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Redescription of *Haploniscus rostratus* (Menzies, 1962) (Crustacea: Peracarida: Isopoda) with observations on the postmarsupial development, size ranges and distribution

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Abstract

Haploniscus rostratus (Menzies, 1962) is redescribed from material obtained during deep-sea expeditions to the southeast Atlantic basins. The species is immediately recognizable by its rostrum and the unique shape of the posterior body. Specimens of all developmental stages were present in the material and are briefly described. Information on body length and body width is given and an identification key to the ontogenetic stages is provided. Development and distribution of the species are discussed. Populations of *H. rostratus* found north and south of the Walvis Ridge have the same morphology and do not represent cryptic species; therefore it is likely that *H. rostratus* is able to cross the Walvis Ridge, which has been postulated as potential barrier for benthic species by other authors.

Key words: Haploniscidae, Cape Basin, Angola Basin, Guinea Basin, Walvis Ridge

Introduction

Within the asellote isopod family Haploniscidae the genus *Haploniscus* contains by far the largest number of species, forming a repository for species that cannot be allocated to one of the other genera of the family. *Haploniscus rostratus* (Menzies, 1962) was originally described by Menzies (1962) as *Antennuloniscus rostratus*. At the same time Menzies erected the genus *Antennuloniscus* based mainly on the long article 3 of antenna 2 in those species included in the genus by him. Wolff (1962) argued that the considerable overlap in the length-width ratio of this article between species of *Antennuloniscus* and *Haploniscus* did not permit the erection of a new genus. Some years later Menzies & Schultz (1968) revised *Antennuloniscus* and gave a more accurate diagnosis for the genus, including the fused articles 5 and 6 of antenna 2, thus making it necessary to remove *Antennuloniscus rostratus* from the genus and to place it in *Haploniscus* instead.

The type locality of the species lies in the Cape Basin in the deep southeast Atlantic in almost 5000 m depth and until recently (Brandt *et al*. 2005) no other records of the species were known.

In the material of the ANDEEP and DIVA expeditions *Haploniscus rostratus* was one of the most abundant haploniscid species, occurring in samples from the Guinea Basin, Angola Basin and Cape Basin. Angola Basin and Cape Basin are separated by the Walvis Ridge, a submarine ridge, which largely prevents the passage of Circumpolar Deep Water into the Angola Basin. Therefore the North Atlantic Deep Water is covering the seafloor in the Guinea and Cape Basins north of the ridge, while the deepest water mass in the Cape Basin is the Circumpolar Deep Water, which enters the basin from the South, but does not cross the Walvis Ridge in significant amounts (Bickert & Wefer 1996). Therefore it has been postulated that the Walvis ridge might present a barrier to benthic deep-sea species (Brandt *et al.* 2005) and the question arose, whether the populations of *H. rostratus* found north and south of the ridge might present two sibling species. This has been investigated by morphological and morphometric means. All developmental stages were present in the material and are described in the following.

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