

shape and resembles *A. normella* Dyar. It is redder than that species and without the conspicuous white mesial shading.

Acrobasis sp.

Two females before me differ from anything in the collection, but may await the discovery of the male before being named. They are very dark gray, the scale ridge slender and slight, the following light shade very narrow, orange-red.

New Brighton, Pa., July 28, 1906 (H. D. Merrick); East River, Conn., August 4, 1906 (Chas. R. Ely).

NOTES ON SOME AMERICAN COCHLIDIIDÆ, WITH DESCRIPTIONS OF NEW SPECIES.

[Lepidoptera.]

By HARRISON G. DYAR.

Sibine apicalis Dyar.

The series of this species has been increased by 2 males, Cordoba, Mexico, May, 1906 (Wm. Schaus); 4 males, Cordoba, Mexico, August, 1906 (R. Müller); 2 males and 2 females, San José, Costa Rica, October, 1906 (Wm. Schaus); 1 female, La Florida, Costa Rica, March, 1907, and 1 male, Guapiles, Costa Rica, May, 1907 (Wm. Schaus).

This species seems, in series, distinct from the North American *Sibine stimulea* Clemens, being larger, and more spotted, the spots irregular and yellow instead of white.

Sibine sp.

Several specimens of *Sibine* have been sent in by Mr. Schaus which I can not place satisfactorily. The species of *Sibine* must be worked up from the larval side before their specific limits can be determined.

Parasa imitata Druce.

One male, Orizaba, Mexico (R. Müller).

Parasa fauna, n. sp.

Vertex of head and thorax green, face brown, as also lateral margins of patagia and a central line on thorax. Abdomen brown. Fore wing green, a brown patch at base resting on costa, the outer margin narrowly brown with an enlargement below vein 2 and a larger one between veins 4 and 6; a deeper green patch at end of cell. Hind wings and under side brown. Expanse, 37 mm.

One male, Colombia (W. E. Pratt, in collection of Wm. Schaus).

Type.—No. 11544, U. S. National Museum.

Allied to *P. imitata* Druce, but larger and without a brown discal spot.

Parasa wellesca Dyar.

Mr. Schaus has sent in specimens from the following new localities: 3 males, San José, Costa Rica, October, 1906; 1 male, Sixola River, Costa Rica, July, 1907; 1 male, R7.

All the specimens are somewhat larger than the types. No female has yet come to hand. The following table will separate the American species of *Parasa* in which the fore wings have a green band in both sexes:

Fore wing largely green.

Outer brown border broad.

Hind wings yellow, with a brown margin.

Fore wing without discal dot.....*viridiplena* Walker.

Outer brown border narrow.

Hind wings yellow.

Fore wings with a small brown discal dot...*wellesca* Dyar.

Fore wing without a discal dot.....*herbina* Schaus.

Hind wings brown.

Outer brown margin confined to the fringe except at vein 7.
laranda Druce.

Outer brown margin more extensive.

Discal dot large *laonome* Druce.

Discal dot small *imitata* Druce.

Discal dot absent *fauna* Dyar.

Euclea norba Druce.

From Mr. Schaus, 1 male, La Florida, Costa Rica, July; 2 males, Sixola River, Costa Rica, April, 1907; 1 male, Cordoba, Mexico, May, 1906; 1 male, Banana River, Costa Rica, March, 1907. Mr. Busck collected 1 male at Tabernilla, Canal Zone, Panama.

Metraga perplexa Walker.

Two males, Tabernilla, Canal Zone, Panama (Aug. Busck).

Metraga zygia Druce.

Three males, La Florida, Costa Rica, March, 1907 (Wm. Schaus); 1 male, Cacao, Trece Aguas, Alta Vera Paz, Guatemala, April 25 (Barber & Schwarz).

Metraga rubicolor Dyar.

Mr. Schaus has collected 1 male, La Florida, Costa Rica, July; 1 male, Zent, Costa Rica, February, 1907; 3 males, Banana River, Costa Rica, March, 1907.

Metraga emilia, n. sp.

Fore wings reddish brown, the outer and inner margins broadly dark purple; a faint discal dot and outer line, limiting the marginal dark shade; hind wings dark straw-color, the fringe purplish, especially so at anal angle. Head and thorax ferruginous, abdomen ochraceous. Expanse, 18 mm.

One male, Tabernilla, Canal Zone, Panama (Aug. Busck).

Type.—No. 11514, U. S. National Museum.

Allied to *M. rubicolor* Dyar, but the outer margin is shaded as well as the inner and the hind wings are pale. Named in honor of Miss Emily Baker, of Hyattsville, Md.

Natada salta Druce.

Specimens have lately been received from Cordoba, Mexico, three, May, 1906, and one, April, 1906 (Wm. Schaus); four, Sixola River, Costa Rica, April, 1907; one, Chiriquicito, Panama, April, 1907 (Wm. Schaus); one, Merida, Venezuela (S. E. Briceno).

Natada arpi, n. sp.

