{rokbox title=|Study area in the Northwest Mediterranean Sea, Balearic sub-basin :: Image: Authors|
thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-composition-distribution-larval-decapod-community-deep-sea-western-mediterranean-sea-balearic-basin-carbonell-et-al-2021-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-composition-distribution-larval-decapod-community-deep-sea-western-mediterranean-sea-balearic-basin-carbonell-et-al-2021.jpg{/rokbox}

Aina Carbonell, **Alberto Aparicio González**, Vanesa Papiol, Joan Enric Cartes, 2021.
Composition and distribution of the larval decapod community in the deep sea of the Western Mediterranean Sea Balearic Sub-basin.
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Abstract: Mechanisms facilitating larvae transport from continental to more oceanic areas were investigated in the Balearic sub-basin (BSB), Western Mediterranean Sea. The abundance, distribution, and development stages of decapod larvae were recorded for a transect of 28 stations crossing the central eddy of the BSB. Zooplankton samples were taken to 1,800 m depth by horizontal and oblique 500-µm mesh size nets hauls towed near the benthic boundary (BBL) and in deep scattering layers (DSL). In total, 67 taxa belonging to Decapoda and one Stomatopoda were identified. Advanced development represented 75% of the individuals recorded. 75% of the species corresponded to adults of deep-sea species, 9% were sergestids (mesopelagic species), and the remaining 16% corresponded to shelf and coastal species. Cluster assemblages formed were related to the hydrological conditions, water masses dynamics, and geomorphologic structures mainly associated with nepheloid layers. Advanced and juvenile specimens of commercial species such as *Parapenaeus longirostris*, *Gery on longipes*
, and
Aristeus antennatus
were found close to seafloor BBL. The influence of trophic ecology should be considered as the priority factor of larvae concentrations in deep.

Keywords: Balearic sub-basin, benthic boundary layer, decapod larvae, deep sea, fishery species, nepheloid layers, Northwestern Mediterranean Sea