{rokbox title=|Demersal chondrichthyans in the western Mediterranean: assemblages and biological parameters of their main species :: Photo: Sergio Ramírez-Amaro| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-biologia-cond roictios-mediterraneo-occidental-ramirez-et-al-2015-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-biologia-cond licaciones/centro-oceanografico-baleares-biologia-cond roictios-mediterraneo-occidental-ramirez-et-al-2015-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-biologia-condroictios-mediterraneo-occidental-ramirez -et-al-2015.jpg{/rokbox}

Sergio Ramírez-Amaro, Francesc Ordines, Bàrbara Terrasa, Antonio Esteban, Cristina García, Beatriz Guijarro and Enric Massutí,

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Demersal chondrichthyans in the western Mediterranean: assemblages and biological parameters of their main species.

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Abstract: The composition and structure of demersal chondrichthyan assemblages and the biological parameters of their main species were compared in four geographical subareas (GSAs) established by the General Fisheries Commission for the Mediterranean in the western Mediterranean : northern Alboran Sea (GSA01) and Alboran Island (GSA02), Balearic Islands (GSA05) and northern Spain (GSA06), with the first two being considered jointly. Data were obtained from 199 hauls undertaken from May to June 2013 during the Spanish International Bottom Trawl Survey in the Mediterranean (MEDITS). Twenty-five different chondrichthyan species were caught in all GSAs: seven were common to all areas, five appeared only in GSA01, nine appeared only in GSA05 and one appeared only in GSA06. Analysis of community structure (clusters, multidimensional scaling, analysis of similitude) revealed two assemblages related to depth, with very similar bathymetric ranges in all GSAs, namely continental shelf (from 41 to 252 m) and slope (from 284 to 813 m). The highest diversity, biomass and abundance values on the shelf and slope assemblages were recorded in GSA05 and GSA01 respectively. These results highlight the effects of the distinct fishing and oceanographic parameters related to the GSAs. Generally, the biological parameters of the most important species did not show differences between GSAs, which could suggest the existence of a single population in the western Mediterranean.

<u>Keywords</u>: abundance, bottom trawl fishery, depth-related trends, diversity, length at first maturity, vulnerable species