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# Stomatopod and decapod crustaceans from Camamu Bay, state of Bahia, Brazil

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## Abstract

Camamu Bay, located on the central coast of the state of Bahia, Brazil (13°47' to 14°10'S), is the third-largest Brazilian bay. It is included in a zone that perhaps constitutes the last unexplored frontier on the Brazilian coast, situated between Todos os Santos Bay in Bahia, and the city of Vitória in Espírito Santo. Moreover, this zone coincides with an area of remarkable zoogeographical interest, the transition zone between the Brazilian and Paulista provinces. Camamu Bay contains a wide diversity of marine environments such as sandy beaches, rocky substrata, and mangroves, and it is still in a good state of preservation compared to other large Brazilian bays. The objective of this study was to survey the fauna of Crustacea (orders Stomatopoda and Decapoda) in Camamu Bay. The material analyzed was collected by trawling from July 2003 to September 2005. Voucher specimens were deposited in the collections of the Universidade Estadual de Santa Cruz and the Universidade Estadual do Sudoeste da Bahia, located in the cities of Ilhéus and Jequié (state of Bahia, Brazil), respectively. A total of 93 species, belonging to 35 families, was collected. The order Stomatopoda was represented by 3 families and 4 species; the order Decapoda was represented by 31 families and 89 species. The most important family in terms of number of species was Alpheidae, with 11 species. Of the total number of species, 88 are recorded from Camamu Bay for the first time, while 10 species are cited from the state of Bahia for the first time. The southern geographical distributional limits in the western Atlantic for the caridean *Synalpheus pandionis* and the brachyurans *Macrocoeloma laevigatum* and *Elamena gordonae* are extended.

**Key words**: crustaceans, diversity, estuaries, Camamu Bay, Bahia

## Introduction

Faunistic surveys are important foundations for knowledge and monitoring of areas of high interest, such as estuaries. In Brazil, wide-ranging systematic studies focusing on the invertebrate fauna of soft bottoms are few, mainly because of the scarcity of specialized professionals and financial support for oceanographic expeditions. Fewer still are studies on the spatial-temporal variability of benthic communities (Blankensteyn & Moura 2002).

Decapod crustaceans are important members of tropical benthic communities. Besides the value of the largest and most abundant species as a food source for humans, a wide variety of small species contribute to the size, complexity, and functioning of tropical ecosystems (Hendrickx 1995).

Camamu Bay is located on the central coast of the state of Bahia, Brazil (13°47' to 14°10'S) and is the third-largest Brazilian bay (Oliveira *et al.* 1998; Oliveira *et al.* 2002). A recent diagnosis of the Brazilian biodiversity in coastal and marine zones (Ministério do Meio Ambiente 2002) indicated this bay as a region of high interest for conservation of estuaries and mangroves. Camamu remains less affected by human activities compared to other large Brazilian bays, e.g., Todos os Santos in the state of Bahia (Barroso *et al.* 2002), Guanabara in the state of Rio de Janeiro (Lavrado *et al.* 2000, Breves-Ramos *et al.* 2005), and other estuarine regions of the coast of Bahia.