

## THE RED CORAL (Corallium rubrum) REARING IN AQUARIA

In the framework of the problems involving production and management of the "red coral" resource, the industrial farming, like that of the pearl oysters, is today still utopian, though is the hope of many people.

Anyway, the most recent researches, mainly developed in these last two decades, allowed to improve a complex of techniques to rear this species in aquaria, that on one side resulted very useful to better understand its biology, on the other could open new experimental perspectives.

After the first attempts in the early '60s, some researchers, mainly from Italy, during the '90s produced a number of rearing protocols to maintain alive the very delicate colonies of red coral, for long-term experimentations on the reproductive and feeding biology of and on its growth rates.

Although these experiences gave satisfactory results, by increasing the overall knowledge on feeding behavior (e.g. the quality and the size-selection of food, the expansion rhythm of polyps) and on reproductive strategies (e.g. the discovery of a new type of asexual reproduction of colonies by fragmentation), no results have been obtained in better understanding the physiological bases of the different pigmentations, and in increasing growth rates, that are of crucial importance when farming a slow-growing species such as red coral.

Therefore, perspectives of rearing colonies in laboratory are based on further research efforts on these latter two topics, also by molecular techniques. This field of research could be very promising both for experiments of rapid restoring of exploited natural banks, and for trying to certificate the origin of red coral colonies, with the aim to improve commercial strategies concerning the quality of the product for a sustainable management of the resource.

Giovanni Fulvio RUSSO Dipartimento di Scienze per l'Ambiente, Università di Napoli Parthenope