



New and little-known cheilostomatous Bryozoa from the south and southeastern Brazilian continental shelf and slope

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Abstract

The present paper reports on 22 species collected by the Brazilian Program of Living Resources in the Exclusive Economic Zone (REVIZEE). A new genus and species of Cribrilinidae, *Corbuliporina crepida* n. gen. et sp., is described, along with seventeen other new species: *Chaperia brasiliensis* n. sp., *Amastigia aviculifera* n. sp., *Isosecuriflustra pinniformis* n. sp., *Cellaria subtropicalis* n. sp., *Melicerita brasiliensis* n. sp., *Arachnopusia haywardi* n. sp., *Smittina migottoi* n. sp., *Hippomenella amaralae* n. sp., *Rogicka joannae* n. sp., *Malakosaria atlantica* n. sp., *Turbicellepora winstonae* n. sp., *Rhynchozoon coalitum* n. sp., *Stephanollona angusta* n. sp., *Stephanollona arborescens* n. sp., *Aulopocella americana* n. sp., *Conescharellina cookae* n. sp. and *Conescharellina bocki* n. sp. *Chorizopora brongniartii* (Audouin, 1826) is recorded for the first time in Brazilian waters and a new combination for *Rhynchozoon arborescens* Canu & Bassler, 1928 is established. New illustrations and taxonomic remarks are included for two little-known species from Brazil, *Rogicka scopae* (Canu & Bassler, 1928) and *Fenestrulina ampla* Canu & Bassler, 1928. A compilation of species recorded from deeper waters of the Brazilian coast is included.

Key words: Bryozoa, Brazil, Cheilostomata, continental shelf, new genus, new species, new combination, taxonomic revision

Introduction

Taxonomic studies on deep-water bryozoans in the Western Atlantic are scarce. The first naturalist to undertake deep-sea dredging in the Atlantic was the naturalist Louis François Pourtalès, during the United States Coast Survey in 1867–1869. Some bryozoan species resulting from this expedition were published by Pourtalès (1867) and Smitt (1872, 1873) and later revised by Winston (2005). Recently, Winston and Woollacott (2009) described some new taxa from deep water off Barbados, which represented a small part of a hitherto unidentified bryozoan collection dredged in the Atlantic by the ‘Hassler’ Expedition (1871–1872). Further sampling conducted during a survey by H.M.S. ‘Alert’ on the southwestern Atlantic continental shelf and slope collected 10 bryozoan species from the Brazilian coast at about 60 m depth (Ridley 1881). However, the most representative sampling was that undertaken by H.M.S. ‘Challenger’ during the years 1873–1876, which collected many bryozoan taxa in Atlantic waters (Busk 1881a, 1884, 1886). Among these samples were 29 new records from northeastern Brazil.

The first published study devoted to Brazilian bryozoans, some of which were collected from the continental shelf and slope, was that of Canu & Bassler (1928a). They studied samples from the voyage of the steamer ‘Norseman’ in 1877 and the U.S. Fisheries Commission steamer ‘Albatross’ in 1887, recording 47 species in Brazilian waters, of which one genus and 27 species were new. Later, R.V. ‘Calypso’ and the oceanographic vessel ‘Almirante Saldanha’ carried out benthic sampling at several localities on the continental shelf and slope of Brazil in the mid-20th century (Braga 1967; Tommasi *et al.* 1972; Buge 1979), and several new bryozoan taxa were collected in bathyal and abyssal Brazilian waters by ‘Atlantis II’ (d’Hondt & Schopf 1984).

The REVIZEE Program (Living Resources in the Exclusive Economic Zone) that began in 1994 had the objective of acquiring abiotic and biotic data in the Exclusive Economic Zone of Brazil. A great number of new benthic taxa from several phyla were discovered (Amaral & Rossi-Wongtschowski 2004; Lavrado & Ignacio 2006; Lavrado & Viana 2007), but only a partial list of bryozoans was published as result of the program (Haddad *et al.* 2004).

Recently, Vieira *et al.* (2008) published a comprehensive annotated checklist of 346 species of Brazilian marine Bryozoa, stating that about 135 species occur on the continental shelf, mostly those reported by Canu & Bassler (1928a), Marcus (1949, 1955), Braga (1967) and Buge (1979).

Since that publication, taxonomic studies in the South Atlantic have revealed novel taxa in both shallow water (Vieira *et al.* 2007, 2010a, 2010b) and on the continental shelf (Ramalho *et al.* 2009; Santana *et al.* 2009) of Brazil. In the present study we describe new species from samples collected on the continental shelf and slope by the RV ‘Prof. Wladimir Besnard’ off Cabo de São Tome (Rio de Janeiro State) to Arroio Chuí (Rio Grande do Sul State), in the scope of the REVIZEE Program; further study of some previously described species has yielded new information that affects their generic status.