

**IDENTIFICATION OF FREE-LIVING GENICULATE CORALLINE RED ALGAE  
(CORALLINALES, RHODOPHYTA) IN A UNIQUE ALGAL BED FORMATION FROM BRAZIL  
AND A DESCRIPTION OF *JANIA CABISTA* SP. NOV.**

**Frederico T.S. Tâmega<sup>1,2\*</sup>, Beatriz N. Torrano-Silva<sup>3</sup>, Mariana Cabral Oliveira<sup>3</sup>, Paula Spotorno-Oliveira<sup>1,2</sup>, Sávio H. Calazans<sup>2</sup>, Edgar Francisco Rosas-Alquicira<sup>4</sup>, Ricardo Coutinho<sup>2</sup> & Viviana Peña<sup>5</sup>**

<sup>1</sup>Programa de Pós-Graduação em Oceanologia, Instituto de Oceanografia, Universidade Federal do Rio Grande, RS, Brazil. <sup>2</sup>Instituto de Estudos do Mar Almirante Paulo Moreira, Departamento de Oceanografia, Arraial do Cabo, RJ, Brazil. <sup>3</sup>Instituto de Biociências, Departamento de Botânica, Universidade de São Paulo, São Paulo, Brazil. <sup>4</sup>Universidad del Mar, Instituto de Recursos, Oaxaca, Mexico. <sup>5</sup>Grupo Bio Cost & CICA, Facultad de Ciencias, Universidade da Coruña, Coruña, Spain. \*e-mail: [fredtamega@gmail.com](mailto:fredtamega@gmail.com).

Previously unknown free-living geniculate coralline algae (GCA) beds were found along the Arraial do Cabo Bay, Brazil. Ecological surveys have shown the importance of these algae in structuring benthic environments. The aim of this research was to identify the species of GCA commonly present in the beds of Arraial do Cabo Bay based on combining morpho-anatomical and molecular analyses. The GCA's species identified in this study were compared based on detailed anatomical descriptions, especially the reproductive structures, with closely related species described for Brazil and worldwide. Two species belonging to the geniculate genera *Amphiroa* and *Jania* are the main components. Molecular analyses inferred from one plastid marker (*psbA*) combined with morpho-anatomical features led us to propose *Jania cabista* Tâmega, Spotorno & Peña, sp. nov., and the resurrection of *Amphiroa exilis* W.H. Harvey (1849) for this unique formation.