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in the Southwest Atlantic between 35°S and 56°S

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Abstract

The aim of this study is to provide a synthesis of the present knowledge of the benthic Amphipoda in the Southwest Atlantic between 35°S and 56°S, and between the coast of Argentina and 50°W. The analysis of 107 taxonomic and ecological papers published between 1852 and 2005 produced a list of 227 oceanographic stations/coastal localities with records of benthic amphipods. Forty-three families, 118 genera and 212 species and subspecies were recorded. The sampling effort has been more intense around the Malvinas/Falkland Islands, Tierra del Fuego and Buenos Aires Provinces. Relatively fewer stations occurred between 41°S and 47°S, where vast areas of the continental shelf lacked any published records of amphipods. Species richness is closely related to the sampling effort, but also increases significantly with latitude. Cluster analysis classified the amphipod fauna in 2 assemblages. The Argentine Biogeographic Province is represented by 35 species, ranging from 36°S to 43°S and encompassing coastal or relatively shallow shelf areas off Buenos Aires, Río Negro and Chubut. The Magellanic Biogeographic Province is represented by 157 species, ranging from 36°S to 56°S and including the coasts of Tierra del Fuego, Santa Cruz and the Malvinas/Falkland Islands. The coastal transition between both faunistic assemblages occurs around 43°S–44°S. On the continental shelf it follows a SW-NE direction around 70–100 m depth. Only 21 species (15.3%) of marine benthic amphipods known to Brazil have also been found in Argentina, suggesting that the Río de la Plata estuary may act as a biogeographic barrier for many warm-temperate species, but most Magellanic species present in southern Chile extend their distribution to the Southwest Atlantic. An up-to-date catalogue of species recorded from the study area is included.

Key words: benthic Amphipoda, biodiversity, latitudinal gradient in species richness, Southwest Atlantic, Argentina