



## Rediscovery of *Bathypsammis* Huys & Gee, 1993 (Copepoda, Harpacticoida, Pseudotachidiidae) with description of a new species from the Antarctic deep sea

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### Abstract

The species diversity of Copepoda Harpacticoida in the deep sea of the Angola Basin (DIVA I expedition with RV *Meteor*) and in the Weddell Sea (ANDEEP II expedition with RV *Polarstern*) have been investigated. From the obtained multicorer samples two female specimens of *Bathypsammis* Huys & Gee, 1993 were collected. The only specimen known before was described as *Psammis longifurca* by Bodin in 1968 from the northern Atlantic. In the present paper a new species *Bathypsammis polaris* sp. n. from the Antarctic Weddell Sea is described. The monophyly of *Bathypsammis* within the Paranannopinae Por, 1986 can be confirmed by several new autapomorphies whereas the relation to other paranannopid taxa must remain open for the moment. The new findings implicate a widespread distribution of *Bathypsammis* from the northern to the southern Atlantic and even to the southern polar regions. Up to now all individuals that have been found occur exclusively at deep-sea sites and in very low abundances.

**Key words:** *Bathypsammis*, new species, systematics, distribution, deep sea, southern Atlantic, Weddell Sea, Copepoda Harpacticoida, deep sea meiofauna

### Introduction

The international deep-sea campaigns DIVA and ANDEEP are integrated into the global deep-sea biodiversity program “Census of the Diversity of Abyssal Marine Life” (CeDAMAr). CeDAMAr aims to produce reliable information on deep-sea diversity and the factors regulating it in the next decades (for more information please visit [www.cedamar.org](http://www.cedamar.org)). Eventually, the stations of the DIVA and ANDEEP expeditions will, for the first time, provide a sampling transect of a complete latitudinal deep-sea gradient from the tropics to the pole in the southern Atlantic. The first DIVA expedition into the Angola basin took place in July 2000. For the first time a comprehensive, replicative sampling design was performed for the meiofauna (compare Rose *et al.* 2005).

Within this framework the species diversity of Copepoda Harpacticoida in the deep sea of the Angola Basin (DIVA I) and in the Weddell Sea (ANDEEP II) have been investigated. Among others, one goal of the whole project is to obtain data on the presence and distribution of harpacticoid higher taxa and species. First results for the DIVA I campaign have been already published (Rose *et al.* 2005).

Within the DIVA and the ANDEEP samples the Pseudotachidiidae Lang, 1936 turned out to be one of the most important taxa of Harpacticoida in terms of species and individual numbers, together with the Ectinosomatidae Sars, 1903, Argestidae Por, 1986 and Ameiridae Monard, 1927. They represent a quite significant taxon within the Harpacticoida, concerning the number of species and subtaxa, as well as a worldwide distribution range. Many species are known from the deep sea. Several monophyletic subgroups have already been identified (compare Willen 1999, 2000, 2005; Hicks 1988). A well represented pseudotachidiid subtaxon in