METHOD FOR REPRODUCTION OF RED CORAL AND OTHER ANTHOZOANS

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Invention

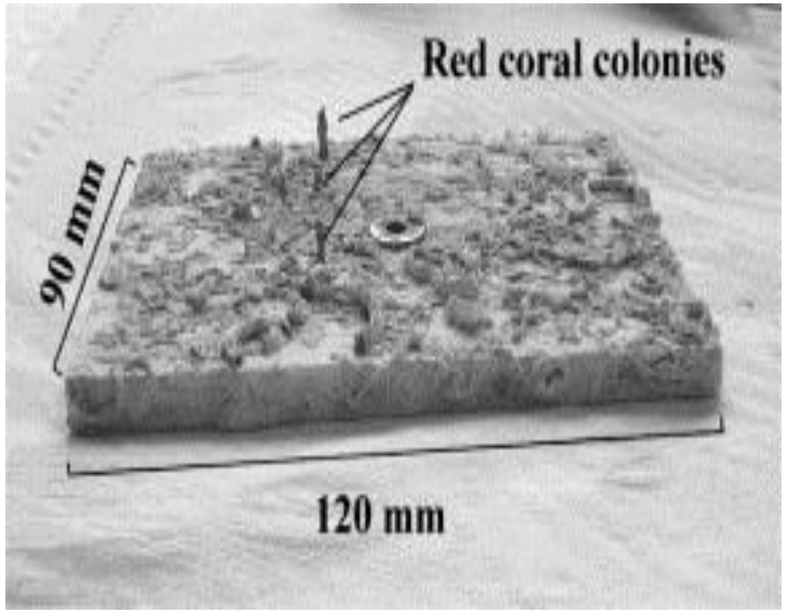
The present invention relates to a method of reproducing Anthozoan colonies from existing colonies in a natural or controlled marine environment by spontaneous settlement, resulting in young red coral colonies (recruits) that can be transferred to another natural or controlled marine environment.

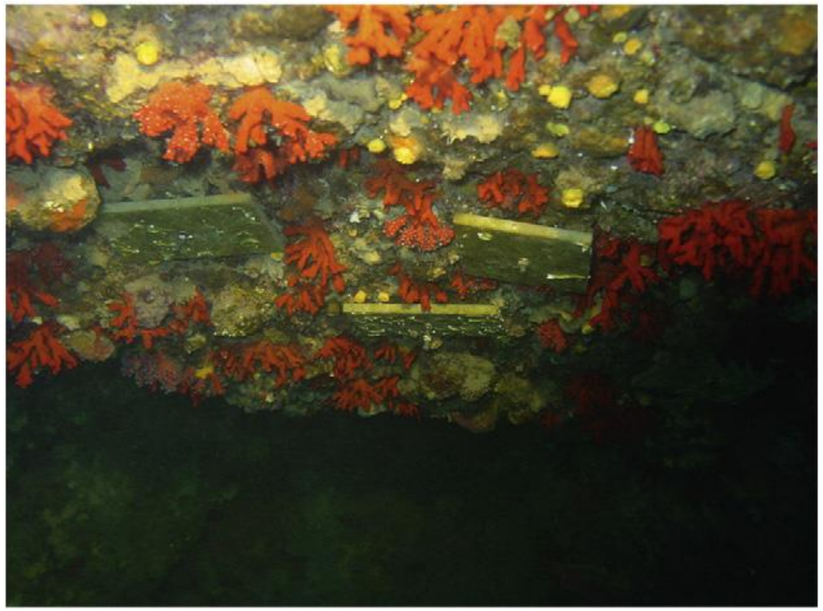
Among the Anthozoa present in nature on the seabed, Corallium rubrum L., the so-called "red coral", is the marine species of greatest economic value in absolute. It is an exclusively Mediterranean species whose overexploited populations have been greatly reduced over time. The species is mainly used to produce jewelry and other artistic products.

The object of the invention is to provide a method for producing and rearing new colonies of red coral, to be able to transport them from a first natural marine environment to a second natural marine environment or to a controlled environment, such as a tank or aquarium, without damaging such colonies.

Preliminary experiments, carried out in the laboratory, indicate that semi-finished Carrara marble tiles are a particularly suitable substrate for the settlement of Red Coral larvae; the efficacy of these tiles was, therefore, also tested in situ. The choice of Carrara marble was not causal, it has a percentage of calcium carbonate that can be close to 90% and the red coral in nature develops on layers of calcium carbonate.

Drawings & pictures





Marble tiles fixed to the vault of a crevice colonised by red coral at the Medes Islands MPA.

Industrial applications

The invention makes 2 types of applications possible:

- colonized tiles can be transported to aquariums for experimental breeding, which once developed would bring great economic benefits;
- the possibility of replanting the colonized tiles - by simply unscrewing the screw that keeps them fixed to the rock - in areas where the species has been locally extinct could favour its recovery. The method, which can thus favor the recovery of coral populations, therefore acquires particular importance for the conservation of this precious Mediterranean species.

Possible developments

The first *marble tiles* were placed on the seabed of Calafuria, south of Livorno, the experiments were repeated on the island of Elba and finally, thanks to an agreement with the Iberian CNR, in Spain, on the seabed of the Medes Islands. The larvae of the red coral have invaded the tiles and have begun to reproduce creating real colonies. At that point, the marble was removed, avoiding damage to the larvae and the surrounding environment. Once the repopulation has taken place, the natural habitat of the coral is reconstituted, and the tile is ready to be fixed on another bottom. Now from the experimental phase, an attempt is made to move on to massive coral repopulation.

Companies that process marble from the Apuan Alps may be interested in funding the development of the technology.

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