



## ***Thylakogaster namibiensis* sp. nov. (Isopoda: Asellota: Janiroidea), a new species of Haplomunnidae from the southeast Atlantic deep sea\***

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### **Abstract**

*Thylakogaster namibiensis* sp. nov., a new deep-sea species belonging to the family Haplomunnidae Wilson, 1976 is described from the southeast Atlantic Ocean. The differences of the new species to the other species of the genus *Thylakogaster* Wilson and Hessler, 1974 are discussed. Main characters distinguishing *T. namibiensis* sp. nov. from its congeners are the presence of cuticular spines on the lateral margins of the pereonites 1–7, the low number of spines on the pleotelson, and the number of five terminal flagellar articles bearing aesthetascs on the antenna 1 of the copulatory male. The new species, *T. namibiensis*, is the first member of this genus found in the southeast Atlantic Ocean and at a depth of 5415 m, it is also the deepest which a member of the genus has ever been found.

**Key words:** Crustacea, Peracarida, *Thylakogaster*, taxonomy, Angola Basin, Me 48-1 / Diva 1, Me 63-2 / Diva 2

### **Introduction**

Over the last few decades the deep sea of the World ocean has generated increased scientific interest, especially with respect to biodiversity studies (Lambshhead *et al.* 2002; Brandt *et al.* 2004). Yet knowledge on macrobenthic life and species composition on oceanic abyssal plains is still relatively insignificant. Considerable taxonomic studies are necessary to complete our knowledge about the deep-sea organisms.

During the expeditions Diva 1 (Meteor 48-1, 2000; Balzer *et al.* 2006) and Diva 2 (Meteor 63-2, 2005; Meteor 63-2, 2005) (Diva: Latitudinal Gradients of Deep-Sea BioDiversity in the Atlantic Ocean) benthos samples were taken from the Cape Basin, Angola abyssal plain and the Guinea Basin in the Atlantic Ocean.

The Diva 1 expedition sampled seven stations in the Angola Basin. More than 1800 Asellota were found. 21 specimens belong to the family Haplomunnidae (Tab. 1). During the Diva 2 expedition, samples were taken at eight stations in the three basins. To date (app. 10% of the material is sorted so far) ~2400 Asellota were found, but only six specimens belong to the family Haplomunnidae (Tab. 1).

The genus *Thylakogaster* Wilson and Hessler, 1974 comprises three described species currently, and is represented from the deep-sea of the Atlantic and Pacific oceans with a maximum depth range from 1135 to 5223 m (Wilson & Hessler 1974). The species *T. lobotourus* Wilson and Hessler, 1974 is known from the Bermuda slope at a depth from 1135 to 2223 m and Mid-Atlantic Ridge, *T. majusculus* Wilson and Hessler, 1974 has been found in the Argentine Basin at from 3305 to 5223 m, and *T. peterpauli* Wilson and Hessler, 1974 is known from the equatorial Atlantic Ocean at depths from 3459 to 3783 m. More *Thylakogaster*