



# Article

urn:lsid:zoobank.org:pub:F8A88226-453E-48D5-8724-04E448944AD9

## ***Scrupocellaria* (Bryozoa: Cheilostomata) from the Queensland coast, with the description of three new species**

KEVIN J. TILBROOK<sup>1</sup> & LEANDRO M. VIEIRA<sup>2</sup>

<sup>1</sup>Museum of Tropical Queensland, 70–102 Flinders Street, Townsville, QLD 4810, Australia. E-mail: kevin.tilbrook@qm.qld.gov.au

<sup>2</sup>Departamento de Zoologia, Instituto de Biociências and Centro de Biologia Marinha, Universidade de São Paulo, São Sebastião, SP, Brazil

### Abstract

Among the *Scrupocellaria* species previously reported from Queensland, three are here redescribed — *S. cervicornis*, *S. curvata* and *S. diadema*; two other species, *S. frondis* and *S. sinuosa*, are recorded from the area for the first time; three new species, *S. hamata* n. sp., *S. prolata* n. sp. and *S. peltata* n. sp., are also described, and the remainder are discussed. The need for the re-examination of specimens assigned to this genus is highlighted. The geographic range of some *Scrupocellaria* species is far more limited than once thought.

**Key words:** biodiversity, Queensland, Australia, Great Barrier Reef, Bryozoa, *Scrupocellaria*, new species

### Introduction

This paper records eight species of *Scrupocellaria* van Beneden, 1845 from the coast of Queensland discovered during the investigation of material in the Museum of Tropical Queensland, collected by the Seabed Biodiversity Project (SBD: 2003–2005) (see Pitcher *et al.* 2007), the Census of Coral Reefs (CReefs: 2008–2010) and the first author. Five of the *Scrupocellaria* species are known (*S. cervicornis* Busk, 1852a, *S. curvata* Harmer, 1926, *S. diadema* Busk, 1852a, *S. frondis* Kirkpatrick, 1890 and *S. sinuosa* Canu & Bassler, 1927) but three are described here as new (*S. prolata* n. sp., *S. peltata* n. sp. and *S. hamata* n. sp.). Based on published literature, seven *Scrupocellaria* species had been reported from the Great Barrier Reef: *S. delilii* (Audouin, 1826), *S. diadema* Busk, 1852a, *S. ferox* Busk, 1852a, *S. obtecta* Haswell, 1880, *S. spatulata* (d'Orbigny, 1851), *S. curvata* Harmer, 1926, and *S. maderensis* Busk, 1860 (Gordon & Bock, in litt.), however the exact identity of some of the material upon which the names were based should be questioned in light of an extended research study that is being carried out on *Scrupocellaria* from many parts of the world, in particular examining intra-specific variation (Vieira & Tilbrook, unpubl. data).

### Systematics

The taxonomy follows that of Tilbrook (2006). The studied material comprises specimens from the collections of the Museum of Tropical Queensland, Townsville (MTQ), the Département Milieux et Peuplements Aquatiques of the Muséum National d'Histoire Naturelle, Paris (MNHN), the Department of Zoology, Natural History Museum, London (NHMUK), and the Department of Paleobiology, National Museum of Natural History (NMNH), Smithsonian Institution. Measurements of specimens (n=15) were made from digital SEM images using the analyzing software ImageJ®.