



Three new species of chydorid cladocerans of subfamily Aloninae (Branchipoda: Anomopoda: Chydoridae) from Brazil

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Abstract

Three new species of Aloninae cladocera from Central and South Brazil are described. Two of them, *Acroperus tupinamba* sp. n. and *Alona yara* sp. n., were previously recorded from the area as European taxa *Acroperus harpae* (Baird, 1834) and *Alona quadrangularis* (O.F. Müller, 1776), respectively. *Acroperus tupinamba* differs from the other species of *Acroperus* in smaller size, long posterior setae of the valves, shorter and wider postabdomen, short setules near the base of postabdominal claw, long apical spines of antenna, and peculiar morphology of limb IV exopodite. *Alona yara* differs from *A. quadrangularis* and *A. kolweizii* Van Damme & Dumont, 2008 in the number of ventral setules on ventral face of limb I, from *A. boliviana* Sinev et Coronel, 2006 in the shape of the body and postabdomen, narrow labral keel, and absence of projections on epipodites IV–V. The third new species, *Celsinotum candango* sp.n. differs from all other species of the genus in proportions of postabdomen. It differs from Australian species (*C. hypsophilum* Frey, 1991, *C. parooensis* Frey, 1991, and *C. platamoides* Frey, 1991) in a less developed dorsal keel, lateral head pores located close to midline, longer spine on basal segment of antennal exopodite, and in the presence of extremely large projections on exopodites IV–V. *Celsinotum candango* differs from Brazilian *C. laticaudatum* Smirnov & Santos-Silva, 1995 in a shorter spine on basal segment of antenna exopodite, in the shape of postabdomen and in morphology of postabdominal denticles. At present, Aloninae fauna of Brazil includes 35 species, and true diversity is undoubtedly higher, with more new species to be expected in the country.

Key words: Cladocera, Brazil, Aloninae, new species, morphology, systematics

Introduction

The Catalogue of Crustacea of Brazil reports the occurrence of 34 species of Chydoridae of the subfamily Aloninae (Elmoor-Loureiro 1998). This species list, however, should be considered incomplete and full of uncertainties, as a large proportion of Brazil has not been adequately surveyed for freshwater zooplankton and several species need taxonomic revision (Elmoor-Loureiro 2000).

During the last decade, in fact, improvements in Aloninae taxonomy, have led to great changes in this previous list of alonine species from Brazil. New species have been described, such as *Alona ossiani* Sinev 1998 and *Alona brandorffi* Sinev & Hollwedel 2002. Some species have been transferred to other genera: *Alona dentifera* (Sars, 1901) (Sinev *et al.* 2004), *Leberis davidi* (Richard, 1895) (Sinev *et al.* 2005), *Nicsmirnovius incredibilis* (Smirnov, 1984) (Kotov 2003), and *Parvalona parva* (Daday, 1905) (Van Damme *et al.* 2005). Detailed re-descriptions provided a better definition of species, some of them previously regarded as “cosmopolitan” species: *Alona glabra* Sars, 1901 (Sinev 2001b), *Alona iheringula* (Sars, 1901) (Sivev 2001a; Kotov & Sinev 2004), *Alona monacantha* Sars 1901 (Sinev 2004a, according to recent revision (Van Damme & Dumont 2008b) this species now should be transferred to the genus *Coronatella*), *Karualona muelleri* (Richard 1897) (Sinev & Hollwedel 2005), *Leydigia* cf. *striata* Birabén 1939 (Kotov *et al.* 2003b; Kotov 2009), *Leydigiopsis curvirostris* Sars, 1901 and *Leydigiopsis megalops* Sars, 1901 (Sinev 2004b).