

{rokbox title=|Study area in the north-western Mediterranean Sea and around the Medes Islands marine protected area :: Image: Authors| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-parasite-diplodus sargus-medes-isbert-et-al-2018-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-parasite-diplodus sargus-medes-isbert-et-al-2018.jpg{/rokbox}

Isbert W, Montero FE, Pérez-Del-Olmo A, López-Sanz À, Reñones O, Orejas C, 2018. [Parasite communities of the white seabream *Diplodus sargus sargus* in the marine protected area of Medes Islands, north-west Mediterranean Sea.](#) J Fish Biol. 2018 Oct;93(4):586-596. doi: 10.1111/jfb.13729.

Abstract: Marine protected areas are considered a useful tool to preserve and recover the biodiversity of ecosystems. It is suggested that fisheries not only affect populations of target and bycatch species but also their parasite communities. Parasites can indicate fishery effects on host species and also on the whole local community, but the effects of fisheries and protection measures on parasite communities are relatively unknown. This study analyses parasite communities of the white seabream *Diplodus sargus sargus* in order to assess potential effects exerted by protection measures within and by fisheries outside a reserve in the western Mediterranean Sea. This small scale analysis offered the opportunity to study different degrees of fishery effects on parasite infracommunities, without considering climatic effects as an additional factor. Parasite infracommunities of fishes from the no-take zone (NTZ) differed in their composition and structure compared with areas completely or partially open to fisheries. The detected spatial differences in the infracommunities derived from generalist parasites and varied slightly between transmission strategies. Monoxenous parasites were richer and more diverse in both fished areas, but more abundant in the no-take, whereas richness and abundance of heteroxenous parasites were higher for the NTZ. In addition to host body size as one factor explaining these spatial variations, differences within parasite infracommunities between the areas may also be linked to increased host densities and habitat quality since the implementation of the NTZ and its protection measures.

Keywords: generalist parasites, habitat, marine reserve, no-take zone (NTZ), parasite infracommunities, seabream