{rokbox title=|Front page :: Image: Authors| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-population-structure-sardine-hake-blackspot-alboran-sea-hidalgo-et-al-2024-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-population-structure-sardine-hake-blackspot-alboran-sea-hidalgo-et-al-2024.jpg{/rokbox}

Hidalgo, M., Hernández, P. and Vasconcellos, M., eds. 2024. **Transboundary population structure of sardine, European hake and blackspot seabream in the Alboran Sea and adjacent waters** . Studies and Reviews No. 104 (General Fisheries Commission for the Mediterranean). Rome, FAO. https://doi.org/10.4060/cd1122en

Abstract: The boundaries of commercially exploited stocks in the Alboran Sea in the western Mediterranean have long been the object of scientific debate, due to gaps in knowledge of the spatial structure and connectivity of fish populations in the area. In an effort to resolve some of these questions, the “Transboundary population structure of sardine, European hake and blackspot seabream in the Alboran Sea and adjacent waters” (Transboran) research project, a collaborative project led jointly by FAO-Copemed II and the GFCM, ran for three years between 2017 and 2021. It aimed to describe the spatial structure of sardine (*Sardina pilchardus*), European hake (*Merluccius merluccius*) and blackspot seabream (*Pagellus bogaraveo*) populations in the western Mediterranean to help inform the best possible management advice for these species. Eight research institutions from five partner countries (Algeria, Italy, Morocco, Spain and Tunisia) joined forces on a comprehensive and multidisciplinary approach covering different techniques for stock identification and complemented by numerical modelling of hydrodynamic dispersal, spatial information on the fleets targeting the studied species, and field data from an ichthyoplankton survey. All of these disciplines provided information at various contrasting scales to take into account life cycle, demographic and evolutionary processes. This report presents the main findings of the Transboran project, which show differentiation of sardine and European hake stocks between the northern and southern Alboran Sea and reveal a homogenous population structure for blackspot seabream across the study area. The results therefore support maintaining the current configuration of stocks within their respective geographical subareas (GSAs) for assessment and management purposes.

Keywords: *Merluccius merluccius*, *Sardina pilchardus*, *Pagellus bogaraveo*, species,

hydrodynamics, modelling, otoliths, morphometrics, meristic counts, parasites, fisheries, ichthyoplankton surveys, stocks, discriminant analysis, stock assessment, Mediterranean Sea