.

**Striped Cutworm, *Euxoa tessellata* (Harris)**

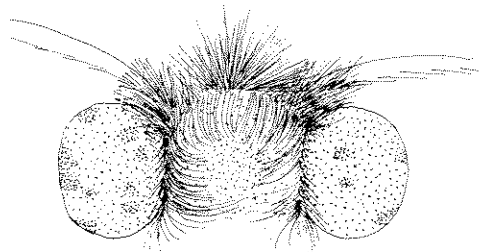
(See plate 53)

Larvae feed on vegetables, alfalfa, corn and clover.

- 59b Dark stripe not present between eyes (Fig. 24); forewing markings variable;



**Figure 23** Top of head showing dark stripe connecting eyes.



**Figure 24** Top of head with dark stripe absent between eyes.

ground color reddish-brown.

**Redbacked Cutworm, *Euxoa ochrogaster* (Guenée)**

(See plates 44 and 45)

Larvae feed on a variety of crops, particularly grains and vegetables.

- 60a (55b) Wing span 3.5 cm or greater, usually about 4 cm ..... 61

- 60b Wing span less than 3.5 cm ..... 64

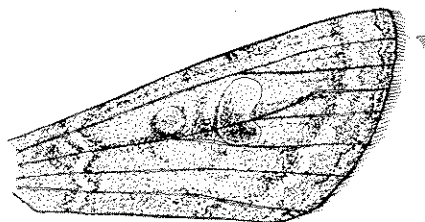
- 61a (60a) Lower half of reniform spot distinctly darker than upper half (Fig. 25); hind wing tan basally; brown distally; wing markings are highly variable.

**Army Cutworm, *Euxoa auxiliaris* (Grote)**

(See plate 54)

Larvae feed on broadleaf weeds, but when starved attack a wide variety of field crops. Adults are found in late spring and early summer, and again in late summer. This species generally is very common.

- 61b Lower half of reniform spot not distinctly darker than upper half, hind wing variable ..... 62



**Figure 25** Army cutworm forewing with darkened lower half of reniform spot.

**62a (61b)** Reniform spot principally white; diffuse white or tan transverse band in subterminal area of forewing.

**Bertha Armyworm**, *Mamestra configurata* Walker

(See plate 48)

Larvae are general feeders, attacking sugarbeets, alfalfa and vegetables.

**62b** Reniform spot brown; subterminal area of forewing without transverse light-colored band ..... 63

**63a (62b)** Forewing well marked, subterminal line usually distinct; hind wing tan basally, brown distally, and opaque.

**Glassy Cutworm**, *Crymodes devastator* (Brace)

(See plate 55)

Larvae feed below ground on grasses, corn, small grains and vegetables. Adults are found in the summer months.

**63b** Forewing not well marked, subterminal line not distinct; hind wing white basally, brown distally, and translucent.

**Variegated Cutworm**, *Peridroma saucia* (Hübner)

(See plates 56 and 57)

Larvae feed on a wide variety of field, forage, vegetable, fruit and flower crops. Adult variegated cutworms are found from spring until autumn.

[Variegated cutworm often is confused with the dark form of army cutworm. Variegated cutworm tends to be larger (wing span greater than 4 cm), with forewings poorly marked. Army cutworm is slightly smaller (wing span less than 4 cm); the forewing has distinct reniform spots, with the lower portion of the spots darker.]

**64a (60b)** Eyes hairy (Fig. 26); hind wings with a dark band distally (Fig. 28).

**Clover Cutworm**, *Scotogramma trifolii* (Hufnagel)

(See plate 58)

Larvae feed on sugarbeet, clover and vegetables.

[A common cutworm in Colorado. This species is easily confused with darksided cutworm and pale western cutworm. Adult clover cutworms are found in spring and summer, darksided and pale western cutworm adults occur in late summer and autumn.]

**64b** Eyes not hairy (Fig. 27); hind wings white, dirty white, or darker distally but without distinct dark band ..... 65

**65a (64b)** Dark stripe present across top of head between eyes (Fig. 23) ..... 66

**65b** Dark stripe not present between eyes (Fig. 24) ..... 67

**66a (65a)** Ground color reddish-brown; forewing markings variable, but usually suppressed.

**Striped Cutworm**, *Euxoa tessellata* (Harris)

(See plate 53)

Larvae feed on vegetables, alfalfa, corn and clover.

**66b** Ground color greyish-brown; transverse line continuing almost to anterior edge of forewing (Fig. 29).

**Darksided Cutworm**, *Euxoa messoria* (Harris)

(See plate 59)

Larvae feed on corn, clover, vegetables, grasses and fruit trees. Adults are found in late summer and autumn.

**67a (65b)** Transverse line curving inward well before the anterior edge of forewing, forming a question-mark shape (Fig. 30); primary forewing veins usually light-colored.

**Pale Western Cutworm**, *Agrotis orthogonia* Morrison

(See plate 60)

Larvae feed below ground on small grains, sugarbeet, alfalfa and vegetables. Adults are found in late summer and autumn.

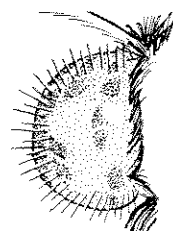
**67b** Transverse line not distinct; primary forewing veins not light-colored.

**Sandhill Cutworm**, *Euxoa detersa* (Walker)

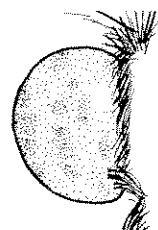
(See plate 11)

Larvae feed on corn and grasses.

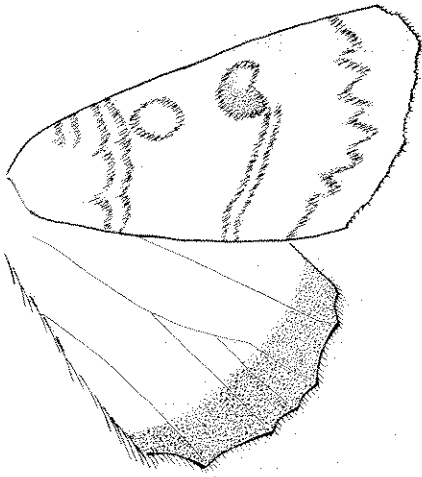
[Specimens of dusky cutworm with weak claviform spots may key to this point. Dusky cutworm has an elongate orbicular spot while sandhill cutworm has an irregular oval orbicular spot . . . see 31a.]



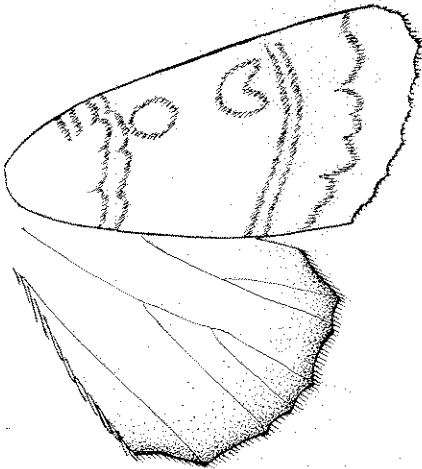
**Figure 26** Clover cutworm compound eye showing distinct hairs.



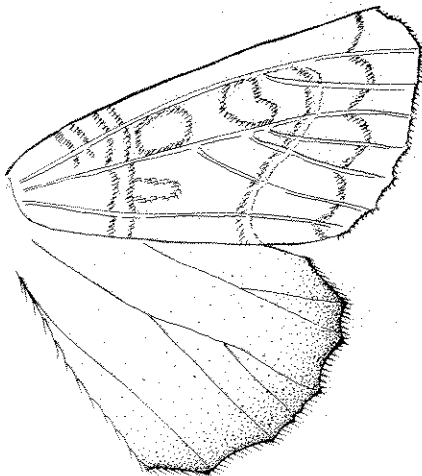
**Figure 27** Eye of cutworm without distinct hairs.



**Figure 28** Forewing and hind wing of clover cutworm showing weak, abbreviated transverse line on forewing and dark distal band on hind wing.



**Figure 29** Forewing and hind wing of dark-sided cutworm showing transverse line extending almost across forewing.



**Figure 30** Forewing and hind wing of pale western cutworm showing strongly curved transverse line and light-colored wing veins on forewing.

