The family Aristiidae (Crustacea: Amphipoda: Lysianassoidea) in Australian waters

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Abstract

The lysianassoid amphipod family Aristiidae is reported from Australian waters for the first time. Two new genera and seven new species are described: Aristias eden sp. nov.; A. gomoni sp. nov.; A. nowra sp. nov.; A. otway sp. nov.; A. poorei sp. nov.; Memana sarda gen. nov., sp. nov.; and Pratinas ludmilla gen. nov., sp. nov.

Key words: Crustacea, Amphipoda, Aristiidae, Australia, new genus, new species, taxonomy, Aristias, Memana, Pratinas

Introduction

The lysianassoid amphipod family Aristiidae is a world-wide group of about 30 species not previously reported from Australian waters. The geographically closest records are those of Aristias tropicus Schellenberg, 1938 from Papua New Guinea, A. thio Lowry & Stoddart, 1994 and A. uokonia Lowry & Stoddart, 1994 both from New Caledonia and an unnamed species of Aristias from New Zealand (Rainer 1981). In this paper we describe seven new species in the genera Aristias Boeck, 1871, Memana gen. nov. and Pratinas gen. nov. All but one of the new taxa come from south-eastern Australia.

Aristiids are often reported as associates of other marine invertebrates such as anemones, ascidians, brachiopods and sponges (see Lowry & Stoddart 1997: 13 and references cited therein). The material studied in the present report was collected mainly by epibenthic sleds, trawls and a box corer and evidence of associations was usually lost in the collecting process. However A. gomoni sp. nov. was considered by the collector to be associated with anemones. Aristias eden sp. nov. has been collected in a sample with many sponges. Pratinas ludmilla sp. nov. was considered by the original collector to be possibly associated with the encrusting ascidian Didemnum psammatode. It has also been found in association with individually-collected gorgonaceans, Echinogorgia spp. and Rumphella aggregata.

Material and methods

The descriptions were generated from a DELTA database (Dallwitz 2005) to the aristiid species of the world. Material is lodged in the Australian Museum, Sydney (AM); Museum Victoria, Melbourne (MV) and Museum and Art Gallery of the Northern Territory, Darwin (NTMAG). The maxilla 1 setal-tooth arrangements follow the standard arrangement set out in Lowry & Stoddart (1995: fig. 25) and used subsequently by Lowry & Stoddart (1997). The bold parts of the descriptions are diagnostic characters which distinguish each taxon in at least two respects from every other taxon. Standard abbreviations on the plates are: A, antenna; C, coxa; E, epistome; EP, epimeron; G, gnathopod; H, head; MD, mandible; MP, maxilliped; MX, maxilla; P, pereopod; T, telson; U, uropod.