Biological Sampling of Demersal Species Targeted by Tunisian Experimental Trawl Surveys

H. Missaoui* and O. Jarboui*

Abstract

According to official data, about fifty commercial marine species are captured by trawling in Tunisian waters. Target species are:

– Demersal fishes: Pagellus erythrinus, Mullus barbatus, Merluccius merluccius, Solea aegyptiaca, Lithognathus mormyrus, Scorpaena sp.

– Crustaceans: Penaeus kerathurus, Parapenaeus longirostris, Aristaeomorpha foliacea, Plesionika spp., Aristaeus antennatus and Nephrops norvegicus

– Cephalopods: Sepia officinalis and Loligo vulgaris.

As regards fish, the total length in centimetres is the commonly used measurement in biometry and to determine the length-composition of the catch. In many cases, however, the fork length rather the standard length is used. Generally, weight is taken in the laboratory and is expressed in grams. For crustaceans, the cephalo-thoracic length is measured in millimetres, although this measurement is converted to total length to meet administrative requirements. Finally, for cephalopods, the mantle length in centimetres is very often taken as the relevant morphometric parameter.

Fish maturation is assessed according to pre-established maturation scales. Fecundity is studied by gravimetric and volumetric methods. Spawning periods are identified by macroscopic observation of the state of the gonads, although, for some species, methods based on histology are also used.

* Institut National d’Agronomie de Tunis (INAT), Tunis, Tunisia; missaoui.hechmi@inat.agrinet.tn
* INSTM, Sfax, Tunisia ; othman.jarboui@instm.rnrt.tn