## LIST OF SPECIES; COMMON AND SCIENTIFIC NAME

### COMMON

alfalfa looper  
 alfalfa webworm  
 army cutworm  
 armyworm  
 beet armyworm  
 beet webworm  
 berthia armyworm  
 bilobed looper  
 black army cutworm  
 black cutworm  
 bristly cutworm  
 bronzed cutworm  
 cabbage looper  
 celery looper  
 claybacked cutworm  
 clover cutworm  
 clover looper  
 corn earworm  
 darksided cutworm  
 dingy cutworm  
 dusky cutworm  
 European corn borer  
 fall armyworm  
 forage looper  
 fourhorned sphinx  
 glassy cutworm  
 granulated cutworm  
 green cloverworm  
 palesided cutworm  
 pale western cutworm  
 redbacked cutworm  
 saltmarsh caterpillar  
 sandhill cutworm  
 small striped cutworm  
 southwestern corn borer  
 speckled cutworm  
 spotted cutworm  
 spotted-legged cutworm  
 striped cutworm  
 striped garden caterpillar  
 tobacco hornworm  
 tomato hornworm  
 underwing moth  
 variegated cutworm  
 well-marked cutworm  
 western bean cutworm  
 wheat head armyworm  
 white cutworm  
 whitelined sphinx  
 yellowheaded cutworm  
 yellowstriped armyworm  
 zebra caterpillar

### SCIENTIFIC

*Autographa californica* (Speyer)  
*Loxostege commixtalis* (Walker)  
*Euxoa auxiliaris* (Grote)  
*Pseudaletia unipuncta* (Haworth)  
*Spodoptera exigua* (Hübner)  
*Loxostege sticticalis* (Linnaeus)  
*Mamestra configurata* Walker  
*Autographa biloba* (Stephens)  
*Actebia fennica* (Tauscher)  
*Agrotis ipsilon* (Hufnagel)  
*Lacinipolia renigera* (Stephens)  
*Nephelodes minians* Guenée  
*Trichoplusia ni* (Hübner)  
*Anagrapha falcifera* (Kirby)  
*Agrotis gladiaria* Morrison  
*Scotogramma trifolii* (Hufnagel)  
*Caenurgina crassiuscula* (Haworth)  
*Heliothis zea* (Boddie)  
*Euxoa messoria* (Harris)  
*Feltia ducens* Walker  
*Agrotis venerabilis* Walker  
*Ostrinia nubilalis* (Hübner)  
*Spodoptera frugiperda* (J.E. Smith)  
*Caenurgina erechtea* (Cramer)  
*Ceratomia amyntor* (Geyer)  
*Crymodes devastator* (Brace)  
*Agrotis annexa* Treitschke  
*Plathypena scabra* (Fabricius)  
*Agrotis malefida* Guenée  
*Agrotis orthogonia* Morrison  
*Euxoa ochrogaster* (Guenée)  
*Estigmene acrea* (Drury)  
*Euxoa detersa* (Walker)  
*Euxoa niveilinea* (Grote)  
*Diatraea grandiosella* (Dyar)  
*Polia subjuncta* (Grote & Robinson)  
*Amathes c-nigrum* (Linnaeus)  
*Agrotis vetusta* Walker  
*Euxoa tessellata* (Harris)  
*Polia legitima* (Grote)  
*Manduca sexta* (Linnaeus)  
*Manduca quinquemaculata* (Haworth)  
*Catocala* spp.  
*Peridroma saucia* (Hübner)  
*Spaelotis clandestina* (Harris)  
*Loxagrotis albicosta* (Smith)  
*Faronta diffusa* (Walker)  
*Euxoa scandens* (Riley)  
*Hyles lineata* (Fabricius)  
*Apamea amputatrix* (Fitch)  
*Spodoptera ornithogalli* (Guenée)  
*Ceramica picta* (Harris)



## LIST OF SPECIES; SCIENTIFIC AND COMMON NAME

### SCIENTIFIC

*Actebia fennica* (Tauscher)  
*Agrotis annexa* Treitschke  
*Agrotis gladiaria* Morrison  
*Agrotis ipsilon* (Hufnagel)  
*Agrotis malefida* Guenée  
*Agrotis orthogonia* Morrison  
*Agrotis venerabilis* Walker  
*Agrotis vetusta* Walker  
*Amathes c-nigrum* (Linnaeus)  
*Anagrapha falcifera* (Kirby)  
*Apamea amputatrix* (Fitch)  
*Autographa biloba* (Stephens)  
*Autographa californica* (Speyer)  
*Caenurgina crassiuscula* (Haworth)  
*Caenurgina erechtea* (Cramer)  
*Catocala* spp.  
*Ceramica picta* (Harris)  
*Ceratomia amyntor* (Geyer)  
*Crymodes devastator* (Brace)  
*Diatraea grandiosella* (Dyar)  
*Estigmene acrea* (Drury)  
*Euxoa auxiliaris* (Grote)  
*Euxoa detersa* (Walker)  
*Euxoa messoria* (Harris)  
*Euxoa niveilinea* (Grote)  
*Euxoa ochrogaster* (Guenée)  
*Euxoa scandens* (Riley)  
*Euxoa tessellata* (Harris)  
*Faronta diffusa* (Walker)  
*Feltia ducens* Walker  
*Heliothis zea* (Boddie)  
*Hyles lineata* (Fabricius)  
*Lacinipolia renigera* (Stephens)  
*Loxagrotis albicosta* (Smith)  
*Loxostege commixtalis* (Walker)  
*Loxostege sticticalis* (Linnaeus)  
*Mamestra configurata* Walker  
*Manduca quinquemaculata* (Haworth)  
*Manduca sexta* (Linnaeus)  
*Nephelodes minians* Guenée  
*Ostrinia nubilalis* (Hübner)  
*Peridroma saucia* (Hübner)  
*Plathypena scabra* (Fabricius)  
*Polia legitima* (Grote)  
*Polia subijuncta* (Grote & Robinson)  
*Pseudaletia unipuncta* (Haworth)  
*Scotogramma trifolii* (Hufnagel)  
*Spaelotis clandestina* (Harris)  
*Spodoptera exigua* (Hübner)  
*Spodoptera frugiperda* (J.E. Smith)  
*Spodoptera ornithogalli* (Guenée)  
*Trichoplusia ni* (Hübner)

### COMMON

black army cutworm  
 granulated cutworm  
 claybacked cutworm  
 black cutworm  
 palesided cutworm  
 pale western cutworm  
 dusky cutworm  
 spotted-legged cutworm  
 spotted cutworm  
 celery looper  
 yellowheaded cutworm  
 bilobed looper  
 alfalfa looper  
 clover looper  
 forage looper  
 underwing moth  
 zebra caterpillar  
 fourhorned sphinx  
 glassy cutworm  
 southwestern corn borer  
 saltmarsh caterpillar  
 army cutworm  
 sandhill cutworm  
 darksided cutworm  
 small striped cutworm  
 redbacked cutworm  
 white cutworm  
 striped cutworm  
 wheat head armyworm  
 dingy cutworm  
 corn earworm  
 whitelined sphinx  
 bristly cutworm  
 western bean cutworm  
 alfalfa webworm  
 beet webworm  
 berthia armyworm  
 tomato hornworm  
 tobacco hornworm  
 bronzed cutworm  
 European corn borer  
 variegated cutworm  
 green cloverworm  
 striped garden caterpillar  
 speckled cutworm  
 armyworm  
 clover cutworm  
 well-marked cutworm  
 beet armyworm  
 fall armyworm  
 yellowstriped armyworm  
 cabbage looper

