A NEW GENUS AND SPECIES OF NEOTROPICAL HORSEFLY (DIPTERA: TABANIDAE)*

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The Neotropical Tabanidae are remarkable for the number of bizarre forms which have developed, especially in the Tribe Diachlorini. Of the 146 generic names proposed at one time or another to include Neotropical Tabanidae, 65 were proposed for Diachlorini. The mortality rate among these names has been high, and conservative students of the family will probably recognize hardly half of these as useful. The proposal of another new genus in this fauna may thus appear somewhat foolhardy; nevertheless, the subject of this note presents a so far unique combination of characters which disturbs current ideas as to relationships within the Tribe.

Querbetia gen. nov.

Eyes bare, apparently with green bands in life. Frons broad, less than twice as high as basal width, with basal callus as wide as frons. Vertex with vestiges of ocelli. Antennae with first segment very greatly inflated and shiny, second segment short and normal, third segment lacking in the only known specimen. Proboscis with theca and labella extensively sclerotized and shiny. Wing venation normal, the subepaulet or basicosta lacking strong setae. Abdomen with second segment narrowed, giving a wasp-waisted appearance. Legs without hind tibial spurs or hind tibial fringes. The name is an anagram of that of Dr. Joseph Bequaert and is masculine. Type and sole species of the genus, Querbetia bequaerti n. sp., described below.

Querbetia bequaerti n. sp.

A blackish wasp-like insect with greatly inflated and shiny subcallus and basal antennal segments, constricted abdomen and wings with anterior half black.

*Manuscript received by the editor June 10, 1963.
Female. Length, 14 mm., of wing, 12 mm. Eyes bare. Efforts to
revive the eye pattern were not wholly successful, but suggest
that the eye was probably green with two narrow parallel transverse
dark bands. Frons slightly higher than basal width, narrowed above.
Callus black, rugose, nearly filling lower half of frons, and leaving
but two small thinly yellowish pollinose triangular areas separating
callus from the wholly black and shiny vertex. Vestiges of three ocelli
are visible close to the lower margin of the shiny area of vertex. Sub-
callus greatly inflated, black and shiny, with a strong median groove
dividing it into two hemispherical halves. Fronto-clypeus and genae
thinly yellowish pollinose, with a roughly wineglass-shaped bare area
in center of fronto-clypeus, and large bare patches on genae, both
bare areas dark brown to black. First antennal segments enormously
inflated, black and shiny with sparse long hairs at base and on ventral
surface. Second segment black and shiny, not inflated, with a strong
dorsal spur and numerous black hairs. Third segment missing. Palpi
black, subshiny, black-haired dorsally, longer ventral hairs brownish
yellow. Proboscis black, the shea and a broad basal strip of labella
sclerotized, shiny.

Mesonotum blackish in ground color, subshiny to thinly grey pol-
linose, with the sides and humeral callosities reddish, and a pair of
dull reddish dorsolateral stripes. Vestiture of sparse black hairs, with
some reddish brown hairs accentuating the dorsolateral stripes. Pleura
blackish brown, thinly grey pollinose, sparsely dark-haired. Scutellum
black, with black and sparse pale hairs. Legs black, black-haired, the
basal thirds of all tibiae yellowish white, white-haired, the tarsi
yellow and yellow-haired. No hind tibial fringe. No spurs on hind
tibiae. Wing as figured, the basicosta bare, the dark portions deep
brownish black, the clear portions yellowish tinged.

Abdomen slender, the second segment slightly narrowed, the
tergites dark brown, their posterior margins very narrowly yellowish.
Vestiture of thin greyish pruinosity and sparse hairs, mixed black and
yellowish, without noticeable pattern. Venter as dorsal surface, ex-
cept that first four sternites are more densely white-haired, fifth and
succeeding sternites dark reddish-haired.

Holotype female. Tingo Maria (Rio Huallaga) Peru, 700 M.,
The abdomen is intact, though detached and glued to a card below the

Explanation of Plate 20

Querbetia bequaerti, n. sp. Fig. 1. Head in side view. Fig. 2. Frons and
basal antennal segments. Fig. 3. Wing.
specimen. One wing was also so glued, but has been mounted in Euparal on a microscope slide. The generic name is an anagram of that of Dr. Joseph Bequaert, to whom this remarkable genus and its included species are respectfully dedicated.

The relationships of this genus appear to be closest to Acanthocera, with which it agrees in general facies, wing pattern, shape of frons, etc., but from which it differs most markedly in the inflated sub-callus and first antennal segments. The lack of terminal antennal segments in the only known specimen makes detailed comparison unprofitable. The only other genera of Neotropical Tabaninae with such inflated first antennal segments are Bolbodimyia Big., and Oopelma End. From Bolbodimyia the present genus differs in wasp-like fascies, different wing pattern, shiny areas on frontoclypeus and genae, lack of inflated tibiae or hind tibial fringe, normal venation (R 2 + 3 not bent abruptly forward), and presence of marked vestiges of ocelli. From Oopelma it differs in much greater size, Oopelma being a tiny Tabanid less than 7 mm. long, in not having the cross-veins prominently clouded, and in having shiny inflated palps and sclerotized theca and labella of the proboscis.

Oopelma appears to be an extreme development of tendencies fore-shadowed in certain species of Stenotabanus, e.g. St. liokylon Fchld., which have the first antennal segments bare and shiny, though very little inflated. It would appear that development of the greatly inflated basal antennal segments has taken place independently in these three genera of Diachlorini, and is unlikely to be of phylogenetic significance.