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Amazonimyia gigantea gen. n., sp. n., a new Tanypodinae (Diptera: Chironomidae) from the Neotropical Region

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Abstract

A new genus, *Amazonimyia*, is established for a species of the tribe Pentaneurini (Diptera, Chironomidae, Tanypodinae) from the Amazon Rainforest in northern Brazil. Generic diagnoses for adult male and pupa are provided together with descriptions of a new species, *Amazonimyia gigantea*.

Key words: Brazil, *Amazonimyia,* Pentaneurini, Neotropical, taxonomy

Introduction

Fittkau (1962), in a reclassification of the subfamily Tanypodinae (Diptera: Chironomidae), divided the genus *Pentaneura* Philippi (*sensu lato* Edwards 1929, Freeman 1955, 1956) into eighteen genera, all of which were placed in the tribe Pentaneurini (Harrison 1970). This arrangement has been largely accepted by other chironomid researchers such as Beck & Beck (1966), Hamilton *et al.* (1969), Roback (1971), Cranston & Epler (2013) and Trivinho-Strixino (2014). So far, the majority of the Amazonian species belonging to this tribe can be placed in one or other of the proposed Fittkau's genera, however we recently examined an undescribed species of Pentaneurini not conforming to any currently recognized genus. Therefore, we here erect a new genus, *Amazonimyia*, for the species *Amazonimyia gigantea* sp. n. The material was collected by E. J. Fittkau from the Amazon Rainforest in northern Brazil and deposited in the entomological collection of the Zoologische Staatssammlung München.

Material and methods

The adults were collected using drift- and hand-net. Specimens examined were slide-mounted in Euparal. General morphological terminology and abbreviations follow Sæther (1980). Measurement methods followed Epler (1988). Mensural data are given as ranges, followed by the number of observed specimens in parenthesis if different from the number (n) stated at the beginning of the description. Type material is deposited in the entomological collection of the Zoologische Staatssammlung München, Germany (ZSM) and in the Museu de Zoologia da USP, Brazil (MZUSP).

Amazonimyia gen. n.

Type species. *Amazonimyia gigantea* sp. n.

Etymology. Derived from Amazonia, referring to the type locality in the Amazon Rainforest in northern Brazil, with the addition of the suffix -myia, meaning fly. Feminine gender.

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some species of *Arctopelopia* and *Thienemannimyia* (*Hayesomyia*), in particular with regard to the short neck and the absence of plastron plate. However, the shagreen of *Amazonimyia* is not formed mostly by multi-branched spinules, which characterises the *Thienemannimyia* group (Fittkau and Murray 1986, Silva *et al.* 2014b). The new genus *Amazonimyia* is entirely consistent with relationships derived from phylogenetic analyses based on morphological data, in the subfamily Tanypodinae (Silva & Ekrem in prep.). In this study, *Amazonimyia* is placed as the most basal taxa of Pentaneurini.

Generic distribution

Amazonimyia gigantea has so far been recorded from its type locality in the Amazon rainforest in the lower region of Rio Negro, in 1961, near Manaus. The specimens examined in this study were collected at the Igarapé do Gigante, a small stream, from a shallow bank with detritus, pH 4.8 and temperature of 24.3º C. The region has been urbanized since the sampling period, but the species probably will still be found in other preserved areas nearby. A similar pupal morphotype was described by Schneiberg (1985: Gen 10 sp. 1) and Ospina-Torres (1992: ET 199) from material collected in the same geographical area by Fittkau (Rio Branquinho and Igarapé do Gigante). However, this morphotype (a pharate male in too poor condition to be described) is darker than *A. gigantea* sp. n. and seems to have a different anal point. Schneiberg (1985) also described another morphotype (Gen 10 sp. 2) from Amazonas State, Rio Marauiá, near mountains and from Pará State, Rio Parú, Missão Tiriyos. This pupal morphotype is characterized by having smaller perforations on corona, thoracic horn apically rounded, abdominal segments V-VII with 5 lateral taeniate setae and anal lobe inner margin convex, with longer hair-like spinules. The genus *Amazonimyia* also has two additional pupal morphotypes collected more recently in Peru, Departamento Huanuco, Panguana, Rio Lullapichis deposited in the ZSM. The first one shows horn distally rounded with neck near apex and convex inner margin of anal lobe. Whereas the second one has tergites II–VII and sternites III–VIII with distal row of short and wide spines and thoracic horn strongly arched nearly 90 degrees.

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