

***Halecium arcticum* (Cnidaria: Hydrozoa), a new species of hydroid from Spitsbergen**

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Abstract

A new species of the genus *Halecium* is described and figured. The new species was found among the kelp forest-associated fauna collected during the Polish diving expedition to Hornsund (Spitsbergen, Svalbard Archipelago) in 2003. The relationships with several closely-related *Halecium* species are discussed.

Key words: Benthic hydroid, new species, *Halecium*, Svalbard, Arctic

Introduction

Information relating to faunal distributions in the Arctic, especially in the Svalbard region, has become increasingly important since this archipelago is in the front line of climate change effects. The southernmost fjord of Spitsbergen, Hornsund, was selected as a Reference Site among the European Marine Biodiversity Research Sites—BIOMARE program (Warwick *et al.* 2003). It is one of the places for which up-to-date faunal inventory lists are of great value as they will allow the monitoring of ongoing biodiversity changes.

The hydrozoan fauna of Svalbard waters is not very well known. A list of 99 species was compiled on the basis of literature records and faunistic studies (Palerud *et al.* 2004). During this work, we found a new hydroid species belonging to the genus *Halecium*. From a total of about 120 valid nominal *Halecium* species (Vervoort & Watson 2003), 11 species have been already recorded from this area (Palerud *et al.* 2004; Ronowicz *in press*).

Material and methods

Hydroids were collected during the expedition to Spitsbergen in July 2003. Samples were collected by scuba diving at three sites in Hornsund fjord, at depths of 5 and 10 m. The most common species of laminarians (*Laminaria digitata* (Hudson) Lamouroux, 1813, *L. saccharina* (Linnaeus) Lamouroux, 1813, and *Alaria esculenta* (Linnaeus) Greville, 1830), with associated fauna were sampled at each site and depth. The samples were preserved in 4% formalin. The hydroid species were identified using standard techniques and literature pertinent to the area (Naumov 1969; Cornelius 1995a; 1995b; Schuchert 2001; 2005).

The type material, as well as some non-type material, are deposited in the Museum of Natural History of Geneva, Switzerland (MHNG).