

Leptocephali collected off the eastern coast of Brazil (12°–23°S)

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Abstract

Although leptocephali are very conspicuous in plankton samples little is known about their occurrence and distribution along the Brazilian coast. Therefore, the present study aimed to identify the leptocephali and their distribution pattern along the eastern Brazilian coast, which is limited in the north by Real River (12°S) and in the south by São Tomé Cape (23°S). Samples were collected during three oceanographic cruises conducted on October–December 1998, May–July 1999 and March–May 2000. Samplings were done using a bongo net with mesh apertures of 330 and 500 µm. The net was towed obliquely and the maximum depth was 200 m. A total of 13 families, 12 genera and 29 species of leptocephali were identified in the study area. Most taxa identified had already been recorded as adult, but the larval phase of some of them had not been identified for this region yet. Among them, Derichthyidae, *Avocettina paucipora* and *Tiluropsis* had not been recorded for this region either as adult or as larvae. Most taxa occurred mainly along the Bahia coast but some species were collected strictly in the southern region of the study area.

Key words: Eastern Brazilian coast, leptocephali, occurrence, distribution

Introduction

Leptocephali are relatively common in plankton samples collected in tropical and subtropical oceans (Smith, 1969; 1979). Although the individuals of this group vary widely in form, all are laterally compressed with V- or W-shaped myomeres (Smith, 1989a). Their bodies are large, ranging approximately from 25 to 400 mm, and some notacanthiform leptocephali can reach 2 m in length.

Twenty-four fish families have leptocephali (Nelson, 1994) and most of them are marine, inhabiting coastal ecosystems and oceanic regions. Some species are mesopelagic or bathypelagic, being found in great depths (<3,000 m). Leptocephali seem to undertake diel vertical migrations, being collected in the upper 100 m during the night and dispersing downward in the daytime (Smith, 1989a).