CARE-MEDIFLORA - Conservation Actions for Threatened Mediterranean Island Flora: *ex situ* and *in situ* joint actions

Final report

DECEMBER 2019

CARE MEDIFLORA

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Sóller Botanical Garden Foundation (JBS), Balearic Islands

Office of the Environment of Corsica – Conservatoire Botanique National de Corse (CBNC)

Hortus Botanicus Karalitanus – University of Cagliari (HBK), Sardinia

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- S'Albufera Natural Park
- Cabrera Archipelago maritime-terrestrial National Park
- Peninsula de Llevant Natural Park
- Serra de Tramuntana Paratge Natural
- Grupotel Parc Natural & Spa
- Landowners of Cabrianes, Son Mut Nou, Clot d'Albarca and S'Aranjassa
- GOB Menorca
- Social & Environmental Observatory Minorca (OBSAM)
- Calvià Town Hall
- S'Albufera d'es Grau Natural Park

In Corsica

- National and Regional Administration
- National and Regional Scientific Committees
- Territorial collectivity
- Municipalities of Focicchia, Santo Pietro di Tenda, Serra di Scopamene and Zonza
- Municipalities community of Alta Rocca
- Management Bodies of NATURA 2000 sites
- National Institute for Agricultural Research (INRA) of San Giuliano
- Association CEN Corse
- Association CPIE Centre-Corse
- Private stakeholders (landowners and socio-professionals)

In Sardinia

- Fo.Re.S.T.A.S Agency – Authonomous Region of Sardinia

In Sicily

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Project CARE-MEDIFLORA – Outline

CARE-MEDIFLORA, "Conservation Actions for Threatened Mediterranean Island Flora: *ex situ* and *in situ* joint actions", aims at improving knowledge and conservation of threatened island plants representative of the entire Mediterranean basin, through the implementation of urgent actions and campaigns. The emphasis was on *in situ* conservation measures that in several cases need to be supported by *ex situ* techniques.

In situ conservation measures such as conservation translocations are particularly relevant in the context of climate change, especially for plant species which are not able to migrate to sites that are climatically more suitable.

CARE-MEDIFLORA has been implemented by institutions of six Mediterranean islands and the IUCN/SSC Mediterranean Plant Specialist Group, who jointly worked to address short-term and long-term conservation needs, including:

- *in situ* conservation of 51 of the most endangered plant species of the Mediterranean islands through *in situ* translocations and other management measures
- *ex situ* conservation of 429 of the most endangered plant species through the collection, seed banking and duplication of accessions representative of the overall diversity of the species
- dissemination and awareness raising of the local and institutional stakeholders
- sharing good conservation practises among the partners
- reinforcement and enlargement of GENMEDA - Network of Mediterranean Plant Conservation Centres.

The project results are shared with conservation plant specialists from countries all around the Mediterranean, to increase collaboration among institutions dealing with *in situ* and *ex situ* conservation, and with local stakeholders, to raise awareness about the vulnerability of the insular flora and share the good practices and lessons learnt. Few projects aiming to

develop knowledge and methodologies in plant conservation on islands have been developed and implemented so far.

Islands involved: Balearic Islands, Corsica, Sardinia, Sicily, Crete and Cyprus

Project duration: April 2016 – June 2019

Project website: www.care-mediflora.eu/

The CARE-MEDIFLORA project was funded (80%) by the MAVA Foundation.

INTRODUCTION

The Mediterranean Basin is an important centre of plant diversity; although it only consists of 1.6% of the Earth's surface, the region hosts approx. 7% of the world's plants, and accordingly has been identified as one of the global biodiversity hotspots (Médail and Quézel, 1997; Cañadas et al., 2014). However, this plant diversity is unevenly distributed and the big Mediterranean islands (i.e. Sicily, Sardinia, Cyprus, Corsica and Crete) and Balearic Archipelago, which have an endemism rate of more than 40%, host a large amount of this richness (Thompson, 2005; Cañadas et al., 2014; Fenu et al., 2017). At the same time, it is also well known that such plant richness is severely threatened by several factors (physical and biological) and, consequently, many plants of these islands require urgent conservation measures, including but not limited to passive protection.

Because of their limited area, discrete nature, and simplified food webs, islands have often been considered ‘‘natural laboratories’’ for ecological studies and to test practical conservation actions, including plant translocations. However, despite the urgent need for conservation actions for a great number of local narrow endemics, few documented initiatives have been carried out in the Mediterranean territories.

The CARE-MEDIFLORA project (http://www.care-mediflora.eu/), supported by the MAVA Foundation, is an initiative led by institutions of six Mediterranean islands (mostly botanical gardens and/or seedbanks) and the IUCN/SSC Mediterranean Plant Specialist Group. Participating institutions have a deep knowledge of the local flora and their conservation status, and also have extensive experience with *ex situ* conservation. All institutions jointly worked to address both short-term and long-term needs for the insular endangered plants, including in situ and ex situ conservation (Fenu et al., 2017).

The approach agreed upon by all partners is mainly based on the use of *ex situ* activities and knowledge as a tool to improve *in situ* conservation of threatened plant species. This approach could be defined “**from *ex situ* to *in situ* conservation**” and it is consistent with the need to integrate *ex situ* and *in situ* approaches, which was recognized more than four decades ago (e.g. Falk, 1987; Heywood, 1993; Maunder et al., 2001; Volis 2016a,b). The CARE-MEDIFLORA approach was arranged into five main activities detailed below:

(1) elaboration of conservation priorities and selection of target species in each island;

(2) Planning in situ and ex situ conservation activities;

(3) ex situ conservation actions;

(4) in situ conservation actions;

(5) networking and communication activities.

1. Elaboration of conservation priorities and selection of target species in the different islands

1.1 Introduction

The project strategy combines different methodologies for prioritizing endangered plant species occurring in each Mediterranean island (six partner islands). CARE-MEDIFLORA prioritised plants that need conservation measures because they are threatened, vulnerable or important for a particular island. In this preliminary phase, all partners cooperated to select the plant species that were targeted during the project, using a common set of criteria to make lists of conservation priorities in order to plan their conservation actions. This phase was identified as a crucial starting point in order to develop knowledge and common methodologies among islands.

1.2 Goals

Definition of the criteria for prioritizing conservation actions of the project;

Use of the common set of criteria by each island to elaborate the list of species selected for the project:

- Six local lists of target plant species (one per island);

- One general list of target plant species for the project.

1.3 Methodology

In order to select the plant species that would be targeted during the project, a set of common criteria to prioritize the conservation actions were identified in order to develop knowledge and common methodologies among islands. Four main criteria were established and used:

- ✓ **Threat degree**:

  It refers to the inclusion of a plant taxa in a threat level (CR, EN, VU) according to the Red List criteria of the IUCN Red List. Data Deficient (DD) plant taxa could be included as a precautionary principle.

- ✓ **Regional Responsibility**:

  It indicates the highest relevance given to those taxa whose distribution is circumscribed to a specific area and represents the first order of priority at local level. Actually, given the peculiarities of the Mediterranean area, plant conservation priority settings at finer-scales were preferred due to biogeographic and cultural diversity and

regional threats. Accordingly, a special priority was given to the restricted range endemic taxa and plants deserving a conservation interest for a given island (e.g. PIPPs - peripheral and isolated plant populations, etc.).

- ✓ **Policy plant species**:

  It refers to those taxa listed in the Annexes of the Habitats Directive (Annexes II, IV and V). The conservation of plant species of community interest to a favourable conservation status by means of cogent protection policies is mandatory for all EU member states. In addition, each partner considered those plants listed in other specific national or regional regulations.

- ✓ **Wetland plants**:

  Wetland plants are eco-physiologically linked to such peculiar habitats as wetlands and have a particular interest for conservationists. This is particularly true for those taxa unable to migrate to other sites which, in a context of climate change or climatic instability, could act as "refugial" stands. This criterion indicates if the taxa selected is a wetland species or grows in a wetland habitat.

