



<http://dx.doi.org/10.11646/zootaxa.3692.1.12>

<http://zoobank.org/urn:lsid:zoobank.org:pub:22608F94-E70F-4148-A1DF-13D48A6F913C>

## A new species of *Acanthaspidia* Stebbing, 1898 (Isopoda, Asellota, Acanthaspidiidae) from the bathyal Weddell Sea (Southern Ocean)

MARLENE TIMM<sup>1</sup>, STEFANIE KAISER<sup>1,2,3,4</sup> & ANGELIKA BRANDT<sup>1</sup>

<sup>1</sup>Biozentrum Grindel & Zoological Museum, Martin-Luther-King-Platz 3, 20146 Hamburg, Germany

<sup>2</sup>Senckenberg am Meer, Deutsches Zentrum für Marine Biodiversitätsforschung (DZMB), c/o Biozentrum Grindel & Zoological Museum, Hamburg, Germany

<sup>3</sup>Current address: National Oceanography Centre, University of Southampton, Waterfront Campus, European Way, Southampton SO14 3ZH, UK

<sup>4</sup>Corresponding author. E-mail: [stefk@noc.ac.uk](mailto:stefk@noc.ac.uk)

### Abstract

A new acanthaspidiid species, *Acanthaspidia matsi* sp. nov., is described from the Powell Basin slope (Weddell Sea, Southern Ocean). Specimens of the new species were collected during the expedition ANDEEP III on board RV Polarstern in March 2005. The new species most closely resembles *Acanthaspidia typhlops* (G. O. Sars, 1879), *Acanthaspidia natalensis* (Kensley, 1977) and *Acanthaspidia bifurcatoides* Kussakin & Vasina, 1982, but can be distinguished from all these species by the following characters: rostrum strongly trifid (tips 0.4 times rostrum length); pereonites 1, 3–4 and 6 with 2 mid-dorsal spines; pleotelson spinulated, with 2 robust mid-dorsal spines. Systematic difficulties to distinguish the genera *Acanthaspidia* Stebbing, 1898 and *Ianthopsis* Beddard, 1886 are discussed and a key to all species in the genus *Acanthaspidia* is provided.

**Key words:** *Acanthaspidia matsi* sp. nov., Antarctic, deep sea, taxonomy, Crustacea, *Ianthopsis*

### Introduction

The deep sea (here referred to as areas below the shelf break) entirely surrounds Antarctica, and such depths constitute the majority of the Southern Ocean (Clarke & Johnston 2003). Yet, despite its vastness and central position in the global climate system, little effort has been made to sample the Southern Ocean deep sea. Most of our knowledge of Southern Ocean biodiversity refers to shelf data, whilst data on deep-sea faunas are scarce. Results of the ANDEEP (*ANTarctic benthic DEEP-sea biodiversity: colonization history and recent community patterns*) project revealed that the deep benthic realm seems to harbor a great biodiversity (Brandt *et al.* 2007). During the three ANDEEP expeditions in 2002 and 2005, more than 600 isopod species were collected. Identification to morpho-species level revealed that most of these species were new to science, but mainly belonged to already known genera or families (Brandt *et al.* 2007).

The family Acanthaspidiidae, established by Menzies (1962), to date consists of three genera, i.e. *Acanthaspidia* Stebbing, 1898, *Ianthopsis* Beddard, 1886 and *Mexicope* Just, 2001. Until now 37 species have been described in the family Acanthaspidiidae, of which 25 species occur in the southern hemisphere (south of 30°S; Brandt 1991; Just 2001; Bruce 2004, incl. this study). *Mexicope* is the only shallow-water taxon (80 m and above, Bruce 2004), while most species of *Ianthopsis* occur in the top 500 m (Just 2001). In *Acanthaspidia* most species have been recorded from mid-shelf and upper-slope depth; only a few *Acanthaspidia* species were collected deeper than 5,000 m (such as *Acanthaspidia iolanthoidea* Kussakin & Vasina, 1982, *Acanthaspidia curtispinosa* Kussakin & Vasina, 1982 and *Acanthaspidia namibia* Brandt, 2001).

During the ANDEEP III expedition specimens of a new species of the genus *Acanthaspidia* were collected from the Weddell Sea continental slope. The current study provides a description of this species, as well as a key to all species in the genus *Acanthaspidia*. Moreover, systematic difficulties to separate genera within Acanthaspidiidae (*Ianthopsis* and *Acanthaspidia* in particular) are discussed.