



LIFE REMoPaF Project (Recovery of Endangered Mollusc *Patella ferruginea*)

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The LIFE REMoPaF project (www.liferemopaf.org) led by ACCIONA Engineering, with the University of Seville and the Port Authority of Melilla, has been chosen by the European Commission to be part of the LIFE15 program. The LIFE program is a financial instrument of the European Union devoted to the conservation and protection of the environment.

The aims of this project are design and test new sustainable and innovative techniques to the protection and recovery of marine mollusc *Patella ferruginea* through the development of an effective methodology that allows the settlement of the larvae and subsequent metamorphosis in juveniles on mobile substrates. The methodology is based on the use of artificial substrates of small size, called AIMS (Artificial Inert Mobile Substrates), designed with a heterogeneity and structural complexity (surface roughness) similar to that which occurs on the rocks of the breakwater where the species naturally is settled. This factor is relevant for the achievement of the objectives, since it has been demonstrated that the roughness and the type of material, together with the action of the currents, are the main factors that determine the settlement of the larvae. For its manufacture, innovative techniques of 3D printing and conventional technology are used.

The project began in 2016 and will run until 2021. Its development is scheduled in several phases and aims to establish a new methodology that allows the transfer of recruits from a donor population, well preserved and with a high density of specimens (particularly the population located in Melilla) to a receiving area (Bay of Algeciras) characterized by relatively low density values, but with the potential to reach a population size that allows it to further development as a breeding population. In addition, the receiving area must have the capacity to shield the selected coastal section, taking into account that one of the most important threat for the species is the collection by humans, either for fishing bait or food. This is the reason why the infrastructure belonging to the Bahía de Algeciras Port Authority (APBA) has been chosen, in particular the external dock of La Linea harbour. The APBA collaborates in a disinterested way since the beginning of the proposal.