Epimeriidae (Crustacea, Amphipoda) from New Zealand with a description of a new species

ANNE-NINA LÖRZ

E-mail: a.loerz@niwa.co.nz

Abstract

Epimeria horsti sp. nov., collected from New Zealand seamounts at 970–1156 m depth, is described in detail. This increases the number of known species of New Zealand Epimeriidae to four. Additionally Epimeria bruuni Barnard, 1961, previously known only from the Kermadec Trench at 2470 m depth, is redescribed using new material collected from Young Nicks Seamount, Hikurangi Plateau. A key is provided for all New Zealand epimeriids. Epimeria horsti can be distinguished from similar species by the unique combination of the following characters: eyes present; dorsal carinae starting on pereon 6; epimera 1–2 posterolateral corner rounded; epimeron 3 posterolateral corner produced.

Key words: New Zealand, seamounts, deep sea, taxonomy, new species, Epimeria, Epimeriidae, Amphipoda, Crustacea

Introduction

Recent New Zealand research voyages collected epimeriid Amphipoda. Examination of material collected on two seamounts to the east of New Zealand revealed at least one species new to science, which is described herein. Further samples, from the Kermadec Trench in over 2000 m depth revealed an adult specimen of Epimeria bruuni Barnard, 1961. The holotype of E. bruuni Barnard, 1961, from the Kermadec Trench is a juvenile and the only specimen known so far. A redescription of E. bruuni is given and the distinction between juvenile and adult specimens is discussed. Four species of Epimeriidae are now known from New Zealand.

Material and methods

Amphipods were collected during Tangaroa voyages to the Graveyard seamount complex on the Chatham Rise east of New Zealand and the Kermadec Trench north of New Zealand. Specimens were sorted on deck, often photographed live onboard, initially preserved in 98% ethanol and later transferred to 70% ethanol. Specimens were examined and dissected using a Leica MZ9.5 stereomicroscope and drawn using a camera lucida attachment. Small appendages (mouthparts, uropods, telson) were temporarily mounted in lactic acid, examined and drawn using a Nikon compound microscope fitted with a camera lucida. The body lengths of specimens examined were measured by tracing individual’s mid-trunk lengths (tip of the rostrum to end of telson) using a camera lucida. All illustrations were inked electronically using a Wacom Intuous3 Graphics Tablet and Adobe Illustrator CS2. Within the description, abbreviations are used for slender setae (SS) and robust setae (RS).