

A REVIEW OF THE NORTH AMERICAN CHRYSAUGINÆ.*

[Lepidoptera, Pyralidæ.]

By HARRISON G. DYAR.

This subfamily of Pyralidæ is represented in North America by but few species, nearly every one of which belongs to a separate genus. Several species had accumulated in the collection of the National Museum which it was desirable to place, and to do so I have made a cursory review of our species, with the following result:

TABLE OF THE GENERA OF CHRYSAUGINÆ OCCURRING IN NORTH AMERICA.

Hind wing with the veins all present.

Fore wing with veins 2-3 stalked, 4 and 5 from the cell.....*Galasa*.

Fore wing with veins 2 to 5 from the cell.

Fore wing with vein 10 arising from the stalk.

Palpi upturned to vertex.....*Tosale*.Palpi porrect, downcurved*Chalinitis*.Fore wing with vein 10 arising from the cell.....*Salobrena*.

Fore wing with veins 4-5 stalked.

Fore wing with 12 veins*Clydonopteron*.

Fore wing with 11 veins.

Fore wing with vein 11 anastomosing with 12.*Xantippides*.Fore wing with vein 11 free.....*Arta*.

Hind wing with vein 4 absent.

Fore wing with vein 11 anastomosing with 12, 10 absent,

Condylolomia.

Fore wing with vein 11 free.

Fore wing with 12 veins.

Fore wing with vein 10 arising from the stalk.

Hind wing with veins 3, 5 separate.....*Amestria*.

Hind wing with veins 3, 5 stalked.

Fore wing with vein 3 from the angle of the cell,

Caphys.

Fore wing with vein 3 stalked with 4 and 5,

Artopsis.Fore wing with vein 10 arising from the cell.....*Satole*.

Fore wing with 11 veins.

Fore wing with veins 4 and 5 stalked, 3 from the cell,

Acallis.Fore wing with veins 3 to 5 stalked.....*Parachma*.

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Genus *GALASA* Walker.*Galasa rubidana* Walker.

This well-known species ranges from Florida and Texas to New Hampshire and the Rocky Mountains. References may be found in Hampson's work on the Chrysauginæ (Proc. Zool. Soc. London, 1897, pp. 633-692) and in Bulletin 52, U. S. National Museum.

Genus *TOSALE* Walker.*Tosale oviplagalis* Walker.

This species has a range similar to the preceding, but does not extend so far to the North. Specimens are before me from Florida, Texas, North Carolina, Maryland, Pennsylvania, and Illinois. I have also a single female from southern Arizona (Poling).

Genus *CHALINITIS* Ragonot.*Chalinitis olealis* Ragonot.

I have no specimens of this species, but the venation given by Hampson and the figure of Ragonot indicate a very distinct form.

Genus *SALOBRENA* Walker.

The synonymy of this genus is given wrongly in Bulletin 52 of the U. S. National Museum. *Cetoperia* Zeller is properly a synonym of it as given by Hampson, but *Clydonopteron* Riley should be distinct. Fernald is right in giving two genera for *tecomæ* Riley and *sincera* Zeller, but he used the wrong names.

Salobrena sincera Zeller.

My specimens are all from Texas, two originally collected by Belfrage and others received later from Brownsville, collected by Messrs. C. H. T. Townsend and H. S. Barber.

Genus *CLYDONOPTERON* Riley.*Clydonopteron tecomæ* Riley.

Besides Riley's types, I have a number of specimens from the vicinity of Washington, D. C., and two from Agricultural College, Mississippi, taken by Mr. Glenn W. Herrick. The larvæ feed in the seed pods of *Tecoma*. This is the only species of North America Chrysauginæ of which anything is known of the early stages, with the exception of one new species, hereinafter described.

Genus **XANTIPPIDES**, n. gen.

Fore wing with vein 2 from well before the angle of the cell, 3 from near the angle, 4-5 long-stalked, 6 shortly stalked with 7 to 9, 7 given off before 9, 10 absent, 11 anastomosing with 12 and separating again; hind wing with vein 2 from before the angle of the cell, 3 to 5 stalked, 6 from the upper angle of the cell, 7 anastomosing with 8. Palpi small, upturned, not reaching the vertex.

Type.—*Xantippe descansalis* Dyar (Proc. Ent. Soc. Wash., X, Nos. 1-2, p. 58, 1908).

Xantippides descansalis Dyar.

Known to me only by the types from San Diego, California.

Genus **ARTA** Grote.**Arta statalis** Grote.

Nearly all my specimens are from Arizona (Huachuca Mts., and Wilgus, Cochise County), all but one having come through Doctor Barnes. One bears only the number 375, but I think it is from Los Angeles, Cal. (D. W. Coquillett). The species may prove to be a synonym of *Parachma ochracealis* Walker, which comes from the same region and is like it in color and markings, but differs in having veins 4 and 5 of the hind wings coincident instead of stalked. This may be a case of variability in venation only.

