



<http://dx.doi.org/10.11646/zootaxa.3669.4.4>

<http://zoobank.org/urn:lsid:zoobank.org:pub:7B3A771A-6DC5-48C5-867E-03A2B76369B3>

A redescription of a rare axiid shrimp, *Amakusaxius amakusanus* (Miyake & Sakai, 1967) (Crustacea: Decapoda: Axiidea) from new material collected off Taiwan

TOMOYUKI KOMAI¹, TIN-YAM CHAN² & JHY-YUN SHY^{3,4}

¹Natural History Museum and Institute, Chiba, 955-2 Aoba-cho, Chuo-ku, Chiba, 260-8682 Japan. E-mail: komai@chiba-muse.or.jp

²Institute of Marine Biology and Center of Excellence for the Oceans, National Taiwan Ocean University, Keelung 20224, Taiwan, R.O.C. E-mail: tychan@mail.ntou.edu.tw

³Department of Aquaculture, National Penghu University, 300 Liu-Ho Road, Magong City, Penghu 880, Taiwan, R.O.C.

E-mail: jyshy@npu.edu.tw

⁴Corresponding author

Abstract

Miyake & Sakai (1967) described a new species of axiid shrimp, *Calocaris (Calastacus) amakusana*, from a single female specimen lacking a major cheliped. Later, Sakai & de Saint Laurent, 1989 transferred this species to their new genus *Acanthaxius*. However, Sakai (2011) recently established a new monotypic genus *Amakusaxius* to accommodate *Acanthaxius amakusana*. Since the original description no additional specimen of this rare species has been reported and consequently an appraisal of *A. amakusanus* (Miyake & Sakai, 1967) has not been possible. Now six specimens including three males and three ovigerous females have been collected from Taiwan. This has enabled the diagnostic characters of the species to be fully evaluated. The presence of a postcervical median carina on the carapace, weak armature on the major cheliped, and the morphology of the uropod are characters that distinguish *Amakusaxius* from *Acanthaxius*. Consequently the monotypic genus *Amakusaxius* Sakai, 2011 is retained.

Key words: Crustacea, Decapoda, Axiidea, *Amakusaxius*, *Acanthaxius*, *Calocaris (Calastacus) amakusana*, redescription

Introduction

Miyake & Sakai (1967) described a new axiid shrimp species, *Calocaris (Calastacus) amakusana*, on the basis of a single female specimen, lacking a major cheliped, from off Tomioka, Amakusa Islands, Kyushu, Japan. They argued that generic assignment of this species was difficult. In their reappraisal of axiid genera, Sakai & de Saint Laurent (1989) transferred this species to their new genus *Acanthaxius* [type species: *Axiopsis (Axiopsis) pilocheira* Sakai, 1987] together with another six species previously assigned to various genera. Recently, Sakai (2011) established a new monotypic genus *Amakusaxius* to accommodate *Acanthaxius*. Since the original description, no additional specimen of this species has been reported, and consequently, no information on the male morphology, which provides important diagnostic characters at genus level, was available.

During the course of a taxonomic study of Axiidae from Taiwan, six specimens (including three males and three ovigerous females, all from Penghu Islands) were obtained that match the original description of *A. amakusaxius*. Comparison with the female holotype confirmed that the specimens from Taiwan belong to the same species. In this study, *A. amakusanus* is fully redescribed and the diagnostic characters of the genus are evaluated.

Material used in this study is deposited in the Kitakyushu Museum of Natural History and Human History (KMNH), Natural History Museum and Institute, Chiba (CBM), National Museum of Marine Biology and Aquarium, Pingtung, Taiwan (NMMBA) and the National Taiwan Ocean University, Keelung (NTOU). The carapace length (cl) is measured dorsally from the level of the orbital margin to the midpoint of the posterodorsal margin of the carapace.