Oklahoma Arctiidae (Lepidoptera)

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The species of Arctiidae represent some of the more colorful moths of the Oklahoma insect fauna. Although many of the arctiids are not of known economic importance, some of the species, e.g. Hyphantria cunea (Drury) are regarded as pests.

The reader is referred to McDunnough (1938) for synonymy. The distribution data are based on specimens from the insect collections of Oklahoma State University and the University of Oklahoma. Since other collections were not examined for possible specimens collected in Oklahoma, the distribution information can not be regarded as complete; however, it represents data not in print elsewhere and should be of value.

In addition to the key to the adults and brief descriptions of the species, a key to larval forms has also been included. For the most part, it has been prepared from literature and is based on the works of the following authors: Beutenmüller (1898), Dyar (1900), Fracker (1915), and Peterson (1948).

All illustration for this work were drawn by Mrs. Barbara Roach, technician, Department of Entomology, Oklahoma State University.

Key to the Arctiid Moths of Oklahoma

1.	Ground color of fore wings white
2.	Ground color of fore wings brown or black, with white lines

8,	Fore wings red or orange		
4.	Fore wings with white bands (spots in bands)		
5.	Posterior margin of hind wings with a well developed dark margin (about ¼ width of wing) Posterior margin of hind wings without a well developed dark margin or only a slightly developed margin Hypoprepia fucoso		
6.	Fore wings dirty white or grey with reddish-orange margins		
	Fore wings brown, hind wing red with brown posterior margins. Eubaphe lacta		
7.	Hind wings white with no dark spots or, if with a faint dark spot, fore wings brown and white		
8.	Head with bright yellow scales Haploa colona reversa Head without bright yellow scales 9		
9.	Thorax with 2 black and yellow longitudinal vittae Ectypia bivittata Thorax not as above		
10.	Fore wing solid white11 Fore wing white, with a pattern or a partial band of spots14		
11.	Abdomen yellow with black spotsEuchaetis oregonensis Abdomen white without spotsHypantria cunea		
12.	Fore wings with dark front and hind margins		
13.	Fore wings with more than 20 dark spotsEstigmene acrea Fore wings with less than 20 dark spotsDiacrista virginica		
14.	Fore wing with a partial band of spotsMaenas vestalis Fore wing with a patternEuerythra phasma		
15.	Black spots on abdomen contiguous or diamond shaped17 Black spots on abdomen separate, not diamond shaped16		
16.	Abdomen reddish-orange; hind wings redApantesis virgo Abdomen pinkish-white; hind wings white with redApantesis arge		
17.	Hind wings with a continuous dark margin Apantesis figurata Hind wings with margin broken18		
18.	Spots on abdomen diamond or triangular shaped		
	Key to the Larvae		
1.	Larvae with unisetose or bisetose chalasae		
2.	Subdorsal setae of metathorax twice as long as middle abdominal setae		
	Subdorsal setae of metathorax and middle abdomen equal3 Verrucae alpha of abdomen about 1/2 of beta, all verrucae small; setae		
3.	of segments 8 and 9 not longer than those of other areas of the body4 Not as above		

4.	With black and white setae Setae may be of two colors, but not black and whi	Ectypia bivittata ite5
5.	Verrucae kappa of the mid abdominal segments above the level of the lower margin of the spiracl Verrucae kappa well below the lower margin of th	ė9
6.	All abdominal verrucae black; body not vittate Most of the verrucae pale; body vittate	
7.	Body longitudinally vittate	Haploa spp.
8.	Laternal vittae pale	Estigmene acrea Diacrista virginica
9.	With zigzag vittae beneath spiracles	
10.	Each tubercle with black and brown hairs Each tubercle with concolorous hairs	
11.	Dorsal vittae present	
12.	Body reddish brown or blackish brown Body ground color buff with an orange tinge	Hypoprepia spp. Utethesia bella
	Humanuania miniata (Vinha)	

Hypoprepia miniata (Kirby)

General color of wings reddish-orange; fore wings with three dark vittae; hind wings reddish-orange with a wide, dark marginal band (Figure 1); wing spread 1 to 1½ inches.

Distribution: Payne County (May-August).

Hypoprepia fucosa Hübner

Description and size that of *H. miniata* except that the dark marginal band of the hind wing is often wanting and if present it is not as wide as the vittae of the fore wings. (Figure 2).