This set of criteria was defined, discussed and approved by all Project Partners. A preliminary list was prepared for each island with taxa and criteria used. All partners agreed that changes in the plant lists would be possible during the project thus making the elaborated lists open and continuously upgradable (i.e. dynamic lists).

Each regional list includes the whole pool of selected taxa, the distribution range among the Mediterranean islands, the reason for which each plant was selected (criterion or criteria adopted), and the type of conservation measure needed. These priority lists indicated the plant populations that needed urgent *in situ* conservation measures (such as translocation, alien species eradication, fencing, etc.) and in which populations seed collection had to be performed for germplasm conservation. As a general rule, taxa (or specific populations) already conserved in seedbanks were not included in the list, except those for which the seed collections had to be renewed or those selected for *in situ* actions.

Subsequently, the six regional lists of target plants elaborated for each island were reviewed and homogenised for the plant taxonomy according to the main regional floras and, subsequently, incorporated in a global list of Mediterranean insular plants that required *in situ* and/or *ex situ* urgent conservation actions (**Annex 1**). For each plant, the distribution type was compiled by integrating local data and reported following a suggested general scale: ENE = Extremely Narrow Endemic (only one population); NE = Narrow Endemic (≤ five populations); RE = Regional Endemic (only one Island); IE = Insular Endemic (more than one island) and W = distributed in more islands or in a wider area.

1.4 Results

This general list includes 735 taxa of priority for conservation actions (Annex 1) not uniformly distributed among islands: the target plant richness varies from 221 taxa in Sicily to 86 in

Corsica, intermediate values are in Cyprus (108), Sardinia (125), Crete (126) and Balearic Islands (159).

The general list includes mainly plants selected by the Regional Responsibility Criterion (630 taxa) and plants assessed as threatened in the global and/or regional IUCN Red List (343 taxa). Plants listed in the Habitats Directive, national or regional regulations and plants related to wetland areas accounted for 80 and 71 taxa, respectively.

The genral list is mainly composed by taxa widely distributed in more islands and in the continental territories (377 taxa; 51.29%), while the “extremely narrow” and the “narrow endemics” accounts together for 34.83% of the total.

The elaboration of the six regional lists of target plants presented an opportunity to assess the level of threats for several endemic taxa and introduce them into the IUCN Global Red List : 11 taxa for Cyprus, 11 taxa for Crete, 7 taxa for Sardinia.

1.5 Discussion/summary

Although relevant progress has been made in recent years to homogenize large-scale floras (e.g. Euro+Med PlantBase), the absence of a common accepted taxonomy at the Mediterranean level represents a significant limitation to planning a general conservation strategy for the entire Mediterranean hotspot.

A realistic way to plan conservation measures at a small scale, to date, should be based on a local/regional (national) taxonomy; this is also necessary, in some countries, when a conservation action has to be approved and adopted by an administrative authority such as a Ministry, local governments etc. (i.e. regional and/or national level).

The selection of target plants highlighted a general point: in all islands, a relevant proportion of the selected taxa needing urgent conservation measures is represented by plants distributed in a wider area, while narrowly distributed endemic plants (Extremely Narrow Endemic and Narrow Endemic) reach a third of the total, except in Sicily, where they represent half of the selected plants. Such an observation contradicts the common use of only the endemic taxa to define the areas of interest for conservation.

A second general indication comes from the island priority lists: one plant can be at the same time extremely widespread in one area but also extremely threatened with extinction in another territory (e.g. PIPPs, ecological disjunctions, etc.).

The above evidence leads us to affirm that the priorities of conservation vary at small local level and that a common priority list (e.g. at biogeographical level such as the Mediterranean area) may not be effective for the plant diversity conservation in a very heterogeneous context such as that represented by the Mediterranean islands. In fact, a taxa could need different conservation interest depending on the particular conditions of the island or the locality where it grows, and thus, the regional responsibility criterion should be the main guide to plan conservation measures at a restricted local scale.

2. Planning *in situ* and *ex situ* conservation activities

2.1 Introduction

Before starting the conservation activities, a preliminary action focused on planning all activities in each island. After pinpointing the prioritized taxa, each partner selected the plant populations needing urgent *in situ* conservation measures (such as translocation, alien species eradication, fencing, etc.) and the populations where seed collection should be performed for germplasm conservation. For the selected populations, partners planned their own *in situ* and *ex situ* activities, taking into account the experience gained in previous projects.

2.2 Goals

Planning all *in situ* and *ex situ* activities, including updated assessment reports per species for six islands, six maps for all *in situ* actions per island, six local plans for *ex situ* actions per island, management & monitoring plans for all *in situ* conservation actions. Specifically:

- Elaboration of assessment reports for all target taxa per island and the target populations of each target taxa for *in situ* and *ex situ* actions:
  - Six assessment reports, regularly updated, for project target taxa and populations (one per island, including lists of selected populations of all target taxa).
- Preparation and update of action plans: Elaboration and update of time plans for *ex situ* actions (including obtaining all needed administrative and legal permissions) and elaboration and update of management plans for all *in situ* actions (including time plans and obtaining all needed administrative and legal permissions):
  - Six local plans, regularly updated, for *ex situ* actions (collection, curation, storage, duplication) (one per island);
  - Minimum a total of 30 management plans (one per target taxa), regularly updated, for project *in situ* actions (minimum five plans per island).

2.3 Methodology

First of all, an exhaustive bibliographic research at local level was carried out on the local threatened plants and about the needed conservation actions; research for existing data (bibliography on the taxa selected and/or similar taxa) was continuous. On the selected taxa, plant populations that needed urgent *in situ* conservation measures (e.g. management, alien plant eradications, fences, translocations) and populations for germplasm conservation were identified.

To complete this preliminary step, two specific templates were elaborated, discussed and approved by all partners. In particular, a selection of the plant populations for *in situ* and *ex situ* actions was performed: each island prepared a preliminary assessment report with a list of all selected taxa and the regional populations selected for *in situ* and/or *ex situ* project actions (with the relevant justification/reasons indicated). In the same way, a specific template was elaborated to manage all the activities related to the *ex situ* actions. A total of six initial local plans for *ex situ* actions (collection, curation, storage, duplication), one per island, were elaborated. The two templates (six preliminary assessment reports and six management plans) were subjected to regular updates.

Only for taxa selected for *in situ* actions, two further documents were elaborated, shared and approved by all partners. These documents, in a common format for each *in situ* action, included one "Management plan" (with detailed information for the local authorities) and one "*In situ* conservation - species information sheet", (with a general description of the conservation action). These documents were subject to regular updates and they were gradually enriched with the description of the implemented *in situ* actions and the results of the monitoring plan.

2.4 Results

During the project, six assessment reports for project target taxa and populations (one per island) and six local plans for *ex situ* actions were elaborated and regularly updated. In addition six local plans for all *in situ* actions per island (including time plans and obtaining all needed administrative and legal permissions) were elaborated and regularly updated. A total of six general maps for all *in situ* actions were also elaborated.

On all six islands, 63 management and monitoring plans were elaborated for the 63 *in situ* conservation actions carried out during the project. When necessary, each partner requested administrative and owner/manager authorizations following the procedures of his country; administrative and owner/manager authorizations were obtained in four islands.

2.5 Discussion / summary

The only realistic way to plan conservation measures at a small scale is to consider the different national laws and protocols, in particular if a specific conservation action has to be approved and adopted by a national or local administrative authority.

In addition the ecological condition, often peculiar to each island or part of islands, must be considered and, as a consequence, planning in detail *in situ* activities is possible only at local scale.

