



Distribution of *Cladophora* Species (Cladophorales, Chlorophyta) along the Brazilian Coast¹

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Abstract

Species in the green algal genus *Cladophora* are morphologically highly variable. Since no specific study concerning *Cladophora* has been previously conducted in Brazil, the aim of this study was to identify *Cladophora* occurring along its coastline. Data were collected from several coastal states in the northeastern to southern regions of Brazil from 2000 to 2003. Specimens from national and international herbaria were also examined. Nine species were registered: *C. brasiliiana*, *C. catenata*, *C. coelothrix*, *C. dalmatica*, *C. montagneana*, *C. ordinata*, *C. prolifera*, *C. rupestris* and *C. vagabunda*. In this study, we recorded the first occurrences of *C. prolifera* in Piauí, *C. dalmatica*, *C. montagneana* and *C. ordinata* in Ceará, *C. rupestris* in Pernambuco, *C. coelothrix*, *C. prolifera* and *C. vagabunda* in Alagoas, *C. vagabunda* in Sergipe, *C. catenata*, *C. dalmatica* and *C. montagneana* in Bahia, *C. rupestris* in Espírito Santo and *C. dalmatica* in Rio de Janeiro. Our findings expand the known distribution of these species along the Brazilian coast.

Key words: Brazil, geographic distribution, *C. brasiliiana*, *C. catenata*, *C. coelothrix*, *C. dalmatica*, *C. montagneana*, *C. ordinata*, *C. prolifera*, *C. rupestris*, *C. vagabunda*

Introduction

The green algal genus *Cladophora* Kützinger (1843a: 262) (Cladophorales) is composed of a heterogeneous group of species with a complex taxonomic history. Species identification is difficult because of the high morphological plasticity and cryptic diversity within the genus. It is also difficult to define stable taxonomic characteristics, since these characteristics are influenced by age and the environment (Hoek 1963, 1979; Parodi 1998). Species of *Cladophora* are widespread in temperate and tropical seas, but they are absent from polar waters. In temperate and tropical regions, they are found in freshwater, marine, estuarine and brackish habitats (Hoek *et al.* 1995). In marine environments, *Cladophora* can occur from the intertidal zone up to 73 m deep (Taylor 1960; Norris & Olsen 1991, Yoneshigue-Valentin *et al.* 2006). Most species grow attached to rocky substrate by rhizoidal cells, but they also can form extensive free-floating masses in eutrophic waters (*e.g.*, coastal lagoons; Reis & Yoneshigue-Valentin 1996).