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Revision of the New World species of the genus *Pelecorhynchus* Macquart, 1850 (Diptera: Pelecorhynchidae)

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Abstract

The New World species of the genus *Pelecorhynchus* Macquart, all of which are only known from Chile, are revised. Two new species are described, *Pelecorhynchus hualqui* sp. nov. and *Pelecorhynchus toltensis* sp. nov. All nine New World species in the genus are redescribed and illustrated, and a key to the species is provided.

Key words: Tabanomorpha, Taxonomy, Neotropical, new species, Chile

Introduction

The taxonomic placement of the genus *Pelecorhynchus* has a complicated history. The genus was established by Macquart (1850) for an Australian species, *Pelecorhynchus maculipennis* Macquart, 1850. This species was synonymized under *P. personatus* (Walker, 1848), which was originally described as a member of the genus *Silvius* Meigen (Tabanidae). Subsequently, *Pelecorhynchus* species were placed in the Tabanidae, within their own subfamily created by Enderlein (1922), the Pelecorhynchinae. *Pelecorhynchus* remained in the Tabanidae until Mackerras & Fuller (1942) elevated the group to family rank. Steyskal (1953) considered *Pelecorhynchus* closely related to the genus *Coenomyia* Latreille, placing these genera in the Coenomyiidae (now Xylophagidae) along with *Arthroteles* Bezzi (Rhagionidae) and *Stratioleptis* Pleske (= *Odontosabula* Matsumura, Xylophagidae). Although this may appear as a major change in the previous classification, at that time the coenomyiid lineage was still considered a close relative of the Tabanidae (Steyskal 1953, Hardy 1955). Teskey (1970) transferred *Glutops* Burgess from Xylophagidae to the Pelecorhynchidae due to the similarities of larval morphology between *Pelecorhynchus* and *Glutops*. However, Krivosheina (1971) created the family Glutopidae to include *Glutops*. Subsequently, Kovalev (1981) synonymized Glutopidae with Rhagionidae, though Nagatomi (1982) recognized the Glutopinae, placing *Pseudoernna* Shiraki with *Glutops*, as a subfamily of Rhagionidae. According to Nagatomi (1982), Pelecorhynchidae remained a family represented by the single genus *Pelecorhynchus*. Woodley (1989) and Sinclair (1992) placed *Pelecorhynchus*, *Pseudoerinna*, and *Glutops* in the Pelecorhynchidae based on synapomorphic features of adults and larvae, and provided evidence that the Pelecorhynchidae is the sister group to Athericidae + Tabanidae. On the other hand, Stuckenberg (2001) recognized all three genera as members of the subfamily Pelecorhynchinae of the Rhagionidae. Molecular evidence supports Teskey's assertion (1970) that *Glutops* and *Pelecorhynchus* are closely related and further confirmed that the Pelecorhynchidae are the sister group to the Athericidae + Tabanidae (Wiegmann *et al.* 2000; Wiegmann *et al.* 2003).

Thirty-eight species of Pelecorhynchidae have been described throughout the world, and are further divided into three genera. Of these, seven species in the genus *Pelecorhynchus* are recorded for the Neotropical region. Ricardo (1910) provided the first revision of the New World species of *Pelecorhynchus*. Surcouf (1921) published a review of the genus, illustrating the genitalia of *P. biguttatus* Philippi. Enderlein (1925) considered the species now placed in *Pelecorhynchus* as a subfamily within the Tabanidae, including 2 genera, *Coenura* Bigot and

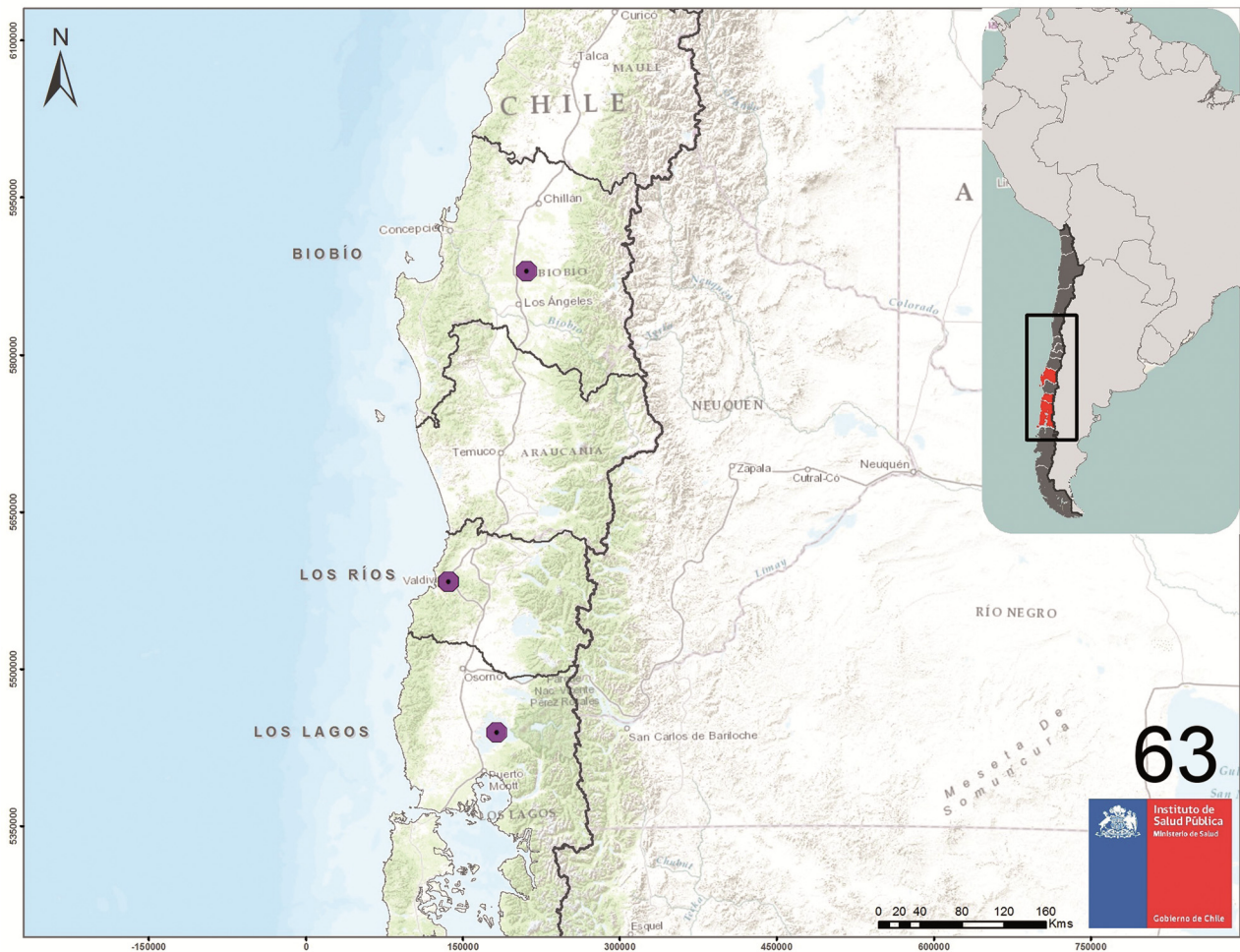


FIGURE 63. Geographic distribution of *Pelecorhynchus xanthopleura* (Philippi, 1865).

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