A new genus of Pseudomesochrinae Willen, 1996 (Copepoda, Harpacticoida, Pseudotachidiidae) from the Guinea Basin*

ELKE WILLEN† & JANINE DITTMAR
AG Zoosystematics and Morphology, Institute for Biology, Faculty 5, University of Oldenburg, D-26111 Oldenburg, Germany
† Corresponding author: ewillen@gmx.de


Abstract

A new species of the new genus Keraia gen. nov. from the Guinea Basin is described in the present paper. The new taxon belongs to the Pseudomesochrinae Willen, 1996, which until now has contained only the genus Pseudomesochra T. Scott, 1902. Both genera are prevalent in the deep sea. Whereas Pseudomesochra reaches quite high individual and species numbers in the investigated samples of the DIVA 1, DIVA 2 and ANDEEP deep-sea expeditions, Keraia is found only occasionally and as single specimens. Keraia is characterised among others by a modified antenna exopodite and the shape of P1. Pseudomesochra on the other hand can still be identified as a monophylum by specialised setation on the P1 endopodite and the lack of the inner setae of the first segment of swimming leg exopodites. Other species of Keraia gen. nov. are K. longiseta (Vasconcelos, George & Santos 2008) and the type species K. tamara (Smirnov, 1946). The available records implicate a widespread occurrence of Keraia gen. nov. from the northern to the southern Atlantic, and even reaching both northern and 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: Keraia, new species, systematics, deep sea, meiofauna

Introduction

The international deep-sea campaigns DIVA 1 and 2 and ANDEEP are integrated into the global deep-sea biodiversity program “Census of the Diversity of Abyssal Marine Life” (CeDAMar). CeDAMar aims in the next few decades to produce reliable information on deep-sea diversity and the factors regulating it (for more information please visit 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 1), Cape Basin (DIVA 2), Guinea Basin (DIVA 2) and in the Weddell Sea (ANDEEP II) has 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. A major harpacticoid family present in the samples are the Pseudotachidiidae Lang, 1936, containing among others the Pseudomesochrinae Willen, 1996.

Until now, the Pseudomesochrinae have only been represented by the single taxon Pseudomesochra T. Scott, 1902. Its species occur mainly in deeper waters and are mostly documented to live in or on muddy