



The marine and estuarine shrimps of the Palaemoninae (Crustacea: Decapoda: Caridea) from Brazil

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Abstract

This study presents the current taxonomic and distributional information of the marine and estuarine species of Palaemoninae subfamily of the Brazilian coast, totaling 13 species. It is also provided an identification key for the species.

Key words: Caridea Palaemonidae, Palaemoninae, taxonomy, identification key, Brazil

Introduction

The family Palaemonidae Rafinesque, 1815 is one of the most representative and successful of the Infraorder Caridea Dana, 1852, being distributed for all the continents, in tropical and temperate regions, having representatives in marine, brackish and freshwater (Holthuis, 1952; Bauer, 2004). Presently, 60 species occur in Brazil, of which, 40 belong to the subfamily Palaemoninae Rafinesque, 1815 and 20 belong to the subfamily Pontoniinae Kingsley, 1878.

Of the species of subfamily Palaemoninae, 13 are the focus of the present study, for being marine or estuarine. The studied genera are: *Brachycarpus* Bate, 1888; *Leander* Desmarest, 1849; *Macrobrachium* Bate, 1868; *Nematopalaemon* Holthuis, 1950a; *Palaemon* Weber, 1795 and *Palaemonetes* Heller, 1869. The marine species are: *Brachycarpus biunguiculatus* (Lucas, 1849); *B. holthuisi* Fausto-Filho, 1966; *Leander paulensis* Ortmann, 1897; *L. tenuicornis* (Say, 1818); *Nematopalaemon schmitti* (Holthuis, 1950b); *Palaemon northropi* (Rankin, 1898); *P. paivai* Fausto-Filho, 1967 and *P. ritteri* Holmes, 1895. The estuarine ones are: *Macrobrachium acanthurus* (Wiegmann, 1836); *M. carcinus* (Linnaeus, 1758); *M. olfersii* (Wiegmann, 1836), *Palaemon pandaliformis* (Stimpson, 1871) and *Palaemonetes argentinus* Nobili, 1901. The estuarine species generally live in freshwater when adults, but as the larval phase occurs in brackish water, the distribution of the species is restricted to rivers that flow directly to the sea (Mossolin & Bueno, 2002).

This study provides the current taxonomic and distributional information of the marine and estuarine species of the subfamily Palaemoninae of the Brazilian coast; as well as providing an identification key for the species. Such works are important tools for biogeographers, taxonomists and ecologists. Among other aspects, this may provide the basis for quick comparisons of species richness between geographic areas and will provide the baseline for the detection of new species in the future.

Material and methods

We studied the shrimps of the subfamily Palaemoninae inhabiting Brazilian coast, i.e. from the mouth of Oiapoque (4°08'N, 51°40'W) to the Arroio Chuí (33°41'S, 53°27'W). The examined material is deposited in