

ZOOTAXA

1095

**Species of the genus *Munidopsis* (Crustacea, Decapoda, Galatheidae)
from the deep Atlantic Ocean,
including cold-seep and hydrothermal vent areas**

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Magnolia Press
Auckland, New Zealand

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(*Zootaxa* 1095)

60 pp.; 30 cm.

13 Dec. 2005

ISBN 1-877407-46-1 (paperback)

ISBN 1-877407-47-X (Online edition)

FIRST PUBLISHED IN 2005 BY

Magnolia Press

P.O. Box 41383

Auckland 1030

New Zealand

e-mail: zootaxa@mapress.com

<http://www.mapress.com/zootaxa/>

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ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

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ENRIQUE MACPHERSON¹ & MICHEL SEGONZAC²

¹ Centro de Estudios Avanzados de Blanes (CSIC), C. acc. Cala San Francesc 14, 17300 Blanes, Spain
(email: macpherson@ceab.csic.es).

² Ifremer, Centre de Brest, DEEP/Laboratoire Environnement Profond, BP 70, 29280 Plouzané, France
(email: segonzac@ifremer.fr).

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Abstract

Twenty-two species of the genus *Munidopsis* from the Atlantic Ocean are studied. Five new species are described (*M. anemia*, *M. exuta*, *M. hirtella*, *M. laurentae* and *M. truculenta*), and diagnoses and illustrations of some relatively rare species (*M. acuminata*, *M. bairdii*, *M. livida*, *M. parfaiti* and *M. thieli*) are provided. None of the species discussed here is restricted to a particular habitat, including species collected from hydrothermal vent (*M. acutispina*, *M. exuta*) and cold seep areas (*M. acutispina*, *M. geyeri*, *M. hirtella*, *M. livida*, *M. marionis*). The new records of some species greatly extend the previously known distribution range of the species (i.e., *M. abyssicola*, *M. aries*, *M. bairdii*, *M. geyeri*, *M. livida*, *M. parfaiti*, *M. thieli*). Finally, some biological and biogeographical data for the different species are discussed.

Key words: Crustacea, Decapoda, Anomura, Galatheidae, *Munidopsis*, new species, hydrothermal vents, cold-seeps, taxonomy

Introduction

The galatheid crabs of the genus *Munidopsis* Whiteaves, 1874, distributed worldwide in all deep-sea habitats, is one of the most diverse genera of the family Galatheidae (Baba 1988, 2005). Species of this genus are commonly found living on the continental slope, usually deeper than 500 m, and on the abyssal plain, > 2000 m (Chace 1942, Miyake & Baba 1970, Pequegnat & Pequegnat 1970, 1971, Baba 2005). They are frequently observed by submersibles during mid-oceanic ridge expeditions and some species have been observed in recently discovered vent and cold-seep communities (Williams 1988, Hashimoto *et al.* 1995, Chevaldonné & Olu 1996). Despite their ecological importance and high diversity, many aspects of their systematics and distribution are still poorly known (Baba 2005).

The genus *Munidopsis* is so far represented in the Atlantic Ocean by more than 70 species, living between 2 m (*M. polymorpha* Koelbel, 1892) and 5330 m (*M. parfaiti* (Filhol, 1885) and *M. thieli* Türkay, 1975). These species have been studied by many authors, either from specimens collected in the eastern Atlantic (e.g., A. Milne-Edwards & Bouvier 1894, 1900, Hansen 1908, Sivertsen & Holthuis 1956, Miyake & Baba 1970, de Saint-Laurent 1985, Tiefenbacher 2001) or the western Atlantic (e.g., A. Milne-Edwards 1880, Chace 1942, Pequegnat & Pequegnat 1970, 1971, Wenner 1982, Gore 1983, Takeda 1983, Pequegnat & Williams 1995, Tavares & Campinho 1998a, b, Navas *et al.* 2003). Sampling effort in the bathyal and abyssal plains (1000 m to 5330 m), where species of *Munidopsis* are more common (Baba 2005), has been very sporadic until recently, limiting our knowledge of the distributional ranges of different species, and few data on their biology have been available (Wenner 1982, Gore 1983, Samuelson 1972, Wilkens *et al.* 1990, Creasey *et al.* 2000).