



## Additions of new species and records to the Tanaidomorpha (Crustacea: Tanaidacea) of Taiwan

YOU-WEI TZENG<sup>1</sup> & PAN-WEN HSUEH<sup>1\*</sup>

<sup>1</sup>Department of Life Sciences, National Chung Hsing University, Taichung, Taiwan 402, R.O.C.

\*Corresponding author. e-mail: [pwhsueh@dragon.nchu.edu.tw](mailto:pwhsueh@dragon.nchu.edu.tw)

### Abstract

This study reports two new species and one new species record of tanaidomorphan tanaidaceans from Taiwan. The leptocheliid *Leptochelia taitungensis* **sp. nov.** can be separated from the most similar species, *Leptochelia tarda*, in the *Leptochelia dubia/savignyi* group by having long distal spines on the maxilliped endites and the male having two-articled uropod exopods. The tanaidid *Zeuxo shitipingensis* **sp. nov.** can be distinguished from *Z. normani* in the *Zeuxo normani* species-complex by having a triangular left mandible *lacinia mobilis*, only one seta on the pleopod endopod inner margin, and the uropod endopod with five to six articles in most adult specimens. Morphological comparisons between *Leptochelia taitungensis* **sp. nov.** and its congeners within the *dubia/savignyi* group, as well as between *Zeuxo shitipingensis* **sp. nov.** and its congeners, are tabulated.

**Key words:** Taiwan, *Leptochelia*, *Zeuxo*

### Introduction

Nine species of tanaidacean crustaceans were collected during ecological surveys of macroinvertebrates on rocky intertidal shores of eastern Taiwan, Table 1. Of these, five have been described as new species, and one was reported as new record for Taiwan (Tzeng & Hsueh 2014a, b). The identities of remaining three species of tanaidomorphan tanaidaceans have recently been revealed, with one belonging to the genus *Leptochelia* Dana, 1849 and the other two species to the genus *Zeuxo* Templeton, 1840.

Males of the *Leptochelia* species of the present study possesses compact and robust chelipeds, which is a common character found in the *dubia/savignyi* group in *Leptochelia* (Edgar 2012; Anderson 2013). One of the two *Zeuxo* species encountered in the present study is identified as *Zeuxo zorro* Bamber & Bird, 1997, the first record for Taiwan. The second *Zeuxo* species has a morphological resemblance to *Zeuxo normani* (Richardson, 1905) from California that resides in the *Zeuxo normani* species complex (Larsen 2014; Larsen *et al.* 2014). The present study describes the two new species and reports one new species record from Taiwan.

### Material and Methods

Sampling for the present study was conducted at rocky intertidal habitats on the eastern coasts of Taiwan during October 2009 to July 2013. Tanaidacean specimens were removed from washings of macroalgae, eunicid polychaete-worm tubes and sand. Specimens were later preserved in 70% alcohol and some were dissected for detailed examination of their morphology. Morphological terminology used in the present study mainly follows Larsen (2003), with exceptions of some setal terms. ‘Plumose setae’ refer to the generally long and flexible setae that have relatively large side setules, whereas ‘broom setae’ are characterised by generally short and fine sensory setae with a few distal side setules. ‘Spines’ refers to stiff and rigid types of setae. All examined specimens are deposited at the National Museum of Natural Science (NMNS), Taichung, Taiwan.