

2nd Mediterranean Plant Conservation Week

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

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S3 - Ex situ and in situ plant species conservation: collaborations, strategies, communication

TITLE: Hierarchisation of species and prioritisation of conservation actions: towards a conservation strategy for flora, from biogeographical to regional level

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ABSTRACT:

The Maritime and Ligurian Alps, located at the interface between the Alps and the Mediterranean region, are one of the regional biodiversity hotspots of the Mediterranean basin. Biodiversity hotspots are areas where exceptional concentrations of endemic species undergo exceptional loss of habitat. In fact, many low altitude species are critically threatened of extinction because of the population increase and tourism boom. Refuge areas, containing a great biodiversity, are also threatened by human impacts because they are submitted to heavy pressures. Many of these endemic species have very restricted distribution areas shared between two countries, France and Italy. Most conservation actions are funded at the national or regional level; however, in most cases this doesn't match species distribution. Moreover, resources are usually too limited to implement conservation actions for all species. This is why a hierarchisation of species and a prioritisation of their conservation actions are required, at both cross-border (or biogeographical) and administrative scales. The strategy we propose here can be synthesised in four steps: (1) to list and hierarchise species; (2) to list the different management projects; (3) to prioritise management projects; and (4) to choose a set of projects to implement. A hierarchisation of species was carried out according to three criteria: biogeographical rarity, local rarity and threats. This last criterion included two sub-criteria, habitat vulnerability and artificialisation. This hierarchisation enabled us to classify species into four conservation concerns: very high, high, medium and low. Then, a management project is assigned to each very high or high conservation concern species according to several criteria. The efficiency of each project is then assessed in terms of costs, benefits and likelihood of success. Finally, we choose a set of projects to implement, according to their efficiency, but also according to available financial and human resources, legislation, and other contextual factors. This strategy should enable us to head resources towards species which need them the most and towards projects with a high success probability.

KEY WORDS:

Conservation priorities, threatened flora, endemic flora, biogeography, conservation strategy