Distribution: Payne County (May-September).

Euchaetias oregonensis Stretch

Head yellow, thorax and wings white, abdomen white beneath, yellow above (except the last segment which is white) with a median and lateral series of black spots; wing spread 1½ to 1½ inches (Figure 3).

Distribution: Beckham, Jefferson, Kiowa, Muskogee, Payne, Pontotoc, Pottawatomie, and Roger Mills Counties (May-July).

Pygarctia spraguei Grote

Head reddish-orange; thorax with two vittae; wings dirty white, fore wings with anterior and posterior margins reddish-orange; abdomen reddish-orange with back spots medially; legs dirty white; wing spread about 14 inches (Figure 4).

Distribution: Beckham, Dewey, Jackson, Kiowa, Major, Roger Mills, and Seminole Counties (June-August).

Eubaphe laeta Guérin

Front wings brown; hind wings orange with brown posterior margins; head brown; thorax brown except for the orange prothorax; abdomen orange with some medial brown spots basally; venter mostly brown, tip orange; wing spread slightly more than % inch (Figure 5).

Distribution: Idabel, McCurtain County, 30 June 1937 (Standish-Kaiser).

Apantesis virgo Linné

Front wings dark brown with white markings; hind wings reddish with brown markings; abdomen reddish with marking as shown in Figure 6; venter brown; wing spread 1% to 2% inches.

Distribution: Payne County (August).

Apantesis oithona Strecker

Front wings brown with pinkish markings; hind wings red with brown markings; head and thorax light pink with brown markings; abdomen red with brown markings; venter white medially and brown laterally; wing spread about 1½ inches (Figure 7).

Distribution: LeFlore, McCurtain, and Payne Counties (May-September).

Apantesis arge (Drury)

Wings and body white or pinkish white with black markings as shown in Figure 8; abdomen may have some orange colored segments; wing spread 1½ to 1½ inches.

Distribution: Adair, Bryan, Cherokee, Cleveland, Custer, Delaware, Hughes, Kiowa, Payne, and Pontotoc Counties (March-September).

Apantesis figurata (Drury)

Front wing brown with white markings; hind wings red, marked with brown; head buff; thorax with three brown vittae; abdomen red with a medial row of brown spots; venter brown; wing spread about 1% inches (Figure 9).

Distribution: A single specimen collected at Sherwood, McCurtain Co., Oklahoma, 27 June 1937 (Standish-Kaiser).

Apantesis nais (Drury)

Front wings brown with white markings; hind wings buff with a pink tinge and brown anterior margins and maculations (Figure 10); thorax with 3 dark vittae; abdomen buff to pinkish with a dark medial vitta on the dorsum; venter and legs dark; wing spread about 1½ inches.

Distribution: Hughes, Jefferson, Murray, Muskogee, and Payne Counties (March-September).

Apantesis phalerata Harris

Front wings brown with white markings; hind wings white with some red tinge or red with variable brown markings; thorax and abdomen marked as shown in Figure 11, lateral area of the abdomen pinkish or red; venter brown; wing spread about 1½ inches.

Distribution: Choctaw, Hughes, and Payne Counties (April-September).

Diacrisia virginica (Fabricius)

Wings white with a few black spots; head, thorax, and part of the abdomen white, remainder of the abdomen light orange with black spots; wing spread 1½ to 1½ inches (Figure 12).

Distribution: Muskogee, Roger Mills, and Payne Counties (April-June).

Maenas vestalis Packard

Front wings white with a few brown spots; hind wings white; thorax and abdomen white; wing spread slightly over 1½ inches.

Distribution: one specimen taken in Payne County, 3 May 1941.

Estigmene acrea (Drury)

Front wings white with black spots; hind wings white with black spots or buff with black spots; abdomen buff with black markings; venter buff with black markings; wing spread about 2 inches (Figure 13).

Distribution: Grady, Lincoln, Love, McCurtain, Payne, and Sequoyah Counties (March-August).

Hyphantria cunea (Drury)

Almost entirely white, the femora of prolegs orange, tarsi black, occasionally some small black spots on the wings; wing spread 1% to 1% inches.

Distribution: Adults have been collected from Payne County in May; however, the larvae have been collected or reported from much of eastern Oklahoma.

