

Distribution of larval Stomiidae of the Brazilian central coast, southwest Atlantic Ocean (12°S–22°S)

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Abstract

This study was designed to describe the occurrence and distribution of Stomiidae along the Brazilian central coast. Three oceanographic cruises were made in the Brazilian central coast during the spring/1998, winter/1999 and autumn/2000. Stomiid larvae were very rare in the samples, occurring in 13% of the sampled stations. A total of 102 stomiid larvae were collected representing 11 species, some of which could only be identified to genus: *Aristostomias* sp., *Astronesthes* sp., *Bathophilus* sp., *Eustomias* sp., *Melanostomias* sp., *Stomias* sp., *Chauliodus sloani*, *Flagellostomias boureei*, *Photonectes mirabilis*, *Photostomias guernei* and *Stomias affinis*. All species identified have already been recorded from the Brazilian coast as adults, except for *P. guernei*, first recorded in this study. Most taxa were distributed both in the northern and southern regions of the study area, including the banks of the Vitória-Trindade Ridge. *Stomias* sp. was the most abundant taxon among all groups and was widely distributed along the study area. The species *C. sloani* and *F. boureei* were only collected in the south and north regions, respectively.

Key words: Spatial distribution, Stomiidae, mesopelagic larvae, Southwest Atlantic Ocean

Introduction

Classification of the stomioid group within the Stomiiformes remains unclear, and some authors maintain the traditional division of six families (e.g., Morrow, 1964; Kawaguchi & Moser, 1984; Eschmeyer, 1990; Moser & Watson, 1996; Carpenter, 2003; Richards, 2006), called advanced stomiiforms, represented by Chauliodontidae, Stomiidae, Astronesthidae, Melanostomiidae, Malacosteidae, and Idiacanthidae (Richards, 2006). Based on anatomical characters, Fink (1984, 1985) grouped these six families into the family Stomiidae, and this classification is followed by other authors (Gibbs & McKinney, 1988; Nelson, 1994; Froese & Pauly, 2005), including the present study.