



On new collections of deep-sea Gadiformes (Actinopterygii: Teleostei) from the Brazilian continental slope, between 11° and 23° S

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Abstract

New collections made by the French research vessel *Thalassa* and the Brazilian *Astro Garoupa* on the Brazilian continental slope, between 11° and 23° S revealed a great diversity of deep-sea gadiforms obtained between 200 and 2270 m. Of the 34 species collected, 13 (38%) are being reported for the first time in the western South Atlantic and one may represent a new species. The most species-rich family in the area is Macrouridae (25 species), followed by Moridae (4), Phycidae (2), Merlucciidae (2), and Bregmacerotidae (1). Most of the species collected is also found in the Gulf of Mexico and Caribbean and have their known ranges of distribution extended into the tropical waters of central Brazil. Four species typically occur in temperate waters and were found only in the southernmost stations. A summary comparison of the bathymetric distributions of each species on the slope is provided.

Key words: Western South Atlantic; demersal; pelagic; gadiforms; taxonomy

Resumo

Novas coleções realizadas pelo navio oceanográfico francês *Thalassa* e brasileiro *Astro Garoupa* no talude continental brasileiro, entre 11° e 23° S, revelaram uma grande diversidade de peixes Gadiformes em águas profundas entre 200 e 2270 m. Das 34 espécies coletadas, 13 (38%) estão sendo relatadas pela primeira vez no Atlântico Sul ocidental e uma pode representar uma espécie nova. As famílias mais diversificadas na área foram Macrouridae (25 espécies), seguida de Moridae (4), Phycidae (2), Merlucciidae (2) e Bregmacerotidae (1). A maioria das espécies coletadas também é encontrada no Golfo do México e Caribe e tiveram suas áreas de distribuição conhecidas estendidas para as águas tropicais do Brasil central. Quatro espécies têm ocorrência típica em águas temperadas e foram encontradas somente nas estações mais ao sul. A comparação resumida entre a distribuição batimétrica para cada espécie é fornecida.

Introduction

The Gadiformes comprises a highly diversified group with more than 500 species in 75 genera and 9 families, commonly known as cods, hakes, and grenadiers. The gadiforms inhabit a great variety of marine environments, such as the tropical and temperate shallow waters and can be even found in freshwaters (genus *Lota*), but it is in the deep-waters of the world oceans where the greatest diversity is found. Families such as Gadidae and Merlucciidae have been well-studied taxonomically and ecologically because of their economic importance. The greatest diversity within this group, however, lies in the benthopelagic family Macrouridae with more than 350 species. Despite of the economical importance of some species, the gadiforms comprises a group that still needs considerable ecological, taxonomic and phylogenetic attention (Lloris *et al.* 2003; Cohen *et al.* 1990; Nelson, 2006).