3. *Ex situ* conservation actions

3.1 Introduction

Although *in situ* conservation measures are the best methods for preserving plant diversity, *ex situ* conservation provides an alternative and complementary method for preventing immediate extinction. One of the most effective ways to preserve the plant diversity through *ex situ* conservation is the storage in seed banks, which allows conserving large amounts of genetic material in a small space and, under suitable conditions, for a long time with minimum risk of genetic degradation.

3.2 Goals

The project targets for this activity included the seed collecting and banking for a total of 600 accessions, finalized to ensure the conservation of germplasm of Mediterranean threatened plants and maximize stored genetic diversity of Mediterranean threatened plants, and the multiplication of a minimum of 9000 new plants to be used for *in situ* actions. In detail:

Seed collecting and banking:

- Minimum 600 accessions (seedlots) from a minimum of 120 taxa collected (100 per island);
- Minimum 600 accessions (seedlots) stored in seed banks (100 per island);
- Minimum 300 accessions duplicated (50 per island);
- Minimum 120 germination experiments (20 per island).

Plant multiplication to guarantee plants availability for *in situ* actions:

- Minimum of 9000 plants (corresponding to 120 taxa) *ex situ* cultivated.

3.3 Methodology

Germplasm collection, curation and storage of seeds / fruits for germplasm conservation was carried out for the taxa and for the populations pinpointed and it adhered to national and international regulations and standards (such as those developed by the international networks of GENMEDA and ENSCONET). The germplasm was collected following criteria aiming at maximizing the representativeness of the genetic diversity of the populations in each island (Bacchetta et al., 2006). To achieve this goal, collections of the same taxon were carried out in more than one population (when possible) and, for those taxa occurring in two or more islands, they were sampled considering their multiple occurrence.

Data concerning the germination eco-physiology of the collected germplasm was obtained through seed germination tests. The taxa to be tested were selected on the basis of their

abundance in terms of number of seeds per accession. Therefore, germination tests were carried out only for those taxa whose distribution allowed the collection of adequate quantity of seeds to be used both for *ex situ* conservation and seed germination tests. Otherwise, a *tetrazolium* test was been done to be sure that the viability of the accessions was enough to conserve it in the seedbank.

As a precautionary measure, aiming at ensuring the conservation of the collected germplasm, germplasm accessions were duplicated in the seed banks of other partners of this project or, if appropriate, with other institutions.

Besides *ex situ* conservation of the seeds in long term collections, each institution had to guarantee the availability of plants for use in recovery plans (e.g. “active seed collection”).

The optimal protocol obtained from the germination experiments or the same information obtained in previous projects (e.g. GENMEDOC, SEMCLIMED, ECOPLANTMED) were used for plant multiplication both in laboratories and/or in public and private nurseries.

3.4 Results

Collection, curation and storage of seeds / fruits for germplasm conservation were performed for the selected target taxa and, specifically, 740 germplasm accessions (mainly seedlots) from 429 taxa were collected and stored in seed banks (Annex 2).

Data concerning the germination eco-physiology of the collected germplasm were obtained through 410 seed germination tests concerning 283 target taxa (Annex 3).

As a precautionary measure, aiming at ensuring the conservation of the collected germplasm, 359 accessions were duplicated in the seed banks of other partners of this project or with other institutions.

A total of over 27,000 plants (corresponding to 162 target taxa) were propagated in partner nurseries and made available for *in situ* and *ex situ* (e.g. planting in botanic gardens) conservation actions.

The results of project *ex situ* actions, both seed banking and plant production, are separately presented for each project island in Annex 4.

3.5 Discussion / summary

Despite several objective constraints (e.g. plants that produce few viable seeds, plants growing in peculiar habitats or unorthodox seeds, etc.), the *ex situ* conservation can guarantee the long-term conservation of a large number of threatened plants. Optimistically, *ex situ* conservation could reach significant levels in the forthcoming years (at least in some territories worldwide) and with accessions representative of the natural variability. However, the main question is: “How will these accessions be used for future conservation activities ?”.

Conservation in a seed bank should be taken only as a temporary measure, aimed to preserve sufficient quantity of germplasm for future *in situ* actions. However, the integration of the *ex situ* approach in an *in situ* program as a pivotal strategy in conservation of threatened plants remains sporadically adopted. Several national and international initiatives promoted the implementation of seed bank collection but, conversely, few initiatives/projects based on the use of *ex situ* activities and knowledge as a tool to improve *in situ* conservation of threatened plants have been funded and implemented.

The costs of plant production are rather small if efficient plant production protocols are available. Only in a few cases was plant production expensive due to the involvement of specific treatments and fully controlled conditions during seedlings' growth in a greenhouse. Thus, development of an efficient plant production protocol, if the latter does not exist, is an effective way to reduce the cost of a future translocation project.

4. *In situ* conservation actions

4.1 Introduction

The best methods for preserving plant diversity are the *in situ* conservation measures aimed at improving the conservation status of the selected taxa/populations. The best methods are the plant translocations (including reintroduction and/or reinforcement); additionally or alternatively, active management measures are also effective to protect the threatened populations (passive defense measures may include fencing the population area from livestock or management actions such as eradicating or controlling pest plants, planting native vegetation - within or around the area, reconnecting isolated remnants, cattle management).

4.2 Goals

The project targets for this activity included all *in situ* conservation actions finalized to improve the conservation status of the selected taxa/populations of Mediterranean threatened plants, including the elaboration of specific long-term monitoring plans. In detail:

- Minimum of 60 *in situ* conservation actions for at least 30 taxa (10 per island);

- Minimum of 60 long-term monitoring plans (for implementing after the end of the project), one for each *in situ* conservation action.

4.3 Methodology

In order to define whether the translocation of the target taxa was possible and feasible, a preliminary survey chiefly based on historical data, current distribution range of the taxon, distance from the nearest natural population(s) and availability of the potential growing sites were performed. In addition, the availability of researches on the life cycle, reproductive biology, population biology and ecological requirements of the particular taxon or plant groups were verified and all these information were considered being crucial for having a reliable *in situ* action. A translocation plan was created for each target plant mainly taking into account the guidelines of IUCN/SSC (2013) but considering also the available updated scientific literature (e.g. Godefroid et al., 2011; Piazza et al., 2011; Cogoni et al., 2013; Volis, 2016b; Laguna et al., 2016).

A similar science-based approach was adopted in order to plan and implement passive or other management actions. In addition, for each *in situ* action, a specific monitoring plan was elaborated and regularly implemented in order to control the effectiveness of such *in situ* measures; in order to make the *in situ* activities more effective, local and regional authorities, and local stakeholders were actively involved in the action implementation and in all monitoring process. All the *in situ* activities were implemented in collaboration with the local relevant authorities of each island, responsible for the management of natural areas.

Moreover, the local authorities were actively involved both in the actions and in the monitoring programmes.

4.4 Results

Overall, a total of 63 *in situ* conservation actions (related to 51 plant taxa) were implemented, mainly represented by plant translocations (51 actions); conversely, management measures are represented by protective fences erection (9 actions) followed by removal of invasive/ornamental taxa (3 actions).

Most of the translocations were planned as reinforcement for existing and threatened populations (49%), while other translocations consisted of reintroductions at sites where the plant was recently disappeared (not due to natural causes; 14%) or new populations at sites with no records of plant occurrence in the past but with suitable ecological conditions (37%). In the majority of the latter two cases, selection of the microsites for planting was based on an expert-based criterion.

Translocations have been implemented by using different plant material, mainly juvenile plants (64% of the total cases) and seeds (40%), followed by reproductive plants, seedlings and, in a few cases, bulbs (24%, 14% and 2%, respectively); often a combination of different plant material type was used (40% of the total).

Considering all translocations carried out, 80% of them required management actions that were complementary to outplanting, such as fencing, eradication of invasive alien plants or weeding; these management actions are necessary both before (41%) and after (75%) translocation.

