RESEARCH OF DISTURBANCE DESCRIPTORS IN MARINE AND TRANSITION AQUATIC ENVIRONMENTS, ACCORDING TO THE DIRECTIVE 2000/60/EC

Recently, the need of new tools and new methodologies for assessing the quality of the benthic environment in transitional and marine-coastal waters, in accordance with the European Water Directive 2000/60/EC, has dramatically increased. The macrobenthic community (benthic invertebrates) is an extremely effective biological quality element and it is widely used for the classification of the ecological status of marine and transition waters, thanks to their ability to respond to natural stress factors and anthropogenic impacts. For these reasons, benthic invertebrates are listed among the quality descriptors for the implementation of the Water Framework Directive 2000/60/EC and the Marine Strategy Framework Directive 2008/56/EC, with the aim to achieve Good Environmental Status (GES) of the European marine and transitional waters by 2020.

GOALS

- Testing the effectiveness of various biotic indices commonly used in Mediterranean coastal and transitional waters, according to the 2000/60/EC;
- Long term environmental and biological monitoring to understand patterns and processes underlying the ecosystem dynamics;
- Identifying taxonomic and functional surrogates for saving time / costs in the long-term monitoring for the study of community dynamics in marine and transitional aquatic systems.

INSTRUMENTS AND METHODS

In the framework of this research different instrumental techniques, such as optical and electronic microscopy, are used.

SUBJECTS

Ecology, Ecology and Chemistry of surface waters, Bioindication

WORKING GROUP

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COLLABORATIONS

The research group has collaborations within the University of Ferrara (Department of Physics and Earth Sciences) as well as several national (ARPA FVG of Trieste, University of Pisa, CNR-ISMAR of Venice, ENEA of Rome, Ca 'Foscari University of Venice) and international (AZTI-Tecnalia, Spain; Marine Biology Station, Slovenia) collaborations.