Growth Parameter and Mortality Estimates of Yellowfin Seabream, *Acanthopagrus latus* (Houttuyn, 1782) in the Coastal Waters of Hormozgan Province, Iran

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Received Date: November 12, 2011 *Corresponding Author* Accepted Date: May 22, 2012

Abstract

The growth and mortality parameters as well as exploitation rate were estimated for Yellowfin seabream, (*Acanthopagrus latus* Houttuyn, 1782) from the specimens collected in Bandar Abbas, Lengeh and Qeshm fishing bay, Iran from July to June 2011. In order to do this, length frequencies distribution were analyzed using the ELEFAN I routine and Pauly’s practical approach from the FISAT II program. The forked length (FL) of the captured fishes ranged from 15 to 41 cm with an average of 25.56 cm. The mixed sexed growth parameters were estimated to be $L_\infty = 43.5$; $k = 0.29$ yr$^{-1}$; year $t_0 = -0.52$. Total mortality ($Z$), natural mortality ($M$), and fishing mortality ($F$) were calculated at 1.16 yr$^{-1}$, 0.69 yr$^{-1}$, and 0.47 yr$^{-1}$ respectively while exploitation rate was 0.41. Using obtained total weight ($W$) data, the relationship between total weight and forked length was described: $W = 0.0379 SL^{2.86}$. It could be speculated that Yellowfin seabream exhibit isometric growth in the area. In this research, MCY is estimated about 352 tons.

Keywords: *Acanthopagrus latus*, Population dynamics, Length frequency, Persian Gulf.