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**A revision of the genus *Paraleptognathia* Kudinova-Pasternak, 1981  
(Crustacea: Tanaidacea) and description of four new species**

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## A revision of the genus *Paraleptognathia* Kudinova-Pasternak, 1981 (Crustacea: Tanaidacea) and description of four new species

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## Abstract

The genus *Paraleptognathia*, a common representative of the deep-sea and polar faunas, has been revised. The genus *Akanthophoreus* Sieg, 1986 has been synonymized with *Paraleptognathia*. A new definition and description of the genus *Paraleptognathia*, redescriptions of nine species [*P. alba* (Hansen, 1913), *P. antarctica* (Vanhöffen, 1914), *P. australis* (Beddard, 1886), *P. brachiata* (Hansen, 1913), *P. gracilis* (Krøyer, 1842), *P. inermis* (Hansen, 1913), *P. longiremis* (Lilljeborg, 1864), *P. multiserrata* (Hansen, 1913), *P. weddellensis* (Sieg, 1986)], and descriptions of four new species (*P. multiserratoides* n. sp., *P. benguela* n. sp., *P. fastuosa* n. sp., *P. tenuichela* n. sp.) are presented. The 16 species of *Paraleptognathia* are discussed.

**Key words:** *Paraleptognathia*, *Akanthophoreus*, *P. multiserratoides* n. sp., *P. benguela* n. sp., *P. fastuosa* n. sp., *P. tenuichela* n. sp., taxonomy, Polar Oceans, deep-sea

## Introduction

The Tanaidacea is a common marine taxon that occurs in all oceans from the upper sub littoral to the abyssal depth (Gutu & Sieg 1999). Members of the *Paraleptognathia* genus are abundant and common in the Polar Regions and at the abyssal depth. Until recently only four species were recognized as belonging to this genus. Some confusion about characters such as the number of articles on the antennule and similarity with other genera made the revision of the genus necessary.

The genus *Paraleptognathia* was created in 1981 by Kudinova-Pasternak to cover an unusual tanaidomorphan female bearing five articles in the antennule, *Paraleptognathia typica*. She considered this character as unique among all known tanaidomorphans. In 1985 Kudinova-Pasternak described one more species *P. bacescui*, which had only four articles on antennule but with the other generic characters. She discusses the possibility that the five articles on antennule of *P. typica* are only a deviation of the normal state of the antennule or that the studied specimen has a congenital malformation. She also considered *P. typica* only a rare species with five articles in the antennule and that this genus is atypical in the Tanaidomorpha where the number of articles on the antennule in females and neuters is very constant, three or four, sometimes five like in *Collettea* (Larsen 2000), in contrast to the Apseudomorpha where it can fluctuate. In 1986, Sieg described one more species from the Antarctic, *P. antarctica*, and discussed the pleopod character of *P. typica* which consisted of a two articulated exopod of pleopod. He believed this to be a misinterpretation by Kudinova-Pasternak (1981) and the normal state is only one segment, as in *P. bacescui* and *P. antarctica*.

Sieg (1991) mentioned that *Akanthophoreus* is a synonym of *Paraleptognathia* but did not explain the arguments, and refers to a work that has been never published. This led to a lot of confusion about this genus, which seems have not constant number of articles in the antennule. Moreover Dojiri & Sieg (1997) described *Paraleptognathia bisetulosa* and