Redescription of Oropezella abdominalis Collin from Chile with description of the male and a key to the Neotropical genera of Ocydromiinae (Diptera, Hybotidae)

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ABSTRACT. Redescription of Oropezella abdominalis Collin from Chile with description of the male and a key to the Neotropical genera of Ocydromiinae (Diptera, Hybotidae). Oropezella abdominalis Collin, 1933 (Diptera, Hybotidae) is redescribed and the male is described for the first time. An identification key to the Neotropical genera of Ocydromiinae is also provided.

KEYWORDS. Neotropical Region; Ocydromiini; Male; Systematics.

The subfamily Ocydromiinae (Diptera, Hybotidae) is represented in the Neotropical region by the tribe Ocydromiini, with the genera Neotrichina Sinclair & Cumming, Oropezella Collin, Hoplopeza Bezzi, Scelolabes Philippi and Chvalaea Papp and Földvári (Smith 1967; Sinclair & Cumming 2000; Papp & Földvári 2001; Ale-Rocha 2006).

The neotropical species of Oropezella Collin include seven Brazilian species and one Chilean species (Collin 1933; Smith 1967; Ale-Rocha 2001). The Chilean species, O. abdominalis Collin, is an interesting species, sharing with the palearctic O. sphenoptera (Loew), the type species of Oropezella, some characters of the head and male terminalia, but differs in having the first flagellomere without style or arista and discal cell emitting three veins. A long first flagellomere without arista and three veins arising from discal cell are present in some New Zealand species of Oropezella (Collin 1933; Plant 1989). In this paper, O. abdominalis is redescribed, the female terminalia is illustrated, the male is described and illustrated for the first time and a key to genera of Ocydromiinae of the Neotropical Region is provided.

MATERIAL AND METHODS

The material is deposited at the Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus, Brazil; Canadian National Collection of Insect (CNC), Ottawa, Canada; California Academy of Science (CAS), San Francisco, USA; The Natural History Museum, London, England (BMNH).

Terms used for adult structures follow McAlpine (1981) except for male terminalia, which follows Cumming et al. (1995).

RESULTS

Identification key for the Neotropical genera of Ocydromiinae

1. Vein Rs short, arising near apex of cell bm .................2

2. Cell dm long; wing narrow and anal lobe undeveloped; hind tibia bristled and not geniculate at base; hind femur banded (Chile, Australasia) ....................... Hoplopeza Bezzi

Cell dm short; wing broad and anal lobe developed; hind tibia lacking bristles and generally geniculate at base; hind femur not banded (Chile, Australia) ................. Scelolabes Philippi

3. Three veins emitted from cell dm reaching wing margin; antenna inserted about middle of head (Chile) ......................... Neotrichina Sinclair & Cumming

Two veins emitted from cell dm reaching wing margin, if the cell dm emit three veins then they do not reach the wing margin; antenna inserted above middle of head

4. Abdominal sclerites heavily sclerotized, punctate; pulvilli

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Redescription of *Oropezella abdominalis* Collin from Chile with description of the male

Holotype female. Body: 3.8 mm. Wing: 3.8 mm.

Redescription. Frons brown, short, about 1/5 of length of face, as wide as long; antenna pale-brown, flagellum twice as long as scape and pedicell together (Fig.1); scape twice length of pedicel; pedicel with short marginal hairs; mouthparts pale-brown, palpus oval, short and setose with one preapical dorsal setae longer than the others; post-cranium brown to black with pale brown sparse pruinosity; post-cranial setae short, thin and sparse; 1 ocellar pair short, proclinated; vertical seta indistinct.

Thorax brown with post-pronotal lobe, notopleuron, postalar callus and scutellum pale-brown to yellow; anepimeron, upper half of katepisternum, anterior margin and upper half of meron and laterotergite pale-brown; fine brown pruinose. Thoracic setae short, inconspicuous; acrostichals and dorsocentrals setae uniserial; notopleuron with 1 seta long and robust and 3-4 setae short and slender; scutellum with one apical pair long, robust, convergent and one lateral seta short and thin; one postalar setae short and thin.

