



**GENERAL FISHERIES COMMISSION FOR  
THE MEDITERRANEAN  
COMMISSION GÉNÉRALE DES PÊCHES  
POUR LA MÉDITERRANÉE**



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**GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN**

**SCIENTIFIC ADVISORY COMMITTEE (SAC)**

**Working Group on stock assessment of small pelagic species  
(Mazara del Vallo, Italy 1<sup>st</sup> – 6<sup>th</sup> November 2010)**

**LIST OF ABSTRACTS\***

*\*As received by the GFCM Secretariat*

## **Sardine and Anchovy assessments in GSA7**

Bigot J. L. and Roos D.

In the gulf of Lion, pelagic fisheries are targeted on sardine and anchovy. Fishing effort depends on market fluctuations. A mean of 50 trawler boats in the last years are targeting these pelagic species. There is also 14 purse seiners in the south of gulf of Lion that catch also these species. Some purse seine boats from Spain come in the area to fish mainly sardine. The assessments provided here are entirely dependent on the assumption of Acoustic biomass providing unbiased estimates of the absolute level of biomass at sea. The perception of moderate fishing mortality is based on the assumption of unbiased estimates of biomass by acoustic. For that reason current results should be taken with caution and the WG think that the current assessment should not be taken as an indication of space for increasing current fishing levels of effort.

## Some biological aspects of *Trachurus mediterraneus* in the Marmara Sea

Demirel N.

*Trachurus mediterraneus*, Mediterranean horse mackerel, together with anchovy, is the most commercially significant fish species in the Marmara Sea. This doctoral dissertation study was undertaken to understand the detailed reproductive biology of this important species in the Northwestern part of the Marmara Sea. Samples were collected monthly from commercial fishing boats around Prince Islands. A total of 1244 individuals were collected. Monthly distribution of the sex ratio was found significant ( $\chi^2 = 25$ , s.d.= 11,  $p < 0,05$ ) Age determination analysis showed that samples were between 0+ and VI year. Average total length was calculated to be  $14,3 \pm 0,12$  for all samples. Estimation of parameter b indicate that *T. mediterraneus* shows positive allometry ( $b=3,26$ ,  $b>3$ ). The smallest size of mature individuals was found as 11,5 cm for both sexes. First maturity length was calculated to be 12,2 cm for females and 12,5 cm for males. Monthly changes of mean percentage of Gonadosomatic Index values, gonadal development stages and oocytes size distribution showed that the spawning season starts in May and lasts in September. The peak spawning season was determined as June and July. Batch fecundity was found as  $9704 \pm 703$  oocytes. Reproductive biology of *T. mediterraneus* has been studied for the first time in the Marmara Sea. These results will provide the basis for future stock assessment and management studies on this species.

## **Stock assessment of *Etrumeus teres* in the Egyptian Mediterranean waters, off Alexandria**

Farrag E. F. E and Mehanna S. F.

Specimens were collected monthly from Alexandria landing canter during the period from January to December 2008. I would like to analyse and compare the results of *Etrumeus teres* with different methods in investigated area with the different areas among the whole Mediterranean.

## **Pêcherie des petits pélagique de la Méditerranée marocaine: situation de l'exploitation et état de Stock**

Kada O. and Idrissi M. H.

On the scale of Moroccan Mediterranean sea and by term of the importance of landings, the sardine is situated in first row, by an annual production of 14 000 tonnes. Fishing of sardine is practiced essentially by approximately 140 units of purse seiners, distributed in seven ports. The evaluation of the state of sardine stock, based on the analysis of length frequency (LCA) with the help of the VIT software (Lleonart et Salat, 1997), was made on data from years 2000 to 2009. The results show that the fishing effort is exercised essentially on adult individuals (between 16 and 19 cm). The analysis of the yield by recruit indicates a state of full fishing on this resource.

## **Biomass estimations of small pelagic fish in the eastern and western side of the South Adriatic Sea – GSA 18**

Leonori I., Campanella F., De Felice A. and Biagiotti I.

The western side of south Adriatic Sea included in GSA 18 has been monitored since 1987 by means of acoustic survey. Recently the same research methodology was applied in the eastern side of south Adriatic Sea, firstly along Montenegrinian coasts (2002, 2004, 2005) and then extended to Albanian waters in 2008. The surveys held in this area in the years 2008 and 2009 and the relative results are presented.

## **Trends in anchovy and sardine populations (1998-2010) in GSA 16 - South of Sicily**

Patti B., Quinci E., Bonanno A., Basilone G., and Mazzola S.

The main distribution area of the anchovy stock in GSA 16 is the narrow continental shelf area between Mazara del Vallo and the southernmost tip of Sicily, Cape Passero (Patti et al., 2004). Small pelagic fleets in GSA 16 are mainly concentrated in Sciacca port. As a result, catches are mainly landed in this port. Information collected in the framework of CA.SFO. study project (Patti et al., 2007) showed that landings in Sciacca port account for about 2/3 of the total landings in GSA 16. Two operational units (OUs) are presently active in Sciacca port, purse seiners and pelagic pair trawlers. In both OUs anchovy represents the main target species due to the higher market price compared to sardine. Available data on catch of anchovy and sardine in GSA 16 are from Sciacca port for 1998-2010, last year until 30th September. Biomass evaluations from echo-surveys carried out from 1998 to 2009 in GSA 16 show that anchovy and sardine population experienced quite large inter-annual fluctuations, from a maximum of about 36,000 t in 2000 to a minimum of about 6,000 t in 2002 for the sardine and from about 23,000 t in 2001 to 3,000 t in 2008 for the anchovy. DEPM biomass estimates are available for the anchovy population in GSA 16 for the 1998, 2000,2001,2005,2006 years. Available information was integrated in order to estimate approximate rate of exploitation of the fish stocks.