



***Latrunculia (Latrunculia) tetraverticillata* sp. nov. (Porifera, Poecilosclerida, Latrunculiidae) from the bathyal region off the coast of Santa Catarina State, Brazil, Southwestern Atlantic**

BEATRIZ MOTHES¹, MAURÍCIO CAMPOS, RAFAEL ECKERT & CLÉA LERNER

Museu de Ciências Naturais, Fundação Zoobotânica do Rio Grande do Sul, Rua Dr. Salvador França, 1427, 90690-000 Porto Alegre, RS, Brazil

¹Corresponding author. E-mail: bmothes@fzb.rs.gov.br

Abstract

Latrunculia (Latrunculia) tetraverticillata sp. nov. is described after two specimens collected off the coast of Santa Catarina State (29°11'16"S–47°54'16"W), from a depth of 420 m. The new species differs from the other extant latrunculiid species in having four whorls along the discorhabd axis. A key to the Southwestern Atlantic species of *Latrunculia (Latrunculia)* is provided.

Key words: Porifera, Poecilosclerida, *Latrunculia*, Taxonomy, new species, Brazil, Southwestern Atlantic

Introduction

Along the Southern coast of Brazil, long sandy beaches are present, which, mainly in the shallow environment, are unsuitable for sponges to settle and attach. In this region, from "Santa Marta Grande" Cape (Santa Catarina State) to "Chuí" (Rio Grande do Sul State), sponges are distributed offshore and found in greater depths (Mothes *et al.*, 2006). A detailed description of the geomorphology and origin of the sedimentary patterns is to be found in Mothes *et al.* (2004a).

The Brazilian coast is influenced by two oceanic currents, the Brazil and Falkland Current. According to Hubold (1980), the Brazil Current transports tropical water in a southerly direction along the continental shelf, where it collides with the Falkland Current (Subantarctic) between 35–40°S latitude. The zone between the two currents is located far western from the Subtropical Convergence in the South Atlantic. The seasonal change in position of the Convergence affects the coastal and shelf waters of Argentina, Uruguay and southern Brazil.

The genus *Latrunculia* du Bocage, 1869 is easily recognized by the possession of anisodiscorhabd microscleres, and the key characters for differentiating species are the ornamentation and ontogeny of the anisodiscorhabd spicules, the spicule dimensions, differences in the areolate porefields and in oscule morphology, as well as the colour in life (Samaai *et al.*, 2006). A recent taxonomic revision of the genus (Samaai *et al.*, 2006) recognised two morphological subgroups and divided the genus into two subgenera (*Latrunculia* Du Bocage, 1869 and *Biannulata* Samaai, Gibbons & Kelly, 2006), as well as supplied information about the status of each nominal species and variety.

According to Samaai *et al.* (2006), three valid species of *Latrunculia (Latrunculia)* are to be found in the Southwestern Atlantic region: *L. biformis* (Kirkpatrick, 1908) and *L. brevis* Ridley & Dendy, 1886, both recorded from the mouth of the Rio de la Plata, between Uruguay and Argentina, and *L. bocagei* Ridley &