

A new species of *Asterocheres* (Copepoda, Siphonostomatoida, Asterocheridae) associated to *Placospongia cristata* Boury-Esnault (Porifera) in Bahia State, Brazil

RICARDO BISPO¹, RODRIGO JOHNSON^{2*} & ELIZABETH NEVES³

Universidade Federal da Bahia, Inst. Biologia, Dpt. Zoologia, Adhemar de Barros, s/n, Campus de Ondina, Bahia, BRAZIL - CEP: 40170-290.

*Corresponding author

Abstract

The siphonostomatoid fauna associated with the sponge, *Placospongia cristata* Boury-Esnault, is studied for the first time. *Asterocheres bimbarrensis* n. sp. is characterized by having two spines distally on the third endopod of P4 instead of a seta and a spine, is described and compared with its congeners. Another species of the genus, *A. neptunei* Johnson, is also found associated with this sponge, however, *P. cristata* may not be its main host since it is scarce. *Asterocheres neptunei* has previously been recorded associated with an undetermined sponge in the southeast region of Brazil thus the present record extends its distribution to the northeast. This study is the first record of the sponge *P. cristata* in Bahia.

Key words: Asterocheridae, Siphonostomatoida, *Asterocheres*, new species, Copepoda, *Placospongia*, Porifera

Introduction

The siphonostomatoid fauna associated with invertebrates in Brazil is still poorly known. Many recent studies were carried out on the coral reefs of Abrolhos region, in the south of Bahia (Fig. 1) (Johnson 1998a–b, 2000, 2002). These studies confirmed the existence of many new siphonostomatoid species associated with different invertebrate groups within that region. Despite these efforts, the remaining Bahia coast, stretching for almost a thousand kilometers, remains unexplored.

The sponges represent microhabitats of different shapes and these provide shelter to a diverse invertebrate fauna (Klitgaard 1995) including polychaetes (Martin & Britayev