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Taxonomic notes on some Cheilostomata (Bryozoa) from Madeira

BJÖRN BERNING
Geowissenschaftliche Sammlungen, Oberösterreichische Landesmuseen, Welser Str. 20, 4060 Leonding, Austria.
E-mail: b.berning@landesmuseum.at

Abstract

Five species of cheilostome Bryozoa from the Madeiran archipelago, which were all introduced during the late 19th and early 20th centuries, are figured and redescribed following examination of the type specimens: *Schizomavella noronhai* (Norman), *Saevitella peristomata* (Waters), *Phaeostachys schmitzi* (Norman), *Plesiocleidochasma porcellanum* (Busk), and *Stephanollona contracta* (Waters). One species, previously recorded as *Microporella decorata* (Reuss), which is a fossil from the Miocene Paratethyan region nowadays placed in the genus *Calloporina* Neviani, is newly described as *Calloporina mariae*. The genus *Schedocleidochasma* Soule, Soule & Chaney is synonymised with *Plesiocleidochasma* Soule, Soule & Chaney, and the generic diagnoses of *Calloporina* Neviani, *Saevitella* Bobies and *Plesiocleidochasma* are amended.

Key words: Atlantic, Bitectiporidae, bryozoans, Escharinidae, Hippopodinidae, Microporellidae, new species, Phidoloporidae, taxonomy

Introduction

About 140 cheilostome bryozoan species are recorded from the Madeiran archipelago. By far most of the research on bryozoans was executed during the late 19th and early 20th centuries (Busk 1858a,b, 1859, 1860, 1861; Hincks 1880; Waters 1899; Norman 1909), while only very few species were added to the list in recent years (d'Hondt 1985; Berning & Kuklinski 2008; Berning *et al*. 2008). Owing to the sole availability of optical microscopy for bryozoan identification before the era of SEM, many species were given names of existing, somewhat similar-looking species from elsewhere. Accordingly, relatively few species were newly introduced, and modern taxonomic revisions of species with 'foreign' taxon names reveal that many of them are, in fact, distinct species, a number of them endemic to the Madeiran archipelago (Berning & Kuklinski 2008; Berning *et al*. 2008).

Recent works on bryozoans from the archipelago also include the pressing issue of invasive species, which have either arrived on Madeira (Wirtz & Canning-Clode 2009) or represent possible records of invasive species from other regions that may have their origin in Madeira. For instance, the shallow-water species *Stephanollona contracta* was described from Madeira by Waters in 1899, while it has been recorded from the continental shelf of southern Iberia (Souto et al. 2010) and from the Azores (pers. observ.) only very recently.

A plot showing the cumulative numbers of species newly recorded from Madeira in works of the early authors (Fig. 1) indicates that the list of known species is far from reflecting the true bryozoan species richness, especially considering that the archipelago has not been systematically sampled before (e.g. none of the early records include species from bathyal depths). Nevertheless, the 140 cheilostome species make the Madeiran archipelago (c. 250 km of coastline altogether) already a hotspot of bryozoan diversity when compared with the c. 260 species known from the Galician coast (O. Reverter-Gil, pers. comm. 2011; coastline length c. 1600 km), for example.

The purpose of this paper is to (re)describe and figure six cheilostome bryozoan species recorded from Madeira based on observations of their respective type specimens using SEM, in order to lay the basis for future studies on biodiversity, biogeography and invasive species in the NE Atlantic region.

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