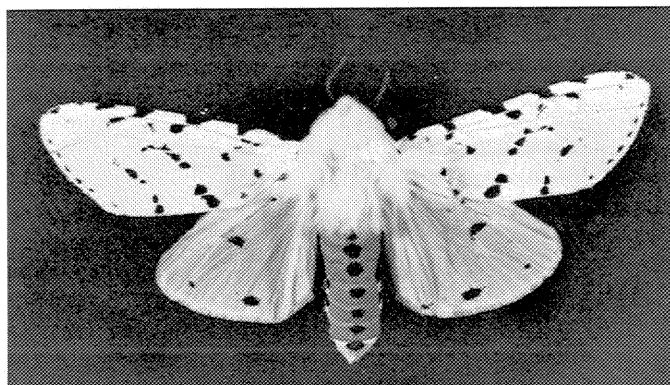


Plate 1 — Saltmarsh caterpillar;  
*Estigmene acrea* (Drury)

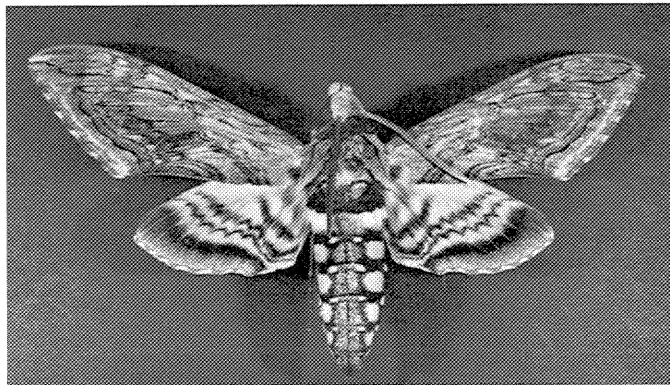


Plate 2 — Tomato hornworm;  
*Manduca quinquemaculata* (Haworth)

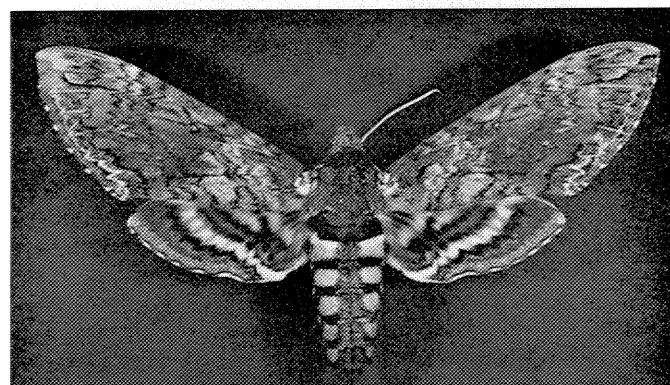


Plate 3 — Tobacco hornworm;  
*Manduca sexta* (Linnaeus)

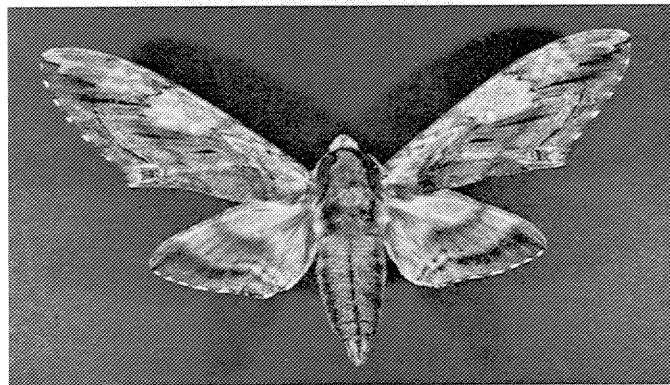


Plate 4 — Fourhorned sphinx;  
*Ceratomia amyntor* (Geyer)

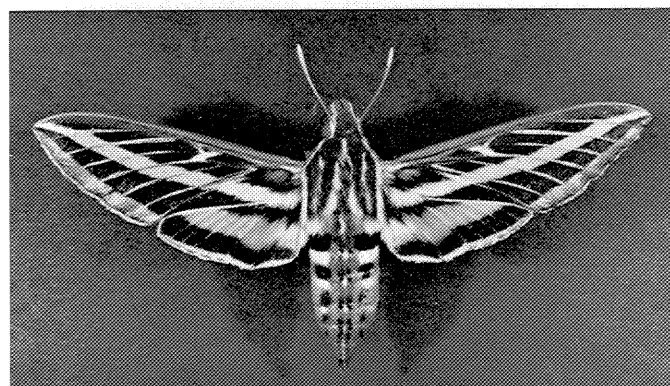


Plate 5 — Whitelined sphinx;  
*Hyles lineata* (Fabricius)



Plate 6 — Underwing moth;  
*Catocala* spp.

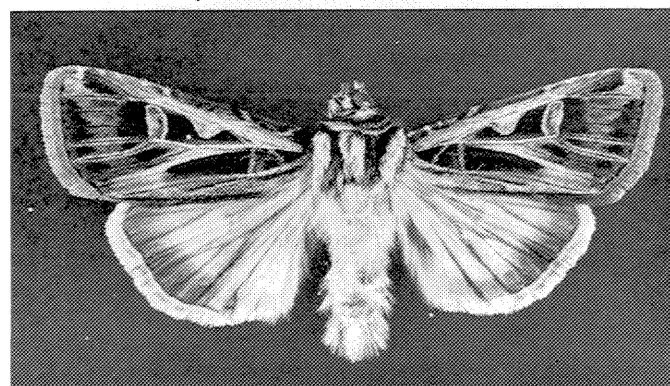


Plate 7 — Dingy cutworm;  
*Feltia ducens* Walker

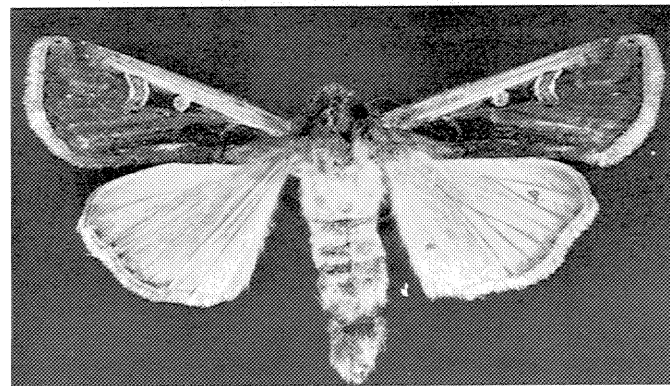


Plate 8 — Western bean cutworm;  
*Loxagrotis albicosta* (Smith)



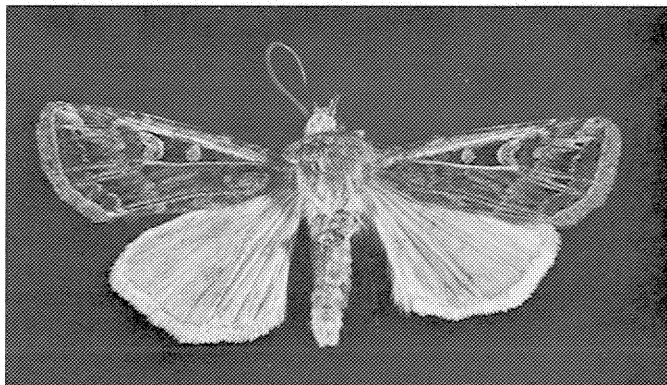


Plate 9 — Small striped cutworm;  
*Euxoa niveilinea* (Grote)



Plate 10 — Army cutworm;  
*Euxoa auxiliaris* (Grote)

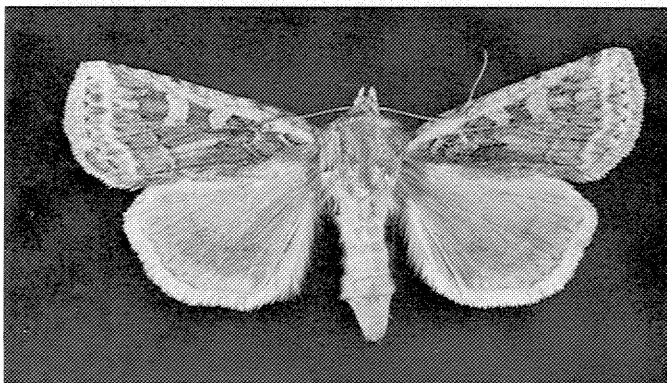


Plate 11 — Sandhill cutworm;  
*Euxoa detersa* (Walker)



Plate 12 — Bilobed looper;  
*Autographa biloba* (Stephens)

