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Article



A new species of the rare caridean genus *Bresilia* Calman (Crustacea: Decapoda: Bresiliidae) from the Ryukyu Islands, Japan, representing a family new to the North Pacific marine fauna

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Abstract

A new species of the rare caridean genus *Bresilia* Calman, 1896, *B. gibbosa*, is described and illustrated on the basis of one ovigerous female and one male specimens collected from a shallow water marine cave in Okinawa Island, Ryukyu Islands, Japan. The new species is morphologically similar to *B. antipodarum* Bruce, 1990, *B. briankensleyi* Bruce, 2005, *B. plumifera* Bruce, 1990 and *B. saldanhai* Calado, Chevaldonné & dos Santos, 2004 in the strongly produced third abdominal tergite, the presence of a long epistomal process, and the presence of an exopodal flagellum on the first maxilliped, but is easily distinguished from all these allied species by the possession of movable spines in the dorsal rostral series and the angular, instead of spinose, pterygostomial margin of the carapace. This new species is the first representative of Bresiliidae from the North Pacific Ocean.

Key words: Crustacea, Decapoda, Caridea, Bresiliidae, Bresilia, new species, Okinawa, marine cave

Introduction

The genus *Bresilia* Calman, 1896 is one of the most rare taxa in the Caridea. Currently, six species are known from the world (Bruce 2005b; De Grave *et al.* 2009): *B. atlantica* Calman, 1896, known from off Ireland, Northeastern Atlantic, at depths of 1229–1372 m (type species of the genus) (Calman 1896; Kemp 1910; Komai & Segonzac 2003); *B. corsicana* Forest & Cals, 1977 from the western Mediterranean Sea at a depth of 450 m (Forest & Cals 1977); *B. antipodarum* Bruce, 1990 known from off eastern Tasmania and New Caledonia, at depth of 800 m (Bruce 1990a; 2004); *B. plumifera* Bruce, 1990 known only from off western Tasmania, at depth of 133 m (Bruce 1990b); *B. saldanhai* Calado, Chevaldonné and dos Santos, 2004 from a marine cave at a depth of 15 m, on the island of Madeira (Calado *et al.* 2004); and *B. briankensleyi* Bruce, 2005 from the Egyptian Red Sea at depths of 750–753 m (Bruce 2005a). In addition, Bruce (2004; 2005b) reported an undescribed species from shallow water off Zanzibar, noting that the whereabouts of the specimen was unknown. Calado *et al.* (2004) provided a review of the four species known at that time. Bruce (2005a, b) also gave an overview of the genus. In spite of the rather wide geographical distribution, no species of the genus is known from the North Pacific Ocean.

In this study, a new species of *Bresilia*, *B. gibbosa*, representing the first known species of the genus, as well as the family Bresiliidae, from the North Pacific Ocean, is described on the basis of one ovigerous female and one male specimens collected from a shallow water marine cave in Okinawa Island, Ryukyu Islands, Japan. *Bresilia gibbosa* **n. sp.** is morphologically similar to *B. antipodarum*, *B. briankensleyi*, *B. plumifera* and *B. saldanhai*. Characters differentiating these species are discussed. Possible heterogeneity of the genus is also briefly discussed.