

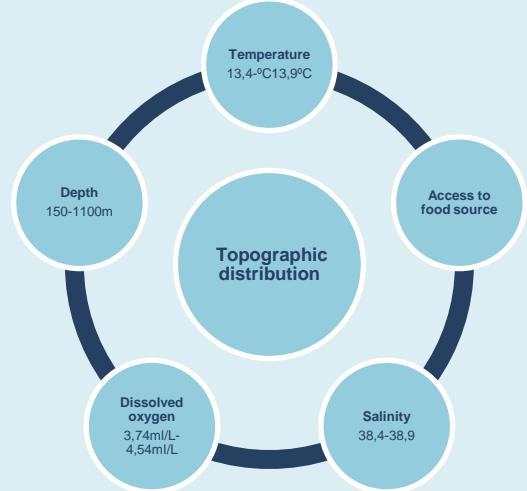
Corals of deep Mediterranean: Distribution and diversity related with their threats and state of protection

Introduction

The Mediterranean Sea has been proposed as a hot spot of terrestrial and coastal marine biodiversity. It represents an excellent biological archive of past and modern deep coral growth. Coral reefs provide niches and nursery grounds for several species, including commercial fish species. Cold-water coral ecosystems are long lived, slow growing and fragile, which make them especially vulnerable to physical damage.

State of the art

Abiotic and biotic factors determining deep-corals distributions



Diversity of Mediterranean corals

Main framebuilders



Any of the species of Mediterranean cold-water corals can be considered endemic.

Importance of corals and threats

Importance



Threats



There is a lack of protection and management in Mediterranean sea

Discussion

Topographic distribution is very important

Main framebuilders are the corals *M. oculata* and *L. pertusa*

Corals don't have high richness and diversity

Associated animal communities have a high diversity and level of endemism

Major threats are trawls and environmental changes

European legislation is not enough

Conclusions

More studies required

- Effects of abiotic factors changing
- Geographical and habitat distribution
- Diversity, ecological and biological functioning.

Legislation

- A new open sea MPAs to include cold-water corals
- Get an adequate regulation of human activities and avoid impacts to coral communities

The awareness about cold-water corals ecosystems and associated communities must continue rising