

TWO NEW SPECIES OF *PHLEBOSOTERA* DUDA  
(DIPTERA: ASTEIIDAE) FROM NORTHERN NIGERIA

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*Abstract.*—Two new species of the genus *Phlebosotera*, *P. sabroskyi* and *P. inuwa*, are described from northern Nigeria.

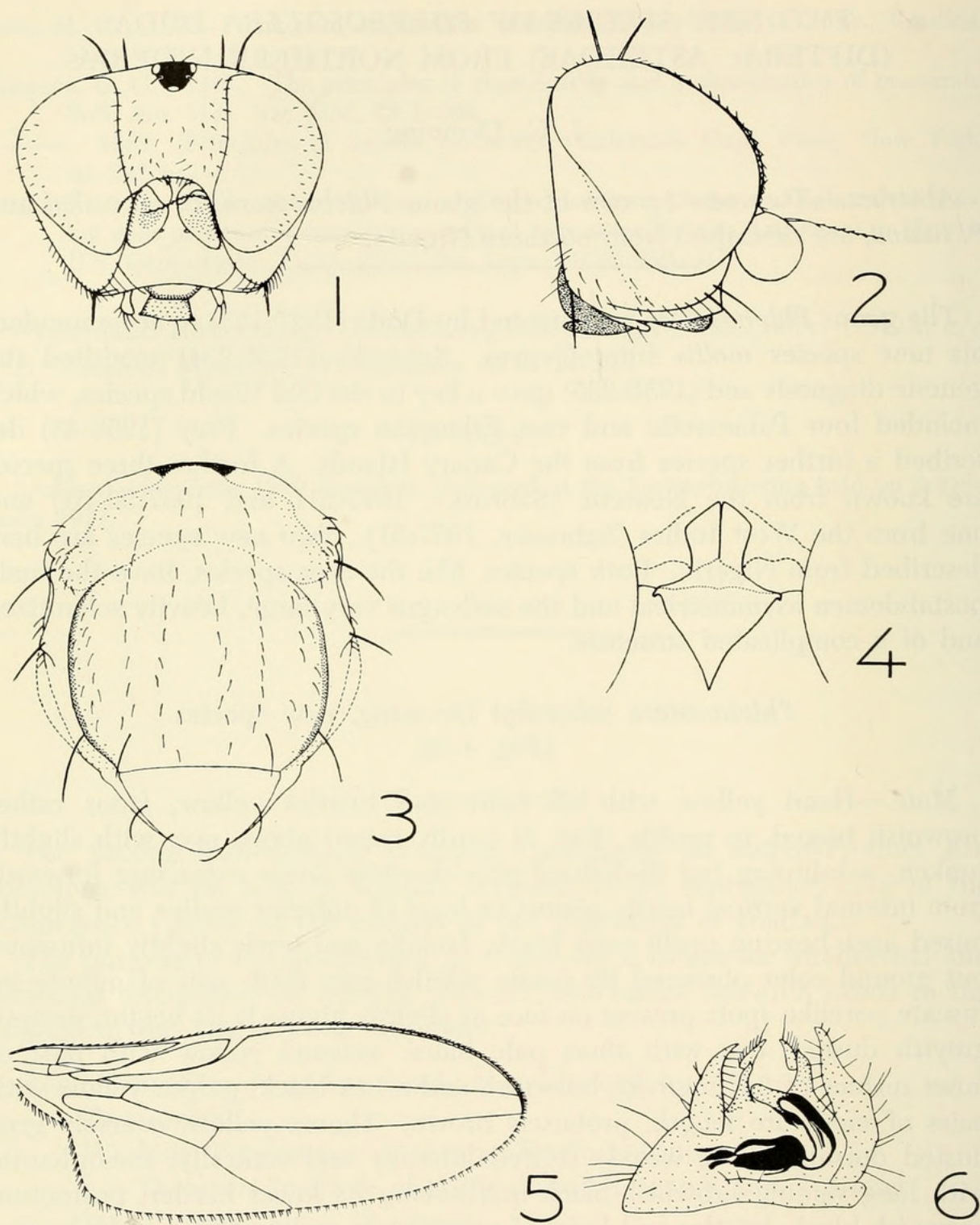
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The genus *Phlebosotera* was erected by Duda (1927:125) to accommodate his new species *mollis* from Cyprus. Sabrosky (1956:234) modified the generic diagnosis and (1956:235) gave a key to the Old World species, which included four Palaearctic and two Ethiopian species. Frey (1958:48) described a further species from the Canary Islands. A further three species are known from the Nearctic (Sabrosky, 1943:511 and 1957:50-51) and one from the West Indies (Sabrosky, 1957:51). Two new species are here described from Nigeria. Both species, like the type-species, have the male postabdomen asymmetrical and the aedeagus very large, heavily sclerotized and of a complicated structure.

