

SAGITTA ENFLATA Grassi AND OTHER CHAETOGNATHS IN THE ALBORAN SEA. DISTRIBUTION AND COMPOSITION.

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ABSTRACT.- The distribution and the sexual stages of *Sagitta enflata* and other chaetognaths of the Alboran Sea are presented.

RESUME. - Les données sur la distribution superficielle et la composition des Chaetognathes recueillis en août 1976 dans la mer d'Alboran ont été analysées. Les états sexuels de *S. inflata*, en particulier, ont été étudiés.

In August 1976, an oceanographic cruise was carried on with the R/V "Cornide de Saavedra", north to the 36° N parallel and between the Strait of Gibraltar and 2° 30' W.

Zooplankton samples proceeding from vertical hauls with a Hensen plankton net of 300 μ mesh from 50 m. to surface were taken. The distribution and abundance of the chaetognaths present in the area, corresponding to the same one studied in 1975 (Camiñas, 1980) were studied.

RESULTS.- A total of 5.938 chaetognaths distributed among the following species were analyzed:

<i>Sagitta enflata</i> ..	5.886	99,12 %	<i>Sagitta serratodentata</i> ..	3	0,05 %
<i>Sagitta minima</i> ...	30	0,51 %	<i>Sagitta lyra</i>	1	0,02 %
<i>Sagitta bipunctata</i>	15	0,25 %	<i>Sagitta</i> sps.	3	0,05 %

As observed by other authors, the presence of *S. enflata* in the epiplankton of the Alboran Sea is predominant in the month of August, since it is an epiplanktonic species found in the first 50 meters.

The distribution of its different sexual stages find the immature stages constitute the greatest proportion while the most advanced stages are found in the most western area.

sexual stage	Inmature	I	II	III	IV
Individual	4.184	1.210	313	163	25
%	70,98	20,53	5,31	2,77	0,42

DISTRIBUTION.- The distribution observed of *S. enflata* during the month of August is similar to that of July 1975, relating it with the surface temperature of the waters. The highest values are found in coastal water of the western area, with waters of mediterranean characteristics: high temperatures and salinities above 36,5 ‰.

Another concentration appears in the area near to the Strait of Gibraltar, following the direction of the atlantic current that enters the Mediterranean (Cano, 1978), with temperatures between 22°-23°C, and is in 1975 with two areas of concentration interrelated. It is interesting to note that the central area of the study with temperatures below 20 °C presents a rather scarce abundance, probably due to upwelling phenomena in the area.

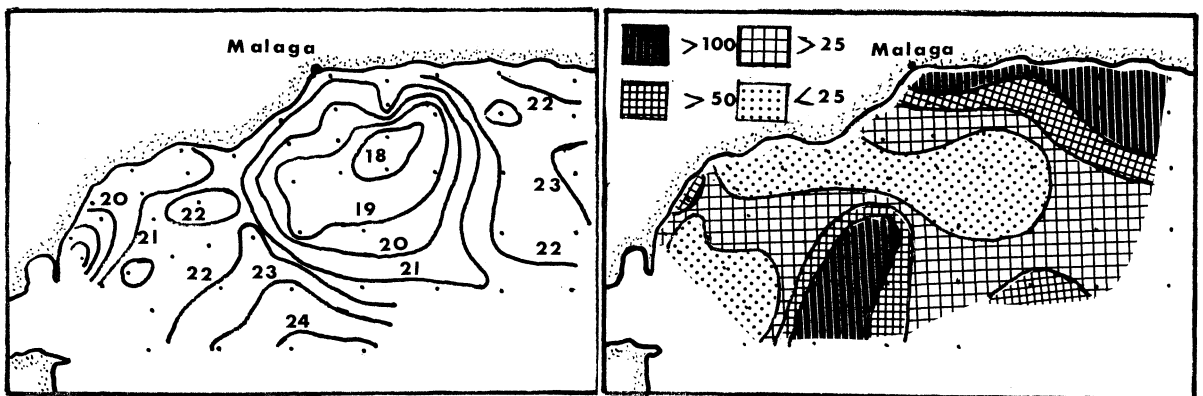


Fig. 1.- Mean temperature in the first 20 meters.

Fig. 2.- *S. enflata* distribution. N/m^3 .

GROWTH.- In 504 exemplaires in a good state of conservation and belonging to the different sexual stages, the total length (LT) was measured. The mean values obtained are the following:

stage	LT(mm)	standard deviation
I	8,58	1,83
II	11,39	1,96
III	13,75	1,80
IV	14,48	2,24

Besides these preliminar data, a later study on the variations of the caudal length and the ovaries will be carried on with the purpose of finding differences between the two concentrations of *S. enflata* in the Alboran Sea.

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