

## **Article**



## New records and new species of the munidopsine squat lobsters (Decapoda: Anomura: Galatheidae: Munidopsinae) from Australia

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## **Abstract**

Nine species of *Munidopsis* Whiteaves, 1784, and one species of *Galacantha* A. Milne-Edwards, 1880 (Crustacea: Decapoda: Galatheidae) are reported from the continental shelf of Australia. Two species are new to science, *M. comarge* **sp. nov.** and *M. vesper* **sp. nov.** *Munidopsis vesper* is presently known only from Western Australia, but *M. comarge* ranges from Western Australia to New Zealand. Six species are reported for the first time from Australian waters, *G. subspinosa* Macpherson, 2007, *M. andamanica* MacGilchrist, 1905, *M. crenatirostris* Baba, 1988, *M. hirsutissima* Balss, 1913, *M. levis* (Alcock & Anderson, 1894) and *M. nitida* (A. Milne-Edwards, 1880). A range extension within Australia is reported for *M. dasypus* Alcock, 1894 and *M. kensleyi* Ahyong & Poore, 2004. These new records expand the number of *Munidopsis* species previously recorded from Australian waters from 15 to 22 and the number of *Galacantha* species from three to four. A key and illustrated guide to the species now known from Australia is provided.

**Key words:** Crustacea, Decapoda, Anomura, Galatheidae, squat lobster, *Munidopsis*, *Galacantha*, new species, key, Western Australia, Australia, New Zealand, taxonomy

## Introduction

The squat lobster genus *Munidopsis* Whiteaves, 1874, occurs in oceans worldwide at a depth range of 2 m to more than 5000 m. Over 220 species are currently known and new species are being discovered at a rapid rate as more of the world's oceans are explored. An impressive 74 new species have been described in the decade since 2000 (Baba *et al.* 2008). The morphologically similar *Galacantha* A. Milne-Edwards, 1880 was reestablished by Macpherson (2007). Nine species of *Galacantha* are currently known worldwide at a depth range of 277 m to 3800 m. Macpherson (2007) concluded that this genus, previously considered a junior synonym of *Munidopsis*, was valid, exhibiting a combination of characters that are not shared by other species, e.g., the extremely strong laterally compressed mesogastric spine and one moderately large cardiac spine on the carapace, one or two prominent anterolateral spines, distally upturned rostral spine, second through fourth abdominal tergites with anterior ridge each with a prominent median spine, eyes movable and spineless, pereopod 2 always overreaching pereopod 1, and epipods present on pereopods 1–3.

The Australian deep-water squat lobsters of the family Galatheidae are known from several studies, focussed on material mainly from the east coast (Henderson 1885, 1888; Haig 1973; Baba 1986, 1994; Baba & Poore 2002; Ahyong & Poore 2004). The present study reports on species of *Munidopsis* and *Galacantha* collected primarily between 12°S and 35°S from the continental margin of Western Australia, in addition to miscellaneous specimens from eastern Australia and New Zealand. Recent sampling was conducted by CSIRO Marine and Atmospheric Research (CMAR) and Museum Victoria using RV *Southern Surveyor* in 2005 and 2007 (project entitled "Mapping benthic ecosystems on the deep continental shelf and slope in Australia's South West Region"). A report on the decapods from voyage SS10-2005 revealed the decapod crustacean fauna to be highly diverse (Poore *et al.* 2008) and seven species of *Munidopsis* were listed. This