{rokbox title=|Round sardinella or Spanish sardine (Sardinella aurita). Gulf of Mexico. :: Credit: SEFSC Pascagoula Laboratory; Collection of Brandi Noble, NOAA/NMFS/SEFSC| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-rafik-et-al-2012-sardinella-aurita-wikipedia-cc-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-rafik-et-al-2012-sardinella-aurita-wikipedia-cc.jpg{/rokbox}

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Influence of summer conditions on the larval fish assemblage in the eastern coast of Tunisia (Ionian Sea, Southern Mediterranean)
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Abstract: The structure of the summer larval fish assemblage off the eastern coast of Tunisia and its relation to environmental conditions was studied, from ichthyoplankton samples taken during a survey conducted between 23rd June and 9th July 2008. A total of 68 larval fish taxa were identified, 52 to species level. The taxonomic composition and abundance of the larval fish assemblage showed high spatial heterogeneity. Mesoscale hydrographic features, such as eddies, seem to play an important role in the spatial distribution of fish larvae in the area, enhancing concentration and retention. The larval fish assemblage was dominated by the small pelagic species *Sardinella aurita* (26.6% of the total larval fish abundance), followed by *Engraulis encrasicolus* (22.6%), *Spicara spp* . (8.6%) and *Mullus barbatus* (6.8%). Shannon–Weaver index (H′) ranged between 0 and 2.62. The highest values were found offshore, at 95 miles east of Sousse, over depths around 250 m. The diversity was higher in this region as a result of transport by currents and retention by eddies. It has also been shown that the eastern coast of Tunisia is a spawning ground for the tuna species *Auxis rochei* , *Thunnus thynnus* and *Thunnus alalunga* . Larvae of mesopelagic fishes represented 5.46% of the total abundance, with *Cyclothone braueri* , *Ceratoscopelus maderensis*

and
Lampanyctus crocodilus
being the most important species. Canonical correspondence analysis (CCA) indicated that depth was the most important environmental factor in explaining species distribution.

Keywords: Fish larvae, Diversity, Assemblage, Southern Mediterranean