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Trawl survey studies during the mounths of May-July 1990 were undertaken in the continental shelf of Catalan sea (W. Mediterranean, Fig. 1). Besides quantitative studies of demersal resource characteristics, a preliminary investigation of trawl efficiency was undertaken. Two commercial trawler both of 50 HP, carried out the field work.

The analyses of catches for two gears used in a coastal fishing along W. Mediterranean coast localities was studied. The mean objective was studied the octopus fishery for his control and protection on a scientific basis.

These surveys are situated in two specific areas (Palamos and Tarragona), divided in two strata under bathimetric criteria (30100 m and 101-200 m). Trawling is done during daylight, and tows were 1/2 hour long. All strata are divided into units of 25 square nautical miles (5°5). The number of hauls in each startum is proportional to its area and selection is made by random sampling. Software used for all data procesing it's compiled under program "CAMP" (SANCHEZ F., 1990) written in dBase III plus.

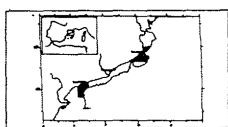


Fig. 1. Area prospected.

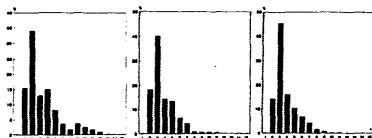


Fig. 2. Length frequency *E. cirrhosa*

The special morphology and oceanographic charactarestics of area studied was determined (LLEONART J. *et al.*, 1988) a very important fishery. The abundance index it's related for the most important species (Table 1): Hake and Curled Octopus.

Hake (*Merluccius merluccius*). The stratified abundance index, in kg/haul for the all mounths (Table 2), show a similar trends under 1 kg/haul, exceptioned in June (110 m depth). The abundance index shows similarity along the survey time. The same circumstances with recruitment index was founded (Table 3).

Curled Octopus (*Eledone cirrhosa*). The abundance index shows great similarity with other species founded in this area. The stratified abundance index show a downward tendency along the mounths (Table 2). In number of individual we founded the same trend. The recruitment index variations (Table 3) showing the same tendency with values varying between 78 and 30 inds. less of 7 cm. The curled octopus population is distributed over the whole continental shelf. Length frequency distribution is given in fig.2. In the experience was mesured 1049 inds. and the lengthweighth relationship obtained was:

$$W = 5.86 \cdot 10^{**} - 3(L^{**}2.39) \quad R = 0.97$$

Table 1

TOTAL AREA			
Abundance index (kg/} hour)			
	May	June	July
<i>E. cirrhosa</i>	1.86	1.76	1.54
<i>M. merluccius</i>	0.51	1.11	0.66
TOTAL FISH.	5.79	8.56	6.80
TOT. CRUSTAC.	0.26	1.38	1.22
TOT. MOLUSCA	2.79	2.24	2.10

Table 2

BIOMASS (kg/}hour)			
Stratified abundance index			
	Strata	30-100m	100-200m
		Weight Num.	Weight Num.
	May	0.39 15	0.56 78
<i>M.m</i>	June	0.45 15	2.12 166
	July	0.52 9	0.73 45
	May	1.46 13	2.08 57
<i>E.c</i>	June	1.98 23	1.43 39
	July	1.00 9	1.82 44

Table 3

Recruitment index											
<i>Merluccius merluccius</i> N° indivs. < 17 cm in 1 hour trawl											
Mounth	Strata	Palamós			Tarragona			Total			
		Yst	Syst	N	Yst	Syst	N	Yst	Syst	N	
May	Total	195	52.01	14	56	11.81	7	108	20.77	21	
	June	Total	204	55.92	17	14	2.25	6	79	20.86	23
	July	Total	117	10.32	16	17	9.77	8	55	16.24	24
<i>Eledone cirrhosa</i> N° indivs. < 7 cm in 1 hour trawl.											
Mounth	Strata	Palamós			Tarragona			Total			
		Yst	Syst	N	Yst	Syst	N	Yst	Syst	N	
May	Total	55	11.94	14	92	24.36	7	78	15.91	21	
	June	Total	65	10.42	17	28	9.00	6	30	4.25	23
	July	Total	54	4.86	16	62	31.36	8	59	19.75	24

REFERENCES

LLEONART J., 1988.- La pesqueria de Cataluna. CEE, DIR.GEN. XIV-B-1
 SANCHEZ F., 1991.- Bottom trawl surveys in the North of Spain. Inf. Tec. IEO. Madrid. Spain.