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A new species of *Maruina* (Diptera: Psychodidae: Psychodinae) from Brazil, with a checklist of all known species of the genus

Una especie nueva de *Maruina* (Diptera: Psychodidae: Psychodinae) de Brasil y una lista completa de todas las especies del género

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RESUMEN

Una nueva especie de psicócido, *Maruina cunhanta* Araújo & Santos, sp. nov., se describe del estado de Espírito Santo, sudoeste de Brasil. También se proporciona una lista de verificación de *Maruina*

Palabras clave: *Alcucina*, psicócido, Neotropical, taxonomía.

ABSTRACT

A new species of moth fly, *Maruina cunhanta* Araújo & Santos, sp. nov., is described from the state of Espírito Santo, southeast Brazil. A checklist of *Maruina* is also provided.

Key words: *Alcucina*, moth fly, Neotropical, taxonomy.

Forty-three species of *Maruina* Müller, 1895 occur in the Americas, four in the Nearctic region, from United States and 39 in the Neotropical Region, with 15 species recorded from Brazil (Kincaid 1899; Johannsen 1938; Vaillant 1963, 1989; Hogue 1973; Wagner 1988; Hogue 1990; Wagner and Joost 1994; Ibáñez-Bernal 1994; Müller 1895; Bravo e Lago 2003; Bravo 2004, 2005; Bravo and Araújo 2018; Camico *et al.* 2019). The species of the genus are easily recognized by the lanceolate form of the wing, four times as long as wide (Hogue 1973).

The species of *Maruina* are separated in two subgenera, *Maruina (Maruina)* and *Maruina (Alcucina)* with 27 and 16 species, respectively. These subgenera are differentiated by the following combination of characters: species of *Maruina (A)* have monomorphic aedeagal spines, males lack the nine sternite, the eye bridge is contiguous or separated by four even ocular facet diameters, and R_3 is united to R_2 . The species of *Maruina (M.)*, on the other hand, have di- or trimorphic aedeagal spines, the ninth sternite of male is well-developed, the eye bridge is separated by 7 to 10 facet diameters, and R_3 is not united to R_2 (Hogue 1973; Bravo 2004).

In this paper, we describe a new species of *Maruina (A.)* from the state of Espírito Santo and an updated list of the species of *Maruina* is included.

MATERIAL AND METHODS

The specimen studied was collected at Reserva Biológica de Duas Bocas, at area of Atlantic rainforest in the state of Espírito Santo, Brazil, using a CDC light trap. The studied specimen is deposited in the Coleção Entomológica Prof. Johann Becker do Museu de Zoologia da Universidade Estadual de Feira de Santana, Bahia, Brazil (MZFS). The specimen was treated with 10% KOH, dehydrated and mounted in Canada balsam. General morphological terminology follows Cumming and Wood (2009).

RESULTS

Maruina (Alcucina) cunhanta Araújo & Santos, sp. nov.
(Figures 1-7)

<http://zoobank.org/E6937F48-D8EA-4E9F-92BA-44F72ED45565>

Type specimens. BRAZIL, Espírito Santo, Cariacica, Reserva Biológica Duas Bocas (20.273083°N, -40.477917°W), holotype ♂, 08.xi.2007, Santos, C.B. col. [CDC light trap] (MZFS).

Etymology. Hogue (1973) traditionally employed Latin-American regional expressions that were used in reference to women to name new species of *Maruina*. Following his tradition the species epithet, *cunhanta*, from the indigenous language Tupi, is a reference to a warrior girl.

Diagnosis. The new species is mainly characterized by the presence of contiguous eye bridge, monomorphic aedeagal spines, short and wide palpal segments approximately of the same length.

