

Technical Aspects of Experimental Demersal Trawl Surveys Carried out along the Coasts of Tunisia

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Abstract

Before 1998, the experimental demersal trawl surveys were carried out by the old research vessel "Hannoun" (23-m length overall, 300-hp engine). The trawls used by this vessel were all bottom trawls with a small vertical mouth opening.

Since 1998, the National Institute of Marine Sciences and Technologies (INSTM) has had at its disposal a high-performance oceanographic research vessel (RV "Hannibal"), with a length overall of 34 m and a 950-hp engine.

The RV "Hannibal" is currently used by the Institute to promote marine research in Tunisia and in the Mediterranean Sea. It especially allows pelagic and benthic trawling to depths up to 800 m; it is equipped with scientific pelagic echo-sounders and conducts experiments on fishing techniques. It is also able to sample water, sediment and phytoplankton down to 4000 m depth and to measure salinity, temperature and other hydro-biological parameters.

During the demersal trawl surveys by the RV "Hannibal", two kinds of bottom trawl were used:

- The shrimp bottom trawl, essentially used in the southern region of Tunisia (Gulf of Gabès), to estimate the stock of carapace prawn, and in the northern region of Tunisia, to estimate the stock of deep-water pink shrimp. This trawl is made up of netting with a small mesh size (from 48 mm in the wings to 40 mm in the cod-end). The average vertical mouth opening is 2 m.
- The high-vertical-opening bottom trawl (GOV) used along the Tunisian coasts to estimate the stocks of demersal fishes and cephalopods. The meshes of this trawl are larger than those of the shrimp trawl (from 300 mm in the wings to 40 mm in the cod-end). The vertical opening is about 5.5 m.

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