The Canadian Entomologist.

VOL. XXV.

LONDON, JULY, 1893.

No. 7.

COMMENTS ON MR. VAN DER WULP'S RECENT DIAGNOSES OF NEW SPECIES OF MEXICAN PHASIIDÆ, GYM- NOSOMATIDÆ, OCYPTERIDÆ, AND PHANIIDÆ.

BY C. H. TYLER TOWNSEND.

Mr. F. M. van der Wulp, the well-known Dutch dipterologist, has recently published, in the *Tijdschrift voor Entomologie*, vol. 35, pp. 183-195, short diagnoses of a large number of new species and several new genera of Mexican Tachinidæ sens. lat. Of these, there are 33 new species and 4 new genera which belong to the above four groups. Of such well-known and well-worked genera as *Trichopoda*, there are 4 new species; of *Hyalomyia*, 10 new species; of *Cistogaster*, 8 new species!

This material was received by Mr. van der Wulp from the editors of the *Biologia Centrali-Americana*, but too late to be included in his parts on the above groups, which had already been published. These forms are to be fully described at some future time in a supplement to the *Biologia*. No localities whatever accompany the short diagnoses.

I desire to offer the following notes on these species :—

PHASIIDÆ.

Trichopoda nitidiventris, ♂, is described as having the cilia of hind tibiæ black with yellow tips. This must be a quite divergent form, since it is the first one known with the tibial cilia varicoloured. It is also very distinct from the previously known forms in having the abdomen shining black with a rufous anus.

T. alipes, ♂, seems to be different from the described species, inasmuch as the tip of the wing, as well as the hind border, is broadly hyaline.

T. squamipes, ♂, seems quite distinct in its yellowish rufous scutellum and abdomen. *T. histrio*, Wlk. (*trifasciata*, Liv.), is the only species known to me with a yellowish, or other than a nearly black, scutellum.

T. nigripes, ♂ ♀, must be near *T. pennipes*. It is smaller, however, and the face and front are whitish instead of golden-yellow.

HOMOGENIA, nov. genus, v. d. W.

This genus must be closely allied to either *Xysta*, or *Phasia*. It is described as similar to *Trichopoda*, but with apical cell open, and cilia of hind tibiae short and less conspicuous. This name is preoccupied (Homogenes) by Thomson in Coleoptera. I propose, therefore, that the genus be known as *Trichopododes*, from its close relationship with *Trichopoda*, as shown by its somewhat less ciliate hind tibiae. Three species of it are described, from 7 to 11 mm. long. They are: *Trichopododes rufipes*, ♂; *T. latipennis*, ♂ ♀; and *T. nigroscutellata*, ♂.

Hyalomyia munda, ♂, seems distinct in the whole body being thickly covered with a yellowish-gray tomentum.

H. villosa, ♂, also seems distinct in its dense yellowish pilosity.

H. hebes, ♂, is apparently distinct in the shorter yellow pilosity.

H. ochriceps, ♂, seems very close to *H. æneiventris*, Will.

H. argenticeps, ♂, is also apparently very near *H. æneiventris*, Will. I do not see why the front in the above five male specimens is described to be as broad as, or broader than, the eyes, unless the anterior triangular portion of the front is meant. But this interpretation is precluded by the next five specimens being indicated as females, all of which are described as having the front trigonal and the eyes but little separated on the vertex. I do not know of any *Hyalomyias* which have the front as broad as the eyes,

H. nigrens, ♀, does not apparently differ much from *H. punctigera*. Twms., so far as can be gathered from the short description.

H. piceiceps, ♀, may be a valid species.

H. mærens, ♀, is quite near *H. purpurascens*, Twms. The wings, however, of the latter are not brown, but whitish.

H. umbrosa, ♀, is a similar but larger species.

H. umbrifera, ♀, is allied to *H. punctigera*, Twms.

GYMNOSOMATIDÆ.

Cistogaster ruficornis, ♂, seems to be *Gymnosoma fliola*, Liv., ♂.

C. melanosoma, ♀, is probably *C. pallasii*, Twms.

C. subpetiolata, ♀, seems only a variety of *C. pallasii*, Twms.

C. propinqua, ♀, seems very near *C. immaculata*, Mcq., ♀.

C. griseonigra, ♀, may be same as *C. occidua*, Walk., ♀.

C. ferruginosa, ♂, is probably *C. immaculata*, Mcq., ♂.

C. hirticollis, ♂, is doubtless *C. occidua*, Wlk., ♂.

C. variegata, ♂, seems to be only a variety of preceding.

OCYPTERIDÆ.

