## **CIESM Congress Session : Endangered invertebrates** Moderator : Sabiha Tlig-Zouari, Tunis El Manar Univ., Tunisia

## Moderator's Synthesis

The Mediterranean Sea is a region of high biodiversity that ranks among the best known in the world. Over the last decades, this complex region has frequently suffered deleterious changes and threats causing serious erosion of marine biodiversity. The quality of information for invertebrate threatened species in the Mediterranean Sea is far lower than for vertebrates and the real degree of extinction risk is underestimated.

Five communications were presented and followed by an intense discussion. The speakers illustrated several aspects of the ecobiology of endangered marine invertebrates (*Pinna rudis, Pinna nobilis, Lithophaga lithophaga, Virgularia mirabilis* and *Funiculina quadrangularis*) for several coastal and protected marine areas of the Mediterranean Sea. A decline of the endangered species population and variability in density spatial distribution, in spite of species protection, explained by human stressors (anchoring) and environmental variables played a secondary role. Knowledge of Biology aspects such as growth, biometric, size frequency structure, condition index is important to develop conservation strategy of threatened species. Furthermore, protected marine areas should be implemented to reduce pressures on invertebrate populations and safeguard critical benthic communities habitats.

The debate made clear that deep investigations on the ecology and biology of invertebrates species are still needed for a large number of sites in the Mediterranean Sea basin to properly assess the current status of these species. The present situation indicates that Mediterranean coastal areas are inadequately protected, planned and managed and in need of urgent conservation efforts to protect marine habitats and threatened species. Data collection could be sustained through participatory projects involving local populations.

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