Unexpected natural stochastic events, mainly related to extreme weather conditions and the presence of feral animals, occurred in 46% of *in situ* conservation actions, causing damage to interventions. Although there is a large number of endangered plants growing on private lands (and outside of the protected areas), *in situ* conservation actions were carried out on legally protected sites managed by public administration (76% of the total) rather than on private land (12% of the total).

Finally, for each *in situ* action a species-specific monitoring protocol was planned and implemented in order to ensure its sustainability; in particular, the monitoring activities were planned and implemented on a monthly basis for 75% of the total actions completed.

The results of project *in situ* actions are separately presented for each island in Annex 5 as "*In Situ* Conservation - Species Information Sheets".

4.5 Discussion / summary

One of the main output of CARE-MEDIFLORA was represented by a several *in situ* conservation actions implemented also exploiting the knowledge acquired in *ex situ*

conservation; in fact, 51 conservation translocations were carried out by introducing *ex situ* propagated material, using a variety of protocols, which differed in type of translocation, site selection method, origin of the genetic material, type of propagated material (seeds or cuttings), and/or planting method (Fenu et al., 2019).

The CARE-MEDIFLORA approach confirms that severe limitations remain in the implementation of these conservation translocations. In general, translocations are considered time-consuming activities, as they require several in-depth preparatory studies, a constant commitment to multiply the outplants, realize and monitor the activities, and a long-term monitoring plan to verify their effectiveness; in addition, translocation programs are considered economically expensive activities, because the pre- and post-translocation management actions required are generally high-priced. Actually, the factors that made translocation challenging - as well as stimulating - included limited human resources and availability of optimal hosting sites, bureaucratic difficulties encountered by working on both private and public properties, and the high uncertainty of success due to stochastic events (Fenu et al., 2019).

Significant cost reductions can also be achieved for the translocation program by the inclusion of researchers, public authorities, volunteers, and local stakeholders (Fenu et al., 2019).

5. Networking and communication actions

Networking and communication were considered very important as it is crucial to involve the local communities and all relevant stakeholders in order to implement successful conservation programmes.

CARE-MEDIFLORA networking and communication actions included:

- ✓ Exchange of experiences within the partnership and among other stakeholders so as to improve collaboration and networking on plant conservation in the Mediterranean area
  - Partner collaborative meetings & field trips on all six islands
  - Meetings with relevant stakeholders on all six islands
  - Trainings
- ✓ Contribution to national reporting for the Convention on Biological Diversity (CBD) & Global Strategy for Plant Conservation (GSPC)
- ✓ Securing the sustainability of the partnership by supporting and enlarging the existing Network of Mediterranean Plant Conservation Centres 'GENMEDA'
  - GENMEDA network new website in both English and French (http://genmeda.net/) & database
  - Three meetings organized for GENMEDA & nine new members added since 2016 in the total of 22
- ✓ Dissemination of project aims and results
  - Project website (http://www.care-mediflora.eu/)
  - Project leaflet in English and local languages
  - Organization of six local dissemination events (one per island)
  - Participation in international and national external events, conferences, workshops
  - Local communication (newspapers, TV, radio, etc) & social media
  - Three scientific papers published
  - Participation in 1st Mediterranean Plant Conservation Week
  - Co-organization and participation in 2nd Mediterranean Plant Conservation Week (http://www.medplantsweek.uicnmed.org/)
  - Edition of the Project Summary for the wide public
  - Edition of the Project Final Report

Many people attended the public meetings, information days and other events of the project. Media coverage was important, and this really enhanced public sensitization and plant conservation on the islands. Many scientists involved in plant conservation were interested in the project methodologies and results. Several presentations were made about the project

(scientific communications in journals, external and partner events, website articles, printed editions), among which the project final workshop which was co-organized with IUCN-MED at the University of Malta (November 2018) in the framework of the event '2nd Mediterranean Plant Conservation Week' and had a great success and publicity at international level

Project scientific publications are listed in Annex 6.

All project publications and main outputs are available at the project website (http://www.care-mediflora.eu/).

LESSONS LEARNT - CONCLUSIONS – RECOMMENDATIONS

- The priorities of conservation vary at local level. A plant needs different conservation interest depending on the particular conditions of the island on which it grows, thus conservation measures have to be planned on a local scale.
- When initiating *in situ* plant conservation actions, we must
    - have a clear idea of what we plan to do (biological and ecological implications but also time and costs involved)
    - have adequate knowledge of the seed germination, propagation and growing of the plant in the nursery / botanical garden
    - select a suitable site that is preferably not too difficult to manage and control
    - have acceptance from / collaboration with local institutions and stakeholders
    - be aware that such actions could take a very long time
    - be aware that monitoring activities should be continuous in order to check the effectiveness of the actions over time.

Next steps

All project partners' institutions deal with plant conservation and seed banking and thus, they will continue working on this theme. At a local level, once the needed resources will be secured for implementing *in situ* conservation actions in the future, for other target taxa of the priority list already established, it will be much easier than before this project, as a great amount of knowledge and experience on this theme was achieved and important synergies with local and national authorities have been established. At a wider level, project partners will continue networking through GENMEDA and the IUCN/SSC Mediterranean Plant Specialist Group and cooperating in similar projects and proposals.

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Networks

European Native Seed Conservation Network – ENSCONET: http://ensconet.maich.gr

Network of Mediterranean Plant Conservation Centres – GENMEDA: http://www.genmeda.net/ (outputs of GENMEDOC and SEMCLIMED projects are available here)

Projects

ECOlogical use of native PLANTs for environmental restoration and sustainable development in the MEDiterranean region – project ECOPLANTMED: http://www.ecoplantmed.eu/en

Creation d'un reseau de centres de conservation du material genetique de la flore des regions mediterraneennes de l'espace MEDOCC – GENMEDOC

Impact of the Climatic Change on the Mediterranean Flora and Conservation Actions – SEMCLIMED

ANNEXES

Annex 1 – List of prioritised plant taxa

Island(s) of occurrence: Balearic Islands (Ba), Corsica (Co), Sardinia (Sa), Sicily (Si), Crete (Cr), Cyprus (Cy)
Occurrence: P = present; A = alien (not native to a specific island); D = doubtful presence
Distribution type:

- ENE = Extremely Narrow Endemic (only one population)
- NE = Narrow Endemic (≤ five populations)
- RE = Regional Endemic (only one Island)
- IE = Insular Endemic (more than one island)
- W = distributed in more islands or in a wider area.

Distribution type defines the "regional responsibility" of an Island on a plant species.
Criteria:

- Red Lists (RL): plant species selected is included in the red list (the plant should be EN, CR or VU in order to justify a conservation action);
- Regional Responsibility (RR): plant species selected plays a key role for the island; the "regional responsibility" criterion is the first order of priority at local level, because it establishes a high priority to plants whose distribution is endemic to the study area (an island in our specific case).
- Habitats Directive (HD): plant species selected is listed in the Annexes II and V of the Habitat Directive.
- Wetland plant (WP): plant species selected is a wetland species or grows in wetland habitat.

