

Length-Weight Relationship and Growth Features of the Red Gurnard *Chelidonichthys cuculus* (Triglidae) from Izmir Bay, Aegean Sea

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Aim of the study: The red gurnard *Chelidonichthys cuculus* is identified as a possible commercial species and monitoring programmes should be carried out to get biological parameters for their stock assessment purposes. In this study, age, growth parameters and length-weight relationship of red gurnard in the Izmir Bay (Aegean Sea) were studied.

Material and Methods: The sampling was based on several bottom trawl surveys between December 2013 and October 2014 from Izmir Bay. Age, growth and length-weight relationship of 363 red gurnard samples, of which 180 female and 183 male, were analysed.

Results: Total lengths were ranged from 10.9 to 30.9 cm and from 14.1 to 29.5 cm for females and males, respectively. Weights were ranged from 8.09 to 79.25 g and from 11.20 to 80.30 g for females and males, respectively. The observed maximum age was 4 for both females and males. The length-weight relationships were calculated for females, males and both sexes as $W=0.1844 \times L^{1.9297}$, $W=0.3713 \times L^{1.722}$ and $W=0.2679 \times L^{1.8173}$, respectively. The von Bertalanffy growth equations were determined for females, males and both sexes as $L_f=47.14006 [1-e^{-0.11328(t + 1.78514)}]$; $L_m=40.95231 [1-e^{-0.144101(t + 1.70457)}]$ and $L_{f+m}=44.45026 [1-e^{-0.123977(t + 1.79154)}]$, respectively.

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Keywords: Red gurnard, *Chelidonichthys cuculus*, length-weight relationship, growth parameters, Izmir Bay, Aegean Sea.