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(eds)**

PLANT MICRO-RESERVES: FROM THEORY TO PRACTICE

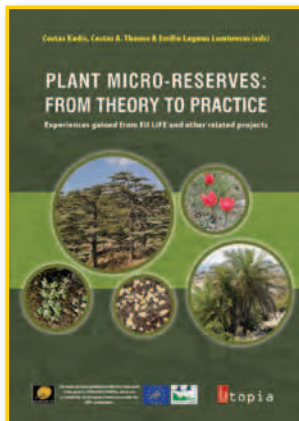
Experiences gained from EU LIFE and other related projects



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 **Utopia**



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Proposals of Plant Micro-Reserves in Sicily (Italy)

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I. Introduction

Similarly to the Valencian Region, where Plant Micro-Reserves (PMRs) were conceived and first realized, the island of Sicily (and surrounding islets) is rich in local endemics, often in small, scattered and restricted populations, sometimes surrounded by cultivated fields or built-up areas.

The Region of Sicily, founded by a Royal Decree in 1946 (before the foundation of the Italian Republic, 1948), is the first established region and has the widest legislative power in Italy. It has a special form and condition of autonomy pursuant to the special statute adopted by constitutional law. Under the art. 117 of the Italian Constitution, the Region of Sicily has exclusive legislative powers in all fields that are not expressly covered by State legislation. In spite of the inclusion of 'protection of the environment and of the ecosystem' in these fields, in Sicily only Regional Natural Reserves and Regional Natural Parks exist, according to a Regional Law on Parks and Reserves (1981) that preceded the National Law (1991). Although Sicily has a good legislation on natural parks and reserves, it is one of the 3 only Italian regions (out of 20), which has no specific law to protect the wild flora, yet, the regional Red List of vascular plants is up-to-date (Raimondo *et al.*, 2011) and could be the basis for this law. In any case, the tool of the PMRs could help to protect plant populations, especially the ones occurring in small sites outside protected areas.

II. Objectives and Methodology

The possibility to introduce the tool of PMRs in Sicily, and in the Aeolian Archipelago in particular, emerged within the LIFE-Nature project 'Eolife99 - Conservation of priority plant species in the Aeolian Islands' (LIFE99 NAT/IT/006217, <http://web.tiscali.it/ecogestioni/eolife/>). During that project, Dr. Emilio Laguna (PMR pioneer, Generalitat Valenciana) came to Lipari to participate in a workshop in April 2002, and he explained in detail the idea of PMRs to protect specif-

ic areas of high floristic value. Therefore, establishing a PMR could be a suitable measure to protect the *Silene hicesiae* (Fig. 9.1) population in its *locus classicus*, the Panarea island.

S. hicesiae is a strictly endemic species, occurring only in two of the Aeolian islands, with a total population of 350 individuals. It is included as 'priority species' in the Annex II of the Habitats Directive. The small population in Panarea, occurring within a Regional Natural Reserve and a Site of Community Interest, was actually subject to various potential disturbances, mainly anthropic (e.g. wildfires, alien species, touristic pressure) but also natural (e.g. landslides). The PMR could be the right tool to manage that situation. This proposal follows the model of an 'intensively managed PMR'. Unfortunately, the difficult normative and administrative situation, and then the end of the LIFE project, did not eventually allow the implementation of the idea.

III. Outcome

More recently, the idea emerged again. This time, in the opposite part of Sicily, namely Trapani, near Palermo. Here, in February 2010, an international meeting was held about the protection of an endangered endemic, *Calendula maritima*:



Figure 9.1
Silene hicesiae (photo: E. Laguna).

this species is not included in the Annexes of the Habitats Directive but, as one of the most threatened Mediterranean insular species, it was selected (together with *Silene hicesiae* and others) for the IUCN 'TOP 50' project (Montmollin & Strahm, 2005). One of the invited speakers of the meeting was Patricia Pérez-Rovira, from the Generalitat Valenciana's PMR team, who presented the experience of the PMRs and the results achieved in Spain (Troia & Raimondo, 2011). Again, establishing a PMR was proposed to protect the *Calendula maritima* populations occurring outside protected areas. And, again, the idea got temporarily lost, waiting for a successful synergy among the Region Government, local authorities and botanists.

IV. References

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Image on next page: Scrub and low forest vegetation of *Quercus alnifolia* (photo: M. Andreou)