



New occurrences of *Myoforceps aristatus* (Bivalvia: Mytilidae) in the Brazilian coast

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Abstract

In this paper, we report 18 new occurrences of the invasive bivalve *Myoforceps aristatus* (Dillwyn, 1817) in the Brazilian coast. These new records were carried out in 2007-2012, and included the northeastern states of Ceará and Bahia, as well as Santa Catarina, São Paulo and Rio de Janeiro in the south-southeastern regions. Specimens of *M. aristatus* were found boring into gastropod and bivalve shells, as well as dead hard coral substrate alongside *Lithophaga bisulcata* (d'Orbigny, 1842), Mytilidae, a native species. This shows that *M. aristatus* may be less selective towards the substrate than originally assumed, and indicates the need of further studies in order to clarify the ecological relationships between these species. The data we present here points out to the fact that the invasion has worsened considerably, or was more severe than previously stated, and endorse previous statements towards the need of financial support for studies on marine bioinvasions in Brazil.

Keywords: Ballast water, Brazilian coast, invasion, *Lithophaga bisulcata*.

Resumo

Neste artigo, apresentamos 18 novas ocorrências do bivalve invasor *Myoforceps aristatus* (Dillwyn, 1817) na costa brasileira. Esses novos registros ocorreram em 2007-2012, e incluem os estados do Ceará e Bahia na região nordeste, assim como Santa Catarina, São Paulo e Rio de Janeiro nas regiões sul-sudeste. Os espécimes de *M. aristatus* foram encontrados perfurando conchas de gastrópodes e bivalves, bem como substrato de coral pétreo morto juntamente com *Lithophaga bisulcata* (d'Orbigny, 1842), uma espécie nativa. Isso mostra que *M. aristatus* pode ser menos seletiva para o substrato do que inicialmente previsto, e aponta para a necessidade de mais estudos a fim de se esclarecer as relações ecológicas entre essas espécies. Os dados que apresentamos aqui apontam o fato de que a invasão piorou consideravelmente, ou era mais grave do que foi referido anteriormente, e apoiam as declarações anteriores para a necessidade de apoio financeiro para estudos sobre invasões biológicas marinhas no Brasil.

Palavras-chave: Água de lastro, costa brasileira, invasão, *Lithophaga bisulcata*.

Introduction

Myoforceps aristatus (Dillwyn, 1817) is a bivalve that bores into hard calcareous substrates, such as mollusk shells. Originally from the Caribbean, It is now widely distributed in the Atlantic and is considered an invasive species, spread through

ballast water in various regions of the world (Boss & Turner, 1962; Simone & Gonçalves, 2006). Records of its occurrence include the Pacific Ocean and the Atlantic, comprising the southwest coast of Brazil in the states of Rio de