*Phlebosotera sabroskyi* Deeming, new species  
(Fig. 1-6)

*Male.*—Head yellow with all hairs and bristles yellow; frons rather brownish tinged, in profile (Fig. 2) hardly raised above eye, with slightly sunken, subshining but ill-defined greyish-white stripe extending forwards from internal vertical bristle almost to level of anterior ocellus and slightly raised area bearing ocelli matt black; facialia and jowls slightly infusate, but ground color obscured by coarse whitish-grey dust; pair of minute infusate porelike spots present on face at slightly above  $\frac{1}{2}$  its height; occiput greyish dusted; eye with short pale hairs; antenna yellow with part of inner surface of 3rd segment brownish and arista black; palpus yellow with hairs of moderate length; proboscis brown. Thorax yellow, coarsely grey dusted dorsally, more weakly dusted laterally and ventrally; mesopleuron with long shining brownish-black mark along its lower border; postnotum brownish black; bristles and hairs of mesonotum and scutellum dark brown, single sternopleural bristle and fine hairs on mesopleuron and sternopleuron yellow; prosternum (Fig. 4) joined to mesosternum and linked to widely-separated fore coxae by membranous bridge. Wing (Fig. 5) yellowish hyaline with yellow veins; haltere yellow. Legs yellow, weakly yellowish dusted and with yellow hairs. Abdomen yellow, basally appearing a little darker, weakly sclerotized and weakly yellowish dusted, tergites bearing short brown hairs; terminalia (Fig. 6). Length about 1.75 mm, of wing 1.90 mm.



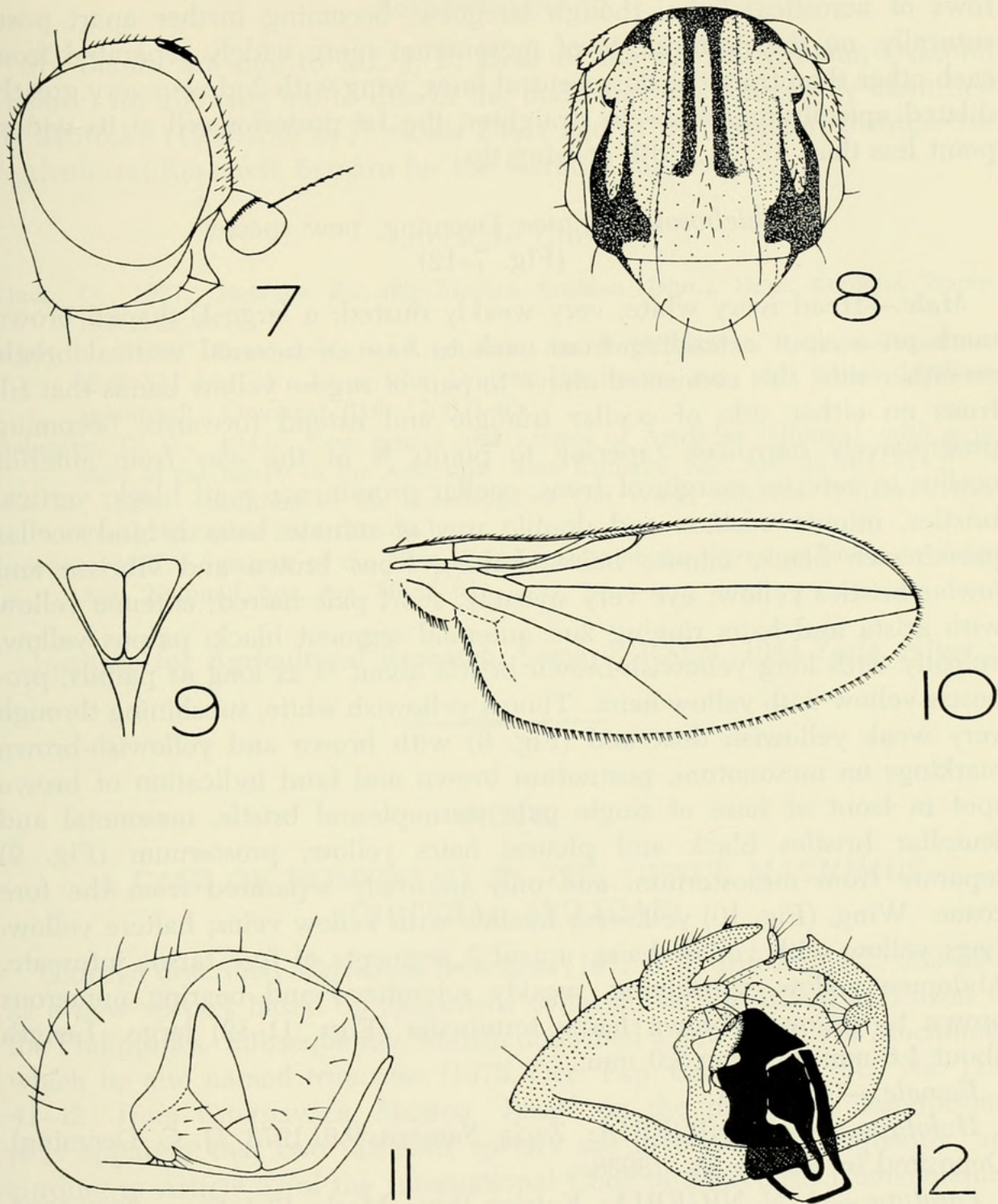


Figs. 1-6. *Phlebosotera sabroskyi*, male; 1. Head from in front; 2. Head in profile; 3. Thorax from above; 4. Prosternum, mesosternum and inner margin of fore coxae; 5. Wing; 6. Terminalia from beneath.

