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**A review of the Australian species of *Ampithoe* Leach, 1814  
(Crustacea: Amphipoda: Ampithoidae)  
with descriptions of seventeen new species**

RACHAEL A. PEART



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## A review of the Australian species of *Ampithoe* Leach, 1814 (Crustacea: Amphipoda: Ampithoidae) with descriptions of seventeen new species

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## Abstract

*Ampithoe* is the largest and the most complex of the ampithoid amphipod genera. The species of this genus have been recorded globally. This study reviews the Australian species of *Ampithoe*, increasing the known Australian fauna from three to 20 species, and provides a key and diagnoses to Australian species. The 17 new species are *Ampithoe boiana* sp. nov., *A. cookana* sp. nov., *A. eremitis* sp. nov., *A. geographe* sp. nov., *A. hiana* sp. nov., *A. hyalos* sp. nov., *A. katae* sp. nov., *A. meganae* sp. nov., *A. merimbula* sp. nov., *A. ningaloo* sp. nov., *A. parakava* sp. nov., *A. peronana* sp. nov., *A. pseudongana* sp. nov., *A. roly* sp. nov., *A. rosema* sp. nov., *A. rotunda* sp. nov. and *A. ulladulla* sp. nov.

**Keywords:** Ampithoidae, Australia, Amphipoda, taxonomy, new species, *Ampithoe*

## Introduction

*Ampithoe* Leach, 1814 is the most speciose of the ampithoid genera. The majority of the 60 known ampithoid species are placed in *Ampithoe* (see Poore & Lowry 1997). Species of *Ampithoe* live on a variety of substrates, ranging from sediments to red, green and brown algae, seagrasses and corals at depths seldom exceeding 20 metres.

Being the oldest ampithoid genus, *Ampithoe* has received and retained the majority of ampithoid species apart from those subsequently removed to other genera in later revisions. Therefore, the current composition of *Ampithoe* is, in many respects, the result of taxonomic contingency. The morphological diversity in *Ampithoe* suggests that it might not be monophyletic and requires revision.

Adding to the morphological diversity and phylogenetic ambiguity of *Ampithoe* is the presence of a group of species within the genus that are distinguished from most other congeners by having enlarged hooks on the telson, strongly prehensile pereopods 5–7 with large striated robust setae on the distal margin of the propodi, and an atypical lower lip. The status of this species group has been ambiguous. Many workers recognized it as a separate genus, *Pleonexes* Bate, 1856 (see Bate 1856, 1857, 1858; Sars 1895; Chevreux 1901; Stebbing 1906; Chevreux & Fage 1925; Gurjanova 1951; J.L. Barnard 1969a; Krapp-Schickel 1969, 1978; Kensley 1971). Conlan (1982) treated *Pleonexes* as a subgenus of *Ampithoe*, whereas Poore & Lowry (1997) treated it as a junior synonym of *Ampithoe*, with its constituents as an informal species group. For the present study, the taxonomy of Poore & Lowry (1997) is followed, pending phylogenetic analysis of the family.

To date, seven species attributed to *Ampithoe* have been reported from Australia, of which only three remain in the genus: *A. kava* Myers, 1985, *A. caddi* Poore & Lowry, 1997, and *A. ngana* Poore & Lowry, 1997 (see Poore & Lowry 1997). The other four species, *Ampithoe setosa* Haswell, 1879 (eastern Australia), *A. australiensis* Bate, 1862 (South Australia), *A. flindersi* Stebbing, 1888 (Flinders Passage, Gulf of Carpentaria), and *A. cinerea* Haswell, 1879 (Port Jackson), do not belong to *Ampithoe* sensu stricto. *Ampithoe setosa* Haswell, 1879, is now recognised as a species of *Cymadusa* Savigny, 1816 (Peart 2004) and a senior synonym of *A. flindersi* (Peart in press). Poore & Lowry (1997) indicated that type material of *A. australiensis* is lost and the figures and description are inadequate for identification except to show that the species is not an *Ampithoe* (uropod 1 peduncle is shown to possess a distoventral spur). *Ampithoe cinerea* also lacks type material and is unidentifiable at generic level based on the type description and figures (Poore & Lowry 1997).

Sixty-two *Ampithoe* species and subspecies are known worldwide. This study increases the number of species known from Australian waters to 20 and the number known worldwide to 79.

## Materials and methods

Descriptions in this study were generated from a DELTA (Dallwitz *et al.* 1993, 1998) database to the world species of Ampithoidae. Terminology for setae and spines follows Watling (1989). Measurements of speci-