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Deep-sea ophidiiform fishes collected on the Brazilian continental slope, between 11° and $23^\circ S$

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Abstract

Collections made by two deep-sea expeditions off eastern Brazil between 11° and 23°S, revealed the occurrence of a rich fish fauna. A total of 94 trawl stations were performed by the RV *Thalassa* and RV *Astro Garoupa*, at depths from 200 to 2300 m. The fishes of the order Ophidiiformes are reported upon here, including 23 species from three families: Carapidae (2), Ophidiidae (19) and Bythitidae (2). Of these, 15 species represent new records for Brazilian waters: *Acanthonus armatus, Barathrites parri, Barathrodemus manatinus, Dicrolene kanazawai, Eretmichthys pinnatus, Holcomycteronus squamosus, Lamprogrammus brunswigi, Luciobrotula sp., Monomitopus agassizii, Neobythites monocellatus, Neobythites sp., Porogadus catena, Porogadus miles, Xyelacyba myersi, and Cataetyx messieri. Luciobrotula sp. represents an undescribed species. This paper also provides a checklist to and an identification key for all ophidiiform fishes from Brazil, totaling 45 species.*

Key words: Ophidiiformes, Carapidae, Ophidiidae, Bythitidae, Aphyonidae, Brazil

Introduction

The knowledge of the Brazilian deep-sea fish diversity remains still insufficient and fragmented mainly due to the lack of deep-sea expeditions and, as a consequence, the scarcity of material available in zoological collections (Figueiredo *et al.* 2002). Early reports about Brazilian deep-sea fishes were based on the material collected by the H.M.S. *Saramang* (1843–1846) (Richardson 1848). Subsequently, Günther (1887) examined the material collected during the H.M.S. *Challenger* expedition (1873–1876). The fishes collected by the French corvettes *Le Travailleur* and *Le Talisman* (1880–1883) and by the steamers *Blake* (1877–1880) and *Albatross* (1887–1888) were studied by Vaillant (1888), Garman (1899) and Goode and Bean (1896), respectively. Subsequently, the German research vessels *Ernst Haeckel* and *Walther Herwig* surveyed the southwest Atlantic from 1966 to 1971 with mid-water and bottom trawls. The fishes collected by RV *Ernst Haeckel* were studied by Karrer (1968, 1973), while numerous records and original descriptions on the mesopelagic and benthopelagic fishes were published in the series "Results of research cruises of FRV Walther Herwig to South America" (e.g. Krefft 1968; Post 1969, 1970; Krefft & Parin 1972; Pietsch 1972; Johnson & Cohen 1974; Krefft & Stehmann 1974; Bertelsen & Pietsch 1977; Castle 1978; McEachran & Compagno 1980; Hulley 1981; McEachran 1983; Parin & Collette 1993).

Other important contributions to the knowledge of deep-sea fishes from the western South Atlantic include the results of two JAMARC (Japan Marine Fishery Resource Research Center) surveys, off Suriname