

A New Species of *Metaprotella* (Crustacea: Amphipoda: Caprellidae) from One Tree Island, Southern Great Barrier Reef, Queensland, Australia

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ABSTRACT. *Metaprotella sandalensis* Mayer, 1898 (Caprellidae: Amphipoda: Crustacea) and related congeners are widely distributed in the Indo-West Pacific. As a first step in elucidating the species diversity of *Metaprotella* from the Great Barrier Reef, a new species, *Metaprotella lowryi* sp. nov. collected from One Tree Island in southern Great Barrier Reef is described and figured. *Metaprotella lowryi* sp. nov. differs from *M. sandalensis* [sensu stricto] by shorter antenna 1 relative to body length and shorter antenna 1 peduncle article 3. The new species of *Metaprotella* is also closely related to *M. solitaria* Takeuchi & Lowry, 2017, reported from the Solitary Islands off the northern coast of New South Wales, but differs by the characters of the head, the propodus of gnathopod 2 and the dorsodistal projections of pereonite 3.

Introduction

The taxonomy of the Caprellidae (Crustacea: Amphipoda) including the genus *Metaprotella* is particularly fluid, with a legacy of “variants” listed in the taxonomic literature until the 1940s (Mayer, 1890, 1903; Schellenberg, 1938; Utinomi, 1947). With increasingly detailed study of caprellid and phtisid morphological microstructures and application of molecular tools, many seemingly widespread species are now understood to represent species complexes (Takeuchi & Lowry, 2007b, 2015[2016], 2019; Cabezas *et al.*, 2013; Takeuchi & Oyamada, 2013; Hughes & Takeuchi, 2016; Takeuchi *et al.*, 2022).

The genus *Metaprotella* Mayer, 1890, currently composed of 13 species, is one of the common caprellid genera in

tropical to subtropical regions of the northern Hemisphere and in tropical to temperate regions of the southern Hemisphere (McCain & Steinberg, 1960; McCain, 1968; Larsen, 1997; Guerra-Garcia, 2002, 2003a, b; Momtazi & Sari, 2013; Takeuchi & Lowry, 2007a, 2019). Of these, *Metaprotella sandalensis* Mayer, 1898 (type locality: Sandal Bay, Lifou Island, New Caledonia) is reportedly widespread in shallow waters of the tropical Indo-west Pacific (Lim & Takeuchi, 2012). *Metaprotella sandalensis* was first reported in Australia by Mayer (1913) from Western Australian and from the Great Barrier Reef by Guerra-Garcia (2006). Both studies relied on the limited original description of the species (Mayer, 1898) and the first review (Mayer, 1903), which documented *M. sandalensis* throughout the Indonesian archipelago owing to the extensive sampling by the *Siboga*

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