CONSERVATION STRATEGY FOR FLORA IN THE FRENCH MEDITERRANEAN REGION

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Corispermum gallicum


Polygonum romanum subsp. *gallicum*


Teucrium aristatum

The decline of biodiversity has been a global concern for several years, and as a result, the conservation of endangered species has become a major issue. However, the protection of all taxa or ecosystems is not an achievable objective due to the extreme diversity of the living world and the limited resources. Therefore, it is necessary to develop a method that could guide conservation actions towards the species, habitats, populations or localities that need it most in order to direct the available resources. The floristic heritage of the Mediterranean biodiversity hotspot is endangered by current socio-economic mutations and global change. Here, the RESEDA-Flore network needs to implement a conservation strategy to better allocate resources towards species and natural habitats. For the conservation of vascular flora, a strategy in four steps was developed, based on (1) the hierarchization of taxa; (2) the typification of conservation actions; (3) the prioritization of projects and (4) their implementation.

- ✶ Easily reproducible method
- ✶ Enables to rank a large amount of taxa without preconceptions
- ✶ Can be adapted to different biogeographical areas and different scales
- ✶ Can be a tool for conservation policies assessments
- ✶ Complementary to other assessment tools (red lists, protection lists)

- ✶ Large scale method
- ✶ Over- or undervaluation of some criteria

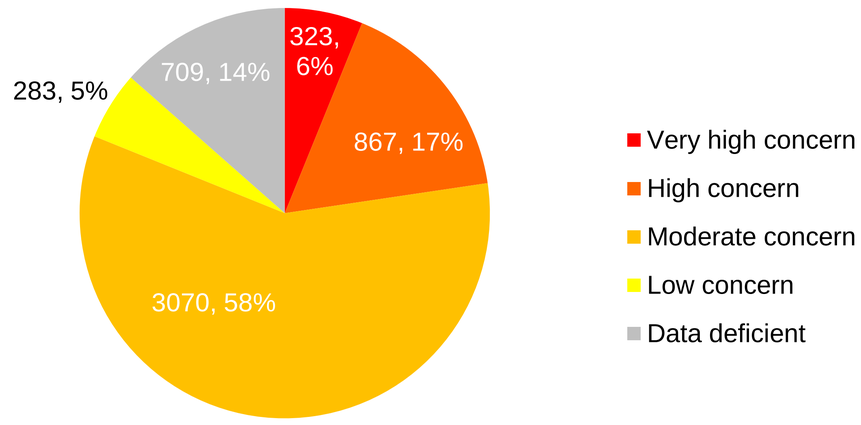
Step 1: Hierarchization of taxa

5,252 taxa (vascular flora, indigenous, species and sub-species) RESEDA-Flore area

3 Criteria
Scores 1 to 5

- ✶ Biogeographical rarity → Global distribution
- ✶ Local rarity → Number of occurrence grid cells
- ✶ Potential threats:
  - Habitat vulnerability → Artificialization rate of occurrence grid cells
  - Soil artificialization → Risk of habitat loss EUNIS habitats

