



«Actions to protect, conserve and promote biodiversity. Field studies of endemic, endangered and nationally important species of Greece». Funded by the Natural Environment and Climate Change Agency (NECCA)

TITLE

Conservation of the threatened Sea urchin *Paracentrotus lividus*

(Project ID: 12652)

PRINCIPAL INVESTIGATOR

AIKATERINI VASILEIADOU

HOST INSTITUTION

HELLENIC CENTRE FOR MARINE RESEARCH

ABSTRACT

The project aims to assess and document the status of the populations of the purple sea urchin *Paracentrotus lividus* in the coasts of Crete, in respect to the alien species *Diadema setosum*. The population of *P. lividus* are under vulnerable due to the overexploitation of the species, the pressures by the shifting climatic conditions and the competition with the Lessepsian migrant *D. setosum*. The alien species is thermophilous, therefore better adapted to the raising water temperature of the Mediterranean and it is not of economic importance. Thus, the conditions are favoring the expansion of *D. setosum* against the indigenous *P. lividus*. The populations status and demographic changes of the *P. lividus* will be assessed by a) in situ documentation of the number of individuals and diameter sizes and b) by employing genetic analysis of mtDNA markers (COI gene). The methodology will provide robust data on the dispersal limits and biodiversity of the populations and allow better monitoring and conservation.