A rather large species, nearly allied to *N. bergii* Dyar. The color of the fore wing is paler than in *bergii*, shining grayish, the brown shading confined to a patch at origin of vein 2 and a large cloud about lower half of outer line; discal dot rounded, blackish; outer line brown, fainter and curved outward where it traverses the brown cloud. Hind wings dark gray-brown. Thorax and base of abdomen tinged with red. Expanse, 37 mm.

One male, Rio de Janeiro, Brazil (J. Arp).

Type.—No. 11539, U. S. National Museum.

Talima straminea Schaus.

Two males, Sixola River, Costa Rica, April, 1907 (W. Schaus).

Epiperola vafera Druce.

I referred this species to *Palcophobetron* on a specimen from Maroni River, French Guiana, in the Schaus collection. The palpi in this specimen are apparently distorted, as additional examples from Palma Sola, Venezuela, show well-developed palpi, reaching to the middle of the front, thus placing the species in *Epiperola*.

***Epiperola vaferella*, n. sp.**

Shining blackish brown, the fore wings of this color to the outer line, which is narrow, pale, single, slightly curved, reaching from outer sixth of costa to middle of inner margin; space beyond this line more grayish; a pale line at the base of the fringe. Hind wings of the color of the outer space of fore wings, with a pale line at the base of fringe. Expanse, 21 mm.

One male, La Florida, Costa Rica, July, 1907 (W. Schaus).

Type.—No. 11540, U. S. National Museum.

Allied to *P. vafera* Druce, but the outer space is paler, the line single, not doubled, more curved and arising farther from the apex.

***Epiperola monochroma*, n. sp.**

Entirely bright brownish ochraceous without any markings. The wings are rather long and pointed, the head prominent, with large eyes, of the general build of *Perola sericea* Möschler, though smaller. Expanse, 30 mm.

Four males, Bocas del Toro, Panama, April, 1907, and Chiriquito, Panama, April, all collected by Mr. Schaus.

Type.—No. 11541, U. S. National Museum.

***Tanadema neutra*, n. sp.**

Allied to *Tanadema mas* Dyar, but the lines on fore wing broad, distinct, dark gray, the two lines alike, the discal mark forming part of the inner line. The lines are rather sharply angled on the veins, the inner one sharply produced at the lower end of the cell. The ground color of the wings is not so red as in *T. mas*, being of a paler color in two specimens, dark in the other but still without the red cast. Expanse, 19 mm.

Three males, Sixola River, Costa Rica, April, 1907; Tuis, Costa Rica, July, 1907; Banana River, Costa Rica, March, 1907 (Wm. Schaus).

Type.—No. 11542, U. S. National Museum.

***Packardia ceanothi*, n. sp.**

Allied to *P. elegans* Packard, but bright brownish ochraceous instead of bronzy brown. In the dark form (corresponding to *elegans*) the fore wings are brownish ochraceous, crossed by two oblique and one reversed curved pale line, the inner line broadly shaded without with dark fuscous brown, the curved line ending at the anal angle in two superposed dots. Hind wings thickly blackish irrorate. In the pale form (corresponding to variety *fusca* Pack.) the markings are nearly obliterated, being of almost the same shade as the ground color. Hind wings pale straw-color.

Seven specimens, bred from larvæ on *Ceanothus* at Tryon, N. C. The larvæ are similar to those of *P. elegans*, and were so determined in the field. However, Mr. Fiske, who was with me, thought they might be a new species as they seemed so partial to the *Ceanothus*, which is not the case with *elegans*. His supposition proves to be correct.

Type.—No. 11498, U. S. National Museum.

DESCRIPTIONS OF SOME NEW MOTHS FROM SOUTHERN CALIFORNIA.

By HARRISON G. DYAR.

Mr. F. A. Merrick, of New Brighton, Pa., has handed me a number of moths, collected in the vicinity of San Diego, Cal., for identification. The collections were made by Messrs. Geo. H. Field and W. S. Wright. The new species among them are here described wherever there were more than one specimen. A number of uniques have been returned to Mr. Merrick and it is hoped to report on these later when Messrs. Field and Wright shall have been fortunate enough to secure additional specimens.

Family ARCTIIDÆ.

Subfamily LITHOSIINÆ.

Phobolusia reincarnata, n. gen. and sp.

Palpi upturned to the vertex, fringed with long hair in front which projects as much as the length of the head; antennæ serrate in the male, simple in the female; tongue moderately long; eyes large, naked; a tuft of scales projects forward at the top of the vertex; tibiæ unarmed, the hind pair with four long spurs; fore wing trigonate, pointed, sub-falcate at the apex, the venation as in *Æolosia* Hampson (Cat. Lep. Phal., II, p. 405, 1900); hind wing rounded trigonate, rather broad.

Fore wing with the ground pale cinereous whitish, but nearly completely overlaid with dark shades; basal space filled in with blackish gray; inner line gray-brown, forming three outward undulations between the costa and median vein, a single large one between median and vein I and another smaller one between vein I and inner margin; a whitish space of the ground color on each side of this line, the inception of these white spaces on costa forming a pair of oblique dashes; median space filled in with blackish gray, usually heaviest in the middle; discal mark a black bar or crescent followed by a white