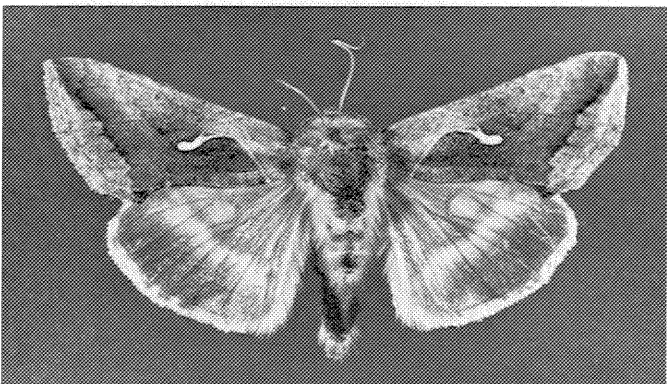


Plate 13 — Celery looper;  
*Anagrapha falcifera* (Kirby)

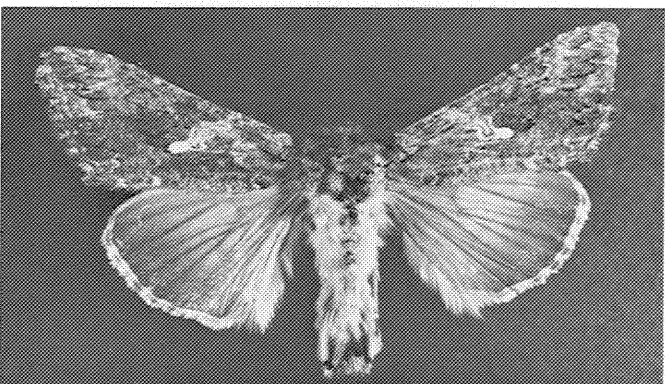


Plate 14 — Cabbage looper;  
*Trichoplusia ni* (Hübner)

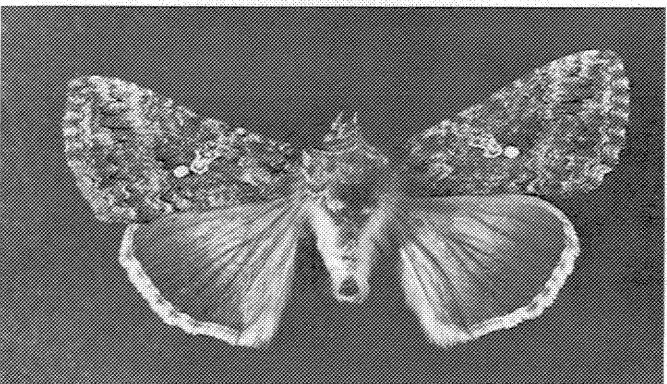


Plate 15 — Cabbage looper;  
*Trichoplusia ni* (Hübner)

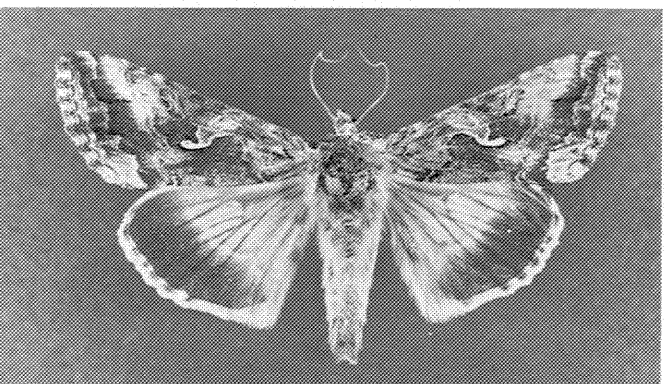


Plate 16 — Alfalfa looper;  
*Autographa californica* (Speyer)

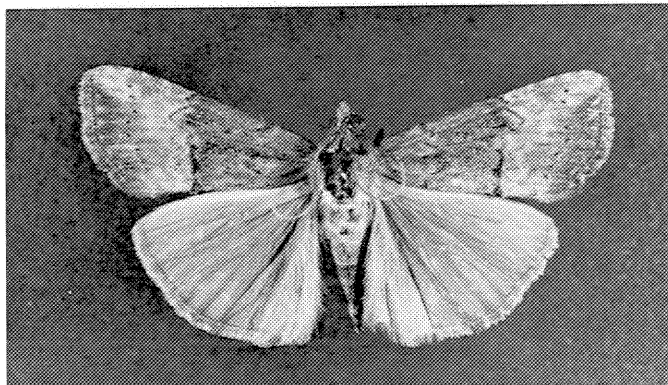


Plate 17 — Green cloverworm;  
*Plathypena scabra* (Fabricius)

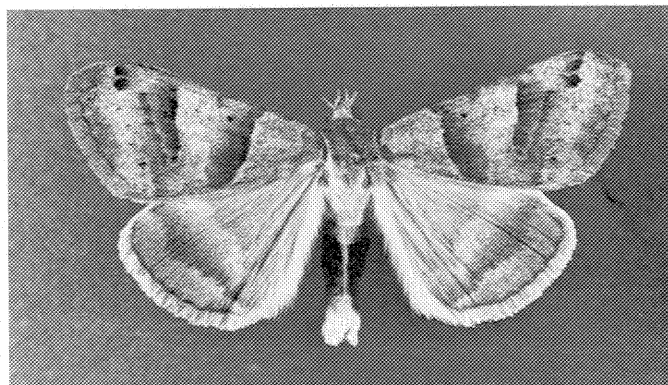


Plate 18 — Forage looper;  
*Caenurgina erecta* (Cramer)

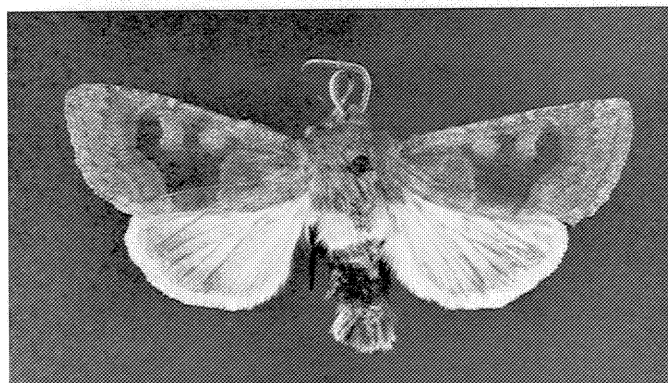


Plate 19 — Bronzed cutworm;  
*Nephelodes minians* Guenée



Plate 20 — Wheat head armyworm;  
*Faronta diffusa* (Walker)

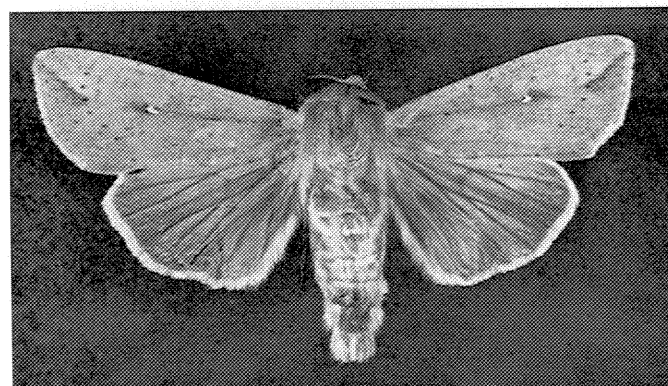


Plate 21 — Armyworm;  
*Pseudaletia unipuncta* (Haworth)

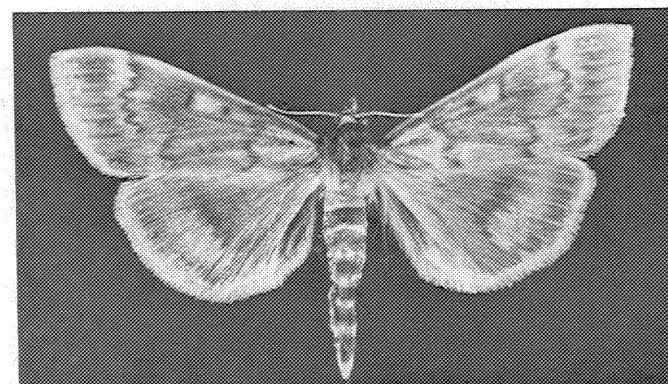


Plate 22 — European corn borer;  
*Ostrinia nubilalis* (Hübner)