Description. Holotype male. Head subcircular in frontal view; eye bridge contiguous (Fig. 1). Antenna incomplete; scape and pedicel subcylindrical; scape about the same length as pedicel; flagellomeres barrel-shaped with a pair of short, single filamented ascoids (Fig. 2). Palpi with four segments, short and wide, each approximately 0.5 times its length; relative length of palpomeres 1.0:1.2:1.5:1.3 (Fig. 3). Wing (Fig. 4) lanceolated, 3.8 times longer than wide; R5 sclerotized except at apex; Sc short, not reaching C; R3 joining R2+3; base of M2 unsclerotized, not reaching M1; M4 sclerotized. Gonocoxites and gonostyles with pilosity; gonocoxites with approximately 20 bristles on dorsal surface. Hypandrium present, stripe-like, apparently displaced apically. Apex of gonostyle digitiform with setae distributed randomly (Fig. 6). Aedeagus symmetrical with apex acute; aedeagal spines monomorphic and aedeagal sheath wide and membranous. Ejaculatory apodeme as long as gonocoxite. Gonocoxal apodeme smaller than aedeagal apodeme (Fig. 6). Epandrium plate-like, rectangular. Sternite 9 absent and hypoproct with apical micropilosity (Fig. 7). Cerci pilose and digitiform with a single apical tenaculum (Fig. 5).

Female: unknown.

Remarks. The new species differs from other species of the subgenus *Alcucina* mainly by the size and the shape of the palpal segments, which are short and broad.

Checklist of *Maruina* Müller, 1895

Subgenus *Aculcina*

Neotropical region

Maruina amada Hogue, 1973. Distribution: Costa Rica.

Maruina amadora Hogue, 1973. Distribution: Argentina, Costa Rica and Mexico.

Maruina caceresi Wagner, 1988. Distribution: Peru.

Maruina chaborra Hogue, 1973. Distribution: Colombia.

Maruina chiringa Hogue, 1990. Distribution: Colombia.

Maruina cholita Hogue, 1973. Distribution: Costa Rica.

Maruina cirrata Bravo & Araújo, 2018. Distribution: Brazil.

Maruina colombicana Wagner & Joost, 1994. Distribution: Colombia.

Maruina cunhanta Araújo & Santos, **sp. nov.** Distribution: Brazil.

Maruina doncella Hogue, 1973. Distribution: Argentina.

Maruina duckhousei Bravo, 2005. Distribution: Brazil.

Maruina guria Bravo, 2004. Distribution: Brazil.

Maruina muchacha Hogue, 1973. Distribution: Costa Rica.

Maruina mucugensis Bravo & Araújo, 2018. Distribution: Brazil.

Maruina pila Camico, Cordeiro & Chagas, 2019. Distribution: Brazil.

Maruina querida Hogue, 1973. Distribution: Costa Rica.

Maruina roraimensis Camico, Cordeiro & Chagas, 2019. Distribution: Brazil.

Subgenus *Maruina*

Neotropical region

Maruina barretto Bravo, 2005. Distribution: Brazil.

Maruina bellaca Hogue, 1973. Distribution: Argentina.

Maruina cachita Hogue, 1973. Distribution: Peru.

Maruina campesina Hogue, 1973. Distribution: Colombia.

Maruina chamaca Hogue, 1973. Distribution: Costa Rica, Mexico.

Maruina chamaquita Hogue, 1973. Distribution: Costa Rica.

Maruina chica Hogue, 1973. Distribution: Costa Rica.

Maruina dama Hogue, 1973. Distribution: Costa Rica.

Maruina garota Hogue, 1973. Distribution: Brazil.

Maruina hirta Johannsen, 1938. Distribution: Puerto Rico.

Maruina hoguei Wagner, 1993. Distribution: Saint Vicent.

Maruina jezeki Bravo, 2005. Distribution: Brazil.

Maruina kallyntrona Camico, Cordeiro & Chagas, 2019. Distribution: Brazil.

Maruina menina Bravo & Lago, 2003. Distribution: Brazil.

Maruina mystax Camico, Cordeiro & Chagas, 2019. Distribution: Brazil.

Maruina namorada Hogue, 1973. Distribution: Brazil.

Maruina nina Hogue, 1973. Distribution: Costa Rica.

Maruina pebeta Ibañez-Bernal, 1994. Distribution: Argentina.

Maruina pilosella Müller, 1895. Distribution: Brazil.

Maruina spinosa Müller, 1895. Distribution: Brazil.

Maruina tica Hogue, 1973. Distribution: Costa Rica.

Maruina tobagensis Wagner, 1993. Distribution: Tobago.

Maruina vidamia Hogue, 1973. Distribution: Costa Rica.

Nearctic region

Maruina boulderina Vaillant, 1963. Distribution: USA.

Maruina lanceolata (Kincaid, 1899). Distribution: USA.

Maruina mollesi Vaillant, 1989. Distribution: USA.

