

# **Article**



# New species of *Neotanais* Beddard, 1886 (Crustacea, Tanaidacea) from the deep sea of the tropical and southern East Atlantic Ocean

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#### **Abstract**

As part of the sampling efforts during the DIVA-II expedition several Tanaidacea of the genus *Neotanais* were captured in the Guinea and the Cape Basin in the tropical and southern East Atlantic Ocean. Two different species were sampled, *Neotanais rotermundiae* sp. n. from the Guinea and *Neotanais guskei* sp. n. from the Cape Basin. The distribution of both species is limited to these basins. A full description for both species is presented. *Neotanais guskei* sp. n. is the largest *Neotanais* reported for the South Atlantic Ocean.

Key words: Tanaidacea, Neotanais, deep sea, Atlantic Ocean, Guinea Basin, Cape Basin

# Introduction

The biology and relationships of deep-sea taxa are poorly understood. In recent years several expeditions have been made to explore several deep-sea basins. The taxonomic work has produced several new species of Tanaidacea from different oceans. Among the deep-sea Tanaidacea the suborder Neotanaidomorpha Sieg, 1980 is of special interest because it is an exclusively deep-sea taxon. It consists of one family and four genera (Sieg 1980) with about 43 species, the most speciose genus is *Neotanais* Beddard, 1886 with about 38 species (Anderson *et al.* 2008). Many of its species are cryptic and it is assumed that all species of Neotanaidomorpha are free-living surface dwellers (Gardiner 1975). Although the family Neotanaidae Lang, 1956 was revised by Gardiner (1975) and again shortly by Larsen (1999, 2003), there are still many open questions (Larsen & Błaźewicz-Paszkowycz 2003). Since 2000 six new species have been described, one for the South-West Atlantic Ocean, three for the Gulf of Mexico and two for the North Pacific Ocean (Larsen & Błaźewicz-Paszkowycz 2003, Larsen & Hansknecht 2003, Bamber 2007).

The deep-sea Tanaidacea fauna of the tropical and southern East Atlantic Ocean is poorly known. In order to improve our knowledge several research programs have been performed in the framework of the Census of the Marine Life (CoML) since 2000. The CoML field-project CeDAMar (Census of the Diversity of Abyssal Marine Life) undertook different expeditions to explore the deep-sea basins of the Atlantic Ocean. The material used in this study comes from the DIVA-II (DIVersity of the deep Atlantic Ocean) expedition to the southern and tropical East Atlantic Ocean. This paper describes two new species of *Neotanais*.

# Material and methods

The material studied was collected in 2005 during the DIVA-II expedition from the Guinea and the Cape Basin aboard the RV *Meteor*, cruise M63-2. The captures were done using an Agassiz trawl (AGT), a modified epibenthic sledge (EBS) (Brenke 2005), a box corer (BC) and a multicorer (MUC) at depths