

A new species of *Amphimedon* (Porifera, Demospongiae, Haplosclerida, Niphatidae) from the Capricorn-Bunker Group of Islands, Great Barrier Reef, Australia: target species for the ‘sponge genome project’

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Abstract

A new niphatid demosponge, *Amphimedon queenslandica* **sp.nov.**, is described from Heron and One Tree Islands, southern Great Barrier Reef, Queensland, Australia. The new species is of particular significance as it is currently the subject of the first sponge genome project. The species is characterized within the globally distributed genus *Amphimedon* by its distinctive blue-green colour, and the combination of encrusting-lobate growth form, spongin-rich spiculofibres and feeble spicule size. The new species is compared and contrasted with known or suspected *Amphimedon* species of Australia and adjacent territories of Papua New Guinea, New Caledonia and Indonesia.

Key words: Porifera, Demospongiae, Haplosclerida, Niphatidae, *Amphimedon*, new species, Heron Island, One Tree Island, Capricorn-Bunker Group, Great Barrier Reef, Queensland, Australia

Introduction

The genus *Amphimedon* is a moderately abundant group of demosponges with approximately 50 valid species described so far in the literature (Desqueyroux-Faúndez & Valentine, 2002; Helmy & Van Soest, 2005; see also the World List of Extant Porifera (<http://www.vliz.be/vmdcdata/porifera/>)), although undoubtedly many more awaiting discovery and description (e.g. QM collections, 35 undescribed species). Species are predominantly shallow-water, known from most seas from the Caribbean, South Atlantic, Indo-west Pacific to Antarctica. Within the Australian, Papua New Guinea, New