*Female*.—Unknown.

*Holotype*.—♂, N. NIGERIA: Katsina, 24.v.1975, (J. C. Deeming), on *Ficus* foliage. Deposited in USNM No. 73939. This species is closely related to *P. cyclops* Sabrosky 1956:236, but differs from it in the following respects:





Figs. 7-12. *Phlebosotera inuwa*, male; 7. Head in profile; 8. Thorax from above; 9. Prosternum and inner margin of fore coxae; 10. Wing; 11. Terminalia from behind; 12. Terminalia from beneath.

Only a single dark pleural spot; vertical bristles greyish white, unlike the more or less infuscate mesonotal bristles; distance between posterior ocelli slightly less than that between posterior ocellus and eye margin; frons between internal vertical bristles slightly less than the width of an eye; the



rows of acrostical hairs, though irregular, becoming further apart post-suturally, on the posterior  $\frac{1}{3}$  of mesonotum more widely separated from each other than from the dorsocentral lines; wing with 2nd vein very greatly dilated apically and 4th vein straighter, the 1st posterior cell at its widest point less than  $3\times$  its width at wing tip.

*Phlebosotera inuwa* Deeming, new species  
(Fig. 7-12)

*Male*.—Head ivory white, very weakly dusted; a large U-shaped brown mark on occiput extending from neck to base of internal vertical bristle on either side, this connected above to pair of rugose yellow bands that fill frons on either side of ocellar triangle and extend forwards, becoming progressively narrower, tapering to points  $\frac{3}{4}$  of the way from anterior ocellus to anterior margin of frons; ocellar prominence matt black; vertical bristles, minute ocellars and double row of minute hairs behind ocellar prominence black, minute hairs clothing frons brown and vibrissa and jowlar bristles yellow; eye very sparsely, short pale haired; antenna yellow with arista and hairs ringing 2nd antennal segment black; palpus yellow, apically with long yellowish-brown bristle about  $\frac{1}{2}$  as long as palpus; proboscis yellow with yellow hairs. Thorax yellowish white, subshining through very weak yellowish dust and (Fig. 8) with brown and yellowish-brown markings on mesonotum, postnotum brown and faint indication of brown spot in front of base of single pale sternopleural bristle, mesonotal and scutellar bristles black and pleural hairs yellow; prosternum (Fig. 9) separate from mesosternum and only narrowly separated from the fore coxae. Wing. (Fig. 10) yellowish hyaline with yellow veins; haltere yellow. Legs yellow with yellow hairs, apical 3 segments of fore tarsus infusate. Abdomen yellow, subshining, weakly sclerotized and bearing numerous brown to yellowish-brown hairs; terminalia (Figs. 11-12) large. Length about 1.6 mm, of wing 2.0 mm.

*Female*.—Unknown.

*Holotype*.—♂, N. NIGERIA: Zaria, Samaru, 9.iii.1973, (J. C. Deeming). Deposited in USNM No. 73938.

*Paratype*.—♂, N. NIGERIA: Katsina Prov., Maska Fish Farm, 26.iii.1972, (J. C. Deeming). Paratype deposited in the Inst. Agric. Res., Samaru.

*Etymology*.—The specific name is taken from the Hausa word for shade or shadow, as both specimens were collected hovering in the shade of large trees (mango and *Parkia*) on days of exceptional heat.

*Discussion*.—This species is probably more closely related to *P. nigriseta* Sabrosky (1956:237) than to any other described species, but it differs from *P. nigriseta* in lacking large black spots on the meso-, sterno-, and hypopleura and small spots in front of and behind the anterior (mesothoracic) spiracle, and in having the sternopleural bristle pale and the tergites yellow.



## Acknowledgments

My thanks are due to Mr. J. P. Dear of the British Museum (Natural History) for allowing me to dissect the male that was tentatively identified by Sabrosky (1956:236) as *P. mollis* Duda and to the Director, Institute for Agricultural Research, Samaru for the facilities for research.

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## NOTE

A CASE OF HOMONYMY IN THE GENUS *MACHIMUS*  
(DIPTERA: ASILIDAE)

Oldroyd described *Machimus truncatus* (1972. Pac. Insects. 14(2):289-290) as a new species based on specimens collected on the island of Luzon in the Philippines. Subsequently, Martin described a new species of *Machimus*, which he also named *truncatus* (1975. Occ. Pap. Calif. Acad. Sci. No. 119: 41-42) from Cuernavaca, Mexico. Based on the published descriptions, it is apparent that two different species are involved. Consequently, according to Article 53 of the International Code of Zoological Nomenclature (1961), the junior primary homonym, *M. truncatus* Martin, must be rejected and replaced. Therefore, I propose that the name *Machimus truncatus* Martin be replaced by the name *Machimus lurrettae* Martin in honor of the late Dr. Charles Martin's second wife, Luretta Martin, who assisted him greatly in preparing his later papers for publication.

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