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Ponta Delgada - São Miguel Island



texture and appearance using a 5-point categoric scale (0. absence to 5. intense, of the attribute) and prepared products of the species (tortas of *Porphyra* sp. and pickles of *Osmundea pinnatifida*) to rate sample overall acceptability, using a 9-point hedonic scale (1. dislike extremely to 9. like extremely). Results suggest that transformed samples of the examined red algae could potentially be part of the diet of the Azorean people. These algae could provide an interesting source of omega-3 fatty acids and thus with a high level of interest from the biotechnological and commercial perspectives.

P3.26

Coastal water characterization in the Azorean archipelago

Patarra RF, Prestes AL, Álvaro NV, Terra MR, Fontaine C., Cámara A, Azevedo JMN, Neto AI

Water Frame Directive (WFD) is a fundamental tool for the management of the European water resources. The geographical situation of the Azores places specific questions to the application of the WFD to the archipelago, and this has been recognized by several authors. There is therefore a need to adapt the legal directives. Due to the high dilution power of the open ocean surrounding these Atlantic islands, the anthropogenic effects are likely to have a localized impact, depending on its intensity and temporality. On the other hand, anthropogenic activities beyond the legal frontiers may have negative impacts due to the global movement of the water masses. The knowledge of the quality of the Azorean coastal waters (RH9) using the quality parameters required by the WFD is fragmentary and there are no temporal series of data. Bibliography is scattered and of variable quality. The delimitation of water masses was done based on expert opinions, with land inputs being identified as the main threats. Water masses adjacent to urbanized areas have thus been classified as "In Doubt". The present project aims at clarifying the status of these waters masses and to develop and test methodologies that could will used in future monitoring programmes applied to the RH9.

P3.27

Aquaculture of the clam *Tapes decussatus* on a closed system

Pereira NM, Rebelo AC, Lourenço T, Amaral AF, Prestes AL, Azevedo JMN, Neto AI

In the Azores, the clam *Tapes decussatus* (Linnaeus 1758) is only known from Fajã de Santo Cristo, a shallow coastal lagoon on the island of São Jorge. It is highly appreciated but demand exceeds supply and measures have been implemented to prevent overexploitation. A pilot project is underway to evaluate the aquaculture potential of this species in an intensive system and the possibility of producing juveniles for restocking programmes. Adult organisms, collected on their natural environment, are kept on a closed system where they are fed a mixed culture of selected microalgae. A photobioreactor was developed to automate microalgae production. Ongoing research comprises: i) studies on the species life cycles, involving induction of gametogenesis and monitoring the development of the offspring, growth, reproduction and mortality; ii) evaluation of the biotic and abiotic factors that directly influence the aquaculture of this species in an closed system; iii) optimization of culture methodologies.

Distribution and population structure of *Helicolenus dactylopterus* (Delaroche, 1809) in the central Mediterranean (southern Tyrrhenian Sea)

Pirrerá L, Perdichizzi A, Perdichizzi F, Modica L, Rinelli P

The blue-mouth, *Helicolenus dactylopterus dactylopterus* (Delaroche, 1809) (Pisces: Scorpaenidae), is a scorpionfish widespread in the whole Mediterranean basin, where it plays an important ecological role in deep-sea fish communities. The rarefaction of this large-size sedentary and slow-growing fish, can be an index of overexploitation. This species is found throughout all Italian seas; the juveniles are mainly located around 150-300 m while the adult specimens are spread over a wider depth range down from 200 m to as deep as 1000 m. The bathymetric distribution, the abundance and the size structure of *H. dactylopterus* were analysed in this study, using the GIS approach to support the results obtained. The present paper integrates data from 11 bottom trawl surveys carried out in the Southern Tyrrhenian Sea (Central Mediterranean), in an area extended from Cape Suvero to Cape S. Vito. Data and samples were collected from a total of 296 hauls within the isobath of 800 meters, carried out during the "International bottom trawl surveys in the Mediterranean Sea" (MEDITS EU Project), developed from 1995 to 2005. In each haul, the catch in weight and number were recorded. The main biological parameters (total length, sex, sexual maturity) of the specimens were measured. On the basis of the sweep-out area, the mean yields, standardized both in number (Density Index: $DI = N/Km^2$) and weight (Biomass Index: $BI = Kg/Km^2$) related to shelf and slope were obtained. A total of 1412 specimens of *H. dactylopterus* weighting 20051 g were caught. The species appeared in 40% of the 296 hauls analyzed, throughout the whole depth range surveyed. The highest values of frequency of occurrence (> 67%) were obtained in the slope while in the shelf fell to around 16%. On the continental shelf the species was found between 106 m and 196 m, and in the slope from 400 m to 600 m. The highest values of relative biomass and density in the slope were obtained in 2005 ($BI = 3,12 Kg/Km^2$ and $DI = 217 N/Km^2$), while in the shelf in 2004 ($BI = 0,45 Kg/Km^2$ and $DI = 377,9 N/Km^2$). The mean biomass values showed a clear increase in 2005 respect to the previous years. The length distribution of the specimens measured ranged between 2,5 cm to 24,5 cm. The specimen size increased progressively with depth from 4,5 cm (100-200m) to 13,4 cm at 500-800 m, in according with the literature.

P3.29

Characterization of transitional waters in the Azorean archipelago

Prestes AL, Patarra RF, Álvaro NV, Azevedo JMN, Neto AI

The geographical situation of the Azores places specific questions to the application of the Water Framework Directive (WFD) to the archipelago, in particular in what concerns the transitional waters, due to the specificity of factors related to the geomorphological conditions of the adjacent land areas. One of the elements for measuring water quality are biotic indexes, in which specific diversity and presence of certain taxa or ecological categories are fundamental. Having risen from the ocean in geologically recent times, the diversity of the fresh water fauna and flora in these water masses are necessarily reduced when compared with continental areas. It is also strongly dependent of occasional colorizations, many of which are accidental or intentional. On the other