

**Length-weight relationships in Gilthead Seabream (*Sparus aurata* L., 1758), caught from Homa Lagoon (Izmir, Türkiye)**

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There are many bays and gulfs at the shore of Aegean Sea. These areas are suitable for natural fish production. There are 26 active lagoons of about 35000 ha which yield a productivity of 5 - 6 kg/da at Türkiye (ALPBAZ, 1987). Gilthead Seabream (*Sparus aurata*) are very frequent in the lagoon areas of our country since is an important commercial fish for all mediterranean countries. Studies have been done about their body length-weight relationships in the lagoons.

The studies have been performed in Homa Lagoon located north west of Izmir Bay (fig. 1). The total area of lagoon is 18000 da., and its average depth is 0,75 m. Around 15000 da. of this area are suitable for fishery. The lagoon is connected to the sea bay six canals. The total fish production in 1989, the period of the present investigation, was 65 ton/year, 15 percent of this was Gilthead Seabream (KORKUT, 1989).

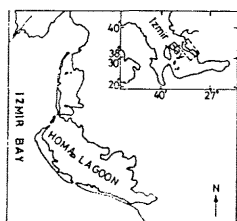


Fig. 1. Homa Lagoon

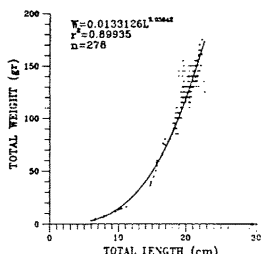


Fig. 2. Length-weight relationship in *S. aurata*

Gilthead Seabream were caught by gillnets, fyke nets and traps. Length and weight measurements have done to observe growth. The parameters of the length(L)/weight(W) regression curves were calculated using the equation:  $W=aL^b$  (fig. 2). For statistical analysis these curves were the transformed into straight line equations. The proportions of individuals of each length class are given at figure 3.

According to our observations Gilthead Seabream reach, in six months, about 170 g in weight and 18.46 cm in length.

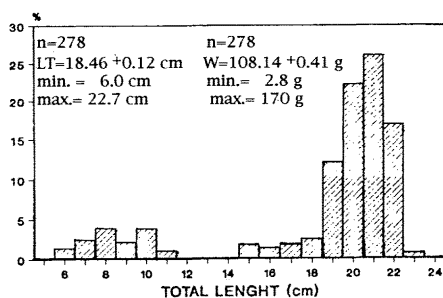


Fig. 3. Proportion of different length classes in Gilthead Seabream (*Sparus aurata* L., 1758).

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