



## Southern Ocean Macrostylidae reviewed with a key to the species and new descriptions from Maud Rise

TORBEN RIEHL<sup>1, 2, 3, ‡</sup> & ANGELIKA BRANDT<sup>1, †</sup>

<sup>1</sup>Universität Hamburg, Biozentrum Grindel & Zoologisches 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

<sup>3</sup>Corresponding author. E-mail: [t.riehl@gmx.de](mailto:t.riehl@gmx.de)

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### Abstract

The nine currently known Southern Ocean species of the asellote isopod family Macrostylidae Hansen, 1916 are reviewed. Modified diagnoses are provided. Two new species, *Macrostylis matildae* n. sp. and *M. scotti* n. sp. are formally described. *M. setulosa* Mezhov, 1992, and *M. vinogradovae* Mezhov, 1992 are redescribed. An identification key to all species is presented. Due to substantial damage and loss of type material, *M. obscura* (Brandt, 1992) and *M. sarsi* Brandt, 1992 are henceforward considered *nomina dubia*. DNA sequences were yielded for molecular characterization of both new species. A phylogenetic analysis shows, although from the same locality, both species are relatively distantly related. Huge divergence is discovered within Macrostylidae which casts doubt on the monotypy of the family.

**Key words:** Janiroidea, benthos, deep sea, bathyal, abyssal, Antarctica, new species, ANDEEP-SYSTCO, Maud Rise, Southern Ocean, seamount

### Introduction

Presently, nine species of the deep-sea isopod family Macrostylidae Hansen, 1916 are formally described from the