© The Authors, 2016. Journal compilation © Australian Museum, Sydney, 2016 *Records of the Australian Museum* (2016) Vol. 68, issue number 5, pp. 231–244. ISSN 0067-1975 (print), ISSN 2201-4349 (online) http://dx.doi.org/10.3853/j.2201-4349.68.2016.1663

## Two New Species of *Quadrisegmentum* (Phtisicidae: Amphipoda: Crustacea) from the Central Indo-Pacific, with Notes on the Type Species *Q. triangulum* Hirayama, 1988

Lauren Elizabeth Hughes<sup>1\*</sup> and Ichiro Takeuchi<sup>2</sup>

<sup>1</sup> Australian Museum Research Institute, Australian Museum, 1 William Street, Sydney New South Wales 2010, Australia

<sup>2</sup> Department of Life Environment Conservation, and Center of Advanced Technology for the Environment, Faculty of Agriculture, Ehime University, 3-5-7 Tarumi, Matsuyama, Ehime 790-8566, Japan

lauren.hughes@austmus.gov.au takeuchi@agr.ehime-u.ac.jp

ABSTRACT. Two new species of *Quadrisegmentum* (Phtisicidae: Amphipoda: Crustacea) are described from the Central Indo-Pacific. The new species *Quadrisegmentum atauro* sp. nov., is described from the Wetar Basin, Timor-Leste in the Lesser Sunda Region of the Western Coral Triangle. The new species name *Q. yirrgay* sp. nov., is established for material from Ashmore Reef in Queensland and Papua New Guinea originally reported under the name *Q. triangulum* Hirayama, 1998 (Guerra-García 2003, 2006; Guerra-García & Lowry 2009). Study of the type material of *Quadrisegmentum triangulum* described from Ashmore Reef in the Timor Sea, Western Australia confirms the absence of projections on pereonite 2, which prompted reassessment of subsequent identifications. Records of *Q. triangulum* are now limited to the type locality only. An updated key to the four known species of *Quadrisegmentum* is provided.

KEYWORDS: Quadrisegmentum; new species; Phtisicidae; Amphipoda; Crustacea; taxonomy

HUGHES, LAUREN ELIZABETH, AND ICHIRO TAKEUCHI. 2016. Two new species of *Quadrisegmentum* (Phtisicidae: Amphipoda: Crustacea) from the Central Indo-Pacific, with notes on the type species *Q. triangulum* Hirayama, 1988. *Records of the Australian Museum* 68(5): 231–244. http://dx.doi.org/10.3853/j.2201-4349.68.2016.1663

Much work remains to be done on the marine amphipod fauna of the Central Indo-Pacific. In the Western Coral Triangle where the species diversity of coral is the highest in the world (Veron *et al.*, 2009), 28 caprellid species from 21 genera have been reported from shallow-waters in the Indonesian Archipelago (Mayer, 1903; McCain & Steinberg, 1970; Krapp-Schickel & Guerra-García, 2005; Scinto *et al.*, 2008). In the Eastern Coral Triangle and Northeast

Australian Shelf (Spalding *et al.*, 2007), three previous studies documented 19 species and 15 genera from these two regions combine (Guerra-García, 2003, 2006; Lowry & Guerra-García, 2009).

The genus *Quadrisegmentum* was established by Hirayama, 1988 to account for one species, *Q. triangulum*, collected from Ashmore Reef in the Timor Sea. Research by Guerra-García (2006) described a second species of