

{rokbox title=|Map of the study area (Alboran Ridge) showing samples from the MEDITS survey from 2012 to 2022 (black points) :: Image:

Authors|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-spatial-distribution-temporal-hidalgo-2024-thumb-et-al.jpg|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-spatial-distribution-temporal-hidalgo-2024-et-al.jpg{/rokbox}

Cristina García-Ruiz , **Manuel Hidalgo**, Cristina Ciércoles, María González-Aguilar, Pedro Torres, Javier Urra and José L. Rueda, 2024.

[**Spatial Distribution and Temporal Variation of Megafauna in Circalittoral and Bathyal Soft Bottoms of the Westernmost Biodiversity Hotspot of the Mediterranean Sea: The Alboran Ridge.**](#)

.Diversity.2024. <https://doi.org/10.3390/d16110686>

Abstract:The Alboran Sea is the westernmost sub-basin of the Mediterranean Sea, and it is connected to the Atlantic Ocean through the Strait of Gibraltar. The Alboran Ridge is located in the middle of the Alboran Sea and represents a hotspot of biodiversity in the Mediterranean Sea. Besides their critical importance, there are few studies on the communities and changes in biodiversity, and they mostly concentrate on infralittoral and circalittoral bottoms. In this work, the composition, structure and bathymetric and temporal changes of megafauna of the Alboran Ridge were examined. Samples were collected from MEDITS surveys carried out between 2012 and 2022 at depths ranging from 100 to 800 m. Analyses were performed separately for each of the taxonomic groups: osteichthyes, chondrichthyes, crustaceans, molluscs, echinoderms and “other groups”. There was no common spatial organization for each of the faunistic groups studied, although most of them displayed differences between the shelf and the slope. The continental shelf was characterized by the highest values of community metrics such as abundance, biomass, species richness and mean weight of species for all groups except for chondrichthyes and crustaceans. Decreasing trends of some community metrics were detected in some of the faunistic groups throughout the study period.

Keywords:bottom trawl survey,Alboran Sea,abundance,biomass,biodiversity.