Results
Scores 3 to 15
4 concern groups

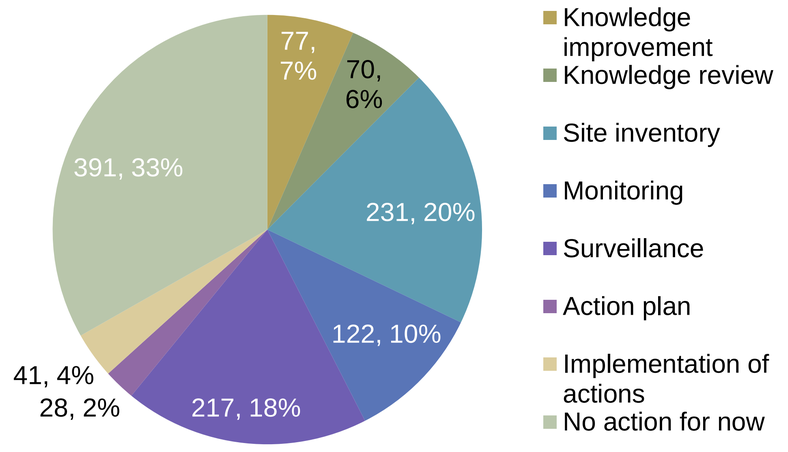



Artemisia molinieri


Arundo donaciformis

Step 2: Typification of actions

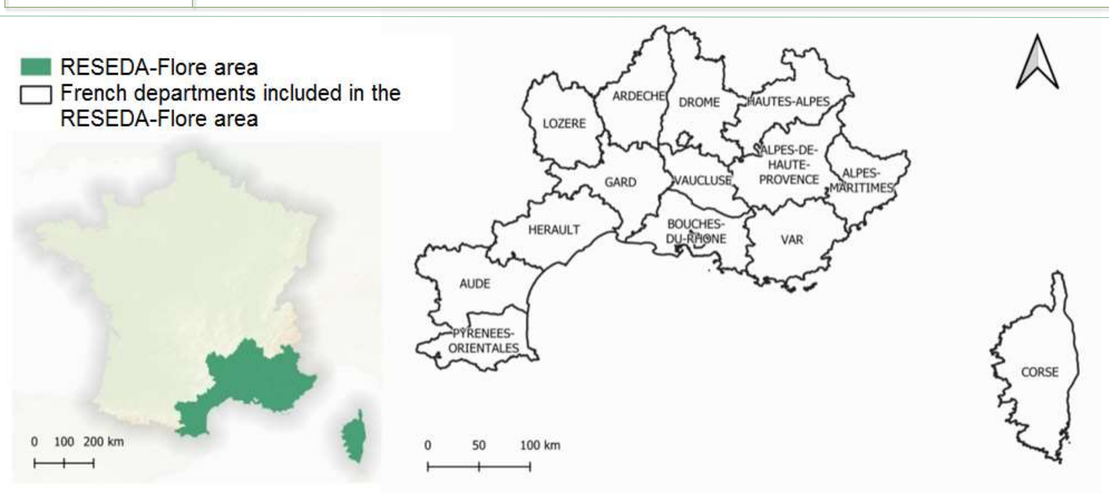
- ✶ To define the different conservation actions
- ✶ To determine which actions have already been implemented for each taxon
- ✶ To determine which actions should be implemented for each taxon
- ✶ Data deficient taxa: knowledge improvement
- ✶ Low and moderate concern taxa: no action for now
- ✶ Very high and high concern taxa: using a decision tree



Step 3: Prioritization of projects

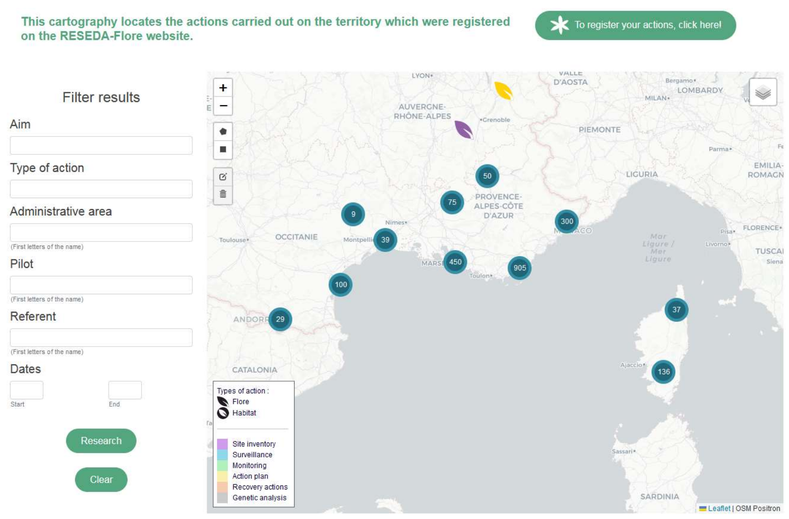
- ✶ To identify priority and feasible projects
- ✶ 3 criteria: actions feasibility, direct threats, benefits for other taxa
- ✶ Scores 1 to 4
- ✶ Priority score for each project

Projects Criteria	Site inventory	Monitoring	Surveillance	Action plan	Implementation of actions
Action feasibility	Sites accessibility			Mobilization of stakeholders	
	Detectability of the taxon or its populations			Ability to take action	
	Number of occurrence grid cells (5 km x 5 km)			Conflicts of use or regulation	
Direct threats	Sum of anthropogenic threats (constructions, uses, leisure activities, picking)				
Benefits for other taxa	Number of taxa located in the same habitat and the same grid cell (1 km x 1 km)				



Step 4: Implementation of projects

- ✶ To choose and implement projects according to available resources, funders, partners, location, project targeted, taxa targeted



- ✶ **RESEDA-Flore network (Network of Actors for the Conservation of Mediterranean Flora)**
- ✶ **Created in 2018, 22 members in 2023**
- ✶ **French Mediterranean region**
- ✶ **Scientific, governmental and non-governmental organizations**
- ✶ **Improve cooperation for a better conservation and management of species and ecosystems**
- ✶ **A strategy for the conservation of natural habitats is also available on the website www.reseda-flore.eu**

SOURCES :
Le Berre, M., Noble, V., Pires, M., Médail, F., & Diadema, K. (2019). How to hierarchise species to determine priorities for conservation action? A critical analysis. *Biodiversity and Conservation*, *28*(12), 3051-3071.
RESEDA-Flore dynamic mapping https://www.reseda-flore.eu/src/actions/carto.php?idma=41
Simethis, Flora database of Conservatoire botanique national méditerranéen , Conservatoire botanique national de Corse et Conservatoire botanique national alpin http://si.cbnmed.fr

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