



Checklist of Copepoda associated with fishes from Brazil

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Abstract

One hundred and seventy-six determined species and 39 undetermined species of copepods associated with 179 marine and freshwater fish species from Brazil are listed, including information about the site of infection, host habitat, localities and references. Also, a host-parasite list is included herein.

Key words: Copepoda, Biodiversity, freshwater and marine fishes, Neotropics, Brazil

Introduction

In recent years, parasites have been recognized as an important component of global biodiversity and research efforts directed at documenting parasite species have increased (Poulin & Morand 2004). The copepods are a common component of the ectoparasite assemblages of all kind of fishes, from all environments and ecosystems (Boxshall & Halsey 2004). In the Neotropics, copepods are the second largest parasite group in marine fishes and the third largest group in the freshwater hosts (Luque & Poulin 2007).

Early records of Copepoda parasitic on Brazilian fishes date back to the nineteenth century, and were initially the result of naturalist expeditions into its territories (Burmeister 1835; Dana 1852; Krøyer 1863; Heller 1865). In the last decade, due to the dynamic nature of copepod systematics and the scattered primary taxonomic literature, there have been only a few papers that have attempted to list copepods associated with Brazilian fishes.

Boxshall and Montú (1997) provided keys, records and brief descriptions of 78 species of parasitic copepods on marine and brackish fishes from Brazil. Thatcher (1997) listed the parasite species from Amazonian fishes. Ho (1998a,b) listed the Brazilian species of parasitic copepods, and recently, Thatcher (2006) given keys and an account of the biology and morphology of parasitic copepods from Amazonian river basin.

Here we provide an updated checklist of the Copepoda species associated with marine and freshwater fishes from Brazil. The information is presented as a list of parasite species and as a host-parasite list. We have attempted to include information from all published reports and papers that were based on original records.

Material and methods

Using published records and original data derived from our research, a checklist was generated of the reported Copepoda species associated with fishes from Brazil. The checklist follows the classification and systematic arrangement of Boxshall and Halsey (2004).

The species of Copepoda are presented in alphabetical order, followed by hosts (specific name), site of infection, predominant habitat (marine, freshwater, brackish), localities and references (between parentheses, in chronological sequence). In addition, the checklist included copepod species recorded only to genus level (undetermined species) and a few species (ergasilids mainly) described from free-living specimens. Copepod