



Review of some little-known benthic hydroids (Cnidaria, Hydrozoa) from the Southern Ocean

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Abstract

A number of benthic hydroid species inhabiting the Southern Ocean are insufficiently characterized. A revision of eight little-known Antarctic species of the order Anthoathecata was made, based on the study of type material. Some of the species have not been recorded since their original description a century ago. Four species (*Bimeria corynopsis*, *Bougainvillia macloviana*, *?Koellikerina belgicae* and *Rhizorhagium antarcticum*) belong to the family Bougainvilliidae, two species (*Hydractinia angusta* and *H. dendritica*) to the family Hydractiniidae, *Perarella clavata* to the family Cytaeidae and, finally, *Rhysia halecii* to the family Rhysiidae. For each species a list of synonyms, a description, a discussion on its relationship with other species and its systematic position, and an account of its autecological data are given. All records found in the literature have been checked.

Key words: Hydrozoans, type material, taxonomy, Antarctic Ocean, autecology, geographic distribution

Introduction

Benthic hydrozoans constitute one of the most important zoological groups of the Southern Ocean, being represented by a relatively high number of species and an astonishing 80% of endemism at the species level (cf. Peña Cantero 2014a). Scientific knowledge on Antarctic benthic hydroids has increased considerably during the last 30 years (cf., for example, Peña Cantero 2008, 2009, 2012, 2014b; Peña Cantero & Vervoort 2009; Peña Cantero & Ramil 2006; Peña Cantero *et al.* 2013; Galea & Schories 2012), although there are still extensive areas around Antarctica where the hydroid fauna is completely unknown and there are also species, particularly anthoathecate ones, which are incompletely known.

The aim of this study was to improve our knowledge on several little-known Antarctic species of the order Anthoathecata Cornelius, 1992, originally described about a century ago. Some of the species have never been found since their original description and for most of them the information about the cnidome, a key taxonomic character for some groups, was non-existent. In some of the species, the examination of the type material has provided additional important information to better characterize them. In other cases, the scarcity of material or its bad condition has prevented me from completely describing the diagnostic characters.

Material and methods

In the treatment of the species, I have at times tried to combine the original descriptions with my own observations. Thus, in some species, rather than re-describing the colony structure, I have relied on the original descriptions of the general habit, since they were done about a hundred years ago while the material was in much better condition. In those cases, I have included quotations of the original descriptions.

The material studied belongs to collections of the Natural History Museum, London, UK (NHM), the Museum für Naturkunde, Humboldt-Universität, Berlin, Germany (ZMB), the Royal Belgian Institute of Natural Sciences, Brussels, Belgium (RBINS) and the Swedish Museum of Natural History, Stockholm, Sweden (SMNH).