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 ...........................................7
   Ground color of fore wings not white ...................................2

2. Ground color of fore wings brown or black, with white lines .......15
   Not as above ..........................................................................3
3. Fore wings red or orange ............................................. 4
Fore wings not red or orange ........................................ 6

4. Fore wings with white bands (spots in bands) .......... *Utethesia bella*
Fore wings with smoky stripes .................................. 5

5. Posterior margin of hind wings with a well developed dark margin
   (about ¼ width of wing) ........................................ Hypoprepia minitata
Posterior margin of hind wings without a well developed dark margin
   or only a slightly developed margin .......................... Hypoprepia fucosa

6. Fore wings dirty white or grey with reddish-orange margins...........................................
Fore wings brown, hind wing red with brown posterior margins.................................... Eubaphe laeta

7. Hind wings white with no dark spots or, if with a faint dark spot,
   fore wings brown and white .................................... 8
Hind wings not white or if white with at least one dark spot and the
   fore wings not as above ........................................ 12

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

10. Fore wing solid white ........................................ 11
Fore wing white, with a pattern or a partial band of spots ............................................. 14

11. Abdomen yellow with black spots .................... *Euchaetis oregonesis*
Abdomen white without spots .................................. Hypantna cunea

12. Fore wings with dark front and hind margins .......... *Haploa clemene*
Fore wings white, dark margins wanting ............................................. 13

13. Fore wings with more than 20 dark spots ................ *Estigmene acrea*
Fore wings with less than 20 dark spots .................... *Diacrista virginica*

14. Fore wing with a partial band of spots ............. *Maenas vestalis*
Fore wing with a pattern ...................................... *Euerythra phasma*

15. Black spots on abdomen contiguous or diamond shaped ............................................. 17
Black spots on abdomen separate, not diamond shaped ............................................. 16

16. Abdomen reddish-orange; hind wings red ............ *Apanteles virgo*
Abdomen pinkish-white; hind wings white with red *Apanteles argi*

17. Hind wings with a continuous dark margin .......... *Apanteles figurata*
Hind wings with margin broken ............................................. 18

18. Spots on abdomen diamond or triangular shaped .......... *Apanteles oithona*
Spots on abdomen not as above ............................ *Apanteles nois and A. phalerata*

Key to the Larvae

1. Larvae with unisetose or bisetose chaetae ............................................. 12
Larvae with multisetose verrucae .................................... 2

2. Subdorsal setae of metathorax twice as long as middle abdominal
   setae .......................................................... *Euchaetis oregonesis*
Subdorsal setae of metathorax and middle abdomen equal ........................................ 3

3. Verrucae alpha of abdomen about ½ of beta, all verrucae small; setae
   of segments 8 and 9 not longer than those of other areas of the body ............................ 4
Not as above .......................................................... 7
BIOLOGICAL SCIENCES

4. With black and white setae .............................................. *Ectypia bivittata*
   Setae may be of two colors, but not black and white .................. 5

5. Verrucae kappa of the mid abdominal segments partially or entirely
   above the level of the lower margin of the spiracle .................. 9
   Verrucae kappa well below the lower margin of the spiracle .......... 6

6. All abdominal verrucae black; body not vittate ...................... *Eubaphe laeta*
   Most of the verrucae pale; body vittate ................................ *Hyphantria cunea*

   Body not longitudinally vittate .......................................... 8

8. Laternal vittae pale ........................................................ *Estigmene acrea*
   Lateral vittae not pale .................................................. *Diacrista virginica*

9. With zigzag vittae beneath spiracles ................................... *Apantesis arge*
   Zigzag vittae wanting .................................................... 10

10. Each tubercle with black and brown hairs ............................ *Apantesis virgo*
    Each tubercle with concolorous hairs ................................ *11*

11. Dorsal vittae present ..................................................... *Apantesis nais*
    Dorsal vittae wanting .................................................. *Apantesis phalerata*

12. Body reddish brown or blackish brown ................................. *Hypoprepia spp.*
    Body ground color buff with an orange tinge ......................... *Utethesia beila*

*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 1 1/2 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).

*Buchaelias 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 1 1/4 to 1 1/2 inches (Figure 3).


*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 1 1/4 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 ¾ 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 1¾ to 2½ 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 1¼ 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 1¾ inches (Figure 9).


**Apantesis nalis** (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 1\(\frac{1}{4}\) to 1\(\frac{1}{2}\) inches (Figure 12).

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

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**Maenas vestalis** Packard

Front wings white with a few brown spots; hind wings white; thorax and abdomen white; wing spread slightly over 1\(\frac{1}{2}\) inches.

Distribution: one specimen taken in Payne County, 3 May 19__.

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**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).


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**Hyphantria cunea** (Drury)

Almost entirely white, the femora of prolegs orange, tarsi black, occasionally some small black spots on the wings; wing spread 1\(\frac{1}{2}\) to 1\(\frac{3}{4}\) inches.

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

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**Euerythra phasma** Harvey

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

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

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**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\(\frac{3}{4}\) inches (Figure 15).

Distribution: Kiowa County, 11 June 1937.

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**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).

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**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 1½ inches (Figure 18).

**Distribution:** Adair and McCurtain Counties (June).

**LITERATURE CITED**


**Explanation of Figures**

1. *Hypoprepia miniata* (Kby.)
3. *Buchatia oregonensis* Stretch
6. *Apantesis virgo* L.
7. *Apantesis orthona* Stkr.
8. *Apantesis argae* (Dru.)
9. *Apantesis figurata* (Dru.)
10. *Apantesis nais* (Dru.)
11. *Apantesis phalerata* Harris
12. *Diacrista virginica* (Fab.)
13. *Ectypia acrea* (Dru.)
14. *Eurythra phasma* Harvey
16. *Utetheta bella* (L.)
17. *Haploa clymene* (Brown)
18. *Haploa colona reversa* Stretch
FIG. 10

FIG. 11

FIG. 12

FIG. 13

FIG. 14

FIG. 15

FIG. 16

FIG. 17

FIG. 18