

Seasonal Distribution and Migration Pattern of the Turbot *Psetta maxima* in the Eastern Black Sea, Republic of Turkey

Kenzo Yoseda^{1,*}, Temel Sahin², Cennet Üstündağ², Yılmaz Çiftci², Kunio Amaoka³

¹ Yaeyama Station, Japan Sea-Farming Association, Ishigaki, Okinawa, 907-0451, Japan.

² Central Fisheries Research Institute, Yomra, Trabzon, P.K. Box 129, Turkey.

³ Laboratory of Marine Zoology, Faculty of Fisheries, Hokkaido University, 3-1-1 Minato-cho, Hakodate 041-8611, Japan.

*Corresponding author: Tel 81-9808-8-2136; Fax 81-9808-8-2137;

E-mail kenzo-yoseda@jasfa.or.jp

Abstract

To determine the seasonal distribution and migration pattern of the Black Sea turbot *Psetta maxima*, specimens were collected off Trabzon, Turkey, in the eastern Black Sea. A total of 422 specimens were caught by 364 otter trawl hauls in 95 cruises from 24 July 1997 to 19 February 1999. Average catch per unit effort was 1.2. The turbot were distributed between 5 m and 70 m depth where the bottom water temperatures varied from 26.4°C down to 8.0°C. They were found mainly at 10 m in July-October and at 5-60 m in November-March. However, the turbot were found in high densities at <20 m depth from April to June. Thus, it appears that the Black Sea turbot migrates from deeper water to shallow coastal waters during the spawning season, April to June. Off Trabzon, *Psetta maxima* spawns in coastal areas <20 m deep.

Key Words: Black Sea, turbot, CPUE, distribution, migration patterns.

Note: It has been prepared for scientific journal.