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Families Anarthruridae Lang, 1971, Colletteidae Larsen & Wilson, 2002, and Leptognathiidae Sieg, 1976*

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* *In*: Larsen, K. & Shimomura, M. (Eds.) (2007) Tanaidacea (Crustacea: Peracarida) from Japan III. The deep trenches; the Kurile-Kamchatka Trench and Japan Trench. *Zootaxa*, 1599, 1–149.

Abstract

The records of the tanaidomorphan family Anarthruridae, from the trenches and other Japanese waters are limited to three species of Anarthruridae, *Anarthruropsis langi* Kudinova-Pasternak, *A. longa* Kudinova-Pasternak and a new species of *Siphonolabrum* Lang. The abysso-hadal *Siphonolabrum tenebrosus* n.sp. that is described from this trench material is very similar to a shallow-water species, *S. californiensis* Dojiri & Sieg, from the Santa Barbara Channel, California.

The heterogeneous family Colletteidae is represented by only three genera in records of tanaidaceans from Japanese waters, the Kurile-Kamchatka Trench and the Japan Trench, *Collettea*, *Leptognathiopsis* and *Tumidochelia*. New specimens of *Leptognathia langi* have allowed it to be partially redescribed and transferred to *Leptognathiopsis*.
Recent changes in the taxonomy and classification of the Family Leptognathiidae are reflected in a much reduced list of species that are recorded from Japanese waters and the Kurile-Kamchatka/Japan Trench. All three genera, *Biarticulata*, *Forcipatia* and *Leptognathia* are represented, by six species. A new species of *Leptognathia* is described and a partial redescription is given of *Forcipatia rotundicauda* with the collection of new material.

Key words: Tanaidacea, Anarthruridae, *Anarthruropsis*, *Biarticulata*, Colletteidae, *Collettea*, *Forcipatia*, *Leptognathia*, Leptognathiidae, *Siphonolabrum*, Japan, Kurile-Kamchatka Trench, Japan Trench

Introduction

The family Anarthruridae Lang, 1971 is not particularly common in deep-sea benthic samples compared to other tanaidomorphan families such as the Agathotanaidae, Colletteidae, Tanaellidae, or Typhlotanaidae, but can be usually assured of a representation by a species belonging to one of the eight described genera or of some as yet undescribed filiform taxa (Bird 2004; Larsen 2005). As a group, the anarthrurids are immediately recognizable through the structure of their uropods and chelipeds, the former with a fused exopod, and the latter with a direct articulation with the carapace via a 'pseudocoxa' or sclerite. Cheliped shape and setation also tends to be more complex than in the Agathotanaidae that superficially display similar uropod and cheliped characters as probable homoplasies.

Until now, in Japanese waters only *Anarthruropsis longa* Kudinova-Pasternak, 1984 has been recorded from shelf and bathyal depths (200–1300 metres) in the Sea of Japan (Kudinova-Pasternak 1984; Larsen & Shimomura 2007). In addition, a congener, *A. langi* Kudinova-Pasternak, 1976, has been recorded at hadal depths (7795–8015 metres) in the northern part of the Kurile-Kamchatka Trench (Kudinova-Pasternak 1976). A (new) species of *Siphonolabrum* Lang, 1972 has now been recorded from the Kurile-Kamchatka Trench and Japan Trench and is described here.

One of the new families defined by Larsen & Wilson (2002) in their phylogenetic study of the Paratanaidoidea, the Colletteidae is a taxon showing great morphological disparity and heterogeneity, and it is often well represented in deep-sea samples, particularly by the genus *Collettea* Lang, 1973. However, up to and includ-

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