MYSIDELLA AUSTRALIANA SP. NOV. FROM BASS STRAIT, AUSTRALIA  
(CRUSTACEA: MYSIDAE: MYSIDELLINAE)

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Abstract


Introduction

A study of mysid fauna from Bass Strait, southern Australia has revealed a new species belonging to the genus Mysidella. The species M. australiana sp. nov., described here, represents the first record of the genus from Australian waters and from the Southern Hemisphere. Diagnostic details of the subfamily Mysidellinae and the genus Mysidella are given here since they are not readily available.

Mysidellinae

Diagnosis. (Based on definitions given in Tattersall and Tattersall, 1951 and Ii, 1964). Labrum posteriorly produced into a large plate divided by deep incision forming 2 unequal lobes. Mandibles with cutting lobe expanded greatly with straight edge and without teeth. Maxillule with lobes bending strongly inward; outer lobe large with numerous spines; inner lobe small bearing plumose setae. Sixth segment of first thoracic endopod expanded and armed with spines. Carpo-propodus of thoracic legs 3–8 divided by 1–2 transverse articulations. Pleopods of both sexes rudimentary. Exopod of uropod entire; outer margin with setae and no spines. Telson with distal cleft. Female with 3 pairs of brood lamellae.

Remarks. This subfamily is established by Norman 1892, is unusual within the Order Mysidacea since it consists of only the genus Mysidella G.O. Sars. This subfamily is easily recognised by the distinctive form of the labrum.

Mysidella G.O. Sars

Mysidella G.O. Sars, 1872: 266. Type species Mysidella typica G.O. Sars, 1872 by original designation.
Figures 1–6. *Mysidella australiana* sp. nov.: fig. 1, anterior of male; fig. 2, antennal scale; fig. 3, labrum; fig. 4, mandible; fig. 5, maxilla; fig. 6, maxillule.
A NEW MYSID FROM BASS STRAIT

Tangaroa, 14 Nov 1981 (stn BSS-S 165), NMV J11047 (3 females, 1 male).

Other material. Type locality, NMV J17261 (4). Central Bass Strait, 100 km SSE of Cape Liptrap, Victoria (39°45.9'S, 145°33.3'E), 74 m, muddy fine sand, R. Wilson on RV Tangaroa, 13 Nov 1981 (stn BSS 156), NMV J11243 (6); Western Bass Strait, 30 km ESE of Cape Otway, Victoria (38°56.4'S, 143°51.0'E), 79 m, fine sand, Smith-McIntyre grab or WHOI sled, R. Wilson on RV Tangaroa, 19 Nov 1981 (stn BSS-Q 654), NMV J5402 (3). Plus other material from BSS stations 118 and 184.

Figures 7-10. Mysidella australiana sp. nov.: fig. 7, first thoracic endopod; fig. 8, terminal segment of first thoracic endopod; fig. 9, sixth thoracic leg; fig. 10, dactylus of sixth thoracic leg.
Description. Description of male holotype with female characters given (where appropriate) from paratype material. General body form compact and robust. Eyes spherical, extending to end of second segment of antennular peduncle, cornea occupies approximately half stalk in dorsal view; pigment red in alcohol (Fig. 1). Carapace with acute apex extending over eyestalk slightly; anterolateral edges rounded; posterior edge dorsally emarginate exposing last thoracic segment. Antennular peduncle of male with setose lobe small and nodular; peduncle of both sexes of similar size. Antennal scale lanceolate in shape, extending beyond antennular peduncle; with distal articulation, setose medial and lateral borders (Fig. 2). Labrum large, obtusely rounded in front; posteriorly produced into 2 unequal lobes (Fig. 3). Mandible with cutting lobe expanded and flattened without teeth; mandibular palp small (Fig. 4). Maxillule with lobes inwardly curved; outer lobe large bearing 13–15 spines; inner lobe with 4–5 plumose setae

Figures 11–14. Mysidella australiana sp. nov.: fig. 11, genital appendage; fig. 12, telson; fig. 13, cleft of telson; fig. 14, endopod of uropod.
The telson of *M. australiana* sp. nov. is distinctive with a hiatus separating the numerous closely spaced spines on the distal half from the widely spaced spines on the proximal half. All other species have spines occupying the distal half of the telson only. Also, the telson of *M. australiana* sp. nov. has a very shallow apical cleft occupying approximately 1/24 of the length of the telson. The cleft is deeper in all other species (occupying between 1/5–1/12 of the telson length) except *M. typhlops*, where the cleft is also shallow occupying 1/19 of the telson. *M. typhlops* is, however, distinctive since it is the only species in the genus with rudimentary eyes.

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References


