

# MORPHOMETRIC CHARACTERISTICS OF THE MOROCCO DENTEX *DENTEX DENTEX* VALENCIENNES, 1830 IN THE IZMIR BAY

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## Abstract

The Morocco dentex, *Dentex maroccanus*, is an important demersal commercial sparid species inhabiting throughout the Mediterranean at the depths from 20 to 500 m. Morocco dentex ecologically prefers deep and higher salinity waters. In the Aegean Sea (Izmir Bay), a basin of the eastern-central Mediterranean, the sparids represent important components of the demersal fish stock and are generally caught by trawl, long line, and trammel nets. In this study morphometric measurements of the 52 Morocco dentex specimens obtained from fishermen trawling in the Izmir bay between April 2013 – March 2014 were examined. As a result, it has been revealed that females are greater than the males in all of the variables examined.

**Keywords:** *Fishes, Teleostei, Aegean Sea*

Sparidae family represented by 37 genera and 178 species in the world seas includes 21 species of 10 genera in Turkish seas [1]. Genera of Pagellus, Pagrus and Dentex are called red seabream. Four species of Dentex (*Dentex dentex*, *D. gibbosus*, *D. macrophthalmus*, *D. Maroccanus*) occur across Turkish sea waters. Of total catch from Turkish seas amounting to 295167.9 tons, some 30142.7 tons were yielded from Aegean Sea. Catch of Sparidae species in Turkish seas is 5057 tons (1.71 %) and 3088,4 (10.2 %) from Turkish seas and Aegean sea, respectively [2]. The major studies on the Morocco dentex in the Mediterranean have been carried on its western basin and concerned the age, growth, feeding, reproduction, and distribution [3]. Studies on the species in Turkish sea are concerned with its length-weight relationships [4; 5; 6]. The first comprehensive biologic study was conducted in Saroz Bay (North Aegean Sea). The present study on morphometric characteristics of the species is expected to contribute to those to be performed on its biology. We studied 52 individuals from all length groups of a total of 439 fish collected from fishermen who catch fish using trawl boats from April 2013 to March 2014 across Foca – Mordogan.

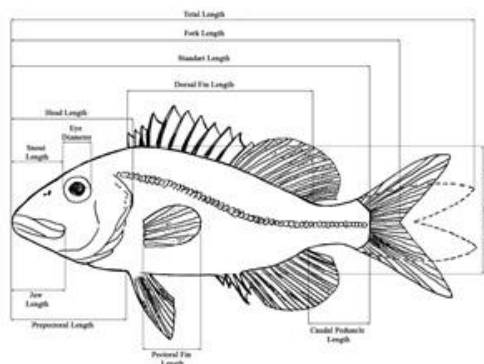


Fig. 1. Morphometric measurements

Their total, fork and Standard length were measured by 0.1 cm scale board and morphometric measurements made using a 0.01 cm – accuracy Mitutoyo digital callipers. Since species of great economic value are target catches, present stocks are due to come into danger of extinction. It is a great importance to follow up stock lengths annually and determine reproduction, growth and development of red seabream in order to preserve and sustain their stocks considering their economic value. Briefly, findings obtained from Morocco dentex fish across Izmir Bay will contribute to detailed biologic studies to be made on the species.

Tab. 1. Morphometric values according to sexes

Parameters	Male (Mean) ± SE (mm)	Female (Mean) ± SE (mm)
Total Length	131.24 ± 2.66	151.36 ± 9.89
Fork Length	119.53 ± 2.64	136.18 ± 9.06
Standard Length	105.90 ± 3.15	122.82 ± 8.58
Body Height	39.38 ± 0.95	45.96 ± 3.20
Head Length	34.67 ± 0.84	40.68 ± 3.18
Snout Length	9.15 ± 0.29	11.20 ± 1.10
Eye Diameter	12.47 ± 0.28	14.56 ± 0.95
Jaw Length	13.72 ± 0.33	16.42 ± 1.36
Dorsal Fin Length	53.20 ± 1.17	60.53 ± 3.81
Pectoral Fin Length	32.09 ± 0.91	37.68 ± 2.90
Prepectoral Length	39.72 ± 0.95	45.67 ± 3.44
Caudal Peduncle Length	18.75 ± 0.42	20.65 ± 1.34

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