

Stocks, Distribution and Population Parameters of Turbot (*Psetta maxima* L.) in front of the Bulgarian Black Sea Coast in 2006

Marina D. Panayotova, Valentina R. Todorova

Institute of Oceanology – BAS, 9000 Varna, 40, Parvi Mai St., P.O.BOX.152, Bulgaria;
E-mails: mpanayotova@io-bas.bg, vtodorova@io-bas.bg

Abstract: Turbot exploited biomass in front of the Bulgarian Black Sea coast was estimated by the swept area method in spring and autumn-winter, 2006. Turbot stock biomass was calculated at 447 tons in spring and 1441 tons in autumn-winter. The considerable disparity between the two assessments was associated mainly with differing vessel and gear selectivity, but method limitations, weather conditions and species spatial and temporal distribution could have also contributed. High values of catch per unit effort and catch per unit area were registered in the areas off the capes Kaliakra, Galata and Emine. The size structure of catches encompassed length classes between 26.5 and 77.5 cm with numerical dominance of individuals with total length between 38.5 and 56.5 cm. The age of caught specimens ranged between 1 – 9 years. Turbot growth rate was estimated by von Bertalanffy growth function. The food spectrum of turbot included representatives of molluscs, crustaceans and fishes. The most important food components during both investigated seasons were fishes, mainly whiting.

Key words: turbot, stock assessment, population parameters, food spectrum