



Family Pseudotanaidae Sieg, 1976*

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Abstract

Two new species from the family Pseudotanaidae were discovered in material collected in the Kurile-Kamchatka Trench and Japan Trench and are described herein. *Cryptocopoides pacificus*, n.sp., of the subfamily Cryptocopinae, is the second species known from the genus heretofore represented only by *C. articus*, a species originating from North Atlantic waters but also reported elsewhere, from which it can be distinguished primarily by differences in body and appendage setation. *Pseudotanais nipponicus*, n.sp. is very similar to the North Atlantic species, *P. longispinus*, but can be distinguished by differences in setation of the mandible pars molaris, setation of the merus and carpus of the first pereopod, and also by having a shorter cephalothorax. A third apparently new species of *Pseudotanais* with forcipate chela was represented by only two specimens and remains undescribed.

Key words: Japan, deep-sea, Tanaidomorpha, *Cryptocopoides*, *Pseudotanais*, Kurile-Kamchatka Trench, Japan Trench.

Introduction

The Family Pseudotanaidae was established by Jurgen Sieg in his dissertation of 1973, although many authors chose to give authority to Sieg (1976) as that was the first time the name appeared in a formal journal.

At present, the systematics of Pseudotanaidae, especially regarding the placement of the subfamily Cryptocopinae, is uncertain partly due to comments by Bird & Holdich (1989) who reported observing some specimens of *Cryptocopoides* cf. *articus* that possessed four pairs of oostegites – a finding that will likely be sufficient to remove the subfamily from Pseudotanaidae. A taxonomic review of the family focusing on specimens collected from the Gulf of Mexico and South Atlantic Bight off the east coast of the U.S. is currently underway by this author.

Both subfamilies, the Cryptocopinae and the Pseudotanainae, were present in the Trench samples, represented by 21 specimens. The taxonomic diversity was low however, with only a single species of Cryptocopinae and two of Pseudotanainae. Herein are described the new species *Cryptocopoides pacificus* found in both the Kurile-Kamchatka Trench and the Japan Trench and *Pseudotanais nipponicus* recorded only from the Kurile-Kamchatka Trench. An additional species of *Pseudotanais* was represented by only two specimens and remains undescribed.

Material and Methods

Specimens were examined and illustrated using a Labrolux compound microscope equipped with drawing tube. Dissections were performed using chemically sharpened tungsten needles with mouthparts and appendages mounted in glycerin jelly. Morphological terminology follows that of Larsen (2003).