

# Fish eggs and larvae from the Mediterranean waters of Egypt

by

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Over 600 plankton samples, comprising both vertical and horizontal hauls, covering the neritic province along the Egypt Coast were examined for the occurrence and distribution of fish eggs and larvae. According to the relative abundance of eggs and larvae in the plankton, it was possible to group them into the following categories :

1. Fishes whose eggs occur in relatively large numbers during the winter season. December to March, temperature 16°C - 19°C. Those include : *Solea* sp. ; *Sharus accratus* ; *Trigla* sp. ; *Trichiuris* sp. ; *Mugil capito* ; *Morone labrax* and *Sardinella pilchardus*.
2. Fishes whose eggs and larvae occur mostly in Spring late March to May at a temperature range 19°C - 24°C *Mullus barbatus*, *Pagrus* and *Pagellus* sp.
3. Fishes whose eggs and larvae were common in summer June-September at a temperature range 24°C - 29°C *Sardinella* sp., *Temnodon sultatus*, *Saurida* sp., *Mugil cephalus*, *Mugil soleans*.
4. Fishes whose eggs and larvae were common in Autumn October-November at a temperature range 26°C - 20°C. *Merluccius* sp., *Solea* sp. and *Mugil cephalus*.

Several species were recorded to have their breeding season extending over two or more seasons e.g. *Engraulis encrassicolis* the eggs of this fish were found in the neritic waters along the coahale coast in comparatively large numbers from March to November. Further more *Engraulis* eggs were found in the brackish water Delta Lakes at low salinities down to 4-6 ‰ weather this fish breed in these lakes or the egg are swept to the lakes from the sea is not get known. Eggs of *Mugil* spp. and *Sardinella* spp. were also found in the plankton from late spring to autumn.

From the study of the relation between the breeding season and the season of maximum catch, it was possible to group these fishes into 2 categories.

1. Species caught with maximum number during their breeding season e.g. : *Solea* *Trichiuris*, *Trigla*, *Temnodon*, *Chrysophryis*, *Morone labrax*, *pagrus* and *pagellus* spp., species belonging to this category may aggregate together at a suitable depth in areas usually fished by fishermen.
2. Species whose period of maximum catch do not coincide with their breeding season such as *Mullus barbatus*, *Saurida* spp. and probably *Mergil* spp., *Sardinella* spp. such species may thus migrate to places or depths not usually fished by fishermen. Their breeding grounds may probably lie outside the continental shelf of our waters.

The relative concentration spatial distribution and the correlation between the abundance of these eggs and larvae with the prevailing hydrological conditions in our waters is dealt with.