Taxon (local checklists)	**Island(s) of occurrence**						**Distribution type**					**Island(s) where taxon prioritised**	**Island(s) where action(s) implemented**	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Acer granatense Boiss.	P						W		1			Ba	Ba	
Acer obtusatum Willd. subsp. *aetnense* (Tineo ex Strobl) C. Brullo & Brullo		P		P			NE		1			Si	Si	
Achillea cretica L.					P	P	W	1				Cy	Cy	
Acinos troodi (Post) Leblebici subsp. *troodi*						P	RE	1				Cy	Cy	
Acis autumnalis (L.) Sweet	P		P				W		1			Ba	Ba	
Aconitum napellus L. subsp. *corsicum* (Gáyer) W. Seitz		P					RE		1	1	1	Co	Co	
Adenocarpus bivonii (C.Presl) C.Presl				P			NE		1			Si		
Adenocarpus commutatus Guss.				P			NE		1			Si		
Aeluropus lagopoides (L.) Trin. ex Thwaites			P	P	P	P	W				1	Si		
Aethionema saxatile (L.) R. Br.			P	P	P		W		1			Si	Si	
Agrimonia eupatoria L.	P	P	P	P		P	W	1				Cy	Cy	

Taxon (local checklists)	Island(s) of occurrence						Distribution type					Island(s) where taxon prioritised	Island(s) where action(s) implemented	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Agrostis barceloi L. Sáez & Rosselló	P						ENE	1	1			Ba		
Alkanna lutea Moris		P	P				W	1	1			Co		
Allium autumnale P. H. Davis						P	RE		1			Cy	Cy	
Allium commutatum Guss.	P	P	P	P	P		W		1			Ba, Si	Ba, Si	
Allium cyprium Brullo, Pavone & Salmeri subsp. *cyprium*						P	RE		1			Cy	Cy	
Allium ebusitanum Font Quer	P						W		1			Ba		
Allium exaltatum (Meikle) Brullo, Pavone, Salmeri & Venora						P	RE	1				Cy	Cy	
Allium grosii Font Quer	P						NE		1	1		Ba		
Allium guttatum Steven subsp. *guttatum*						P	RE	1				Cy	Cy	
Allium marathasicum Brullo, Pavone & Salmeri						P	ENE	1	1			Cy	Cy	Cy
Allium platakisii Tzanoud. & Kypr.					P		ENE	1	1			Cr		
Alyssum baldacii Vierh. ex Nyár					P		W	1	1			Cr	Cr	
Alyssum chondrogynum B. L. Burtt						P	RE		1			Cy		
Alyssum cypricum Nyár.						P	W		1			Cy		
Alyssum fragillimum (Bald.) Rech.f.					P		NE	1	1			Cr	Cr	
Alyssum idaeum Boiss. & Heldr.					P		NE	1	1			Cr		
Alyssum lassiticum Halácsy					P		NE	1	1			Cr		
Alyssum sphacioticum Boiss. & Heldr.					P		NE	1	1			Cr		
Alyssum troodi Boiss.						P	RE		1			Cy	Cy	
Amelanchier ovalis Medik.	P		P		P		W	1	1			Ba		
Amelanchier ovalis Medik. subsp. *embergeri* Favarger & Stearn				P			W		1			Si		
Ammophila arenaria (L.) Link	P	P	P	P	P	P	W	1				Cy	Cy	
Anagyris foetida L.	P	P	P	P	P		W		1			Si	Si	
Anchusa cespitosa Lam.					P		NE	1	1			Cr	Cr	
Anchusa crispa Viv. subsp. *crispa*		P	P				IE	1	1	1		Co, Sa	Co, Sa	Co
Anchusa crispa Viv. subsp. *maritima* (Vals.) Selvi & Bigazzi			P				NE	1	1	1		Sa	Sa	
Anchusa sardoa (Illario) Selvi & Bigazzi			P				ENE	1	1			Sa	Sa	
Anchusa undulata L. subsp. *hybrida* (Ten.) Cout.	D	P	P		P	P	W	1	1			Co	Co	
Andrachne telephioides L.	P				P	P	W	1	1			Ba		

Taxon (local checklists)	Island(s) of occurrence						Distribution type					Island(s) where taxon prioritised	Island(s) where action(s) implemented	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Androcymbium rechingeri Greuter					P		W	1		1		Cr	Cr	Cr
Andryala cossyrensis Guss.				P			RE	1	1			Si	Si	
Anthemis aetnensis Schouw in Sprengel				P			NE	1	1			Si	Si	
Anthemis cossyrensis (Guss.) Guss.				P			NE		1			Si		
Anthemis cupaniana Tod. ex Nyman				P			NE		1			Si	Si	
Anthemis glaberrima (Rech. fil.) Greuter					P		NE	1	1	1		Cr	Cr	
Anthemis intermedia Guss.				P			NE		1			Si	Si	
Anthemis peregrina L. subsp. *peregrina*				P			W	1	1			Si		
Anthemis pignattiorum Guarino, Raimondo & Domina				P			ENE	1	1			Si	Si	
Anthemis secundirramea Biv.	P		P				W	1	1			Ba		
Anthemis tomentosa L.						P	NE	1				Cy	Cy	Cy
Anthriscus caucalis M. Bieb.	P	P	P			P	W	1	1			Ba		
Anthyllis barba-jovis L.		P	P	P			W		1			Si, Co, Sa	Co, Si	
Anthyllis barba-jovis L. *x A. hermanniae* L. subsp. *corsica* Brullo & Giusso		P					ENE		1			Co	Co	
Anthyllis hermanniae L. subsp. *ichnusae* Brullo & Giusso		P	P				RE		1			Sa	Sa	
Anthyllis hystrix (Willk. ex F.Barceló) Cardona, Contandr. & E.Sierra	P						NE			1		Ba	Ba	
Antirrhinum siculum Mill.			P	P	D		W		1			Sa	Sa	
Aquilegia barbaricina Arrigoni & E.Nardi			P				NE	1	1		1	Sa	Sa	
Aquilegia bernardii Gren. & Godr.		P					RE		1		1	Co	Co	
Aquilegia cremnophila Bacch., Brullo, Congiu, Fenu, J. Garrido & Mattana			P				NE	1	1			Sa	Sa	
Aquilegia litardierei Briq.		P					NE		1		1	Co	Co	
Aquilegia nugorensis Arrigoni & E.Nardi			P				RE	1	1		1	Sa	Sa	
Arenaria bolosii (Cañig.) L.Sáez & Rosselló	P						NE	1	1			Ba		
Arenaria grandiflora L.	P	P		P			W		1			Si	Si	
Aristolochia rotunda L.	P	P	D				W		1			Ba		
Armeria morisii Boiss.			P				NE		1			Sa		
Armeria pungens (Link) Hoffmanns. & Link		P	P				W		1			Co	Co	
Armeria sardoa Spreng. subsp. *genargentea* Arrigoni			P				NE		1			Sa	Sa	

Taxon (local checklists)	Island(s) of occurrence						Distribution type					Island(s) where taxon prioritised	Island(s) where action(s) implemented	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Armeria sardoa Spreng. subsp. *sardoa*			P				RE		1			Sa		
Armeria soleirolii (Duby) Godr.		P					RE		1	1		Co	Co	
Armeria sulcitana Arrigoni			P				NE		1			Sa	Sa	
Arrhenatherum album (Vahl) Clayton subsp. *cypricola* H. Scholz						P	RE		1			Cy	Cy	
Artemisia caerulescens L.	P						W		1			Ba		
Artemisia caerulescens L. subsp. *densiflora* (Viv.) Kerguélen & Lambinon		P	P				IE	1	1			Co		
Artemisia campestris L. subsp. *variabilis* (Ten.) Greuter			P	P			W		1			Sa	Sa	
Artemisia inculta Delile					P		W	1				Cr	Cr	
Arthrocnemum macrostachyum (Moric.) C. Koch	P	P	P	P	P	P	W				1	Si		
Arum concinnatum Schott					P	P	IE	1				Cy		
Arum cylindraceum Gasp. subsp. *pitsyllianum* Hadjik., Hand & G. Mans.						P	NE	1	1			Cy		
Arum cyrenaicum Hruby					P		W	1				Cr		
Arum purpureospathum P.C. Boyce					P		IE	1	1			Cr	Cr	
Arum rupicola Boiss.						P	W	1				Cy	Cy	
Arum sintenisii (Engl.) P. C. Boyce						P	NE	1	1			Cy	Cy	Cy
Asparagus aetnensis Tornab.		P		P			ENE	1	1			Si		
Asperula paui Font Quer	P						W		1			Ba		
Asphodelus cerasiferus J. Gay	P	P	D				W		1			Ba		
Aster tripolium L. subsp. *pannonicus* (Jacq.) Soó	P						W		1		1	Ba	Ba	
Astragalus alopecurus Pall.		P					W	1	1	1		Co		Co
Astragalus balearicus Chater	P						IE		1			Ba	Ba	
Astragalus creticus Lam. subsp. *minoicus* Brullo & Giusso					P		ENE		1			Cr	Cr	
Astragalus genargenteus Moris			P				ENE		1			Sa	Sa	
Astragalus gennarii Bacch. & Brullo			P				ENE		1			Sa	Sa	Sa
Astragalus greuteri Bacch. & Brullo		P					RE		1			Co	Co	
Astragalus huetii Bunge				P			NE		1			Si	Si	
Astragalus idaeus Bunge					P		ENE	1	1			Cr	Cr	
Astragalus kamarinensis C. Brullo, Brullo, Giusso, Miniss. & Sciandr.				P			ENE	1	1			Si	Si	

