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## First record of the caridean shrimp genus *Bresilia* Calman, 1896 (Crustacea: Decapoda: Bresiliidae) from the East Pacific and description of a new species

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### Abstract

A new species of *Bresilia* Calman, 1896, representing the first record of this genus for the East Pacific, is described from deep water off the Pacific coast of Mexico. The new species is close to *B. atlantica* Calman, 1896, the type species of the genus with which it shares the general shape of the carapace and rostrum, the latter with a reduced number of small dorsal teeth, and the shape and relative size of the first pereopod. It also shares with *B. atlantica* a similar antennular peduncle and a distally very wide scaphocerite. The first maxilliped has a long crescent-shaped exopod, without a flagellum and a strongly reduced caridean lobe, two characters found in *B. atlantica* and in only one other known species of *Bresilia*, i.e., *B. corsicana* Forest & Cals, 1977. The new species can be distinguished from the other seven species of *Bresilia* by the armature of the rostrum (few, very small spines) and a much wider scaphocerite, with an anterior margin twice as wide as the proximal margin.

**Key words:** Bresiliidae, *Bresilia pacifica* sp. nov., Pacific Mexico

### Introduction

Since the family Bresiliidae Calman, 1896, was treated by Holthuis (1993) in its classical review of genera and families of caridean shrimps, many genera he included in the Bresiliidae have been relocated in other families: the genus *Agostocaris* C.W.J. Hart & Manning, 1986, in the Agostocarididae C.W.J. Hart & Manning, 1986; *Discias* Rathbun, 1902, *Kirnasia* Burukovsky, 1988, *Lucaya* Chace, 1939, and *Tridiscias* Kensley, 1983, in the Disciadidae Rathbun, 1902; *Alvinocaris* Williams & Chace, 1982, *Chorocaris* Martin & Hessler, 1990, and *Rimicaris* Williams & Rona, 1986, in the Alvinocarididae; and *Pseudocheles* Chace & Brown, 1978, in the Pseudochelidae De Grave & Moosa, 2004. The Bresiliidae sensu De Grave & Fransen (2011) is therefore currently reduced to a small group of two genera (*Bresilia* Calman, 1896, and *Encantada* Wicksten, 1989) and nine species. *Encantada spinoculata* Wicksten, 1989, the only species of the genus, is so far known only from off the Galapagos Islands (De Grave & Fransen, 2011). The eight species of *Bresilia* are known from Japan, the Tasman Sea, the Mediterranean, the Red Sea, and the East Atlantic (Calado *et al.* 2004; Bruce 2005; Komai & Yamada 2010, 2011; De Grave & Fransen 2011). Furthermore, due to the relocation of species previously included in the Bresiliidae by De Grave & Fransen (2011), of the three species of "Bresiliidae" reported by Wicksten & Hendrickx (2003) from the eastern tropical Pacific (i.e., *E. spinoculata*, *Discias serrifer* Rathbun, 1902, and *Alvinocaris lusca* Williams & Chace, 1982), only one actually belongs in the family Bresiliidae: *E. spinoculata*.

Except for three species, *Bresilia saldanhai* Calado, Chevaldonné & dos Santos, 2004, *B. gibbosa* Komai & Yamada, 2010, and *B. rufiocus* Komai & Yamada, 2011, collected in shallow-water caves, species of *Bresilia* occur in deep water, between 133 and 1372 m depth (Komai & Yamada 2010, 2011). Species of *Bresilia* are also small, from 6 to 29 mm in the total length (Calado *et al.* 2004; Komai & Yamada 2010, 2011).

During sampling operations in deep water off the west coast of the Baja California Peninsula, Mexico, one specimen of *Bresilia* was collected below the Oxygen Minimum Zone (OMZ) below 1200 m depth. It represents the first record of the genus for the entire East Pacific and the second species of Bresiliidae for this region. It is an undescribed species, which is described and illustrated herein as *B. pacifica* sp. nov. The type material is deposited

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