

# **Article**



http://dx.doi.org/10.11646/zootaxa.3613.3.5 http://zoobank.org/urn:lsid:zoobank.org:pub:71E1FD28-07FE-4986-A4A2-9AD4FF1372A8

## Lamprempis Wheeler & Melander (Diptera, Empididae, Empidinae) from Maranhão, Brazil

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#### **Abstract**

Lamprempis Wheeler & Melander, 1901 is a Neotropical genus with 22 known species. Two species collected in the Brazilian state of Maranhão, L. longipenis sp. nov. and L. triangulata sp. nov., are here described and illustrated. A published *Lamprempis* key is modified to include the newly described species.

Key words: Lamprempis, Empidinae, Empidini, Empidoidea, Neotropical Region, taxonomy

#### Introduction

Lamprempis Wheeler & Melander, 1901 was erected as a subgenus of Empis to include six Central American species (Wheeler & Melander 1901). These species have a metallic green-blue or metallic black coloration, antennae generally inserted high on the head, scape nearly as long as postpedicel, postpedicel longer than stylus, anal lobe of wing developed with a deep incision, vein  $M_1$  evanescent and legs of female and male peculiarly ornamented (Bezzi 1909; Smith 1962, 1975; Cumming & Sinclair 2009). Melander (1902) elevated Lamprempis to generic status, and added L. superba (Loew) to the genus. Coquillett (1903) designated Empis chichimeca Wheeler & Melander, 1901, from Mexico, as the type species and also described L. setigera Coquillet, 1903. Subsequently, additional species were described by Bezzi (1905), Engel (1928) and Smith (1962, 1975), for a total of 22 species today (Yang et al. 2007).

Lamprempis is not well delimited. Ongoing unpublished phylogenetic analyses using molecular data indicate that the genus is polyphyletic (M. Mendonça pers. comm.). Consequently there is an urgent need for a thorough taxonomic revision in order to accurately determine its limits and diagnosis.

In Brazil there are six recorded species in the southeast and central west regions: L. bezzii Smith and L. boracea Smith from Santa Catarina; L. cucama Smith, L. furcaticauda Smith, L. sazimae Smith and L. truncatus Smith from Minas Gerais (Smith 1975, Yang et al. 2007). Herein, we extend the geographic distribution to northeastern Brazil, through the description of two new species from the state of Maranhão.

### Material and methods

This study is based on specimens housed in Coleção Zoológica do Maranhão (CZMA), Caxias, Maranhão, Brazil and Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus, Amazonas, Brazil.

Dissected structures were macerated in heated 85% lactic acid (Cumming 1992) and examined on excavated slides. After examination, dissected parts were placed in microvials with glycerine and pinned with their respective specimen. Morphological terminology follows Cumming and Wood (2009). The holotype label data is cited in full after the description, with original spelling and punctuation. Data from each label is enclosed by quotation marks (""). Information presented within square brackets is complementary data not present on the labels.