Taxon (local checklists)	Island(s) of occurrence						Distribution type					Island(s) where taxon prioritised	Island(s) where action(s) implemented	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Astragalus macrocarpus DC. subsp. *lefkarensis* Kirchhoff & Meikle						P	RE	1	1	1		Cy	Cy	
Astragalus nebrodensis (Guss.) Strobl				P			NE		1			Si	Si	
Astragalus raphaelis G. Ferro				P			NE	1	1			Si	Si	Si
Astragalus siculus Biv.				P			NE		1			Si	Si	
Astragalus suberosus Banks & Sol.						P	W	1				Cy	Cy	Cy
Astragalus terraccianoi Vals.		P	P				IE		1			Co		
Astragalus thermensis Vals.			P				ENE		1			Sa		
Athamanta sicula L.				P			W		1			Si	Si	
Aubrieta deltoidea (L.) DC. subsp. *sicula* (Strobl) Phitos				P	P		NE		1			Si	Si	
Barnardia numidica (Poir.) Speta	P						W		1			Ba		
Bellevalia brevipedicellata Turrill					P		NE	1	1			Cr	Cr	Cr
Bellevalia juliana Bareka, Turland & Kamari					P		NE		1			Cr	Cr	
Bellevalia romana (L.) Rchb.		P	P	D			W	1	1		1	Co	Co	
Berberis vulgaris L. subsp. *aetnensis* (C.Presl) Rouy & Foucaud		P	P	P			W		1			Sa, Si	Sa, Si	
Betula aetnensis Rafin.				P			ENE	1	1			Si	Si	Si
Biarum dispar (Schott) Talavera			P				W		1			Sa	Sa	
Biscutella ebusitana Rosselló, N. Torres & L. Sáez	P						NE		1			Ba		
Biscutella rotgesii Foucaud		P					RE		1	1		Co	Co	
Bituminaria basaltica Miniss., Brullo C., Brullo, Giusso & Sciandr.				P			ENE	1	1			Si		
Bituminaria bituminosa (L.) C.H. Stirton	P	P	P	P	P	P	W		1			Si		
Bituminaria morisiana (Pignatti & Metlesics) Greuter			P				W		1			Sa	Sa	
Bolanthus creutzburgii Greuter subsp. *zaffranii* Phitos, Turland & Bergmeier					P		ENE	1	1			Cr	Cr	Cr
Borago morisiana Bigazzi & Ricceri			P				NE	1	1		1	Sa		
Borago pygmaea (DC.) Chater & Greuter		P	P				IE	1	1		1	Sa		
Botrychium simplex E. Hitchc.		P					W	1	1	1	1	Co		
Brachypodium sylvaticum (Huds.) P.Beauv.	P	P	P	P	P		W		1			Si	Si	
Brassica bivoniana Mazzola & Raimondo				P			NE	1	1			Si		

Taxon (local checklists)	Island(s) of occurrence						Distribution type					Island(s) where taxon prioritised	Island(s) where action(s) implemented	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Brassica drepanensis (Caruel) Damanti				P			ENE	1	1			Si		
Brassica hilarionis Post						P	RE	1		1		Cy	Cy	
Brassica incana Ten.				P			W		1			Si	Si	
Brassica insularis Moris		P	P	P			IE		1	1		Co, Sa	Co, Sa	
Brassica macrocarpa Guss.				P			ENE	1	1	1		Si		
Brassica raimondoi Sciandr., C. Brullo, Brullo, Giusso, Miniss. & Salmeri				P			ENE	1	1			Si		
Brassica rupestris Rafin subsp. *hispida* Raimondo & Mazzola				P			ENE	1	1			Si		
Brassica tinei Lojac.				P			NE	1	1			Si		
Brassica trichocarpa Brullo C., Brullo, Giusso & Ilardi				P			ENE	1	1			Si		
Brassica tyrrhena Giotta, Piccitto & Arrigoni			P				NE		1			Sa		
Brassica villosa Biv. subsp. *brevisiliqua* (Raimondo & Mazzola) Raimondo & Geraci				P			ENE	1	1			Si	Si	
Brassica villosa Biv. subsp. *villosa*				P			ENE	1	1			Si		
Brimeura duvignaaudii (L.Llorens) Rosselló, Mus & Mayol	P						NE	1	1			Ba		
Briza maxima L.	P	P	P	P	P	P	W		1			Si	Si	
Bunium corydalinum DC. subsp. *corydalinum*		P	P				IE		1			Sa		
Bupleurum fruticosum L.		P	P	P			W		1			Sa, Si	Si	
Bupleurum gaudianum Snogerup					P		NE	1	1			Cr	Cr	
Bupleurum rigidum L.	P						W		1			Ba		
Buxus balearica Lam.	P		P				W		1			Sa, Ba	Ba	
Cachrys ferulacea (L.) Calest.				P			W		1			Si		
Calamintha cretica (L.) Lam.					P		RE	1	1			Cr	Cr	
Calicotome spinosa (L.) Link	P	P	P	P			W		1			Sa	Sa	
Callitriche pulchra Schotsman					P	P	W	1			1	Cr	Cr	
Campanula fastigiata Schult.						P	RE	1				Cy		
Campanula forsythii (Arcangeli) Podlech			P				NE		1			Sa	Sa	
Campanula hierapetrae Rech. fil.					P		NE	1	1			Cr		
Campanula laciniata L.					P		IE	1				Cr	Cr	
Campanula podocarpa Boiss.						P	RE	1				Cy	Cy	
Campanula saxatilis L. subsp. *saxatilis*					P		RE	1	1			Cr	Cr	
Carduus bourgaeanus Sch.Bip. ex Boiss. & Reut.	P						W		1			Ba		
Carex extensa Good.		P	P	P	P	P	W		1		1	Si		