Maruina pennaki Vaillant, 1963. Distribution: USA.

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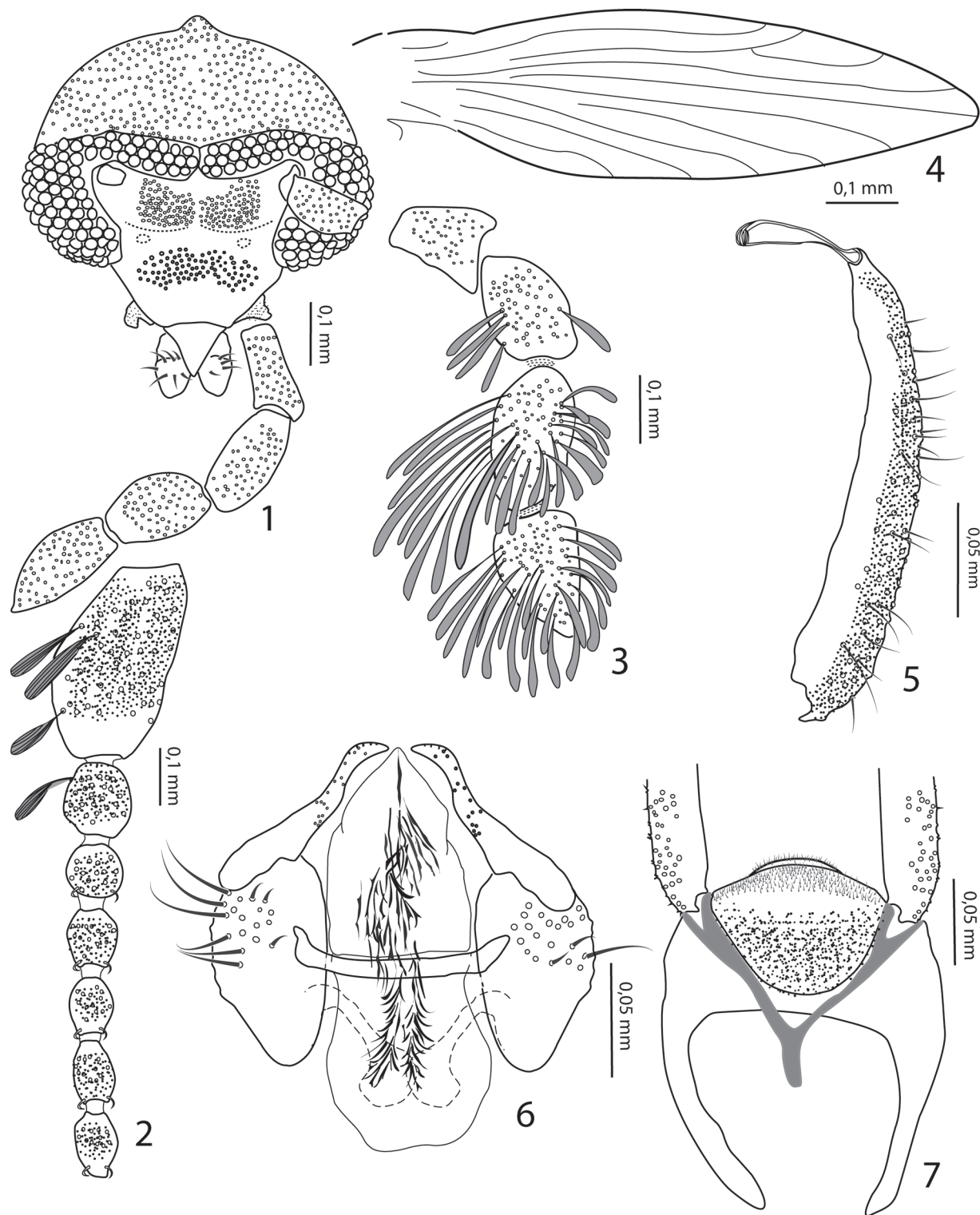
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Figs. 1-7. *Maruina cunhanta* Araújo & Santos, **sp. nov.** 1. Head; 2. Scape, pedicel and basal flagellomeres; 3. Palpus; 4. Left wing; 5. Cercus; 6. Male terminalia, dorsal; 7. Cerci, epandrium and hypoproct.