



On a new Antarctic species of *Symplectoscyphus* Marktanner-Turneretscher, 1890 (Cnidaria, Hydrozoa, Sertulariidae), with an annotated checklist of the Antarctic species of the genus

ÁLVARO L. PEÑA CANTERO

Instituto Cavanilles de Biodiversidad y Biología Evolutiva; Universidad de Valencia/Fundación General Universidad de Valencia; Apdo. Correos 22085; 46071 Valencia, Spain. E-mail: alvaro.l.pena@uv.es

Abstract

A new Antarctic species of the genus *Symplectoscyphus* Marktanner-Turneretscher is described and figured, and its position amongst the allied Antarctic species of the genus is discussed. The material was collected from the Ross Sea area (Antarctica) during the BioRoss survey to the western Ross Sea and Balleny Islands in 2004. *Symplectoscyphus frondosus*, sp. nov., is unique amongst the Antarctic known species of the genus in having large, erect, rigid, much-branched, bottlebrush-shaped stems. An annotated checklist of the Antarctic species of the genus is also included. Sixteen of the 19 known Antarctic species are endemic to the Antarctic Region (84%), two are also present in sub-Antarctic waters and only one has a wider distribution.

Key words: Biodiversity, new species, Benthos, Ross Sea, Antarctica, Southern Ocean

Introduction

A biodiversity survey of the western Ross Sea and Balleny Islands was undertaken by the National Institute of Water & Atmospheric Research (NIWA) of New Zealand in 2004. An important collection of hydroids was sorted from the numerous benthic samples taken, including an outstanding species new to science of the genus *Symplectoscyphus* Marktanner-Turneretscher, 1890, namely *Symplectoscyphus frondosus* **sp. nov.** Its description is provided here.

Symplectoscyphus is a genus of benthic hydroids with a relatively high number of species; approximately one hundred being known (cf. Vervoort 1993; Bouillon *et al.* 2006). It is also one of the most speciose genera of hydrozoans inhabiting benthic communities of the Antarctic marine ecosystem, with so far 18 known species (Peña Cantero 2004; Peña Cantero & Vervoort 2009), which constitutes approximately 14% of the biodiversity in Antarctic Leptothecata. Most of the species of *Symplectoscyphus* inhabiting Antarctic benthic communities are endemic to the Antarctic Region. Only three species are also present outside those waters.

Material and methods

Material was collected by the NIWA research vessel *Tangaroa* during the BioRoss survey of the western Ross Sea and Balleny Islands in 2004 (Table 1). Four different gear types were used to collect benthic invertebrates: VanVeen grab, Agassiz trawl, epibenthic sled, and rock dredge. Hydrozoans were fixed in either 8% formalin or 98% ethanol, and later transferred to 70% ethanol.

Type material is held in the National Institute of Water and Atmospheric Research Invertebrate Collection at Wellington (NIWA), New Zealand, and in the Museo Nacional de Ciencias Naturales (MNCN) of Madrid, Spain.