### Panacemyia verticalis, new species

Male.-Similar to the preceding species except as follows: Front at vertex 0.18 of head width; frontal stripe wider than parafrontal on entire length; ocellar and vertical bristles vestigial; orbitals absent; frontal row irregular anteriorly, three or four bristles beneath base of antenna; latter black with a reddish tinge on apex of second segment and base of third; cheek about one-eighth of eye length; thinly gray pollinose; facial ridge with fine hairs on about lowest fifth; palpus black; occiput cinereous becoming blackish above; legs black, long and slender; claws and pulvilli elongate; abdomen moderately long and arched in profile, fourth segment normal in structure; intermediate segments each with two pairs of discals, hairs on upper surface long and erect; anal segment strongly bristled above; genitalia retracted, caudoventral; inner forceps blackish, short, tapering to a sharp tip, latter slightly divided and bowed forward; accessory process reddish, much wider than forceps and broadly rounded at apex; fifth sternite small, with a median V-shaped incision, lobes reddish black, clothed with pale pubescence on inner margin.

Length, 7.5 mm.

Type.—Holotype &, Amherst, Ohio, June 15, 1924 (H. J. Reinhard).

This is the first male specimen of the genus hitherto brought to light. It agrees with *panamensis* in having the ocellars reduced to small hairs and in some additional details, but the black palpi in the present form seem to indicate a specific difference. The marked reduction in size of the inner verticals is unusual, but this and the differences in abdominal chaetotaxy may prove to be secondary sexual items.

# THE GENUS CHRYSOZONA MEIGEN IN NORTH AMERICA

(DIPTERA, TABANIDAE)

BY CORNELIUS B. PHILIP, National Microbiological Institute, Public Health Service, Rocky Mountain Laboratory, Hamilton, Mont.

The rarity of flies of the genus Chrysozona (syn. Haematopota Meig.) along the entire Atlantic Coast from Rhode Island south without a male showing up until within the past 2 or 3 years is most remarkable, considering the greater frequency of Chrysozona americana (O.S.) in the Northwest and elaboration of the genus in the Old World. The writer was provided a specimen of supposed C. "rara" through the generosity of Dr. A. B. Champlain which proves to differ from either of the eastern described species—C. rara (Jhns.) or C. punctulata (Macq.) This specimen has the marked dorsal notch subapically on the scape seen in C. punctulata, but not in *C. rara*, more attenuated and pointed palpi than in either, a taller front, and the tibial bands much broader than in either. It is also considerably larger than either. Subsequently, a second specimen was located in the University of Kansas collection and loaned for study by Dr. R. H. Beamer, along with another specimen from California representing another undescribed species of the genus.

The resemblance of the new species to variants of the European genotype C. pluvialis (Linn.) was so close that the opinion of Mr. H. Oldroyd of the British Museum was solicited since he has monographed the extensive African species. He replied as follows, "I agree that it is hard to give any distinct character which would separate [your new species] champlaini and pluvialis in a key, but the specimen you sent to me is certainly unlike *pluvialis* to look at. H. *pluvialis* is much bigger and blacker, like your *americana* in general appearance. The differences that your *champlaini* does show are comparative: e.g., first antennal segment more slender, red-brown instead of black; third antennal segment much narrower, and therefore relatively more elongate in shape; palpi with fewer black hairs; wing-pattern more blurred, the streaks making up the rosettes much less sharply-outlined." It also appears likely that if C. pluvialis had been introduced from Europe as early as the two specimens here described it would have become much more noticeable by this time.

The following new Nearctic species is therefore described.

# Chrysozona champlaini, new species

Holotype  $\mathcal{Q}$ , 9 mm. Head with front subequal in maximum width to height; the callosity transverse, but deeper than the other two eastern species, the two sublateral velvety spots rounded with very narrow, short, lateral extrusions. Face whitish pollinose and pilose with the usual brown punctations. The apical segments of the palpi yellow, thickened basally and attenuated to points, with sparse yellow and brown hairs. Scapes of the antennae less swollen compared to either of the others, the subapical notch, as marked as in *C. punctulata*; third segment plus annuli closer to *C. rara* in shape, not compacted as in *C. punctulata*.

The usual thoracic grayish lines for the genus, and abdominal patterns of sublateral grayish spots and gray incisures prolonged in median triangles; scutellum gray.

