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A new species of *Robertsella* Guinot, 1969 (Crustacea: Brachyura: Panopeidae) from the southwestern Atlantic

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Abstract

A new species of deep-water brachyuran crab, *Robertsella meridionalis*, from Brazil is described and illustrated. The new species can be easily separated from its northwestern Atlantic counterpart, *R. mystica* Guinot, 1969, by a suite of carapace and appendage characters. *Robertsella mystica* is redescribed and illustrated. Putative sound-producing structures in the genus *Robertsella* are first described.

Key words: biodiversity, taxonomy, western Atlantic, Brazil, deep sea, stridulating mechanism

Introduction

Among the material collected during the cruises of the research vessel *Soloncy Moura* off the coast of Santa Catarina, southwestern Brazil, was a specimen of *Robertsella* Guinot, 1969, that resembled *Robertsella mystica* Guinot, 1969, the only known species in the genus (Ng *et al.*, 2008). Comparison of this material with specimens from more northern localities (South Carolina, Gulf of Mexico, Florida, and Dry Tortugas), showed that the southwestern Atlantic specimen actually belong to an undescribed species. That new species is named herein *Robertsella meridionalis* **n. sp.** *Robertsella mystica*, briefly diagnosed by Guinot (1969), is herein redescribed and illustrated based on the holotype.

Abbreviations used include: MZUSP (Museum of Zoology of the University of São Paulo); USNM (National Museum of Natural History, Smithsonian Institution, Washington, D.C.); carapace length (cl), taken from the front to the posterior margin of the carapace; carapace width (cw), taken at the level of the fourth anterolateral tooth of the carapace; P1 cheliped; P2–P5, pereopods 2 to 5; Mxp3, third maxilliped.

Robertsella Guinot, 1969

Robertsella Guinot, 1969: 716 [type species *Robertsella mystica* Guinot, 1969, fixed by original designation and monotypy. Gender feminine].

Robertsella Evenhuis, 1978: 247 [Invalid junior homonym. Type species *Cyrtomorpha paganica* White, 1916. Insecta: Diptera].

Robertsella Chen and Shi, 2003: 135 [Invalid junior homonym. Type species *Rugosochonetes macgregori* Roberts, 1971, fixed by original designation. Brachiopoda].

Robertsella—Pequegnat 1970: 192; Powers 1977: 116; Manning & Blow 1979: 106; Hendrickx 1998: 543; Števcíć 2005: 52; Ng *et al.* 2008: 189; Castro *et al.* 2010: 14.

Included species. *Robertsella meridionalis* **n. sp.** and *Robertsella mystica* Guinot, 1969.

Remarks. Števcíć (2005: 52) erected the monogeneric tribe Robertsellini Števcíć, 2005, within the Pseudorhombilidae Alcock, 1900, to receive the genus *Robertsella* Guinot, 1969, without any explanation. We follow Ng *et al.* (2008: 189) in keeping *Robertsella* within the Panopeidae Ortmann, 1893.

mystica, is one more example. The largely untested assumption of a widely distributed western Atlantic decapod fauna (e.g., Coelho & Ramos, 1972; Melo, 1996; Boschi, 2000) has perhaps been too easily accepted as factual, although to which extent is yet to be investigated.

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