



<http://dx.doi.org/10.11646/zootaxa.3827.2.2>

<http://zoobank.org/urn:lsid:zoobank.org:pub:D9AEB652-345E-4BB2-8CBD-A3FB4F92C733>

Six species of *Calyptotheca* (Bryozoa, Cheilostomata, Lanceoporidae) from the Gulf of Carpentaria and northern Australia, with description of a new species

ROBYN L. CUMMING¹ & KEVIN J. TILBROOK²

Museum of Tropical Queensland, 70–102 Flinders Street, Townsville, Queensland, 4810, Australia

¹Corresponding author. E-mail: robyn.cumming@qm.qld.gov.au

²Current address: Research Associate, Oxford University Museum of Natural History, Parks Road, Oxford, OX1 3PW, UK

Abstract

A new diagnosis is presented for *Calyptotheca* Harmer, 1957 and six species are described from the Gulf of Carpentaria: *C. wasinensis* (Waters, 1913) (type species), *C. australis* (Haswell, 1880), *C. conica* Cook, 1965 (with a redescription of the holotype), *C. tenuata* Harmer, 1957, *C. triquetra* (Harmer, 1957) and *C. lardil* n. sp. These are the first records of Bryozoa from the Gulf of Carpentaria, and the first Australian records for *C. wasinensis*, *C. tenuata* and *C. triquetra*. The limit of distribution of three species is extended east to the Gulf of Carpentaria, from Kenya for *C. wasinensis*, from China for *C. tenuata*, and from northwestern Australia for *C. conica*. The number of tropical *Calyptotheca* species in Australian territorial waters is increased from seven to eleven.

Key words: Timor Sea, Arafura Sea, Beagle Gulf, tropical Australia, Indo-Pacific

Introduction

Knowledge of tropical Australian Bryozoa is mostly restricted to the Great Barrier Reef (GBR) and Torres Strait. The early collections of the expeditions of *HMS Rattlesnake* (1846–50) and *HMS Challenger* (1873–76) were from Torres Strait, described by Busk (1852a, b, 1884, 1886). Haswell (1880) described 59 species from Holbourne Island, central GBR. The anthropologist A.C. Haddon donated to the British and Cambridge Museums his 1888–1889 collection from Torres Strait and these were described by Kirkpatrick (1890) and included in the four volumes of the *Siboga* Expedition to the Malay Archipelago (1899–1900) by Harmer (1915, 1926, 1934, 1957). Marcus (1921) described and illustrated several species (none new) from Cape Jaubert, collected during Eric Mjöberg's 1910–1913 Swedish Scientific Expeditions to Australia. Ryland & Hayward (1992) and Hayward & Ryland (1995) described 124 species from Heron Island, GBR, and more recent authors included GBR and sometimes other tropical Australian species in studies of various taxa (Gordon & Arnold 1998; Hayward 1988a, 1999, 2000, 2004; Hayward & Parker 1994; Tilbrook 1998, 1999, 2001, 2011, 2012a, b; Tilbrook & Cook 2005; Tilbrook & Vieira 2012).

Tropical Australia west of Torres Strait includes the entire northern and northwestern coast of Australia, from Cape York Peninsula in Queensland to North West Cape in Western Australia, more than a quarter of Australia's coastline. Subsequent to the historical expeditions, only five publications describing new species of bryozoans have featured or included this region (Cook 1965; Hayward & Parker 1994; Metcalfe *et al.* 2007; Gordon 2009; Reverter-Gil *et al.* 2011). Together, these records account for less than 1% of the 1062 species recorded for the Australian region by Butler *et al.* (2010). Gordon (2009) provided the only checklist for the region, with 84 species from the vicinity of Darwin, and noted that most of these also occurred in Indonesia and had been described in the *Siboga* reports (Harmer 1915, 1926, 1934, 1957). The present paper provides the first study of Bryozoa from the Gulf of Carpentaria and is based on the Gulf of Carpentaria Collection (collected 2003 and 2005) held at Museum of Tropical Queensland, Townsville.

Acknowledgements

We gratefully acknowledge Australian Biological Resources Study for support and the CReefs Australia Project for cofunding to RLC (grant # RF210–11), and CReefs, BHP Billiton and the Queensland Museum Foundation for support to KJT. The CReefs Australia Project was generously sponsored by BHP Billiton in partnership with The Great Barrier Reef Foundation, the Australian Institute of Marine Science and the Alfred P. Sloan Foundation. The Museum of Tropical Queensland kindly provided laboratory facilities and access to the Gulf of Carpentaria bryozoan collection. We thank Gavin Dally (Museum and Art Gallery of the Northern Territory) and Stephen Keable (Australian Museum) for loans of specimens, and Mary Spencer-Jones (NHMUK) for SEM images. Andrei Ostrovsky, Julia Cáceres-Chamizom and Dennis Gordon kindly shared SEM images. Professor Paul Memmot (University of Queensland) provided advice on the usage of aboriginal names. Oscar Reverter-Gil and an anonymous reviewer provided comments that greatly improved the manuscript. We particularly thank Niel Bruce (MTQ) for inspired mentorship and support.

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