



## Mysids (Crustacea: Peracarida) from the southern Indian Ocean with descriptions of two new species

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### Abstract

Three species of mysids belonging to two genera from the southern Indian Ocean (Lat. 31–55°S and Long. 45°E) are reported, of these two species - *Siriella brevispina* and *Euchaetomera spinosa* - are recorded as new to science. *Siriella brevispina* shares characters associated with the Brevicaudata- and Thompsonii-groups and is distinguished from related species by the presence of a short telson, the anterior margin of the carapace with a triangular rostral plate, the labrum with a long process on the anterior margin, and the inner margin of the uropodal endopod showing an alternating arrangement of long and short spines. *Euchaetomera spinosa* is distinguished from the morphologically similar species *Euchaetomera zurstrasseni* by the absence of an ocular papilla, presence of a distal suture in the antennal scale, and the arrangement of spines on the telson.

**Key words:** Mysids, *Siriella*, *Euchaetomera*, morphology, systematics, southern Indian Ocean

### Introduction

For the Southern Ocean, several general studies on mysid fauna are available (Ledoyer 1989, 1990a, 1990b; Wittmann 1996; Petryashev 2007) as well as information on ecology, distribution, and depth ranges of various species (Brandt *et al.* 1998; Siegel & Harm 1996; Siegel & Siegel 1988; Ward 1984, 1985). Sixty species of mysids are reported from the Southern Ocean (San Vicente 2007), 37 known from the Antarctic region, of which 19 species are endemic (Brandt *et al.* 1998). In connection with a survey, in 2004, on the fauna of the southern Indian Ocean, three species of mysids were collected. These species, two new to science, are described in this paper. Type specimens are stored in the reference collections of the Indian Ocean Biological Centre (IOBC), Regional Centre, National Institute of Oceanography, Kochi, India.

### Material and methods

The material examined was collected as part of a pilot expedition, conducted by NCAOR (National Centre for Antarctic Ocean Research) to estimate the primary and secondary productivity in relation to environmental parameters. Zooplankton samples were taken from 13 stations in the southern Indian Ocean during austral summer (1 January–25 February 2004) between 31–55°S and 45°E (Fig. 1). Samples were collected from five different depth strata (surface to top of thermocline, top of thermocline to bottom of thermocline, bottom of thermocline to 300 m, 300–500 m and 500–1000 m) using a Multiple Plankton Net (MPN) (Hydrobios - mesh size 0.2 mm and mouth area 0.25 m<sup>2</sup>) and surface samples using a Bongo Net (BN) (Hydrobios - mesh size 0.3 mm; filtering cone length 250 cm; ring diameter 60 cm). Plankton samples were preserved in a 5% formaldehyde solution.

In the laboratory, mysids were sorted from the zooplankton samples and classified according to the degree of development of secondary sexual characteristics (Biju & Panampunnayil 2009). Total length of the