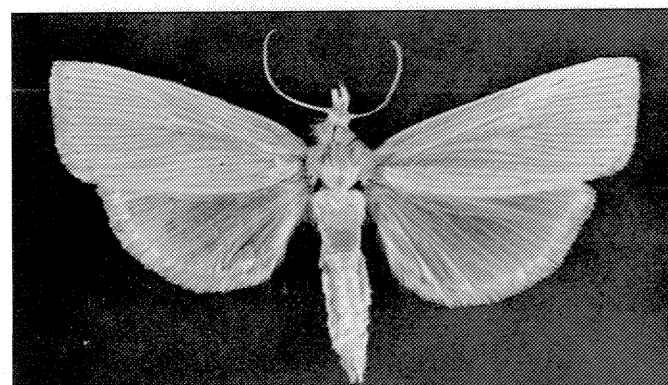


Plate 23 — Southwestern corn borer;  
*Diatraea grandiosella* (Dyar)



Plate 24 — Beet webworm;  
*Loxostege sticticalis* (Linnaeus)



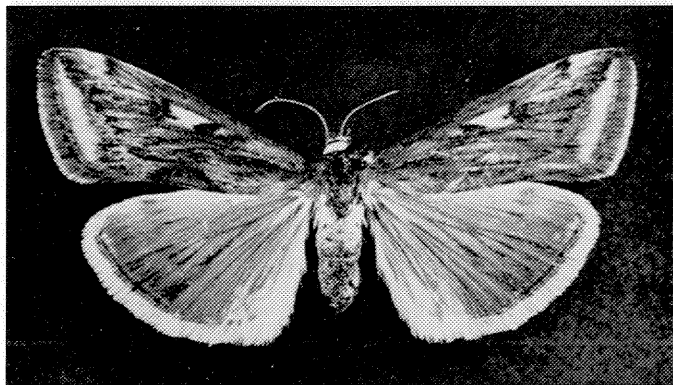


Plate 25 — Alfalfa webworm;  
*Loxostege commixtalis* (Walker)

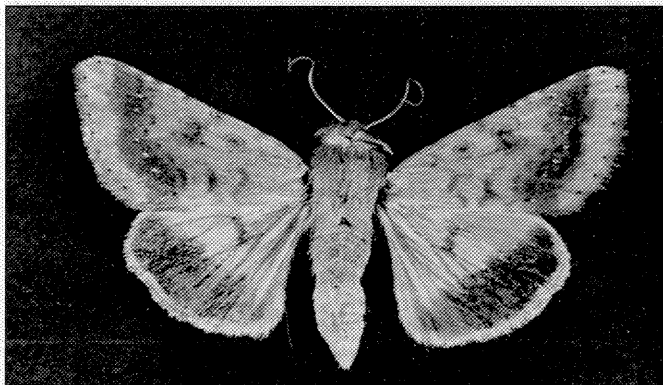


Plate 26 — Corn earworm;  
*Heliothis zea* (Boddie)



Plate 27 — Corn earworm;  
*Heliothis zea* (Boddie)

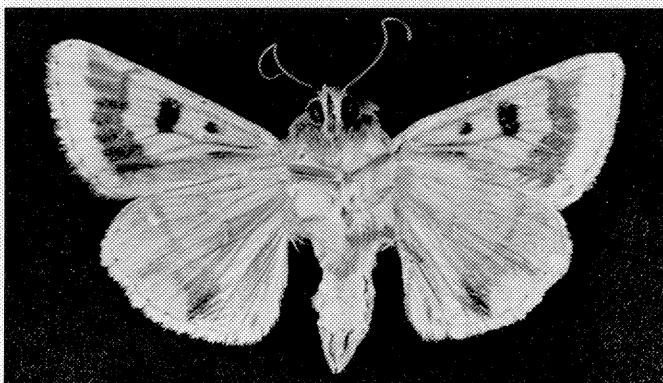


Plate 28 — Corn earworm;  
*Heliothis zea* (Boddie)

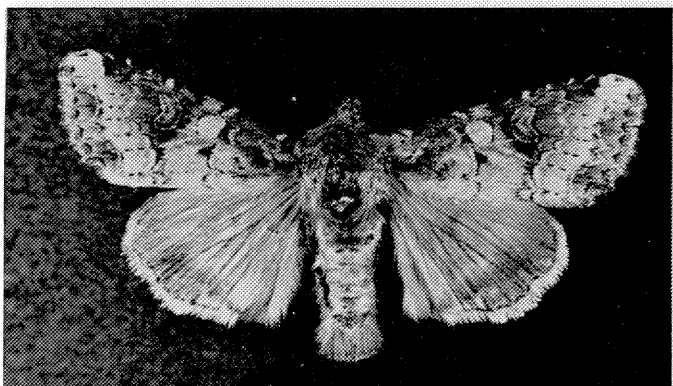


Plate 29 — Striped garden caterpillar;  
*Polia legitima* (Grote)

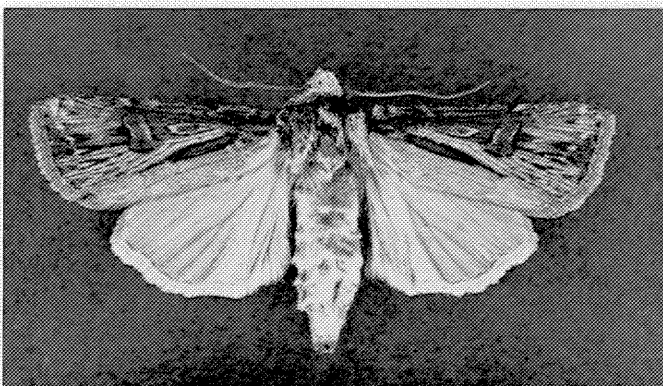


Plate 30 — Dusky cutworm;  
*Agrotis venerabilis* Walker

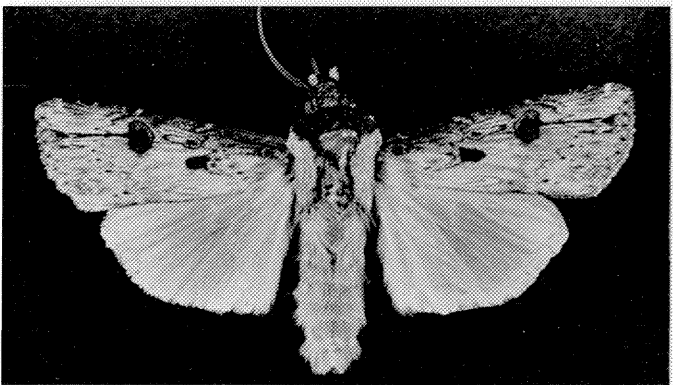


Plate 31 — Palesided cutworm;  
*Agrotis malefida* Guenée



Plate 32 — Beet armyworm;  
*Spodoptera exigua* (Hübner)

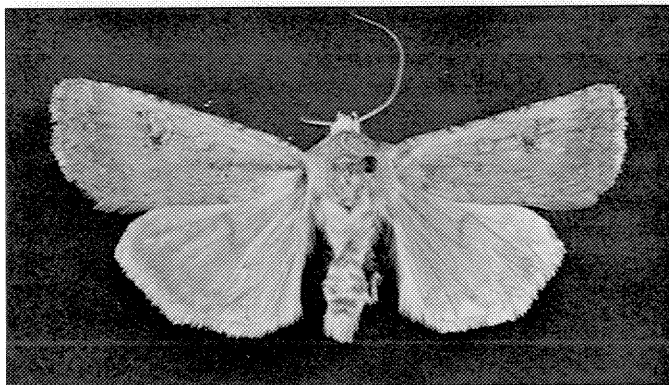


Plate 33 — White cutworm;  
*Euxoa scandens* (Riley)

