



## Length-Weight Relationships of Two Groupers from Southern Aegean Sea, Turkey

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### Abstract

In this study, length-weight relationships (LWRs) were calculated for *Epinephelus aeneus* (Geoffroy Saint-Hilaire, 1817) [n= 16; 17.0-36.8 (26.7±6.3) cm TL, and 60.6-728.3 (265.4±205.5) g] and *Mycteroperca rubra* (Bloch, 1793) [n= 12; 20.0-32.0 (27.1±4.9) cm TL, and 110.8-362.9 (245.9±88.0) g] specimens collected seasonally via commercial gill-net (30 mm mesh size, 8 m height, and 500 m length) vessel (F/V ILKYAZ, 11.3 m, 135 HP) between February and November 2013 from Akbük Cove (Gökova SEPA, southern Aegean Sea). LWR equations were calculated as follow:  $W = 0.0161 * L^{2.91}$  ( $R^2 = 0.96$ ; C.I. of  $b = 0.42$ ) for *E. aeneus*, and  $W = 0.2872 * L^{2.04}$  ( $R^2 = 0.87$ ; C.I. of  $b = 0.70$ ) for *M. rubra*. According to Fishbase, only five LWR studies existed for *E. aeneus* ( $n_{min} = 9$ ,  $n_{max} = 36$ ,  $b_{min} = 2.85$ ,  $b_{max} = 3.58$ ), and only one LW study for *M. rubra* ( $n = 1$ ,  $b = 3.0$ ). Thus, the results provided in this study could serve as a useful tool in future studies in the wider study area and as a future reference for comparisons of similar parameters estimated in other Mediterranean regions for these two grouper species.

### Keywords:

*Epinephelus aeneus*, *Mycteroperca rubra*, Gökova SEPA, No Fishing Zone, No Take Zone

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