

## Amphipoda from the South Pacific: Tonga

A.A. MYERS

Department of Zoology, University College,  
Cork, Ireland

**ABSTRACT.** Thirty-two species of gammaridean Amphipoda are recorded from Tongatapu, Tonga. Five species are new to the Vanuatu-Tonga island arc, and these are figured, along with four other species. Seventy-two percent of the species collected are also known from Fiji. Two species are endemic to Tonga.

MYERS, A.A., 1986. Amphipoda from the South Pacific: Tonga. Records of the Australian Museum 38(5): 271-289.

Only four species of gammaridean amphipod appear to have been recorded from the Tonga island archipelago prior to the present work. All were collected by the U.S. Exploring expedition of 1838-42 and reported on by Dana (1853). Of these, one species, *Orchestia spinipalma* Dana (= *Talorchestia*) has since been recorded from the Bismark Archipelago, the Philippines, Australia and New Zealand, but the other three species (*Allorchestes gracilis* Dana, *Amphithoe tongensis* Dana and *Gammarus albidus* Dana) have not been recorded again either in Tonga or elsewhere, and even their identity remains equivocal.

The present work reports on a collection of gammaridean amphipods made by the writer on the island of Tongatapu, Tonga in 1979. Eleven families and thirty-two species are represented in the collection. Two species, *Lembos saloteae* Myers, described previously (Myers 1985a) from the same collection and *Parawaldeckia mua* Myers, are endemic. Seventy-two percent of the gammarideans represented in the collection are also known from Fiji. This might be anticipated, since the two archipelagos form part of the Vanuatu-Tonga island arc which originated at the mid Eocene/late Eocene boundary (c. 40 my BP).

Figures are given of the five species not previously recorded from the Vanuatu-Tonga island arc. Species described and figured from Fiji (Myers 1985c) are merely recorded (Table 1), except where significant variation is exhibited.

Specimens are housed in the author's personal collection and in the Australian Museum.

Of the 32 species in the Tongan material only *Amphilochus menehune* Barnard, *Gitanopsis tai* Myers, *Lembos saloteae* Myers and *Globosolembos excavatus* Myers have not been deposited in the Australian Museum.

### Abbreviations Used in Figures

A1	Antenna 1
C1-2	Coxae 1-2
Epl-3	Epimera 1-3
G1-2	Gnathopods 1-2
Hd	Head
Md	Mandible Palp
P3-7	Pereopods 3-7
P7D	Dactylus of pereopod 7
Pl 1-4	Pleonites 1-4
Pr 6-7	Pereonites 6-7
T	Telson
Ul-3	Uropods 1-3.

### FAMILY LEUCOTHOIDAE

#### *Leucothoe hyhelia* Barnard

Fig. 1

*Leucothoe hyhelia* Barnard, 1965: 489, fig. 5.—Barnard, 1970: 205, fig. 135.—? Ledoyer, 1978: 298.—? Ledoyer, 1979a: 102, fig. 63.

**Remarks.** Some doubt exists concerning the material attributed to this species by Ledoyer (1979a) from Madagascar. In that material, the palm of the hyperadult male gnathopod 2 propodus is distinctly toothed, the telson is distally simple and the peduncular articles of antenna 2 are elongate and slender. None of these character states were observed by Barnard (1965, 1970) nor were they exhibited by Tongan material. Material ascribed to *L. hyhelia* by Ledoyer (1978) from Mauritius was not figured, and in the light of the above comments must also remain unconfirmed.