{rokbox title=|Raya picuda (Dipturus oxyrinchus) capturada en aguas de Baleares :: Foto: Ana Morillas, COB-IEO| thumb=|images/stories/ieo/imagenespublicaciones/dipturus_ordines2011_640_thumb.jpg|}images/stories/ieo/imagenespublicaciones/dipturus_ordines2011_640.jpg{/rokbox}

Francesc Ordines, Enric Massutí, Joan Moranta, Antoni Quetglas, Beatriz Guijarro and Khaled Fliti, (2011).
Balearic Islands vs Algeria: two nearby western Mediterranean elasmobranch assemblages with different oceanographic scenarios and fishing histories.
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Abstract: In this paper we compare the elasmobranch composition, depth-related trends of species and community descriptors (abundance, biomass, mean fish weight, species richness and diversity) of the Balearic Islands Archipelago and Algeria (north- and southwestern Mediterranean, respectively). The samples used in this study were collected in bottom trawl surveys between 36 and 779 m depth. Generalized linear models, linear regression, cluster and similarity percentage analyses, and generalized additive models were used to compare the two areas. Twenty-nine elasmobranch species were caught, 12 of them common to both areas, 7 appearing only in the Balearic Islands, and 10 only in Algeria. The bathymetric distributions of species were, in most cases, best fitted to uni-modal response curves. The models for species common to both areas showed similar bathymetric trends, except for *Etmopterus spinax*, which in Algeria showed a maximum abundance located 154 m shallower than in the Balearic Islands. Four bathymetric assemblages were identified in both areas with similar depth ranges but with different species composition. The mean values of the community descriptors were higher on the shelf in the Balearic Islands, whereas higher values were detected on the slope in Algeria. Different between-area bathymetric trends for all the descriptors were detected, with the exception of mean fish weight. The distinct environmental scenarios and fishing histories of the areas studied are discussed as underlying traits influencing the elasmobranch populations.

Keywords: community descriptors, bathymetric trends, environmental factors, fishing mortality, threatened species