Wings with "water markings" and dark areas more dilute than in the other species, the former broader, the hyaline circle in cell  $R_1$  at the end of the stigma complete, and the apical crossband single, decurved and attenuated in cell  $R_4$ , parallel to but not reaching the margin of the wing. Legs dark with broad tibial bands as follows: one broad one on basal third of tibia 1, two on tibiae 2 and 3, one basally on metatarsus 3.

248

Types.—Holotype  $\mathfrak{P}$ , Hummelstown, Pa., VI.10.20, J. G. Sanders. Temporarily in collection of the author through courtesy of A. B. Champlain, an avid collector, for whom the species is cordially named; 1  $\mathfrak{P}$  paratype, "R.I., U.S.A.," "U of K Lot 769." In Kansas University collection. This is obviously a very early collected specimen.

The species is closest to C. rara of the Nearctic species, but is readily separated by the characters given above, and in the key below. It is a larger species with more grayish-appearing abdomen, the median triangles appearing almost as an obscure grayish longitudinal line.

Both Johnson (1912) and Stone (1938) redescribed C. punctulata without mentioning that Macquart's description was based, as he states and Dr. Séguy confirms, on a type in the Paris Museum with a substitute glued head of another tabanid. In addition, the abdomen is now also missing. The type locality, "Carolinie" of the early days, could have been quite different than now, and in the absence of confirmatory specimens, makes records of *punctulata* north of the Atlantic Coast of Georgia very doubtful. A diagram of the wing of the type, through kindness of Dr. Séguy, agrees with the fine punctations of specimens seen from Jacksonville, Florida, but his statements regarding the legs might refer to still another unrecognized species-"Tibia I avec deux anneaux blancs; tibia II avec trois anneaux blancs, un basal; tibia III avec un anneau prebasal blanc. . . . . .'' Further comparative study of the mutilated type is desirable.

### Chrysozona willistoni, new species

Through courtesy of Dr. R. H. Beamer, the writer received an unusual, small, brownish-appearing California specimen which had stood for many years in a series of C. americana (O.S.) at Kansas University. That this was an undescribed western species was confirmed by two fresh ones taken in California by Mr. Larry Quate and Mr. E. I. Schlinger, which showed the more characteristic blackish ground color of the other American species suggesting that the former had faded somewhat with age. The shape of the antenna and fore tibia, reduced tibial rings and wing pattern, dark halteres, and small size are closer in appearance to C. punctulata of Florida than to C. americana of the North and West.

Holotype  $\mathcal{Q}$ , 6.5 mm. Front but little wider across the vertex than high; cinereous with concolorous hairs, gray pollinosity along the lateral borders, and narrowly margining the two sublateral, rounded, velvety spots, plus a smaller central spot, but not extending downward laterally between the eyes and edges of the callosity, as in most *C*. *americana*. Callosity piceous, relatively taller than in *C*. *americana*, upper margin gently convex, the corners projected upward. Face gray with gray hairs and the usual dark punctations above, which in part are confluent. Antennae black with blackish hairs, scapes shiny, slender, and with pronounced, subapical dorsal notches, distinctly shorter than the third segment, the plate of which is longer than the flagellum. Palpi robust, ashen colored with yellow hairs and a few black ones intermixed.

Thorax and scutellum blackish with only two abbreviated, narrow, sublateral, gray lines anteriorly, the median line vestigial, and with sparse, pale-yellow hairs; no gray, integumental spots in front of the scutellum; pleural hairs brown and gray intermixed. Legs blackish, fore tibiae markedly incrassate and a pale band on about the basal fourth, two rather narrow rings on the mid-tibiae, the hind pair with two less distinct pale bands and with a marked fringe of black and pale hairs. Wings dark brown, the markings much narrower but sharper than in *C. americana*, rosettes not very plain, the subapical, sinuous marking reaching the hind margin in cell  $R_i$ , and continuing narrowly along the entire hind margin as an interrupted band. Halteres brown, the seams of the knobs narrowly yellowish.

Abdomen blackish, incisures above and below, narrowly gray, the usual double row of sublateral gray, isolated spots from tergite 3 on, no gray middorsal triangles except a suggestion on tergite 2; sternal hairs predominantly yellowish.

