

Reproduction of Five Important Demersal Fishes in the Eastern Black Sea

Dr. Yaşar GENÇ –CFRI, Head of Program and Project Department

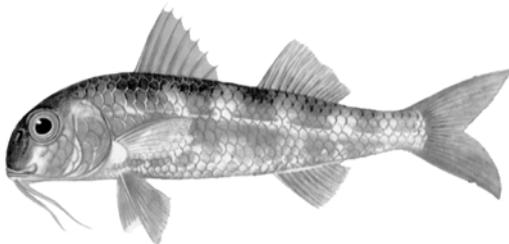
Studies were conducted in 1991-1996 of the reproductive characters of five commercial fishes in the Black Sea, namely whiting *Merlangius merlangus euxinus*, red mullet *Mullus barbatus*, turbot *Psetta maxima maeotica*, plaice *Platichthys flesus luscus*, and picarel *Spicara smaris*. The data obtained were to be used for the management of the fisheries stocks. The fishes were sampled by otter trawl, sorted, and measured for total length, body weight, and gonad weight. Otolits were collected and the annual rings counted under a binocular microscope. Data were obtained from 24,986 whiting, 14,553 red mullet, 1,559 turbot, 7,610 plaice, and 6,627 picarel.

Whiting is the most abundant demersal fish in the Black Sea. It lives under the thermocline during the summer. Sexual maturity is at 2 years of age. Spawning takes place all year round at water temperatures of 7-15°C, but with peaks in the spring and autumn.



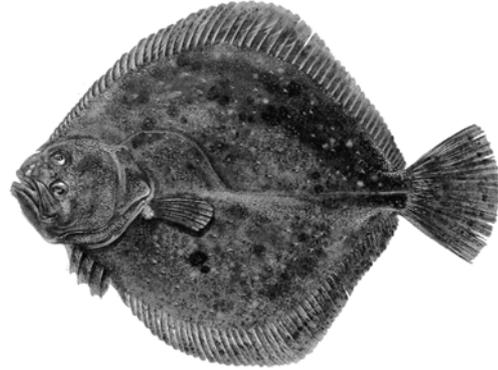
Whiting, *Merlangius merlangus euxinus*

Red mullet is the second most abundant demersal fish in the Black Sea. This fish has been mistaken for the striped red mullet in the Aegean and Mediterranean Sea. Some Russian scientists classify it as the Black Sea red mullet. Sexual maturity is at one year of age. Red mullet spawn during June-August when water temperatures are 18-25°C; the peak is between 15 June and 15 July.



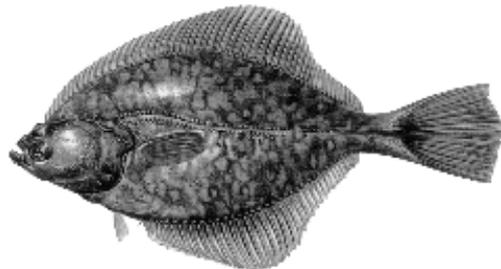
Red mullet, *Mullus barbatus*

Turbot first mature sexually at 4 years of age. They spawn in April-June at water temperatures of 12-18°C, with a peak in May.



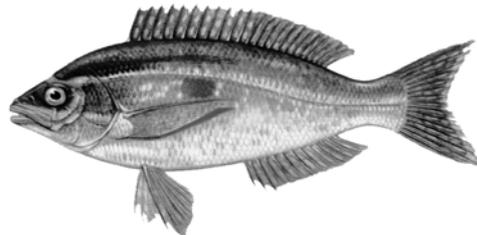
Turbot, *Psetta maxima maeotica*

Plaice reproduce starting at 2 years of age. Spawning takes place in November-February at water temperatures of 7-13°C, with the maximum in December-January.



Plaice, *Platichthys flesus luscus*

Picarel first spawn at one year of age. They spawn in June-August at water temperatures of 18-25°C, but most spawning occurs between 15 June and 15 July.



Picarel, *Spicara smaris*

