Age and Growth of Turbot *Psetta maxima* in the Black Sea, Turkey

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Abstract

The age and growth of turbot *Psetta maxima* in the Black Sea were examined from specimens caught by both coastal fisheries in Trabzon and a trawl net survey of the Trabzon Fisheries Research Institute from December 1997 to July 1999. The number of otoliths available for examination was 641 pairs of otoliths. We counted the number of otolith opaque and hyaline zones and measured the otolith and ring radii. Monthly changes in the ratio of the number of opaque edges and marginal growth rate indicated that a single ring was formed once a year for both sexes. The relations of back-calculated standard length(cm) $L(t)$ to age t(years old) expressed using the Bertalanffy growth equation were represented as $L(t)=54.8\{1-e^{-0.481(t+0.011)}\}$ and $L(t)=45.0\{1-e^{-0.597(t+0.011)}\}$ for female and male, respectively. The estimate of growth coefficient did not differ from those of turbot in the Gulf of Lion and in a release-recapture experiment in the Black Sea, but were nearly twice as large as that in the Gulf of Pomerania.

Key Words: turbot, *Psetta maxima*, Black Sea, age determination, growth

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