A new deep-sea species of the genus *Urocaridella* (Crustacea: Decapoda: Caridea: Palaemonidea) from Yap Seamount in the Western Pacific

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Abstract

A new species of palaemonid shrimp, *Urocaridella liui* sp. nov., is discovered from deep waters on the Yap Seamount in the Western Pacific. The new species is unique in the genus by having a pronounced triangular protrusion on the third posterior part of the third pleonal tergite and the almost colorless body, as well as for its occurrence in waters deeper than 250 meters. Other distinct characteristics of this species are the arrangement of dorsal rostral teeth; shorter fingers of the first and second pereiopods and shorter dactyli of the posterior pereiopods; the ratio of the carpus/palm length of the first and second pereiopods; the slender, but not filiform third to fifth pereiopods; and rounded postero-ventrally margin of the fifth abdominal somite. A key to the species of *Urocaridella* is provided.

Key words: Crustacea, Decapoda, Palaemonidae, *Urocaridella*, new species, Seamount

Introduction

The status of the palaemonid genus *Urocaridella* Borradaile, 1915 was rather controversial and it was synonymized with *Leander* Desmarest, 1849 (Holthuis 1950, 1955; Chace & Bruce, 1993). The most updated classification of carideans by De Grave and Fransen (2011) recognized this genus and included four species, namely *U. urocaridella* (Holthuis, 1950), *U. antonbruunii* (Bruce, 1967), *U. vestigialis* Chace & Bruce, 1993 and *U. pulchella* Yokes & Galil, 2006. Nevertheless, many recent underwater guide books suggest that there are many more species in this genus (e.g. Debelius 1999; Minemizu 2000, 2013; Kawamoto & Okuno 2009; Humann & De Loach 2010).

Recently the Chinese research vessel “KEXUE” using the remote operated vehicle (ROV) “FAXIAN” to survey the biodiversity of the Yap Seamount in the Western Pacific collected an usual specimen referable to *Urocaridella*. The Yap Seamount specimen came from a depth of 255 m, unusually deep for this genus, and was almost colorless without any particular marking on the body. All known species of *Urocaridella*, including the undescribed forms shown in underwater guide books, occur in shallow subtidal waters and with striking coloration. Careful examination showed that the Yap Seamount specimen exhibit some distinctive characters differentiating it from all known *Urocaridella* species. The present work describes this new species and presents an identification key to all the named species of the genus.

Material and methods

Material for this study was collected from the Yap Seamount Expedition organized by the Institute of Oceanology, Chinese Academy of Sciences in 2014-2015. The holotype is deposited in the Marine Biological Museum of the