

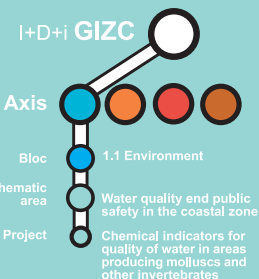
Project

# CHEMICAL INDICATORS FOR QUALITY OF WATER IN AREAS PRODUCING MOLLUSCS AND OTHER INVERTEBRATES

I+D+i  
**GIZC**  
GESTIÓ INTEGRADA  
DE LA ZONA COSTANERA

Axis  
Bloc 1.1  
Thematic area

Disciplinary research  
Environment  
Water quality end public safety in the coastal zone



## Summary

EU directive 2000/60/EC establishes a European framework for the protection and control of pollution in continental surface, transitional, coastal and underground waters. Mussels filter water and concentrate in their own body (above all in their branchiae and tissue) all dissolved substances in the water. This bio-accumulative capacity allows us to determine the levels of heavy metals (Cd, Hg, Zn, Pb, Cu, Ni, Cr, As, Se), organic components (DDT, DDE, DDD, PCBs, HAP) and dioxins, substances that are difficult to determine since they appear in low levels in the marine environment and yet are harmful to human health.

## Actions

-Compile and synthesise data from the Area of Fisheries and aquaculture on heavy metals and organic pollutants in molluscs in the Balearic Islands. -Study the relationship between these data and the Water Framework Directive, coordinating this information with the results of the European MYTILOS project.

-Create a database integrating the levels of heavy metals and organic pollutants analysed in molluscs from the Balearic Islands.

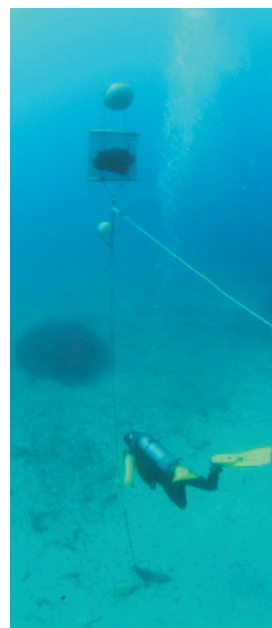
-Assess the bio-accumulative tendencies by pollutant types in various invertebrates.



Data collection from biological sample of mussels



Following one of 30 mussel cages situated in 15 different sampling points



Cage at a few metres' depth

## Applications

### Research

The MYTILOS project will provide scientific data on the levels of chemical pollutants in marine invertebrates normally consumed by humans. The techniques applied are pioneering regarding gaining data and allow us to assess globally the quality of waters along the Mediterranean coastline.

### Administration

Through the study of chemical pollution in mussels the Government of the Balearic Islands will have key data on the chemical pollution in marine products for human consumption caught and raised in the Balearic Islands.

### Enterprise

The data obtained will be of great use to fishing cooperatives, businesses related to the fisheries sector, and the aquaculture industry, which will be able to carry out more exhaustive checks on their products.

### Consumers

This network of water quality control in the Balearic Islands will have a positive effect on the quality of products and will benefit consumers.

## Contact

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