The occurrence of *Scolymia cubensis* in Brazil:
revising the problem of the Caribbean solitary mussels

ELIZABETH NEVES¹, RODRIGO JOHNSSON¹, CLAUDIO SAMPAIO² & MICHEL PICHON³

¹Universidade Federal da Bahia Instituto de Biologia, Depto. de Zoologia Av. Adhemar de Barros s/ no, Campus Ondina CEP: 40170-290, Salvador (BA), Brasil.

²Universidade Federal da Paraíba Instituto de Biologia, Depto. de Sistemática e Ecologia, Programa de Pós-Graduação em Zoologia, Campus Universitário I, Cidade Universitária CEP: 58059-900, João Pessoa (PB), Brasil

³Laboratoire de Biologie Marine et Malacologie, Ecole Pratique des Hautes Études Université de Perpignan, 66860 Perpignan Cedex, France

Abstract

Identification of scleractinian corals is traditionally based upon morphological analysis of skeleton traits. However, due to the influence of the environment on coral development, and the pattern highly variable of most diagnostical characters, additional information related to anatomy of soft parts, reproductive behavior and ecological interactions have been argued to support the distinction among similar morphotypes. Caribbean and South Atlantic *Scolymia* comprise a small group of solitary zooxanthellate corals: *Scolymia lacera*, *S. cubensis* and *S. wellsii* have been far subject of taxonomical misunderstandings. Aggressive interactions between *S. lacera* and *S. cubensis* were useful to validate their specific status. Nevertheless, *S. wellsii* has been erroneously suggested to be synonym of *S. cubensis*. Following Laborel, Lang and Wells’ studies, we reinforce the individuality of the Atlantic *Scolymia* species, confirming the occurrence of *S. cubensis* to Brazil. Supporting newly-reported occurrences of Caribbean species along the Brazilian littoral, this finding is likely to contribute with a new perspective to assess the ‘variability’ among scleractinian corals. A key for the identification of the *Scolymia* species is provided.

Key words: Scleractinia, Mussidae, *Scolymia*, taxonomy, South Atlantic, Brazil

Introduction

*Madrepora lacera* from the West Indian was originally described by Pallas in 1766. Milne Edwards and Haime (1849) described a second species, *M. cubensis*, from St. Thomas,