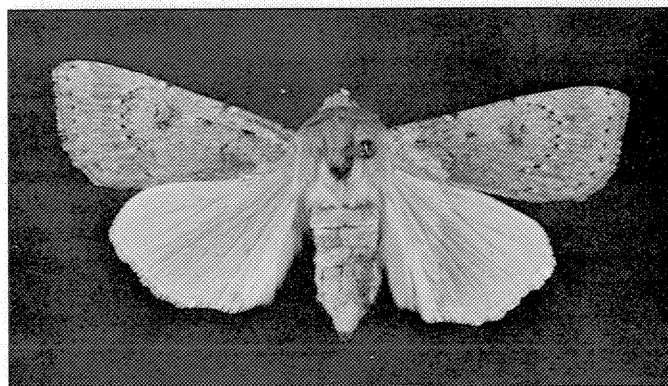


Plate 34 — Spotted-legged cutworm;  
*Agrotis vetusta* Walker

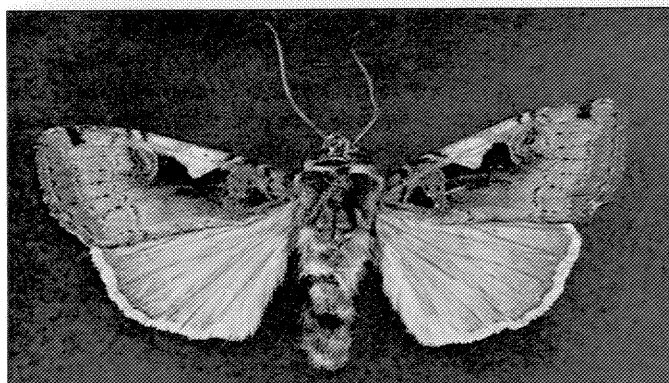


Plate 35 — Spotted cutworm;  
*Amathes c-nigrum* (Linnaeus)

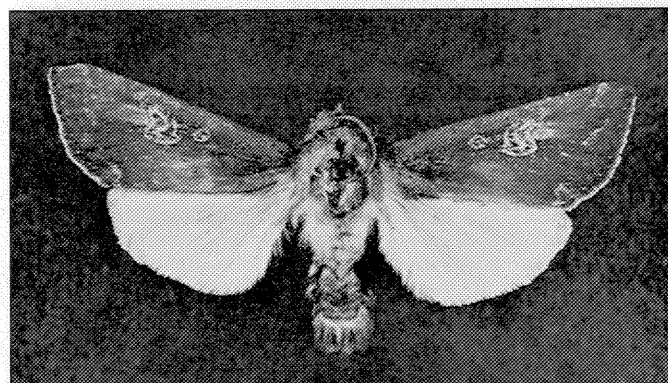


Plate 36 — Zebra caterpillar;  
*Ceramica picta* (Harris)

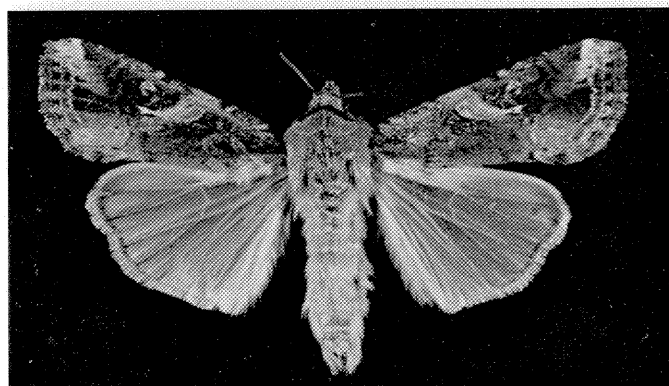


Plate 37 — Fall armyworm;  
*Spodoptera frugiperda* (J.E. Smith)

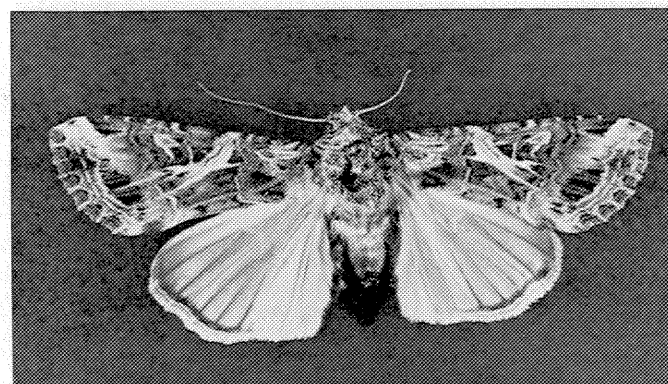


Plate 38 — Yellowstriped armyworm;  
*Spodoptera ornithogalli* (Guenée)

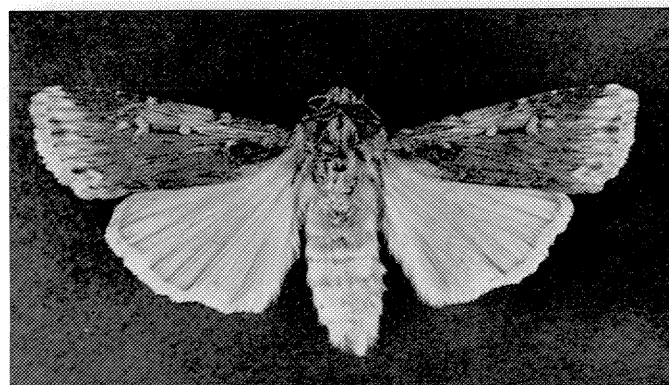


Plate 39 — Granulated cutworm;  
*Agrotis annexa* Treitschke

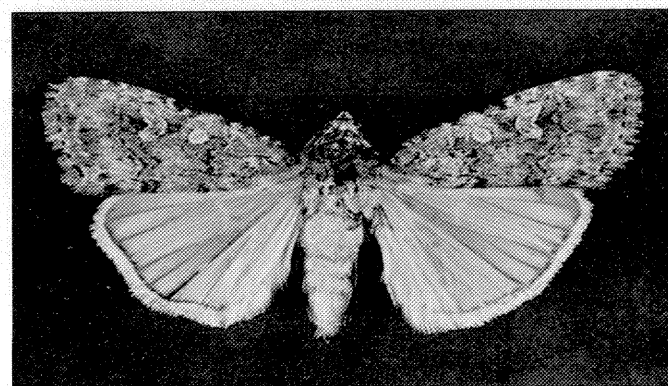


Plate 40 — Fall armyworm;  
*Spodoptera frugiperda* (J.E. Smith)



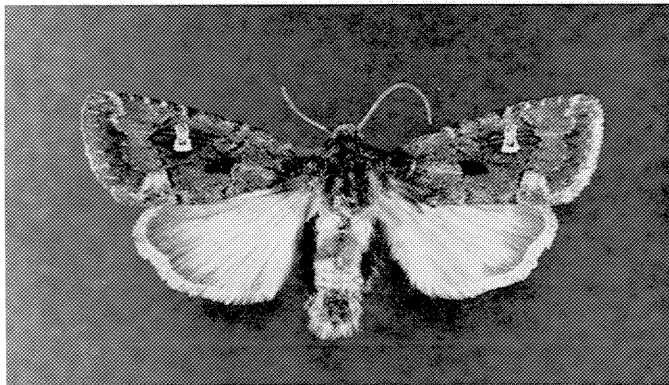


Plate 41 — Bristly cutworm;  
*Lacinipolia renigera* (Stephens)

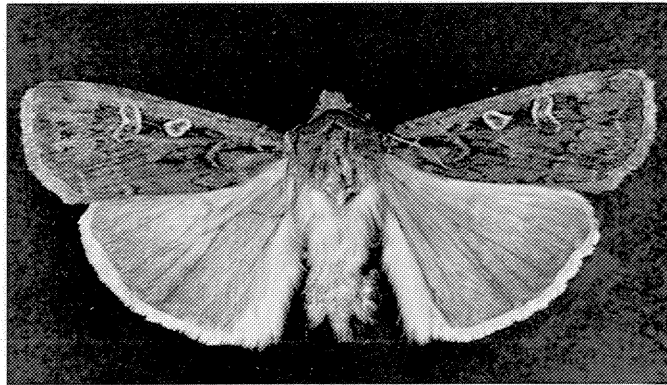


Plate 42 — Army cutworm;  
*Euxoa auxiliaris* (Grote)

