

## **Methods Used to Determine the Spatial Distribution of Tunisian Demersal Resources: a GIS application**

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### **Abstract**

A long series of trawl-survey data has been assembled in the last few decades at the national and regional level. Adopting a standard methodology for archiving data in the Mediterranean countries has been a challenge, but it has allowed regional studies on shared stocks to be carried out.

The development of a standard data base, which takes into account the specificities of each region particularly with respect to the sampling methods, the target species, the processing of the catch, the biological sampling, the measurement methods (biological, physical, chemical and ecological parameters) and the analyses, will enhance the use of such a data base and encourage its adoption as a national data-archiving system.

The experimental-trawling demersal-resource data base, developed in the framework of COPEMED (FAO–Spain regional fishery co-operation project), is presented. Particular interest is attached to the data-base structure with respect to the sampling strategy already adopted during the Tunisian surveys. Moreover, the presentation gives particular attention to: the interface of this data base with the GIS (geographical information system) used to image the spatial distribution of the demersal resources; and to the available tools, including the summary statistics, the exploratory analyses and the geostatistical models for the spatial interpolation of data in the GIS system.

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