



## Ampithoidae\*

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### Abstract

Five genera and 19 species of ampithoid amphipods are reported from the Great Barrier Reef, Queensland, Australia. Seven species are new to science. The majority of species occur in the genus *Cymadusa*.

**Key words:** Crustacea, Amphipoda, Ampithoidae, Great Barrier Reef, Australia, taxonomy, new species, *Ampithoe cookana*, *Ampithoe katae*, *Ampithoe kava*, *Ampithoe meganae*, *Ampithoe waialua*, *Cymadusa alyxis*, *Cymadusa cavimana*, *Cymadusa heronensis*, *Cymadusa hoeyae*, *Cymadusa khbarnardi*, *Cymadusa mariabyrneae*, *Cymadusa imbroglio*, *Cymadusa smilodonta*, *Cymadusa tattersalli*, *Cymadusa thagaay*, *Cymadusa wistari*, *Paragrubia edgari*, *Plumithoe quadrimana*, *Sunamphitoe fantome*

### Introduction

Ampithoids are shallow-water tropical to temperate herbivorous amphipods found around the world. Previous to this study 42 ampithoid species were known from Australia (Just 2002 (1); Lowry & Stoddart 2003 (12); Peart 2004 (1); Peart 2006 (3); Peart 2007a, b (25)). We report 19 species in five genera from the Great Barrier Reef and increase the Australian ampithoid fauna to 49 species. About 75% of the 19 Great Barrier Reef ampithoid species, including seven new species described here, have been reported in the last four years (Peart 2004, 2007a, b). Such a high species richness of ampithoid amphipods in a tropical reef system has not been reported from any other reef system (J.L. Barnard 1965 (Micronesia, 5 species), 1970 (Hawaii, 10 species); Ledoyer 1983 (Madagascar, 11 species), 1984 (New Caledonia, 11 species); Myers 1985 (Fiji, 11 species); Appadoo & Myers 2004 (Mauritius, 12 species).

### Material and methods

The descriptions were generated from a DELTA database (Dallwitz 2005) to the ampithoid genera and species of the world. All material is lodged in the Australian Museum, Sydney (AM). A set of colour plates, a list of standard abbreviations and detailed station data is available in Lowry & Myers (2009). A CD (*Benthic Amphipoda (Crustacea: Peracarida) of the Great Barrier Reef: Interactive Keys*) is available with the book or the keys can be accessed at the crustacea.net website.

This paper includes seven new species, two of these species are attributed to Peart from work in an unpublished MSc thesis, and five are attributed to Hughes & Lowry. In this paper terminology defining the palm angle follows Poore & Lowry (1997).