



<http://dx.doi.org/10.11646/zootaxa.3918.4.5>

<http://zoobank.org/urn:lsid:zoobank.org:pub:9AB24F71-9CA0-47C1-8401-2149D3456740>

## Three new species of *Exampithoe* from Australia and New Zealand (Ampithoidae: Amphipoda: Crustacea)

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### Abstract

Three new species of *Exampithoe* are described from Australia and New Zealand. Material described here corroborates the peculiar mandibular palp variability, with either a two- or three- articulate palp reported for species within the genus *Exampithoe* compared to the absence of the mandibular palp in *Melanesius*. The Exampithoinae remain a Southern Hemisphere subfamily with nine described species.

**Key words:** *Exampithoe*, taxonomy, new species, Ampithoidae, Australia, New Zealand

### Introduction

As part of a broader study on herbivory in marine invertebrate ecosystems, several ampithoid amphipods were recognised as new to science. The new species, *Exampithoe burrowwo* **sp. nov.**, *E. taylori* **sp. nov.** and *E. waratah* **sp. nov.**, are described here. The subfamily Exampithoinae Myers & Lowry, 2003 is unusual in the presence or absence of the mandibular palp. In the three new species, a range of mandibular palp development is observed, from a well-developed, 3-articulate palp with many apical setae and short article 1 (*E. waratah* **sp. nov.**); well-developed, 3-articulate palp with few setae and long article 1 (*E. taylori* **sp. nov.**) and reduced, 2-articulate palp (*E. burrowwo* **sp. nov.**). Exampithoines appear to feed exclusively on brown algae (Phaeophyceae). To date there are nine described species of Exampithoinae including the new species described here, with the subfamily only known in the Southern Hemisphere from southern Africa, Australia, New Zealand, and New Caledonia. A key to Exampithoinae species is provided.

### Materials and methods

Material examined is deposited in the Australian Museum, Sydney (AM) and the New Zealand Institute for Water and Atmospheric Research (NIWA). Material was dissected in 80% ethanol. Permanent slides were made using Aquatex mounting agent. Illustrations were made using a Leitz Laborlux K and Wilde Heerbrugg stereomicroscopes fitted with camera lucida. Abbreviations for parts are as follows: A—antenna; F—accessory flagellum; G—gnathopod; LL—lower lip; Md—mandible; Mx—maxilla; P—pereopod; p—palp; T—telson; U—uropod and UL—upper lip. Descriptions were generated from an Open DELTA database of the Ampithoidae, containing all Indo-Pacific species of Exampithoinae.

### Systematics

#### Sendicaudata Lowry & Myers, 2013

## Acknowledgements

We thank Alistair G.B. Poore for making the collection available for study. Sadie Mills (NIWA), Helen Stoddart (AM) and Stephen Keable (AM) assisted with curation of material. Comments from two anonymous reviewers were greatly appreciated.

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