Euerythra phasma Harvey

Wings white with brownish pattern on the fore wing, veins orange within the pattern; abdomen white with a variable amount of reddishorange on the dorsum (Figure 14).

Distribution: Caddo, Custer, Marshall, McCurtain, Murray, Payne, Pontotoc, and Sequoyah Counties (May-August).

Ectypia bivittata Clemens

Wings white with black spots; head and thorax white, thorax with two black longitudinal vittae, each margined with yellow laterally; abdomen white with yellow dorsally on the middle segments and a row of medial black spots; wing spread about 1% inches (Figure 15).

Distribution: Kiowa County, 11 June 1937.

Utethesia bella (Linné)

Front wings with light orange ground color, banded white with black spots in the bands; hind wings reddish-pink with brown posterior margins; body white, head and thorax with black spots, humeral area of the thorax with orange patches (Figure 16).

Distribution: Cleveland and Payne Counties (July-October).

Haploa clymene (Brown)

Front wings white with brown pattern; hind wings yellow with brown spots; head white with orange posteriorly; thorax white with brown medial

vitta; abdomen yellow with brown vitta; wing spread slightly over 2 inches (Figure 17).

Distribution: Bryan, McCurtain, and McIntosh Counties (June).

Haploa colona reversa Stretch

Wings white with a brown pattern on the front wings; prothorax orange, often with two brown spots, remainder of thorax white with a dark medial vitta and two patches of orange or yellow bordering the stripe apically; wing spread about 1% inches (Figure 18).

Distribution: Adair and McCurtain Counties (June).

LITERATURE CITED

- Beutenmüller, William. 1898. Descriptive catalogue of the bombycine moths found within fifty miles of New York City. Bull. Am. Mus. Nat. Hist. 10: 353-448.
- Dyar, H. G. 1900. Preliminary notes on the larvae of the genus Arctia. J. N. Y. Ent. Soc. 8: 34-47.
- Fracker, S. B. 1915. The classification of lepidopterous larvae. Ill. Biol. Monog. 2(1), 161 pp.
- McDunnough, J. 1938. Check list of the Lepidoptera of Canada and the United States of America. Pt. 1. Macrolepidoptera. Mem. So. Calif. Acad. Sci. 1: 1-272.
- Peterson, A. 1948. Larvae of insects. An introduction to Nearctic species. Pt. 1. Lepidoptera and plant infesting Hymenoptera. Columbus, Ohio, publ. by the author. 315 pp.

Explanation of Figures

- 1. Hypoprepia miniata (Kby.)
- 2. Hypoprepia fucosa Hbn.
- 3. Euchaetias oregonensis Stretch
- 4. Pygarctia spraguei Grt.
- 5. Eubaphe laeta Guer.
- 6. Apantesis virgo L.
- 7. Apantesis oithona Stkr.
- 8. Apantesis arge (Dru.)
- 9. Apantesis figurata (Dru.)
- 10. Apantesis nais (Dru.)
- 11. Apantesis phalerata Harris
- 12. Diacrisia virginica (Fab.)
- 13. Estigmene acrea (Dru.)
- 14. Eucrythra phasma Harvey
- 15. Ectypia biviatta Clem.
- 16. Utethesia bella (L.)
- 17. Haploa clymene (Brown)
- 18. Haploa colona reversa Stretch

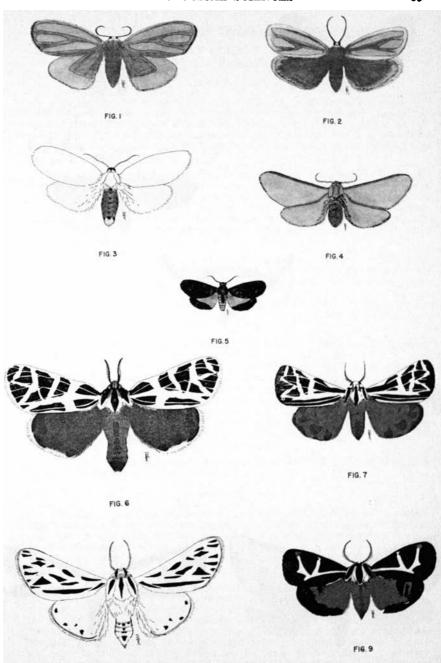


FIG. 8

