



## Three new species of the genus *Oligobregma* (Polychaeta, Scalibregmatidae) from the Scotia and Weddell Seas (Antarctica)

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### Abstract

Three new species of the scalibregmatid genus *Oligobregma* Kudenov & Blake, 1978 are described from Antarctic waters. The species are best distinguished by the number and arrangement of acicular spines in anterior notopodia. While *Oligobregma pseudocollare* **sp. nov.**, bears two rows of spines in the first two notopodia, spines are arranged in single rows in *Oligobregma blakei* **sp. nov.** In *Oligobregma quadrispinosa* **sp. nov.**, the first four chaetigers are armed with acicular spines. The species were collected from depths between 753 and 4069 m in the Scotia and Weddell Seas. A comparison with further species of *Oligobregma* known from Southern Oceans is given.

**Key words:** Antarctica, deep sea, *Oligobregma*, *O. pseudocollare* **sp. nov.**, *O. blakei* **sp. nov.**, *O. quadrispinosa* **sp. nov.**

### Introduction

During the expeditions ANDEEP I/II (January–April, 2002) deep-sea samples were taken from different locations in the Scotia and Weddell Seas and around the South Sandwich Trench in order to gain insight into the biodiversity of the Antarctic deep-sea benthos (Brandt *et al.*, 2004a). The analysis of the species richness of the Antarctic deep sea will contribute to the goal of exploring the biodiversity of the deep oceans worldwide.

One of the dominant taxa in bathyal and abyssal depths are the polychaeta (Grassle & Maciolek, 1992; Hessler & Jumars, 1974; Kröncke, Türkay & Fiege, 2003). In spite of their high occurrence in deep-sea samples worldwide, only a small percentage of them have been described until now. Over 30% of all individuals from boxcore samples collected during ANDEEP I/II and analysed to date are new to science (Hilbig, 2004). A similar percentage of unknown species is expected from epibenthic sledge samples.

The epibenthic sledge was deployed at 21 stations. For this study the polychaete samples of 10 stations were analysed. As a first result the descriptions of three new species of the genus *Oligobregma* Kudenov & Blake, 1978 (Scalibregmatidae) are presented here.

Hartman (1966) published a summary of the “Sedentaria” known until then from Antarctic waters. The Scalibregmatidae were represented by four species, none of them belonging to the genus *Oligobregma*. The genus was described by Kudenov and Blake (1978). It is characterised by the presence of dorsal and ventral cirri in posterior parapodia and acicular spines in anterior notopodia. The body is arenicoliform, branchiae are absent.

Blake (1981) revised the Scalibregmatidae of South America and Antarctica. He discovered 14 species of Scalibregmatidae with an Antarctic or Subantarctic distribution, including three species of *Oligobregma*. Since then, no species have been described from the Antarctic deep sea. The relatively high diversity of the