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	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Carlina macrocephala Moris subsp. *macrocephala*		P	P				IE		1			Sa	Sa	
Caroxylon agrigentinum (Guss.) C. Brullo, Brullo, Giusso, Guarino & Iamonico				P			NE	1	1			Si		
Carthamus balearicus (J.J.Rodr.) Greuter	P						NE		1	1		Ba		
Carthamus caeruleus L.	P	P	P	P	P	P	W	1				Cy		
Carthamus dianius (Webb) Coincy	P						ENE	1	1			Ba		
Castroviejoa frigida (Labill.) Galbany, L.Sáez & Benedí		P	D				RE		1			Co	Co	
Celtis aetnensis (Tornab.) Strobl				P			NE	1	1			Si	Si	
Celtis asperrima Lojac.				P			NE	1	1			Si	Si	
Centaurea argentea L. subsp. *argentea*					P		IE	1				Cr		
Centaurea argentea L. subsp. *chionantha* (Turland & L. Chilton) Greuter					P		NE	1	1			Cr	Cr	
Centaurea baldaccii Degen ex Bald.					P		NE	1	1			Cr	Cr	
Centaurea busambarensis Guss.				P			ENE		1			Si		
Centaurea cyprensis (Holub) T. Georgiadis						P	RE		1			Cy		
Centaurea deusta Ten. subsp. *divaricata* (Guss.) Matthäs & Pignatti				P			ENE	1	1			Si		
Centaurea giardinae Raimondo & Spadaro				P			NE	1	1			Si	Si	
Centaurea lancifolia Spreng.					P		NE	1	1	1		Cr		
Centaurea magistrorum Arrigoni & Camarda			P				ENE	1	1			Sa	Sa	Sa
Centaurea panormitana Lojac.				P			NE	1	1			Si		
Centaurea parlatoris Heldr. subsp. *parlatoris*				P			NE	1	1			Si	Si	
Centaurea poculatoris Greuter					P		NE	1	1			Cr	Cr	
Centaurea pumilio L.					P	P	W	1				Cr	Cr	
Centaurea sphaerocephala L.		P	P	P			W		1			Si	Si	
Centaurea todaroi Lacaita				P			ENE		1			Si		
Centaurea tyrrhena C. Brullo, Brullo & Giusso				P			NE	1	1			Si		
Centranthus amazonum Fridl. & A.Raynal			P				NE	1	1	1		Sa	Sa	Sa
Centranthus trinervis (Viv.) Bég.		P					ENE	1	1	1		Co	Co	Co
Cephalaria bigazzii Bacch., Brullo & Giusso			P				ENE		1			Sa		

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	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Cephalaria ebusitana (O. Bolòs & Vigo) Bacch., Brullo & Giusso	P						IE	1	1			Ba		
Cerastium supramontanum Arrigoni			P				NE		1			Sa	Sa	
Cerastium tomentosum L.		P		P			W		1			Si	Si	
Cerinthe major L. subsp. *gymnandra* (Gasp.) Rouy		P					W		1			Co		
Cerinthe major L. subsp. *major*		P	P	D	P		W		1			Co	Co	
Cerinthe tenuiflora Bertol.		P					RE		1		1	Co	Co	
Chaenorhinum origanifolium (L.) Kostel. subsp. *rodriguezii* (Porta) Güemes	P						NE		1			Ba		
Chaenorhinum rubrifolium (DC.) Fourr.	P			P	P	P	W	1				Cy	Cy	
Chaenorhinum rubrifolium (DC.) Fourr. subsp. *formenterae* (Gand.) R.Fern.	P						NE		1			Ba		
Chaerophyllum creticum Boiss. & Heldr.					P		NE	1	1			Cr	Cr	Cr
Chamaerops humilis L.	P		P				W		1			Ba	Ba	
Charybdis glaucophylla Bacch., Brullo, D'Emerico, Pontec. & Salmeri			P				NE		1			Sa		
Cistus albidus L.	P	A	P				W		1			Sa	Sa	
Cistus clusii Dunal	P			P			W	1	1			Si, Ba	Ba	
Cistus creticus L.	P	P	P		P	P	W		1			Ba	Ba	
Cistus crispus L.				P			W	1	1			Si		
Cistus salviifolius L.	P	P	P	P	P	P	W		1			Si	Si	
Cladium mariscus (L.) Pohl	P	P	P	P		P	W		1		1	Ba, Si	Ba	
Clinopodium rouyanum (Briq.) Govaerts	P						NE		1			Ba		
Clinopodium sandalioticum (Bacch. & Brullo) Bacch. & Brullo ex Peruzzi & F.Conti			P				NE		1			Sa		
Clinopodium sardoum (Asch. & Levier) Peruzzi & F.Conti			P				NE		1			Sa	Sa	
Colchicum lusitanum Brot.	P		P				W	1	1			Ba		
Colutea arborescens L.	P	P	P	P			W		1			Sa		
Colymbada tauromenitana (Guss.) Holub				P			NE	1	1			Si	Si	
Convolvulus valentinus Cav. subsp. *suffruticosus* (Desf.) Maire	P						W	1	1			Ba	Ba	
Cornus sanguinea L.		P	P	P			W		1		1	Sa	Sa	
Corydalis rutifolia (Sm.) DC.						P	RE		1			Cy		
Cotoneaster nebrodensis (Guss.) K. Koch				P			NE		1			Si	Si	

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	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Crambe hispanica L.			P	P		P	W	1				Cy	Cy	
Crataegus orientalis M. Bieb subsp. *orientalis*				P	P	P	W		1			Si	Si	
Crepis auriculifolia Sieber ex Spreng.					P		RE	1	1			Cr	Cr	
Crepis bivoniana (Reichenb.) Soldano & F. Conti				P			NE		1			Si		
*Crepis pusilla (*Sommier) Merxm.	P				P	P	IE	1		1		Ba, Cy	Cy	
Crepis sibthorpiana Boiss. & Heldr.					P		RE	1	1			Cr	Cr	
Cressa cretica L.	P	P	P		P	P	W		1			Ba		
Crithmum maritimum L.	P	P	P	P	P	P	W		1			Ba	Ba	
Crocus cyprius Boiss. & Kotschy						P	RE	1	1	1		Cy	Cy	
Crocus hartmannianus Holmboe						P	RE	1	1	1		Cy	Cy	
Crucianella maritima L.	P	P	P	P			W		1			Si, Sa, Ba	Ba, Sa	
Crucianella rupestris Guss.				P			NE	1	1			Si		
Crypsis hadjikyriakou Raus & H.Scholz						P	ENE	1	1			Cy	Cy	Cy
Cyanus segetum Hill		P					W		1			Co	Co	
Cyclamen graecum Link subsp. *anatolicum* Ietsw.					P	P	IE	1				Cy	Cy	
Cymbalaria fragilis (Rodr.) A.Chev.	P						NE	1	1			Ba		
Cymbalaria longipes (Boiss. & Heldr.) Chev.					P	P	IE	1				Cy		
Cynanchum acutum L.	P		P	P	P	P	W	1				Cy	Cy	
Cynara cyrenaica Maire & Weiller					P		W	1				Cr	Cr	
Cynara makrisii Hand & Hadjik.						P	ENE	1	1			Cy	Cy	
Cynoglossum apenninum L.				P			W		1			Si		
Cynoglossum barbaricinum Arrigoni & Selvi			P				NE		1		1	Sa		
Cynoglossum troodi H. Lindb.						P	RE	1				Cy	Cy	
Cytisus fontanesii Ball	P						W		1			Ba		
Cytisus villosus Pourr.		P	P	P			W		1			Si	Si	
Dactylorhiza elata (Poir.) Soó subsp. *sesquipedalis* (Willd.) Soó		D	P				ENE	1	1		1	Sa		
Damasonium bourgaei Coss.	P		P	P			W		1		1	Ba, Si	Ba, Si	
Daphne laureola L.		P	P	P			W		1			Sa, Si	Si	
Daphne oleoides Schreb.		P	P	P	P	D	W		1			Sa		
Daphne rodriguezii Teixidor	P						NE		1	1		Ba		
Datisca cannabina L.					P	P	W	1			1	Cr, Cy	Cr, Cy	Cr