Types.—Holotype  $\mathfrak{P}$ , 5 mi. S. E. Wilbur Hot Springs, Colusa Co., Calif., 27 May 1950, L. W. Quate; through the generosity of Mr. Quate this specimen is in the author's collection. Paratypes: 1  $\mathfrak{P}$ , Calif. Unfortunately, the labels for this older paratype, which is in the University of Kansas collection, state only "Calif." and "det. by S. W. Williston."—the specimen is in essential agreement except for the more brownish appearance and broken antennae; 1  $\mathfrak{P}$ , Walter Spring, Napa Co., Calif., 15 May 1951, E. I. Schlinger. This latter specimen is much larger (9 mm.), but is in essential agreement, with the hind tibial rings more distinct from an outer viewpoint, and the sublateral gray spots more evident on tergites 4 and 5.

C. willistoni is quite distinct from any of the other four Nearctic species as indicated in the following key.

### KEY TO NEARCTIC CHRYSOZONA FEMALES

The males of all but the more common boreal and western species, C. americana (O.S.), are undescribed. A few males of C. rara have recently been taken attracted to lights and are readily associated on characters of the appendages.

 Size medium, 9-10 mm.; tibiae with pale rings broad, those of the fore pair occupying at least the basal third; pale, sinuous, subapical wing-band not usually reaching hind margin

2

Size usually small, 6-7.5 mm.; tibial rings very narrow, the anterior rings not wider than the basal fourth of the fore tibiae; subapical wing band crossing to hind margin 3 PROC. ENT SOC. WASH., VOL. 55, NO. 5, OCTOBER 1953

- Antennae blackish, or deep mahogany brown, scape very swollen without dorsal, subapical notch; halteres very pallid; scutellum black; boreal and northwestern species \_\_\_\_\_\_\_ americana (O.S.)
- Scape swollen, without dorsal notch (plate slender and much longer than the flagellum); fore tibiae hardly, if any, more swollen than the others; mid-Atlantic Coast States *rara* (Jhns.) Scape with a strong subapical, dorsal notch; fore tibiae strongly dilated
- 4. Palpi slender, longer than antennal scape which is moderately dilated basad of the notch (plate and flagellum chunky, subequal in length); hind-tibial rings definite, at least basally; knobs of halteres entirely brown; northern Florida

punctulata (Macq.)

Palpi robust, subequal in length to the more slender scape (plate and flagellum slender, the former a little longer); hind tibial rings less definite; seams of halteres pale; Californía

willistoni, new species

### REFERENCES

Johnson, C. W., 1912. The North American species of the genus Haematopota. Psyche 19: 181-183.

Stone, A., 1938. The horseflies of the subfamily Tabaninae of the Nearctic Region. U. S. Dept. Agr. Misc. Publ. No. 305, p. 171.

# A NEW CENTRAL AMERICAN MILLIPED OF THE GENUS PLATYRHACUS

## (POLYDESMIDA, PLATYRHACIDAE)

### BY RICHARD L. HOFFMAN, Clifton Forge, Va.

A large and striking milliped, found in the unworked neotropical material belonging to the U. S. National Museum, represents a very interesting undescribed species. A name is herewith proposed, and the opportunity taken to present some comments upon certain other species belonging to the genus *Platyrhacus*.

In another paper, now in press, I suggested that Koch's name *Platyrhacus* be restricted to the group of species of which *clathratus* Gervais, *montivagus* Carl, *pococki* Brolemann, and *javarynus* Schubart are representatives. It is the largest group of American platyrhacids, embracing at the present time some 29 species, and ranging from Costa Rica south to the upper Amazon basin in northeastern Peru. Under the name *Tirodesmus*, it was treated by Attems in 1938 as a



Philip, Cornelius B. 1953. "The genus Chrysozona Meigen in North America (Diptera, Tabanidae)." *Proceedings of the Entomological Society of Washington* 55, 247–251.

View This Item Online: <u>https://www.biodiversitylibrary.org/item/54777</u> Permalink: <u>https://www.biodiversitylibrary.org/partpdf/54962</u>

**Holding Institution** Smithsonian Libraries and Archives

**Sponsored by** Smithsonian

**Copyright & Reuse** Copyright Status: In copyright. Digitized with the permission of the rights holder. Rights Holder: Entomological Society of Washington License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.