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The Cumacea of the Red Sea and Gulf of Aden, with the description of four new species and one genus

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Abstract

Cumacea from benthos samples of the RV *Meteor* cruise 5/2 (1987) are investigated. Six species were identified. Descriptions of a new genus and species *Paravaunthompsonia meteorae* and three new species *Pseudosympodomma adensis*, *Cyclaspis carinobacata* (Bodotriidae) and *Procampylaspis hildegardae* (Nannastacidae) are given.

Key words: Cumacea, Red Sea, western Indian Ocean, deep sea, taxonomy, new species

Introduction

Numerous cumacean species from most of the known families are found in the western Indian Ocean. Primarily from deep water are the families Lampropidae (11 species), Leuconidae (5 species), Ceratocumatidae (2 species, deep water) and Diastylidae (27 species, with 16 species from deep water). Predominantly from shallow waters are the families Bodotriidae (93 species), Nannastacidae (61 species), Pseudocumatidae (1 species), and Gynodiastylidae (8 species). In total 208 species are described for the western Indian Ocean, including the Red Sea.

In the Arabian region, including the Red Sea, Gulf of Arabia and the Persian Gulf, 51 species have been described up until now, mostly from shallow water: 26 species of the family Bodotriidae (only 2 of them live below shelf depths); 22 species of the family Nannastacidae (2 of them from the deep sea); 2 Diastylidae (1 from the deep sea) and 1 Gynodiastylidae (shallow water). Investigations were made by Calman (1904, 1907, 1911), Bacescu (1992) (catalogue), Bacescu & Muradian (1972, 1975), Mühlenhardt-Siegel (1996, 2000) and Corbera et al. (2005). Most of the material examined so far was captured from the shelf; very few investigations were carried out on the continental slope or the abyssal plains.

The present study is part of the Makrobenthos sub-project, carried out by Dr. M. Türkay and colleagues on board RV *Meteor* February/March 1987. The aim of the project was to compare the benthic mega- and macro-fauna of the deep Red Sea with the fauna of the Gulf of Aden, "Thus allowing for a more precise description of the isolation of the deep Red Sea benthic fauna from that of adjacent oceanic waters" (Nellen et al. 1996).

Preliminary investigations of the cumacean material obtained during RV Meteor 5/2 cruise are published in Mühlenhardt-Siegel (1996) and resulted in three new species: *Iphinoe marisrubri, Makrokylindrus declivifrons* and a new genus and new species *Bathycampylaspis dactyloclavata*.

Material and methods

RV *Meteor* cruise no. 5/2 took place during February and March 1987 under the scientific leadership of Prof. Dr. H. Thiel. The stations with Cumacea are given in Table 1.