Spongiopsyllus redactus, a new species of Entomolepididae (Copepoda, Siphonostomatoida) associated with a scleractinian coral in Brazil

ROBERTA CANÁRIO1,4, ELIZABETH G. NEVES2 & RODRIGO JOHNSSON3

Universidade Federal da Bahia, Inst. Biologia, Dept. Zoologia, LABIMAR – Crustacea, Cnidaria & Fauna Associada, Av. Adhemar de Barros, s/n, Campus de Ondina, Bahia, BRAZIL - CEP: 40170-290. E-mails: 1betaelfa@gmail.com, 2elizabeth.neves@gmail.com, 3r.johnsson@gmail.com

4Corresponding author

Abstract

The family Entomolepididae is represented in the South Atlantic Ocean solely by Spongiopsyllus, a monotypic genus found previously in association with sponges. A recent survey on the Boa Viagem Reefs, located off Salvador, Bahia State, on the northeastern region of Brazil, has revealed a new species of the genus, Spongiopsyllus redactus n. sp., found associated with the endemic scleractinian coral Mussismilia hispida (Verrill). The new species is distinguished from its congener, S. adventicius Johnsson, 2000, by differences in the number of segments of the antennule, the ornamentation of the distal endopodal segment of the antenna, and the setation of the maxilliped and P1. An updated key to the species of Entomolepididae is also provided.

Key words: associated copepod, Scleractinia, Mussismilia hispida, symbiotic fauna

Introduction

The Entomolepididae Brady, 1899 is a small siphonostomatoid family of the Copepoda comprising 11 species classified in seven genera and reported from all major oceans of the world. Only the genera Parmulodes C. B. Wilson, 1944, Parmulella Stock, 1992, and Spongiopsyllus Johnsson, 2000, all monotypic, have been recorded so far within the Atlantic Ocean (Wilson 1944; Stock 1992; Johnsson 2000). Among these three genera, Spongiopsyllus is the only one recorded from the South Atlantic Ocean. Boxshall & Halsey (2004) stated that poriferans are the most common host group for the Entomolepididae. The present study describes a second species of Spongiopsyllus from Brazil and the first report of an entomolepidid associated with the scleractinian coral Mussismilia hispida (Verrill) (Cnidaria: Mussidae). An updated key to the species of Entomolepididae is also given.

Material and methods

A colony of Mussismilia hispida was hand-collected at a depth of 3 m at Boa Viagem Reefs, Salvador, Bahia (12°56’S, 38°30’W) (Fig. 1). The colony was placed in a plastic bag filled with seawater and then transported alive to the laboratory where it was fixed in 70% ethanol. The sample washing was filtered through a 100 µm plankton net, transferred to a petri dish filled with ethanol, and sorted for copepods under a dissecting microscope.