

New Australian Species of Ampeliscidae (Crustacea: Amphipoda) from the Great Barrier Reef and Eastern Australia with a Key to Australian Species

GARY C. B. POORE¹  AND JAMES K. LOWRY^{2†} 

¹ Museums Victoria, GPO Box 666, Melbourne VIC 3001, Australia

² Australian Museum Research Institute,
Australian Museum, 1 William Street, Sydney NSW 2010, Australia (deceased 4 November 2021)

ABSTRACT. Six new species of Ampeliscidae are described: *Ampelisca capella* sp. nov., *Ampelisca mingela* sp. nov., *Byblis pialba* sp. nov. and *Byblis wadara* sp. nov. from the Great Barrier Reef; *Ampelisca katoomba* sp. nov. from the New South Wales shelf; and *Byblis liena* sp. nov. from the Queensland slope. *Byblisoides esferis* J. L. Barnard, 1961 is recorded from southeastern Australia, the first record of the genus in Australia. These bring the number of eastern Australian species to twenty-six. Distributions of three other species are extended northwards into Queensland. A key to all eastern Australian species is provided.

Introduction

Ampeliscid amphipods occur worldwide on soft sedimentary environments from intertidal to abyssal depths and can be abundant. Forty years ago, Jim Lowry and I agreed to collaborate on papers on the taxonomy of Amphipoda. We chose as a starting point, Ampeliscidae, for the simple reasons that the family was first in an alphabetical list of families, that we were both aware of several undescribed species found in benthic surveys in Victoria and New South Wales, and that Jerry Barnard who was active in Australia then, had no immediate interest in the family. We published one paper on 12 species of *Ampelisca* Krøyer, 1842, five species of *Byblis* Boeck, 1871 and one of *Haploops* Liljeborg, 1856, all from southeastern Australia but did not complete descriptions of others that we recognized and named at the time (Lowry & Poore, 1985). Jim and I also collaborated on the first ingolfiellid amphipods from Australia (Lowry & Poore, 1989). Here, we complete the figures of six new species that we recognized in the 1980s, mostly from tropical Australia,

and extend the geographical range of others. The opportunity is taken to record *Byblisoides esferis* J. L. Barnard, 1961 from deep water in southeastern Australia. Australian ampeliscid species now number 26 but the fauna of Western Australia has not been studied.

I am pleased to complete our study of ampeliscid amphipods and to dedicate this contribution to the memory of Jim Lowry.

Materials and methods

The collections of new species come from sediment samples taken at One Tree Island, Clack Island, Lizard Island and Heron Island, Great Barrier Reef islands in Queensland, and from benthic surveys off New South Wales and Queensland made by the Australian Museum in the late 1970s from FRV *Kapala*. Collections of already described species derive from a series of grab samples taken along the Qld coast from the Queensland Department of Primary Industries' FRV *Gwendoline May* in February and March 1998 by GCBP

Keywords: Crustacea, Amphipoda, Ampeliscidae, *Ampelisca*, *Byblis*, *Byblisoides*, taxonomy, new species

ZooBank registration: [urn:lsid:zoobank.org:pub:8580D095-3E88-4FB5-B2D6-5DA6755BB16A](https://zoobank.org/pub:8580D095-3E88-4FB5-B2D6-5DA6755BB16A)

ORCID iD: Gary C. B. Poore <https://orcid.org/0000-0002-7414-183X>, James K. Lowry <https://orcid.org/0000-0003-0437-6753>

Corresponding author: Gary C. B. Poore gpoore@museum.vic.gov.au

Submitted: 2 March 2022 **Accepted:** 19 June 2022 **Published:** 6 December 2023 (in print and online simultaneously)

Publisher: The Australian Museum, Sydney, Australia (a statutory authority of, and principally funded by, the NSW State Government)

Citation: Poore, Gary C. B., and James K. Lowry. 2023. New Australian species of Ampeliscidae (Crustacea: Amphipoda) from the Great Barrier Reef and eastern Australia with a key to Australian species. In *Festschrift in Honour of James K. Lowry*, ed. P. B. Berents, S. T. Ahyong, A. A. Myers, and L. Fanini. *Records of the Australian Museum* 75(4): 519–533.

<https://doi.org/10.3853/j.2201-4349.75.2023.1890>

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