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## Two new species of Tanaidacea (Crustacea, Peracarida) from Taiwan

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### Abstract

Two new species, representing the genus *Aparatanais* of the family Paratanaidae and the genus *Tanais* of the family Tanaidae (both families belonging to the suborder Tanaidomorpha), are described in the present study. The genus *Aparatanais*, the family Paratanaidae and the superfamily Paratanaoidea are recorded for the first time from Taiwan. *Aparatanais lenoprimum* **sp. nov.** departs from its congeners by the lack of subdistal teeth on the superior margin of the right mandible and without serration on left mandible *lacinia mobilis*. *Tanais nuwalianensis* **sp. nov.** is distinguished from its most similar congener, *Tanais tinhauae*, by the presence of a much smaller right mandible *lacinia mobilis*, fewer carpal spines on pereopods 2–6, fewer leaf-like setae on the distal margin of the propodus of Pereopod 6, and fewer inner setae on the pleopod basis. Morphological comparisons between members of the genus *Aparatanais*, as well as the genus *Tanais* are tabulated.

**Key words:** Taiwan, *Aparatanais*, *Tanais*

### Introduction

Tanaidaceans are small crustaceans inhabiting a wide range of habitats, from freshwater, the intertidal zone, deep oceanic trenches, and from polar waters to the tropics. In some environmental conditions (e.g. deep-sea soft bottoms), this group is highly diverse and abundant (Błażewicz-Paszkowycz *et al.* 2012). Although attention to this group has intensified in the last ten years, with over 400 new species described since the year 2000 (Błażewicz-Paszkowycz *et al.* 2012), little information on tanaidaceans is available from Taiwan.

Within the family Paratanaidae Lang, 1949, Bird and Bamber (2013) erected three new genera (*Acallocheirus* Bird & Bamber, 2013, *Aparatanais* Bird & Bamber, 2013, and *Penteparatanais* Bird & Bamber, 2013) and transferred five species from *Paratanais* to the *Aparatanais*. The present study follows the most recent taxonomic scheme of Tanaidacea provided by G. Anderson (2013).

Recently, two species of tanaidaceans were collected from intertidal rocky habitats on the coast of eastern Taiwan. One of them has plumose seta on pleonites 1–4 epimera, four-articled antennules, unfused maxilliped endites broader than the basis, short uropod rami with one-segmented exopods and two-segmented endopods, and a heavy serrate spine on the article 2 of the maxilliped palps (Bird & Bamber 2013), and is classified to the genus *Aparatanais*. The present species departs from its congeners by the lack of subdistal spines on the superior margin of right mandible and without serration on left mandible *lacinia mobilis*. The second species has been assigned to the genus *Tanais* Milne-Edwards, 1828 by 1) the presence of four free pleonites and first three pleonites with paired pleopods, 2) the pleopods basal article having seven to eleven setae on outer margin, 3) the presence of six aesthetascs on terminal article of antennule, 4) the presence of maxilliped coxa and a pair of long setulate setae on maxilliped endites, and 5) the lack of ischium on pereopods, which fit the diagnosis of *Tanais* given by Edgar (2008). This species is distinguished from its most closely resembling congener, *Tanais tinhauae* Bamber & Bird, 1997, by the presence of a much smaller right mandible *lacinia mobilis*, fewer carpal spines on pereopod 2–6, fewer leaf-like setae on the distal margin of the propodus of Pereopod 6, and fewer inner setae on the pleopod basis. Thus, the two new taxa of tanaidaceans are described here.

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