

## A new deep-water species of *Myopiarolis* Bruce, 2009 (Crustacea: Isopoda: Serolidae) from New Zealand waters

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### Abstract

*Myopiarolis tona* sp. nov. is described from the Challenger Plateau, southern Lord Howe Rise and the west coast of the North Island, New Zealand at depths of 634–1250 m. *M. tona* sp. nov. can be identified by the prominent posteriorly directed dorsal nodule on fused pereonites 5–7. There are nine species in four genera of the cold-water, epibenthic family Serolidae recorded from New Zealand waters, three species of *Myopiarolis* Bruce, 2009, one undescribed species of *Acutiserolis* Brandt, 1988, four of *Brucerolis* Poore and Storey, 2009 and the monotypic *Spinoserolis* Brandt, 1988.

**Key words:** *Myopiarolis*, taxonomy, new species

### Introduction

The Serolidae are a relatively small and primarily Southern Hemisphere family of 23 genera and 123 species (Schotte *et al.* 2015), nine of which occur in New Zealand. Serolids range in size from a few millimetres to the large sub-Antarctic *Ceratoserolis* Cals, 1977 that reaches to more than 5 cm in length. Two species are subtidal, with most species occurring from the shallow subtidal down to depths of 2000 m. The greatest recorded depth for the family is of *Atlantoserolis vema* (Menzies, 1962) at a depth of 5024 m.

The family has been reviewed extensively by Brandt (1988) and Wägele (1994); references to earlier works can be found in those titles. Phylogeny, biogeography and cryptic speciation of the family has been analysed albeit with relatively small datasets (Held 2000, 2001, 2003; Leese and Held 2008; Leese *et al.* 2008a, 2008b, 2010). The taxonomy of the New Zealand Serolidae has most recently been updated by Bruce (2008), Poore and Storey (2009) and Storey and Poore (2009). Bruce (2009) reviewed the genus *Myopiarolis* for the southwestern Pacific and gave a key to the serolid genera of the tropical and subtropical Indo-Pacific, which can be used to identify the New Zealand genera. At present the New Zealand Serolidae are represented by nine species in four genera, namely *Myopiarolis* Bruce, 2009 (three species), one of *Acutiserolis* Brandt, 1988, four of *Brucerolis* Poore and Storey, 2009 and the monotypic *Spinoserolis* Brandt, 1988. *Myopiarolis* is a widespread genus with greatest diversity in the southwestern Pacific, as previewed by Bruce (2009). The highest species diversity is in New Zealand waters, three described species (*M. bicolor* (Bruce, 2008), *M. carinata* (Bruce, 2008) and *M. tona* sp. nov.) and a further five undescribed species from New Zealand waters have been determined from material held in the NIWA collections.

### Material and methods

The description is based on the male holotype and female allotype. Dissected appendages of male paratype were removed from the left hand side unless the appendage was damaged. Specimens were examined, dissected and