{rokbox title=|:: Image: Authors|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-biological-parameters-ecology-valls-2022-thumb-et-al.png|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-biological-parameters-ecology-valls-2022-et-al.png{/rokbox}

Cristina Ciércoles, Cristina García-Ruíz, Pere Abelló, **Manuel Hidalgo**, Pedro Torres, María González, Ángel Mateo-Ramírez, José Luis Rueda, 2022.
Decapod crustacean assemblages on trawlable grounds in the northern Alboran Sea and Gulf of Vera.
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Abstract:This study analyses the samples collected annually (2012 to 2018) on circalittoral and bathyal soft bottoms (30 to 800 m) by the MEDITS surveys in the northern Alboran Sea (including Alboran Island) and the Gulf of Vera to determine the composition, structure and distribution of decapod crustacean assemblages. A total of 94 decapod crustacean species were identified. Non-metric multidimensional scaling showed depth to be the main factor for distinguishing four main decapod assemblages: the inner shelf (30-100 m depth), outer shelf (101-200 m), upper slope (201-500 m) and middle slope (501-800 m). PERMANOVA analyses revealed further significant depth-related differences between three established geographical sectors of the study area (northern Alboran Sea, Gulf of Vera and Alboran Island). Generalized additive model analyses were used to assess the bathymetrical, geographical and environmental effects on the ecological indices of each assemblage. Results showed that depth and the geographical effect were the main drivers in all cases. Decreases in abundance and increases in species richness, Shannon-Wiener diversity and Pielou's evenness indices with depth were detected. This study shows the primacy of depth and geographical effect on the distribution of decapod species in the study area, in alignment with findings from other parts of the Mediterranean Sea.

Keywords:Alboran Sea,crustaceans,decapods,assemblages,GAM,circalittoral,bathyal,biodiversity.