DETERMINATION OF THE SELECTIVITY OF BOTTOM TRAWLS GEARS

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In this research, suitable net mesh and mesh size that are suitable for catch fish size on dominant species on trawl fishing in Black Sea; whiting (*Merlangius merlangus euxinus* Nord. 1840), red mullet (*Mullus barbatus ponticus* Ess. 1927) and pickerel (*Spicara smaris* Lin. 1758) have been determined and improvement of some standard have been studied. By determination of suitable net mesh protection of small fish and five change to their grow-up and reproduction have been aimed.

This study done by using Trabzon Fisheries Research Institute's possibilities, Institute's research vessel, SÜRAT-1, on caught fish which were caught from of shore of Trabzon in 1993-1996. Trawl pulling were done 20-60 m depth.

In this study bottom trawl selectivity for whiting, red mullet and pickerel were investigated using the covered codend method of Trabzon in Eastern Black Sea coast of Turkey. Mesh selection trails were carried out using trawls codends with 18 mm, 20 mm and 22 mm diamond and also 22 mm with square mesh size.

The mesh size giving the best selection for the dynamics of the whiting, red mullet and pickerel stocks appears to be 22 and the selection length were in order; 15.1 cm, 13.8 cm and 14.8 cm. The codends which have mesh size smaller than 22 mm catches under size fish.

In addition, the square and diamond mesh codend with mesh size of 22 mm, were compared with % 50 retention length. The selection factors for square mesh codend were higher than those for diamond mesh codend. This results show that diamond mesh catches much smaller than the square mesh codend.