



***Bresilia antipodarum* Bruce, 1990 (Crustacea: Decapoda: Bresiliidae), a new record from New Caledonian waters**

Alexander J. BRUCE

Crustacea Section, Queensland Museum, P. O. Box 3300, South Brisbane, Queensland, Australia 4101.
E-mail abruce@broad.net.au

Abstract: Specimens of the bresiliid shrimp, *Bresilia antipodarum* Bruce, 1990 (Crustacea: Decapoda: Bresiliidae), have been collected for the second time only. The new record enables the description of the species to be augmented and indicates a considerable extension of its range, from off Tasmania to New Caledonia.

Résumé: *Bresilia antipodarum* Bruce, 1990 (Crustacea: Decapoda: Bresiliidae), nouveau signalement des eaux de Nouvelle Calédonie. Ce travail est le second signalement de la crevette Bresiliidae *Bresilia antipodarum* Bruce, 1990. Cette nouvelle récolte de deux spécimens permet une description plus précise de l'espèce, et étend considérablement son aire de distribution connue, de la Tasmanie à la Nouvelle Calédonie.

Keywords: *Bresilia antipodarum*, Bresiliidae, Caridea, Second record, Morphology, New Caledonia.

Introduction

The shrimps of the genus *Bresilia* Calman, 1896, are particularly poorly known. Five species have been described in this genus. Three, *B. atlantica* Calman, 1896, *B. corsicana* Forest & Cals, 1977, and *B. saldanhai* Calado, Chevaldonné & dos Santos, 2004, are from the northeast Atlantic and Mediterranean regions, and *B. antipodarum* Bruce, 1990a and *B. plumifera* Bruce, 1990b from Australian waters. Three species are known only from the holotype specimens. In the case of *B. antipodarum* the single specimen was not complete, lacking all ambulatory pereiopods. The discovery of two further specimens,

although also not in good condition, enables the description to be augmented and the geographical distribution extended into tropical regions. The specimens are deposited in the collections of the Muséum National d'Histoire Naturelle, Paris.

A key for the identification of the five species of *Bresilia* is provided by Calado et al. (2004), who place *B. antipodarum* most closely to *B. atlantica*. With the exception of *B. saldanhai*, found in a shallow-water cave, the species of this genus are found in deeper waters, from 133 m (*B. plumifera*), 450 m (*B. corsicana*), 800 m (*B. antipodarum*), to 1372 m (*B. atlantica*).

Reçu le 6 avril 2004 ; accepté après révision le 7 juin 2004.
Received 6 April 2004; accepted in revised form 7 June 2004.

Abbreviations used: CL, post-orbital carapace length, in millimeters. MNHN, Muséum National d'Histoire Naturelle, Paris.

