

SHORT DESCRIPTION OF THE TURKISH SWORDFISH FISHERY IN 2001

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SUMMARY

Swordfish (*Xiphias gladius* L., 1758) are widely distributed in tropical and temperate seas including the Mediterranean Sea. In this study, the length distributions are given for measured swordfish samples in 2001. A total of 111 specimens were measured between January and June in the fish market in Istanbul. The minimum and maximum lengths were sampled as 70,5 cm and 185 cm, respectively.

RÉSUMÉ

L'espadon (*Xiphias gladius* L., 1758) est largement répandu dans les eaux tropicales et tempérées, notamment dans la Méditerranée. La présente étude fournit les distributions de taille des espadons échantillonnés et mesurés en 2001. Un total de 111 spécimens ont été mesurés entre janvier et juin dans le marché au poisson d'Istanbul. Les longueurs minimales et maximales échantillonnées ont été respectivement de 70,5 cm et 185 cm.

RESUMEN

El pez espada (*Xiphias gladius* L., 1758) se extiende por una amplia zona en los mares templados y tropicales, incluido el Mediterráneo. En este estudio, se presentan las distribuciones de tallas para los ejemplares de pez espada medidas en 2001. En el mercado de pescado de Estambul se midió un total de 111 especímenes entre enero y junio. Las tallas mínimas y máximas muestreadas fueron de 70,5 y 185 cm, respectivamente.

KEY WORDS

Swordfish, *Xiphias gladius*, the Mediterranean Sea

1. INTRODUCTION

In Turkish waters, swordfish are caught in the northern part of Aegean sea by harpoons, in the eastern part of the Aegean sea and in the Mediterranean sea by longlines. A total of 510 MT swordfish were caught by Turkish fishermen in 2001 and 17913 kg of swordfish were sold in Istanbul at the Fish Market.

2. MATERIALS AND METHOD

Swordfish were measured at Istanbul Fish Market in January-June in 2001. The lower jaw fork lengths (LJFL) of swordfish were measured by using a caliper.

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3. RESULTS AND DISCUSSION

The minimum and maximum length of measured 111 specimen in 2001 were 70,5 cm and 185 cm. In **Figure 1** and **Table 1** the length distributions of swordfish are given.

Swordfish in the Mediterranean sea generally do not exceed 220 cm fork length. In other seas swordfish get bigger than in the Mediterranean sea. Considering the length distribution data in 2001, these fish are generally under 125 cm fork length (59,46%). Regarding the total numbers of the fish sampled, 115 cm (12,6%) and 110 cm (10,8) length classes were more numerous than the other length classes.

The reproduction period of this species is from May to September. In May, few mature females were sampled.

In the Mediterranean sea, the males mature at the end of the first year, whereas the females reach maturation during the third year. Some female swordfish mature in the second year (De Metrio and Megalofonou 1987). Considering the first maturity of the females, swordfish should not be caught under the 135 cm fork length. The total number of the sampled swordfish under 135 cm fork length in is 2001 72,97%.

In the future more, work on selectivity should be conducted.

REFERENCES

- DE METRIO, G. and P. Megalofonou 1987. Catch, size distribution, growth and sex ratio of swordfish *Xiphias gladius* (L., 1758) in the Gulf of Taranto. FAO Fish. Rep. No. 394; pp. 91-102.
- ALIÇLI, T.Z. and I.K. Oray,. 2002 Investigations on the Fishing Methods and Length Distributions of Swordfish (*Xiphias gladius* L., 1758) in the Mediterranean Sea. International Conference on Environmental Problems of Mediterranean Region 12-15 April 2002, Nicosia, North Cyprus. (in press).

Table 1. Length distribution of the measured samples in 2001.

<i>Length classes</i>	<i>n</i>	<i>%f</i>
70	5	4,5045
75	4	3,6036
80	8	7,20721
85	4	3,6036
90	0	0
95	2	1,8018
100	1	0,9009
105	7	6,30631
110	12	10,8108
115	14	12,6126
120	9	8,10811
125	7	6,30631
130	8	7,20721
135	6	5,40541
140	8	7,20721
145	6	5,40541
150	3	2,7027
155	1	0,9009
160	1	0,9009
165	2	1,8018
170	0	0
175	2	1,8018
180	0	0
185	1	0,9009

n = 111

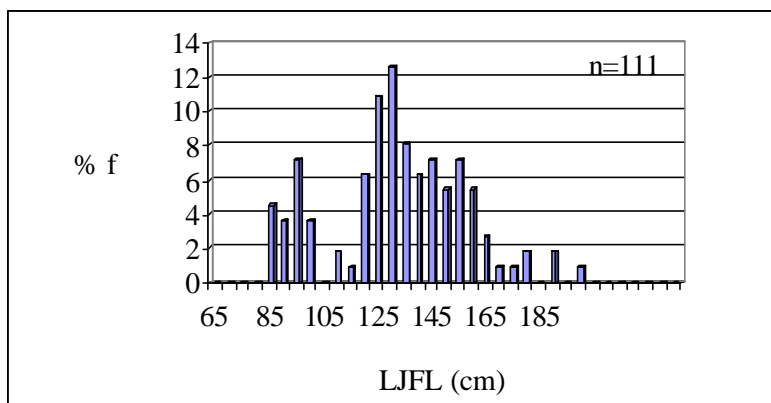


Figure 1. Length distribution of swordfish in 2001.