



## Calcareous sponges (Porifera, Calcarea) from Ilha Grande Bay, Brazil, with descriptions of three new species

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### Abstract

This is the first surveillance of calcareous sponges (Porifera, Calcarea) from Ilha Grande Bay in the Southwest coast of Rio de Janeiro, Brazil. Two islands were surveyed and the description of the calcareous sponges collected is presented here. A total of 98 specimens were collected, from five species. *Clathrina aspina* has its geographic distribution extended to the South of Rio de Janeiro state; *Sycettusa* cf. *hastifera*, a species from the Red Sea, and previously cited to the North of Rio de Janeiro state, was now found in Ilha Grande Bay; three new species to science are being described here: *Clathrina angraensis* sp. nov., *Leucandra serrata* sp. nov., and *Paraleucilla perlucida* sp. nov.

**Key words:** Calcarea, Ilha Grande Bay, Brazil, Atlantic

### Introduction

Studies on calcareous sponges from the Brazilian coast started in the nineteenth century, with the collections made by the HMS “Alert” (Ridley 1881) and the “Challenger” (Poléjaeff 1883), and with the works of Haeckel (1872) and Carter (1890). Since then, several other studies have been published (Borojevic 1971, Borojevic & Peixinho 1976, Mothes de Moraes 1985, Muricy *et al.* 1991, Solé-Cava *et al.* 1991, Muricy *et al.* 1993, Klautau *et al.* 1994, Mothes & Lerner 1994, Muricy & Moraes 1998, Muricy & Silva 1999, Klautau & Borojevic 2001, Klautau & Valentine 2003, Monteiro & Muricy 2004, Klautau *et al.* 2004, Vilanova *et al.* 2004, Rossi *et al.* 2006). Although the number of publications has increased, they are concentrated on the Southeastern and Northeastern regions. In the Southeast, they were focused on the North of the Rio de Janeiro state.

The Ilha Grande Bay is a large area located in the South of Rio de Janeiro state, Brazil (23°–23° 40' S latitude and 44°–44° 4' W longitude). It is characterized by a system of estuarine and oligotrophic waters, with a significant diversity of marine ecosystems, such as rocky shores, islands, mangroves and sandy beaches. The weather is hot, tropical and humid, with average annual temperature of 22.5° C, and water temperature varying between 18° C and 24° C (Belo *et al.* 2002). The region is relatively well preserved, still with the remainders of the insular Atlantic Forest, and is considered a priority area for conservation (Belo *et al.* 2002). Regardless of its importance, very few studies on the marine invertebrate fauna in this bay were conducted, and sponges are among the lesser studied organisms (Castro *et al.* 1999, Mayer-Pinto *et al.* 2000, Mayer-Pinto & Junqueira 2003, Paula & Creed 2004). To date, only one article was published on this subject (Vilanova *et al.* 2004). The present work aims to start filling the gap in the knowledge on calcareous sponges of the South