Legs pale-brown except coxae, trochanters, base of femora, inferior surface of fore and mid femora yellow, apex of hind tibia and all tarsi brown. Mid tibia with 1 long anterior bristle in
Phallus (Fig. 6) robust, distiphallus long, robust at basal half distally, apex rounded; dorsal bridge well sclerotized, complete. Articulated; hypandrium (Fig. 2) broad medially and narrowed; lamellae united dorsally by a narrow area; only left surstyli visible through the notch of the posterodorsal margin; tergite 10 inside of the segment 8; sternite 10 visible through the notch of the posterodorsal margin of the eighth segment; cerci short.

Terminalia: epandrium (Figs. 3–5) deep cleft dorsally, epandrial tergites 2 and 3, distal margin of segments with elongate setae, basal segments pale-yellow with a dorsal brown spot on the middle; 1 long posterior at basal third; 1 short dorsal and 1 long anterodorsal subbasal bristles, 1 short anterior apical and others apical setae short. Hind femur with some anterovelontral elongate slender setae. Hind tibia with sparse elongate slender setae on anterovelontal and posterovelontal surfaces. Tarsi slender.

Wing (Fig. 10) pale-brown; pterostigma slightly brownish. Abdomen black with very fine sparse brownish pruinescence; setae pale-brown to yellow, short, slender; sclerites heavily sclerotized, segments 1–7 firmly united by a rigid membrane; spiracles obscure. Terminalia (Figs. 7–9): eighth segment tubular, tergite and sternite fused, twice the length of the preceding segment with U-shaped notch on posterodorsal margin; tergite 10 inside of the segment 8; sternite 10 visible through the notch of the posterodorsal margin of the eighth segment; cerci short.

Male. Similar to the female but bristle on legs somewhat stronger; abdomen broadened distally, pale brown except three basal segments pale-yellow with a dorsal brown spot on tergites 2 and 3, distal margin of segments with elongate setae. Terminalia: epandrium (Figs. 3–5) deep cleft dorsally, epandrial lamellae united dorsally by a narrow area; only left surstyli articulated; hypandrium (Fig. 2) broad medially and narrowed distally, apex rounded; dorsal bridge well sclerotized, complete. Phallos (Fig. 6) robust, distiphallus long, robust at basal half and slender and weakly sclerotized on the remaining.


Additional material. CHILE: Llanquihue, El Chingue MT, N. of Correntoso, vi-v. 1988, L.E. Pena, 1 male (CNC); 1.1990, 1 male (CNC); vi-v.1988, 1 male (INPA); Osorno, 20 km E. of Puyehue, 26.i.1951, Ross & Michelbaker, 1 male (CNC); 30 km E. of Puyehue, 26.i.1951, Ross & Michelbaker, 1 male (INPA); 10 km E. of Puyehue, 26.i.1951, Ross & Michelbaker, 1 female (INPA).

Distribution: Chile.

FIG. 10. Oropezella abdominalis. Wing.

Oropezella is represented in the Neotropical Region by seven species from Brazil and one species from Chile, O. abdominalis (Collin 1933, Smith 1967, Ale-Rocha 2001). O. abdominalis differs from Brazilian species and the type species of Oropezella, O. sphehoptera, in having the first flagellomere long, without style or arista, discal cell emitting three veins (a distinct stump of a third upper vein) and abdominal sclerites heavily sclerotized. The characters of antenna and discal cell are shared with the New Zealand species of Oropezella of Group A delineated by Plant (1989), and the heavily sclerotized abdomen of O. abdominalis is a characteristic found up to now only in Chvalaea. Those characteristics shared by O. abdominalis with different groups of species, within or outside of Oropezella, suggest that the limits of this genus need to be defined better.

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REFERENCES


