

ON THE CLASSIFICATION OF THE CORYDALINÆ, WITH
DESCRIPTION OF A NEW SPECIES.

[Neuroptera, Sialidæ.]

By NATHAN BANKS.

While examining the new species described below I became interested in some points of venation which distinguished it from our common species of *Chauliodes*. This led to an investigation of all the forms available, with the result of finding several new characters for the distinction of the various genera.

***Neohermes humeralis*, n. sp.**

Jet black; head from middle of eyes back to prothorax bright reddish, except a blackish spot around ocelli; extreme base of wings bright yellowish, rest of wings blackish, the costal area to pterostigma paler; venation black; no other markings. Head rather long and narrow; antennæ at base but little if any farther apart than are the posterior ocelli, slightly serrate beneath in male; posterior ocelli fully three times their diameter apart; vertex with about three or four elongate elevated areas each side; pronotum distinctly longer than broad, sides parallel. Wings moderately slender; cells of costal area mostly longer on the subcosta than broad; first fork of cubitus starting away at a very acute angle; anal vein with two branches, both strongly geniculate, the two anal cells subequal in length, the lower giving off two veins, the upper without any; no cross-vein between first branch of anal vein and last branch from anal cell.

Expanse, 76 mm.

Two specimens from Santiago, Chile (M. J. Rivera). Professor Rivera kindly gave me also two specimens of *Chauliodes cinerascens* Blanchard.

A comparison of these with our United States species has led me to propose other characters than those now in use for the separation of the various genera allied to *Chauliodes* and *Corydalis*. One of the principal distinctions formerly in use was the comparative abundance of cross-veins in the wings; this was scarcely usable, as there is a great amount of variation in this matter. The presence of the tooth on the side of the head behind the eyes is more easily used, yet one can hardly consider it a character of great value. The venation of the various genera is extremely similar, except in the anal region. In most of the forms the anal vein forks but once, but in these two Chilean species, in several of our native species, and in those species placed by Doctor van der Weele in the genera

5. Labrum deflected; clypeal margin toothed; cross-veins in apical part of wing numerous *Corydalis*.
 Labrum horizontal, partly covering mandibles; clypeal margin not so distinctly toothed; cross-veins in apical part of wing less numerous *Neuromus*.
6. Anterior ocellus small, round, more than twice its diameter from the posterior ocelli; costal cells about as long as broad; black species. *Nigronia*.
 Anterior ocellus large, transverse, not twice its long diameter from the others; gray, mottled species. *Chauliodes*.

Neohermes, n. gen.

This new genus is proposed for such species as have the anal vein with two forks, the anal cells subequal in length, the lower with two veins, the upper with one, and no cross-vein between the first branch of the anal vein and the vein from anal cell. The costal cells are about as long as broad, and the antennæ are as near to the ocelli as to the eyes; the branches of the median vein are simple, and there are but three cross-veins from radial sector to radius.

The type is *N. filicornis* Banks (sub *Chauliodes*). This genus includes also *Chauliodes californicus* Walker, *C. angusticollis* Hagen, *C. cinerascens* Blanchard, and *N. humeralis* Banks.

Hermes Gray.

This genus is restricted to a few forms closely allied to the type species, *H. maculipennis* Gray. This is the only species of this genus that I have examined. There are five or six cross-veins from the radial sector to the radius.

Protohermes van der Weele.

In spite of their pale coloration the species of this genus are extremely closely related to *Hermes*. I have examined only *albipennis* Walker, *anticus* Walker, and *grandis* Thunberg. These have five or six cross-veins from radius to radial sector, and at least one branch of median vein is forked.

Corydalis Latreille.

The most important character for the distinction of this genus is the strongly deflected labrum, and the corresponding development of the clypeal margin with teeth. *Acanthocorydalis* van der Weele may rank as a subgenus, having a spine on head and more than three cross-veins between radius and radial sector.

Neuromus Rambur.

This genus, of which *N. testaceus* Rambur is the type, is rather variable in appearance; the larger species show an approach to *Corydalis*, while the smaller species look much like *Protohermes*. I have examined *N. testaceus*, *N. intimus* McLachlan, *N. latratus* McLachlan, and the three American species, *hieroglyphicus* Rambur, *soror* Hagen, and *corripiciens* Walker; these latter may be placed in a subgenus—*Chloronia*—having but three cross-veins from radius to radial sector, and branches of median vein forked only near tip.

Nigronia, n. gen.

This genus I erect for the two black-winged species found in the Eastern States, *serricornis* Say and *fasciatus* Walker, distinguished as indicated in the table. The habits of the adult flies is quite different from that of the typical *Chauliodes*. This genus bears the same relationship to *Chauliodes* that *Protohermes* does to *Hermes*.

Chauliodes Latreille.

In this genus I have examined our two species, *pectinicornis* Linnaeus, and *rastricornis* Rambur, *C. diversus* Walker from New Zealand and *C. japonicus* McLachlan from Japan. In *C. diversus* the pronotum is longer than broad; and in this and *C. japonicus* the costal cells are as long as broad.

It may be well here to add some points wherein the *Sialinæ* differ from the *Corydalinæ*. In *Sialis* there are no ocelli; the 4th tarsal joint is bilobed; the basal tarsal joint is about twice as long as the apical (subequal in the *Corydalinæ*); the anal and cubital veins of fore-wings are both simple (forked in *Corydalinæ*); the upper branch of radial sector sends a few branches to the costal margin (very rarely one in the *Corydalinæ*). There are three cross-veins from radius to radial sector as in many *Corydalinæ*.

NOTES ON A FEW APPARENT CASES OF SYNONYMY IN LEPIDOPTERA.

By HARRISON G. DYAR.

Kodiosoma fulva Stretch.

New synonym, *Kodiosoma otera* Barnes, Can. Ent., xxxix, p. 10, 1907.

The female type agrees in general with the female of the variety *tricolor*, the border of the hind wings being narrower,



Banks, Nathan. 1908. "On the classification of the Corydalinae, with description of a new species." *Proceedings of the Entomological Society of Washington* 10, 27–30.

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