



## New polychaete species collected during the expeditions ANDEEP I, II, and III to the deep Atlantic sector of the Southern Ocean in the austral summers 2002 and 2005 — Ampharetidae, Opheliidae, and Scalibregmatidae

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### Abstract

Seven new species of polychaetes are presented from the Southern Ocean deep sea. The ampharetid species *Anobothrus pseudoampharete* **sp. nov.** is the third species of its genus reported for the Southern Ocean, the same applies to the scalibregmatid species *Pseudoscalibregma papilia* **sp. nov.** Five new opheliid species are described — two belong to the genus *Ophelina* Örsted, 1843, namely *O. ammotrypanella* **sp. nov.** and *O. robusta* **sp. nov.** The remaining three species, *Ammotrypanella cirrosa* **sp. nov.**, *A. mcintoshi* **sp. nov.**, and *A. princessa* **sp. nov.**, belong to the formerly monospecific genus *Ammotrypanella* McIntosh, 1879. Based on these new findings the genus is revised, its type species *A. arctica* McIntosh, 1879 is redescribed.

**Key words:** Antarctica, deep sea, *Anobothrus pseudoampharete* **sp. nov.**, *Ammotrypanella*, *Ammotrypanella cirrosa* **sp. nov.**, *Ammotrypanella mcintoshi* **sp. nov.**, *Ammotrypanella princessa* **sp. nov.**, *Ophelina ammotrypanella* **sp. nov.**, *Ophelina robusta* **sp. nov.**, *Pseudoscalibregma papilia* **sp. nov.**

### Introduction

In course of the expeditions ANDEEP I, II, and III in 2002 and 2005 the deep benthos of the Atlantic sector of the Southern Ocean was sampled. As part of the “Census of the Diversity of the Abyssal Marine Life” (CeDAMar, subproject of the “Census of Marine Life”), the ANDEEP projects were designed to conduct a thorough survey of the deep-sea benthos in the Weddell Sea and adjacent basins addressing questions concerning benthic biodiversity and ecology in these basins, the degree of isolation of the Southern Ocean deep sea, and the origin of the recent fauna (Fütterer *et al.* 2003; Brandt *et al.* 2004).

As part of the ANDEEP projects a total of 155 polychaete species originating from 29 epibenthic sledge samples have been identified to date. These make up approximately two third of the total species number expected. Sixty-six species of Ampharetidae, Opheliidae, and Scalibregmatidae could be distinguished, proving these families to be among the most species rich polychaete families in the Southern Ocean deep sea. About 50 % of the species found are presumably new to science.

In this study the descriptions of seven new species of these families are presented. All species are considerably abundant in the samples analyzed and specimens were of good condition. In addition to species descriptions the opheliid genus *Ammotrypanella* McIntosh, 1879 is revised. The genus *Ammotrypanella* has until now been considered to be monospecific. Records of the type species *A. arctica* McIntosh, 1879 are questionable; some records might belong to species of *Ophelina* Örsted, 1843 (*e.g.*, Fauvel 1914; Levenstein 1978). The finding of further specimens of *A. arctica* in the samples and the discovery of three new species of