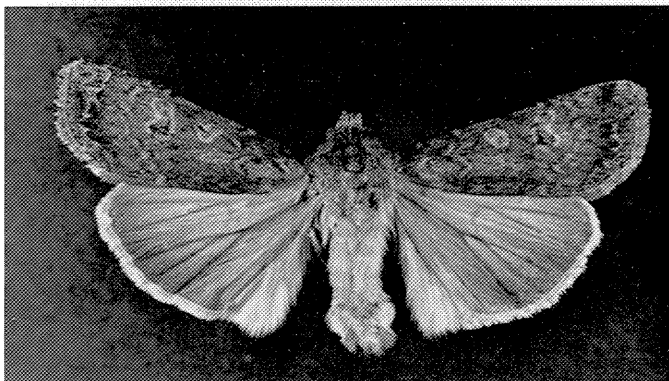


Plate 43 — Army cutworm;  
*Euxoa auxiliaris* (Grote)

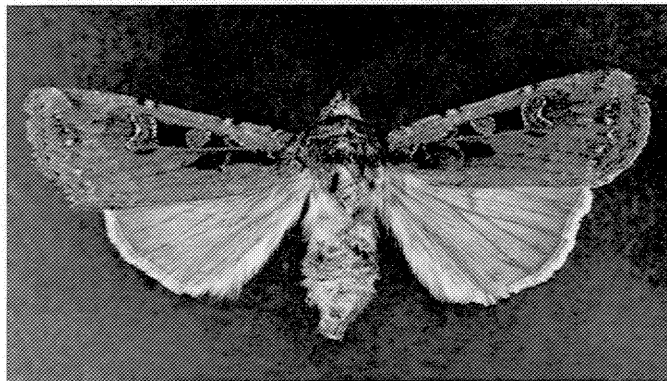


Plate 44 — Redbacked cutworm;  
*Euxoa ochrogaster* (Guenée)

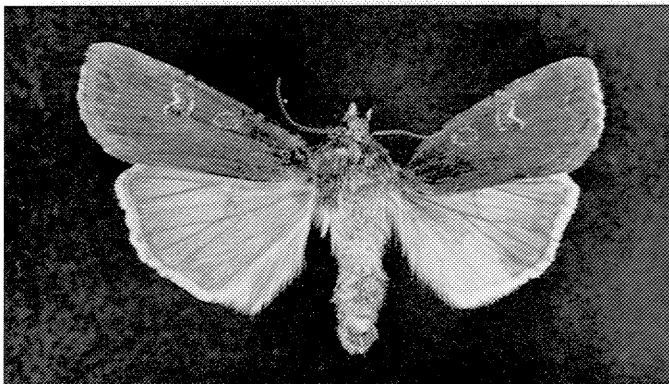


Plate 45 — Redbacked cutworm;  
*Euxoa ochrogaster* (Guenée)

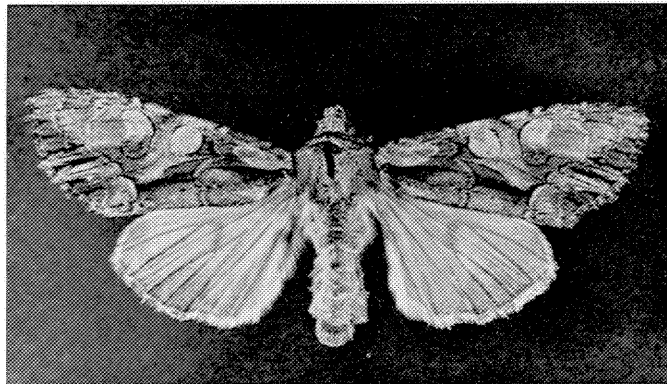


Plate 46 — Speckled cutworm;  
*Polia subjuncta* (Grote and Robinson)

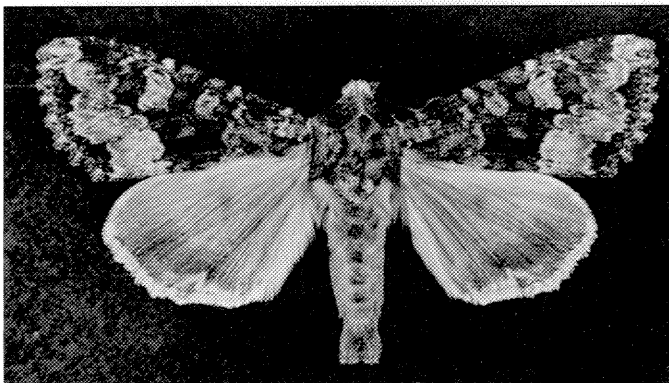


Plate 47 — Yellowheaded cutworm;  
*Apamea amputatrix* (Fitch)

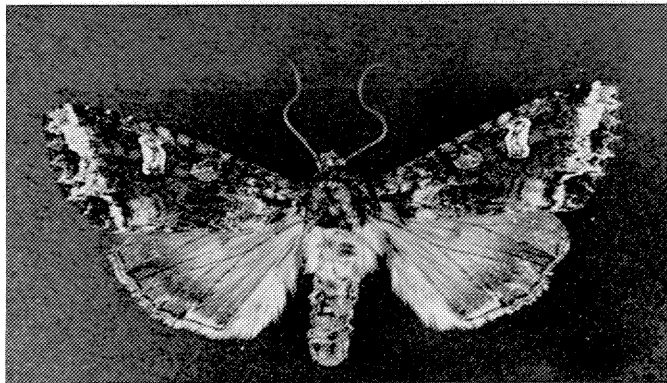


Plate 48 — Bertha armyworm;  
*Mamestra configurata* Walker

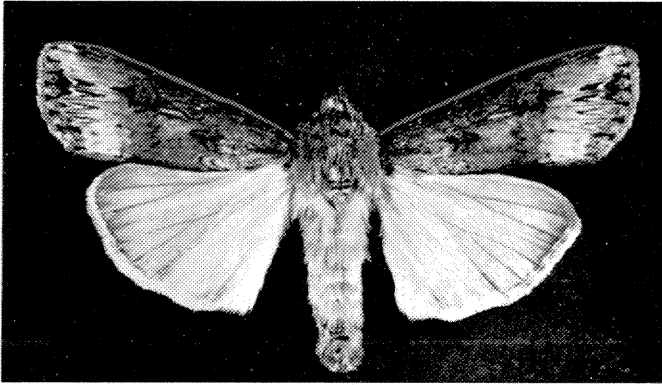


Plate 49 — Black cutworm;  
*Agrotis ipsilon* (Hufnagel)

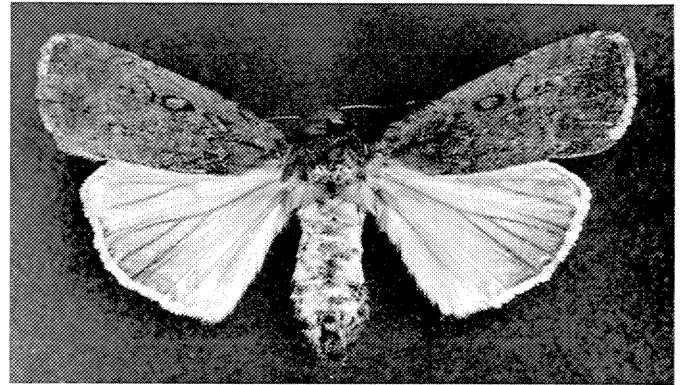


Plate 50 — Well-marked cutworm;  
*Spaelotis clandestina* (Harris)

