

Redescription of two Hexactinosida (Porifera, Hexactinellida) from the southwestern Atlantic, collected by Programme REVIZEE

DANIELA A. LOPES^{*}, EDUARDO HAJDU^{*} & HENRY M. REISWIG^{**}

^{*} Departamento de Invertebrados, Museu Nacional, Universidade Federal do Rio de Janeiro, Quinta da Boa Vista s/n, São Cristovão, 20940-040, Rio de Janeiro, RJ, Brazil. danielalopes@mn.ufrj.br; hajdu@acd.ufrj.br

^{**} Natural History Section, Royal British Columbia Museum, Victoria, BC, Canada. hmreiswig@shaw.ca

Abstract

In this study, two species of hexactinosid sponges from the bathyal southwestern Atlantic (Hexactinosida, Hexactinellida), collected by Programme REVIZEE—Central Score, are redescribed and illustrated by scanning electron microscopy (SEM), viz., *Aphrocallistes beatrix* Gray, 1858 and *Dactylocalyx pumiceus* Stutchbury, 1841. This is the first redescription of *A. beatrix* based on extensive SEM use. Fourteen species of hexactinellid sponges are now recorded from the southwestern Atlantic, *Aphrocallistes beatrix*, *Caulocalyx tener* Schulze, 1886, *Caulophacus abyssalis* Tabachnick, 1990, *Dactylocalyx pumiceus*, *Euplectella suberea* Thomson, 1876, *Holascus stellatus* Schulze, 1887, *Hyalonema schmidti* Schulze, 1899, *Hyalonema tenue* Schulze, 1886, *Malacosaccus heteropinularia* Tabachnick, 1990, *Pheronema carpenteri* (Thomson, 1869), *Rossella antarctica* Carter, 1872, *R. nuda* Topsent, 1901, *R. inermis* (Topsent, 1916) and *R. racovitzae* Topsent, 1901.

Key words: Taxonomy, hexactinellids, sponges, Hexasterophora, Programme REVIZEE, deep sea, continental slope, Southwestern Atlantic, *Aphrocallistes beatrix*, *Dactylocalyx pumiceus*

Introduction

The Hexactinellida received little attention in the past due to the inherent difficulty to assess deep-water habitats, the preferred grounds for hexactinellid populations, with the consequence that their biology remained largely unknown until very recently. Significant advances have been obtained however with the study of the few species inhabiting shallow waters, revealing several aspects of their tissue organization, cellular biology and feeding (e.g. Reiswig & Mehl, 1991; Boury-Esnault & Vacelet, 1994; Leys, 1995; Wyeth, 1999).