{rokbox title=|The twelve sampled coves, according to crossed factors -location and exposure- and sheltered :: Image: Authors| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-asentamiento-juveniles-paisaje-marino-cuadros-et-al-2017-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-asentamiento-juveniles-paisaje-marino-cuadros-et-al-2017.jpg{/rokbox}

Amalia Cuadros, **Joan Moranta**, Luis Cardona, Pierre Thiriet, Jérémy Pastor, Nina Larissa Arroyo, Adrien Cheminée, 2017. **Seascape attributes, at different spatial scales, determine settlement and post-settlement of juvenile fish.** Estuarine, Coastal and Shelf Science. Volume 185, 5 February 2017, Pages 120-129.

Abstract: Concern has increased in recent decades regarding processes influencing fish juvenile density distributions; indeed, juveniles determine the replenishment of populations and their habitats are often found in shallow coastal areas, where human impacts are concentrated. We aimed to measure the relative importance of seascape attributes at various spatial scales (from seascape to microhabitat) in fish settlement and post-settlement processes. Along the coast of Minorca Island (NW Mediterranean), *Diplodus sargus* settlement variability was higher among the southern coast compared to the variability in the northern one. Independently of coast location, sheltered nurseries presented lower settlement intensity and recruitment levels compared to exposed ones. Such patterns suggested differential larval supply according to exposure level. Furthermore, subsequent density-dependent post-settlement mortality reduced the cove-specific variability of initial settlement. In addition, inside each cove, juveniles displayed ontogenetic changes of microhabitat use: smaller juveniles were more abundant in the most heterogeneous microhabitat. Consequently, juvenile density distributions responded to seascape attributes at different spatial scales; this suggests that both lager scale attributes and microhabitat influence both settlement and post-settlement processes, and may be limiting for recruitment. Our study demonstrated the importance of a diversified seascape to promote fish population replenishment.

Keywords: *Diplodus sargus*, Juveniles, Settlement, Growth, Survival, Connectivity, Exposure, Habitat structure, Minorca island, Mediterranean sea