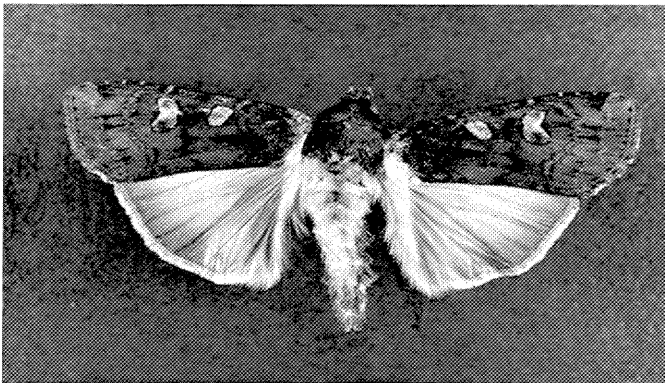


Plate 51 — Black army cutworm;  
*Actebia fennica* (Tauscher)

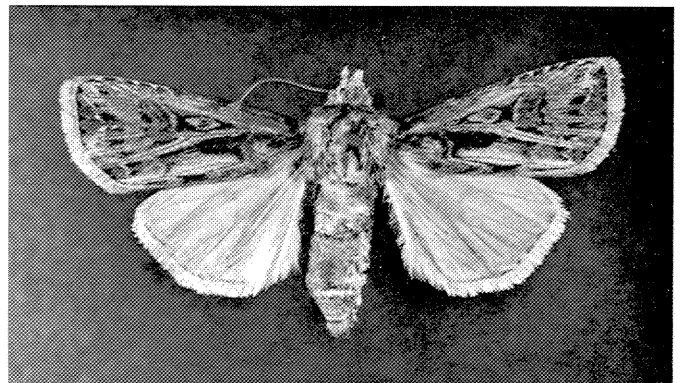


Plate 52 — Claybacked cutworm;  
*Agrotis gladiaria* Morrison

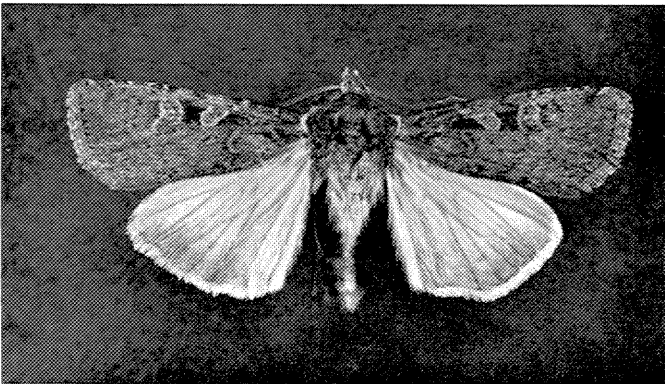


Plate 53 — Striped cutworm;  
*Euxoa tessellata* (Harris)



Plate 54 — Army cutworm;  
*Euxoa auxiliaris* (Grote)

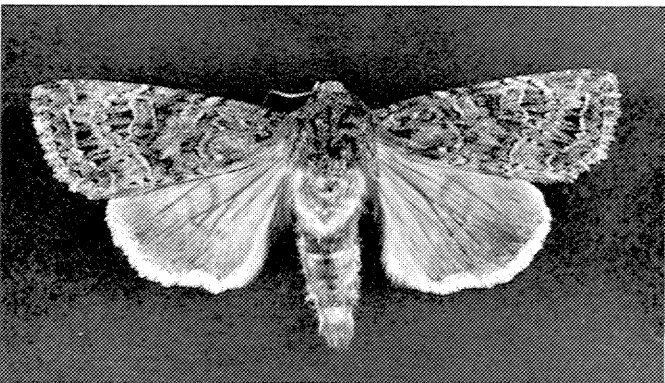


Plate 55 — Glassy cutworm;  
*Crymodes devastator* (Brace)

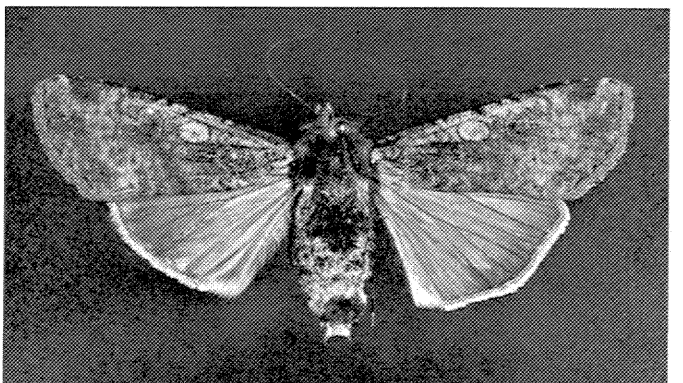


Plate 56 — Variegated cutworm;  
*Peridroma saucia* (Hübner)

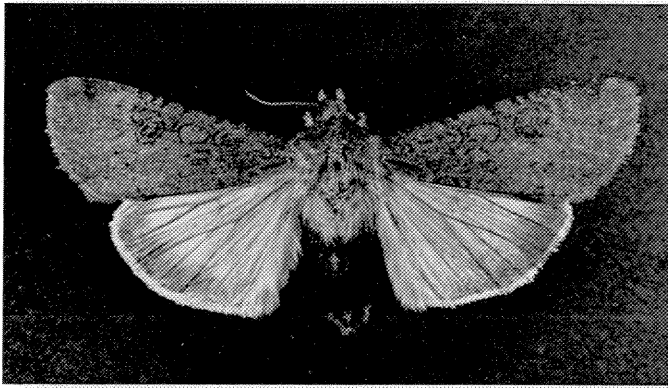


Plate 57 — Variegated cutworm;  
*Peridroma saucia* (Hübner)

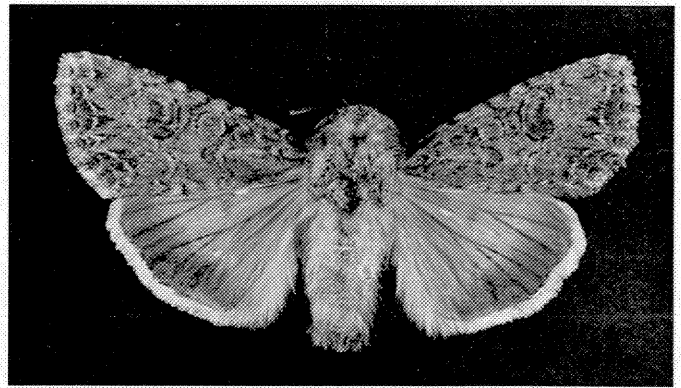


Plate 58 — Clover cutworm;  
*Scotogramma trifolii* (Hufnagel)

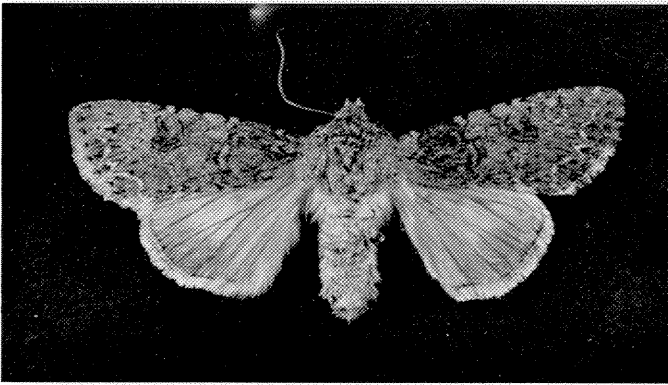


Plate 59 — Darksided cutworm;  
*Euxoa messoria* (Harris)

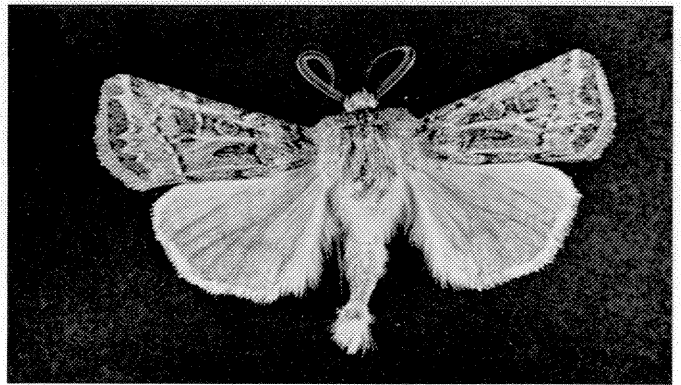


Plate 60 — Pale western cutworm;  
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