



## Shallow-water species of *Beania* Johnston, 1840 (Bryozoa, Cheilostomata) from the tropical and subtropical Western Atlantic

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### Abstract

This paper describes four new species of the bryozoan genus *Beania* from the Brazilian coast. Two of them have been previously recorded in the western Atlantic as *Beania hirtissima* (Heller, 1867) and *Beania mirabilis* Johnston, 1840, respectively; they are redescribed here as *Beania americana* n. sp. and *Beania mirabilissima* n. sp. Two reticulate species, *Beania correiae* n. sp. and *Beania metrii* n. sp., are newly described. Descriptions of four other species of *Beania* from the region are also included: *Beania australis* Busk, 1852, *Beania cupulariensis* Osburn, 1914, *Beania klugei* Cook, 1968 and *Beania maxilladentata* Ramalho, Muricy & Taylor, 2010.

**Key words:** Beaniidae, *Beania*, biodiversity, distribution, new species, taxonomy, Brazil, western Atlantic

### Introduction

The genus *Beania* Johnston, 1840 was established monotypically for *Beania mirabilis* Johnston, 1840. About 60 species are now known worldwide (Bock 2008), found from intertidal environments to the deep sea. *Beania* species may produce uniserial colonies, as in the type species, or reticulate colonies with six connective tubes, as in *Beania crotali* (Busk, 1852a), type species of *Diachoris* Busk, 1852a. Both *Diachoris* and *Chaunosia* Busk, 1867 (type species *Chaunosia hirtissima* Busk, 1867, nec *Diachoris hirtissima* Heller, 1867), are considered junior synonyms of *Beania* Johnston, 1840 (Harmer 1926). Some Adriatic species of *Beania*, including the reticulate *Beania hirtissima* (Heller, 1867), have been discussed and their status clarified by Hayward and McKinney (2002).

In a recent checklist of marine bryozoans from Brazil, Vieira *et al.* (2008) recorded seven species of *Beania*, including *Beania hirtissima* (Heller, 1867), reported from the Atlantic coast by several authors (e.g. Marcus 1949; Osburn 1940; Winston 1982) but of questionable identification. Ramalho *et al.* (2010) described the new species *Beania maxilladentata* from Rio de Janeiro state, and redescribed *B. mirabilis* and *B. klugei* Cook, 1968. In addition, they suggested that new taxonomic studies were required in order to understand better the diversity and distribution of *Beania* in Brazilian waters.

The present work provides descriptions and figures of eight shallow-water species of *Beania* along the Brazilian coast and some other parts of the tropical and subtropical Western Atlantic. Four of them are described as new species, including two that have been previously attributed to *Beania hirtissima* (Heller, 1867) and *B. mirabilis* Johnston, 1840; these are redescribed here as *Beania americana* n. sp. and *B. mirabilissima* n. sp., respectively. Two new reticulate species, *Beania correiae* n. sp. and *Beania metrii* n. sp., are also described. Four other species from the region are included, viz *B. australis* Busk, 1852b, *B. cupulariensis* Osburn, 1914, *B. klugei* Cook, 1968, and *B. maxilladentata* Ramalho, Muricy & Taylor, 2010.