

2nd Mediterranean Plant Conservation Week

“Conservation of Mediterranean Plant Diversity: Complementary Approaches and New Perspectives”

La Valetta, Malta, 12-16 November 2018



S2 - In situ plant species conservation: technical aspects, methodology, monitoring

TITLE: Contribution of translocations to enhance the conservation status of the threatened Mediterranean island flora: the CARE-MEDIFLORA project

AUTHORS: Fenu Giuseppe (on behalf of all CARE-MEDIFLORA project)

INSTITUTION: CARE-MEDIFLORA project [1 Centre for the Conservation of Biodiversity (CCB), Life and Environmental Sciences Department, University of Cagliari, Viale S. Ignazio da Laconi 13, 09123 Cagliari, Italy. 2 Hortus Botanicus Karalitanus (HBK), University of Cagliari, Italy]

CORRESPONDING AUTHOR: gfenu@unica.it

ABSTRACT:

Mediterranean islands represent a center of plant diversity featured by an endemic richness rate higher than mainland areas. However, such plant richness is threatened by several physical and biological factors and, consequently, many plants of these islands require urgent protection measures. The CARE-MEDIFLORA project, an initiative implemented by institutions of six Mediterranean islands and the IUCN/SSC Mediterranean Plant Specialist Group with a long lasting experience in the field of plant conservation, work to address both short-term and long-term needs for these threatened plants by implementing specific translocation programs (Fenu et al. 2017). The project promotes the use of ex situ collections to experiment with in situ active actions for threatened island plants since the importance of translocations is particularly relevant when it is part of an integrated ex situ and in situ conservation approach: the tight connection between in situ and ex situ conservation strategies is the emerging tool in the conservation of plant diversity (Cogoni et al. 2013; Volis 2016).

Based on a set of common criteria, a preliminary list of target plants, for which translocation programs were planned, included 167 taxa, mainly selected by the regional responsibility criterion and/or assessed as threatened in the global and/or regional IUCN Red List.

A total of 43 translocations have been implemented in all six islands, focused on plants with different biological cycles and ecological requirements (plants growing in different habitats). Different methodological protocols, which included different origin of the genetic material, type of propagative material (seeds or cuttings) and/or planting methods, were tested. For each translocation a specific mid- and long-term monitoring protocol was planned and implemented in order to ensure its sustainability.

During several meetings in all islands, the different project experiences are shared among partners to co-develop technical aspects, to refine methodologies and to plan successful in situ conservation actions. In order to make the translocations more effective, they were implemented in collaboration with the local and regional authorities, and local stakeholders were actively involved in the monitoring activities.

The CARE-MEDIFLORA project represents the first attempt to develop common strategies and a great opportunity to join and harmonize methods and methodologies focused on threatened plant conservation in unique natural laboratories such as the Mediterranean islands; in addition, the results of the project significantly contribute to the achievement of the GSPC targets in the Mediterranean islands.

KEY WORDS: Translocations, threatened plants, Mediterranean Islands, Monitoring activities, in situ conservation