New species and new records of deepwater munidid squat lobsters from north-western Australia: Onconida, Bathymunida, Crosnierita, Plesionida and Torbenella

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Abstract

Seven species of Munididae are reported from the continental margin of north-western Australia. Three species are new to science: Crosnierita adela sp. nov., Onconida ariel sp. nov. and Plesionida aurelia sp. nov., each presently known only from Western Australia. Four species are reported for the first time from Australian waters, Bathymunida balssi Van Dam, 1838, Bathymunida dissimilis Baba & de Saint Laurent, 1996, Crosnierita yante (Macpherson, 1994) and Torbenella orbis (Baba, 2005). Keys to the world species of the genera represented are provided.

Key words: Crustacea, Decapoda, Anomura, Munididae, squat lobster, Onconida, Bathymunida, Crosnierita and Plesionida, new species, key, Western Australia, Australia, taxonomy

Introduction

Recent sampling off Western Australia by RV Southern Surveyor under the joint CSIRO Marine and Atmospheric Research (CMAR) and Museum Victoria programmes, “Mapping benthic ecosystems on the deep continental shelf and slope in Australia’s South West Region” (SS10-2005) and “Exploring and characterising marine ecosystems of the NW Region” (SS05-2007), resulted in important collections of decapod crustaceans, including many squat lobsters (Poore et al. 2008; Taylor et al. 2010; Poore & Andreakis 2011; McCallum & Poore 2013).

The squat lobster family Munididae Ahyong, Baba, Macpherson & Poore, 2010, comprises 20 genera and about 400 species; the largest genus being Munida Leach, 1820 with more than 250 species (Baba et al. 2008). Members share a trifid or trispinous anterior margin of the carapace and usually occur at outer shelf or slope depths. The Munididae can be divided into two groups based on the presence or absence of pleopod 1 in males (Ahyong et al. 2011). The Group 1 munidids have a pleopod 1 in males modified as a gonopod and comprise eight genera including the type genus Munida. The Group 2 munidids all lack the male pleopod 1 and comprise 12 genera related to Agononida Baba & de Saint Laurent, 1996, and Bathymunida Balss, 1914. Of the Group 2 munidids, the species of Agononida were recently studied by Poore & Andreakis (2012). Here we report on the remaining Group 2 species, all taken by SS05-2007, comprising representatives of Bathymunida Balss, 1914, Torbenella Baba, 2008, Crosnierita Macpherson, 1998, Onconida Baba & de Saint Laurent, 1996, and Plesionida Baba & de Saint Laurent, 1996, including new species from the latter three genera.

Material and methods

Morphological terminology generally follows Baba (2005) and Ahyong et al. (2010). Carapace length (cl) is measured along the dorsal midline from the rostral apex to the posterior margin of the carapace. Postorbital carapace length (pcl) is measured dorsally from the posterior margin of the orbit to the posterior margin of the...
extensor marginal spines in addition to the distal spine; the extensor meral margins of pereopods 3 and 4 have only the distal spine. Baba (2005) noted the presence of a decalcified area on the surface of the ischium on pereopods 1–3 of the holotype of *T. orbis*. Similar translucent, decalcified areas are evident in two of the present specimens, indistinct in the other.

**Distribution.** Kei Islands, Norfolk Island and now from Western Australia; 260–456 m.

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**References**