Ocyptera signatipennis, ♂, is probably *Cocyptera euchenor*, Wlk.
XANTHOMELANA, nov. genus, v. d. W.

This genus must be very similar to *Ocyptera*, differing only by the curved, not angulated, fourth vein, and the shortly petiolate apical cell, with the petiole ending at the wing's tip. This name is also preoccupied (*Xanthomelon*, Mart., Moll., 1860), and may be changed to *XANTHOMELANODES*. Six species are described, from $4\frac{1}{2}$ to $7\frac{1}{2}$ mm. long. They are:—*Xanthomelanodes articulata*, ♂; *X. rubicunda*, ♂(?); *X. dorsalis*, ♂ ♀; *X. trigonalis*, ♂; *X. gracilentia*, ♂ ♀; and *X. anceps*, ♂.

PHANIIDÆ.

CLINOASTER, nov. genus, v. d. W.

This genus must bear a striking resemblance to *Hemyda*, differing almost wholly in the short petiolate, instead of open, apical cell, and in the fourth vein being bent at an angle. It belongs apparently in the *Ocypteridæ*, however, and not in the *Phaniidæ*, as indicated by the elongate and incurvate abdomen.

Clinogaster notabilis, ♂, type of the genus, must be very similar in size and appearance to *Hemyda aurata*.

PENTHOSIA, nov. genus, v. d. W.

This genus is erected by Mr. van der Wulp for *Scopolia satanica*, Bigot (Ann. Soc. Ent. Fr., 1888, p. 254). Mr. van der Wulp has been kind enough to send me a specimen of this species, labelled: "Omiteme, Guerrero, 8,000 ft. July. H. H. Smith." It is a well-marked genus, bearing much structural resemblance to *Ocyptera*, but differing at once in its well-formed palpi, and its intensely and evenly black colour. It should, I think, also be included in the *Ocypteridæ*. Both this genus and *Clinogaster* exhibit a closer relationship with *Ocyptera* than do any of the other American genera of *Ocypteridæ*, by virtue of their petiolate apical cell.

To sum up:

The above 4 new genera appear to be quite distinct and valid. The species of *Trichopoda* appear to be distinct from those previously described. The *Hyalomyias*, at least the most of them, are doubtless valid species. This is not to be wondered at, since the genus *Hyalomyia* is rich in forms. It is more remarkable, however, that 4 new species of *Trichopoda* should turn up at this late day, and in a single collection.

When we come to the genus *Cistogaster*, and find 8 new species, we may well be astonished. This genus has never before been turned up in Mexico, or anywhere in tropical America. Though most numerous in individuals in most parts of the United States, there were heretofore but 3 species to be distinguished, and these might easily all be considered but forms of a single variable species. Bearing this in mind, we are wholly unprepared for such a sudden increase in the number of species, and may well doubt their validity. With the single exception of the first species (*C. ruficornis*), they are probably all referable to the three already known species. From the description of *C. ruficornis*, I cannot resist the conclusion that Mr. van der Wulp has mistaken *Gymnosoma filiola*, Liv., for a *Cistogaster*.

Of course it is difficult, and to a certain extent uncertain, to judge of these forms from the brief diagnoses alone that have so far appeared. For this reason I feel called upon to delay the publication of Part I. of the Monograph of North American Tachinidæ, referred to in *Psyche*, Jan., 1893, until the Biologia supplement appears giving fuller descriptions of these species with drawings.

If any of the above comments prove to be erroneous in their conclusions, I shall be most happy to amend them.

DESCRIPTION OF THE GRUBS OF CHRYSOMELA EXCLAMATIONIS.

BY C. H. TYLER TOWNSEND.

This species is quite common in New Mexico, where it feeds on the native sunflower (*Helianthus sp.*). On August 7, 1892, at Belen, N. Mex., I found the native *Helianthus annuus* badly infested with the adults and numerous light green grubs of this species, which were eating the leaves extensively. From these grubs the following description is drawn:—

Larva (about full grown).—Length, $5\frac{1}{2}$ to 7 mm.; greatest width, 4 to $4\frac{1}{2}$ mm.; greatest thickness, 3 to $3\frac{1}{2}$ mm.; width of prothoracic segment, 2 to $2\frac{1}{2}$ mm.; of head, $1\frac{1}{2}$ mm. Colour wholly light green, except head and legs, which are slightly tinged with brownish; eyes, antennæ and jaws, brown. Shape subpyriform, curvate, very strongly convex dorsally; slightly concave ventrally in lateral profile, but a little convex in longitudinal profile;