Arta olivalis Grote.

I have one specimen from Texas, Belfrage's original collecting, and another taken on Plummers Island, Maryland, by Mr. August Busck.

Genus **AMESTRIA** Ragonot.**Amestria oculiferalis** Ragonot.

Not known to me, but should be easily recognizable from Ragonot's figure.

Genus **CAPHYS** Walker.**Caphys bilinea** Walker.

Known from Brazil, Venezuela, the West Indies, and Central America; it also extends into Arizona, whence I have specimens labelled So. Arizona (Poling), and Nogales, Arizona, July 7 and 30 (E. J. Osler). References and synonymy will be found in Hampson's paper (page 678); this is the first record of this as a North American species. The specimens before me vary remarkably in size.

Genus *ARTOPSIS*, n. gen.

Fore wing with vein 2 from well before the angle of the cell, 3 to 5 stalked, 6 from below the upper angle of the cell, 7 to 10 stalked, 9 and 10 being on a common stalk in one specimen, separate in another, 11 free, arising from the cell before apex; hind wing with vein 2 from before the angle of the cell, 3 and 5 long-stalked, 4 absent, 6 from the upper angle of the cell, 7 anastomosing with 8. Palpi small, slender, upturned, not reaching vertex.

Artopsis borregalis, n. sp.

Fore wing ochraceous, overspread with purplish cinereous, leaving two rather broad, distinct, curved, pale lines; hind wings pale, with a faint, outer, curved, paler line. Expanse, 13 to 15 mm.

Four specimens, Brownsville, Texas, "Los Borregos," June, 1905 (H. S. Barber.)

Type.—No. 11921, U. S. National Museum.

Genus *SATOLE*, n. gen.

Fore wing with vein 2 from well before the angle of the cell, 3 at the angle, 4 and 5 stalked, 6 from the upper angle of the cell, 7 to 9 stalked, 10 and 11 from the cell, free; hind wing with vein 2 from well before the angle of the cell, veins 3 and 5 separate, 4 absent, 6 from the upper angle of the cell, 7 anastomosing with 8. Palpi in the male slender, sharply upturned, and reaching above the vertex; in the female porrect, the tip dependent, the second joint thickened with scales above.

Satole ligniperdalis, n. sp.

Male with the costa enlarged at the base and folded over to form a pouch as in *Tosale oviplagalis* Walk. Blackish gray, the basal space especially blackish; lines slender, white, distinct although very narrow, both excurved mesially, parallel, dividing the wing into three areas of nearly equal width; faint indications of two darker rounded discal dots, one in the cell and one at the end; mesial space somewhat lighter next to the inner line. Hind wing dark gray, the fringes dark, with a double blackish line at their base. Coloration of the sexes alike. Expanse, male, 18 mm.; female, 22 mm.

Nine specimens, Portal, Arizona, bred from larvæ boring in the solid wood of "desert willow" (*Chilopsis linearis*), issued June 28, 1907 (U. S. Dept. Agriculture, Hopkins, U. S. 5587).

Type.—No. 11922, U. S. National Museum.

Mr. Webb has handed me a vial containing two of the larvæ of this species. They are short and robust, whitish

without markings, the head pale luteous, clypeus dark brown, the mandibles, a spot on each side of clypeus, and antennæ also brown. The feet are very short, those of joints 7 to 10 represented by complete, rather broad ellipses of crochets, the last pair by a line of crochets. Spiracles black-ringed. Tubercles very minute, iv and v approximated substigmatically on a common chitinized but colorless area, normal. Skin smooth, the segments triannulate, distinctly so.

Genus *ACALLIS* Ragonot.

Acallis griphalis Hulst.

I have two males from Fort Collins, Colorado (C. P. Gillette), numbered 2573 Agr. College. Also a female specimen from Williams, Arizona, July 10 (H. S. Barber) which is much larger than the males and has the outer line farther from the margin.

Genus *PARACHMA* Walker.

Parachma ochracealis Walker.

I have specimens from Huachuca Mts. and Santa Rita Mts., Arizona (Dr. Barnes). (See remark under *Arta statalis*, p. 94.)

Genus *CONDYLOLOMIA* Grote.

Condylolomia participalis Grote.

I have specimens from Cohasset, Mass. (O. Bryant), New Brighton, Pa. (F. A. Merrick), Pittsburgh, Pa. (H. Engel), and Plummers Island, Maryland (A. Busck).

A REVIEW OF THE NORTH AMERICAN PYRALINÆ.*

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Having had occasion to transfer the moths of this subfamily to new drawers in anticipation of moving the National Museum collection to the new building, I used the opportunity to rearrange them and determine the unnamed specimens. The subfamily is represented by but few species in our region, falling into six genera, separable as follows:

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