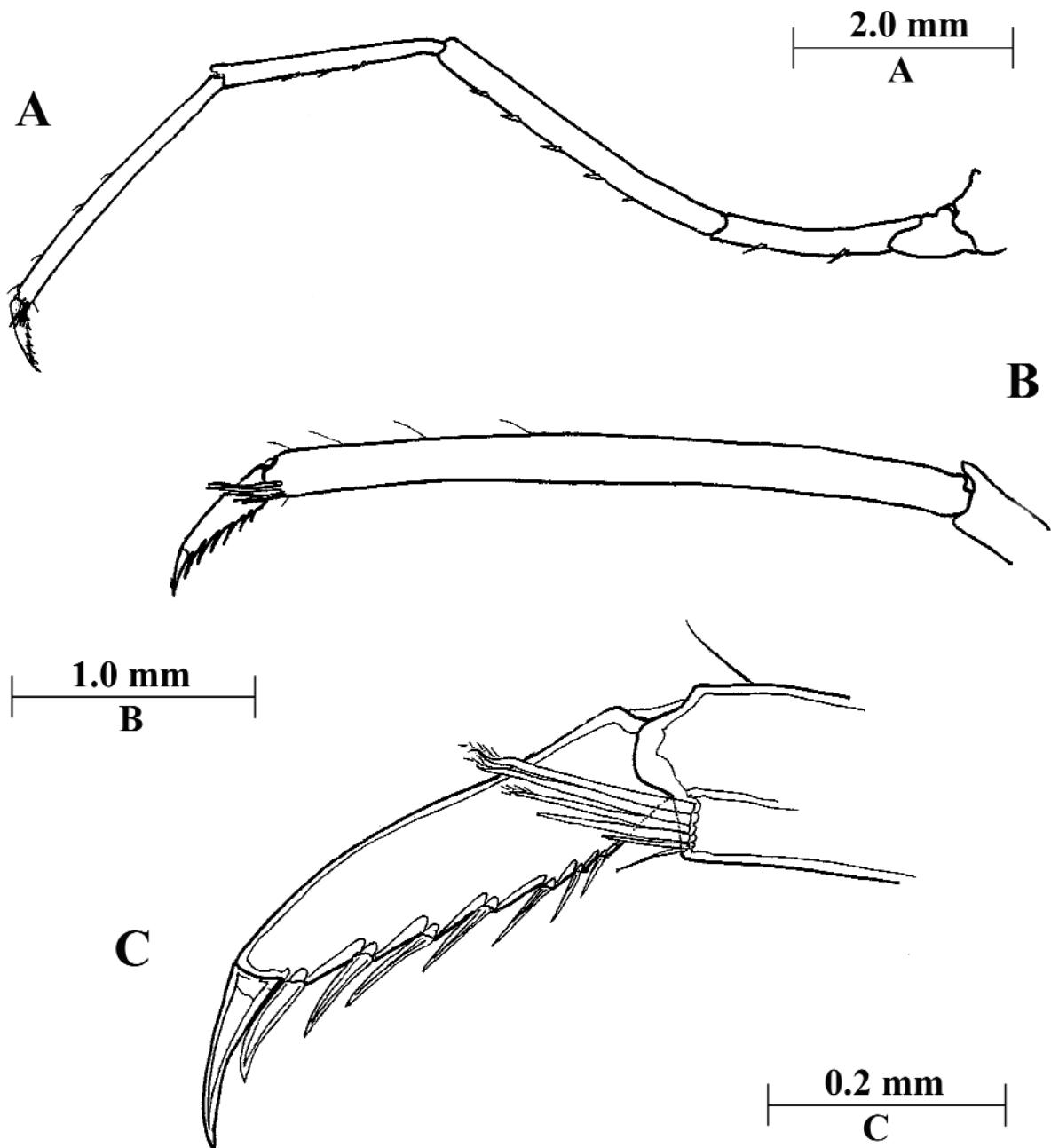


Figure 1. *Bresilia antipodarum* Bruce, 1990. Female, New Caledonia. **A.** Third pereiopod. **B.** Same, propod and dactyl. **C.** Same, dactyl and distal propod.

Figure 1. *Bresilia antipodarum* Bruce, 1990. Femelle, Nouvelle Calédonie. **A.** Troisième péréiopode. **B.** Idem, propodus et dactyle. **C.** idem, dactyle et propodus distal.

Systematics

CRUSTACEA DECAPODA

Superfamily BRESILIOIDEA Calman, 1896

Family Bresiliidae Calman, 1896

Genus *Bresilia* Calman, 1896

Bresilia antipodarum Bruce, 1990

Figure 1

Bresilia antipodarum Bruce, 1990a: 855-862, figs 6-10.

Material

1 G (CL 4.8 mm), 1 E (CL 4.7 mm), BALTHUS 3, N/O Alis, stn. DW776, 24°44.24'S, 170°08.01'E, 770-830 m, 24 November 1993, coll. B. Richer de Forges, MNHN Na.15260.

Diagnosis

Rostral dentition 9/1, third abdominal segment with posteroventral carina strongly compressed, without median epistomal process, first maxilliped exopod with flagellum, first pereiopod with distoventral angle of ischium unarmed, ambulatory dactyls ventrally spinulate, posterior telson margin angular.

Description

As originally described. The female third pereiopod (Fig. 1A) extends to exceed the scaphocerite by about half the propod length. The dactylus (Fig. 1C) is compressed, about 5.0 times longer than its basal depth, with clearly demarcated unguis. Unguis about 3.5 times longer than basal width, curved, about 0.33 of corpus length, unarmed; corpus about 3.0 times longer than basal depth, with 7 distinctly articulated ventral spines, distal spine 0.6 of unguis length, spines decreasing in size proximally, proximal spines with serrulate lateral margins; propod (Fig. 1B) slender, about 0.6 of CL, uniform, about 16.0 times longer than wide, with 3 stout spiniform setae distolaterally, 5 distomedially, distodorsal spine setulose, without ventral spines; carpus about 0.8 of propod length, about 10.0 times longer than wide, with 3 ventrolateral spines on central third; merus about 1.1 times propod length, uniform, about 12 times longer than wide, with 5 ventrolateral spines; ischium about 0.6 of meral length, with 2 ventrolateral spines only; basis and coxa without special features.

Remarks

The specimens agree closely with the description of the unique holotype specimen. The male specimen has both first pereiopods and the left second pereiopod, only the left fourth and fifth pereiopods are complete. The female has the right first pereiopod and both second pereiopods and the

right third and fourth pereiopods complete. The additional information on the ambulatory pereiopods does not enable those of *B. antipodarum* to be compared with those of *B. plumifera* as the details of those appendages are still unknown. The unique holotype specimen of that species lacked all third to fifth pereiopods. The ambulatory dactyl of *B. corsicana* has not been illustrated. The dactylus is described as having five setae along the ventral margin, with the first two distally enlarged (Forest & Cals, 1977). The ambulatory dactyls of *B. atlantica* have similarly not been illustrated in detail. The original description (Calman, 1896) states only that the dactyl is long and slender. From his illustration it is about 0.3 of the propod length and clearly devoid of ventral spines. Calman notes a "brush of stiff setae springing near its base", which appears similar to the conspicuous distomedial and distolateral spiniform setae present in *B. antipodarum*. The additional specimens of *B. atlantica* reported on by Kemp (1910) provided no further information.

The holotype specimen of *B. corsicana* was reported as associated with the coral *Madrepora oculata* L. from 450 m. The capture of a heterosexual pair of *B. antipodarum* may suggest that the latter species also has similar commensal associations.

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