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	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Delphinium caseyi B. L. Burtt						P	NE	1		1		Cy		
Delphinium pentagynum Lam.	P						W	1	1			Ba		
Delphinium pictum Willd.	P	P	P				W		1			Sa	Sa	
Desmazeria pignattii Brullo & Pavone			P	P			NE		1			Si		
Desmazeria sicula (Jacq.) Dumort.			P	P			W		1			Si		
Dianthus arrostii C. Presl				P			NE		1			Si		
Dianthus gasparrinii Guss.				P			NE	1	1			Si		
Dianthus genargenteus Bacch., Brullo, Casti & Giusso			P				NE		1			Sa	Sa	
Dianthus gyspergerae Rouy		P					RE	1	1			Co	Co	
Dianthus juniperinus Sm. subsp. *kavusicus* Turland					P		NE	1	1			Cr	Cr	
Dianthus morisianus Vals.			P				ENE	1	1			Sa	Sa	Sa
Dianthus mossanus Bacch. & Brullo			P				NE		1			Sa		
Dianthus rupicola Biv. subsp. *aeolicus* (Lojac.) Brullo & Minissale				P			NE		1	1		Si		
Dianthus rupicola Biv. subsp. *rupicola*				P			W		1	1		Si, Ba	Si	Si
Dianthus siculus C.Presl				P			NE	1	1			Si	Si	
Dianthus tripunctatus Sm.					P	P	IE	1				Cy	Cy	
Dianthus xylorrhizus Boiss. & Heldr.					P		NE	1	1			Cr	Cr	
Dichoropetalum kyriakae (Hadjik. & Alziar) Hand & Hadjik.						P	ENE	1	1			Cy	Cy	Cy
Digitalis minor L.	P						IE		1			Ba	Ba	
Digitalis minor L. var. *palaui* (Garcias Font & Marcos) Hinz & Rosselló	P						IE		1			Ba		
Digitalis purpurea L. var. *gyspergerae* (Rouy) Fiori		P	P				IE		1			Sa	Sa	
Dioscorea communis (L.) Caddick & Wilkin	P	P	P	P	P	P	W		1			Si	Si	
Diplotaxis crassifolia (Rafin.) DC.				P			NE		1			Si	Si	
Diplotaxis ibicensis (Pau) Gómez Campo	P						W		1	1		Ba	Ba	
Dipsacus ferox Loisel.		P	P				IE		1			Sa	Sa	
Doronicum corsicum (Loisel.) Poir.		P					RE		1		1	Co	Co	
Dorycnium fulgurans (Porta) Lassen	P						NE		1			Ba	Ba	Ba
Draba loiseleurii Boiss.		P					RE		1			Co		
Drimia fugax (Moris) Stearn	P	P	P				W		1			Ba		

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Dryopteris pallida (Bory) Maire & Petitm. subsp. *pallida*	P	P	P	D	P	P	W	1	1			Co		
Echinophora spinosa L.	P	P	P				W		1			Ba		
Echium anchusoides Bacch., Brullo & Selvi			P				RE		1			Sa		
Echium italicum L. subsp. *siculum* (Lacaita) Greuter & Burdet		P		P			NE		1			Si		
Echium judaeum Lacaita						P	RE	1				Cy	Cy	
Edraianthus graminifolius (L.) DC. subsp. *siculus* (Strobl) Lakušić ex Greuter & Burdet				P			NE		1			Si		
Elaeoselinum asclepium (L.) Berrol. subsp. *meoides* (Desf.) Maire		P	P				IE	1	1			Co		
Elaeoselinum asclepium (L.) Bertol	P						W		1			Ba		
Elatine alsinastrum L.			P	P	P		W		1		1	Cr, Si	Si	
Elatine brochonii Clavaud	D	P		D		D	W		1		1	Co		Co
Elatine macropoda Guss.	P	P	P			P	W		1		1	Ba	Ba	
Eleohcaris acicularis (L.) Roem. & Schult	P						W		1		1	Ba		
Elytrigia corsica (Hack.) Holub/*Elymus corsicus* (Hackel) Kerguélen		P	P				IE		1			Co, Sa	Co, Sa	
Elytrigia juncea (L.) Nevski	P	P	P	P		P	W		1			Si		
Elytrigia scirpea (C. Presl) Holub		P		P			W		1		1	Si		
Enarthrocarpus arcuatus Labill.					P	P	IE	1				Cy	Cy	
Ephedra fragilis Desf.	P			P		P	W		1			Si	Si	
Epipactis cretica Kalopissis & Robatsch					P		RE	1	1		1	Cr		
Erica manipuliflora Salisb.				P	P	P	W	1				Cy	Cy	
Erica sicula Guss. subsp. *libanotica* (Barb.-Boiss. & Barbey) P. F. Stevens						P	W		1			Cy		
Erigeron paolii Gamisans		P					RE		1			Co		
Erodium corsicum Léman		P	P				IE		1			Co	Co	
Erodium crassifolium L'Hér. subsp. *crassifolium*					P	P	IE	1				Cy		
Erodium maritimum L'Hér. ex Aiton	P		P				W	1	1			Ba		
Erucastrum virgatum (J. & C.Presl) C. Presl				P			W		1			Si	Si	
Eryngium pusillum L.		P	P	D			W	1	1		1	Co	Co	
Eryngium ternatum Poir.					P		RE	1	1			Cr	Cr	

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	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Erysimum bonannianum C. Presl				P			NE		1			Si		
Erysimum brulloi G. Ferro				P			ENE	1	1			Si	Si	
Erysimum etnense Jordan				P			NE	1	1			Si	Si	
Erysimum kykkoticum Alziar & Hadjik.						P	ENE	1	1			Cy		
Eupatorium cannabinum L. subsp. *corsicum* (Loisel.) P. Fourn.		P	P				W		1			Sa		
Euphorbia aleppica L.				P		P	W	1				Cy	Cy	
Euphorbia bivonae Steud.				P			NE	1	1			Si	Si	
Euphorbia cassia Boiss. subsp. *rigoi* (Freyn) Holmboe						P	RE		1			Cy		
Euphorbia dendroides L.	P	P	P	P	P	P	W		1			Si	Si	
Euphorbia dracunculoides Lam. subsp *inconspicua* (Ball) Maire	P						W	1	1			Ba	Ba	
Euphorbia fontqueriana Greuter	P						ENE		1			Ba		
Euphorbia lemesiana Hadjik. Hand, Christodoulou & Frajman						P	RE	1	1			Cy		
Euphorbia maresii Knoche subsp. *balearica* (Willk.) Malag.	P						NE		1			Ba	Ba	
Euphorbia papillaris (Boiss.) Raffaelli & Ricceri				P			NE		1			Si		
Euphorbia paralias L.	P	P	P	P	P	P	W	1				Si, Ba, Cy	Ba, Cy	Cy
Euphorbia peplis L.	P	P	P	D	P	P	W		1			Co		
Euphorbia squamigera Loisel.	P						W		1			Ba		
Euphrasia nana (Rouy) Prain		P	P				IE		1			Co		
Ferula arrigonii Bocchieri		P	P				IE	1	1			Sa, Co	Co, Sa	
Ferula cypria Post						P	W	1	1			Cy	Cy	
Ferulago cypria H. Wolff						P	RE		1			Cy		
Ferulago nodosa (L.) Boiss. subsp. *rigida* (Ten.) Troia & Raimondo				P			NE	1	1			Si		
Festuca morisiana Parl. subsp. *morisiana*			P				NE		1			Sa		
Filago mareotica Delile						P	W	1				Cy	Cy	
Filago petro-ianii Rita & Dittrich	P						ENE		1			Ba		
Filago wagenitziana Bergmeier					P		ENE		1		1	Cr		
Fraxinus angustifolia Vahl	P		P	P			W					Si		
Fraxinus angustifolia Vahl subsp. *oxycarpa* (Willd.) Franco & Rocha Alfonso		P	P	P	A	A	W		1		1	Sa		

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	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Fraxinus ornus L.		P	P	P	P		W					Si		
Fritillaria persica L.						P	W	1				Cy	Cy	
Galium lucidum All.	P	P	P	P			W		1			Si	Si	
Galium tenuissimum M. Bieb.						P	W	1				Cy	Cy	
Genista aetnensis (Biv.) DC.		P	P	P			IE	1	1		1	Co, Si, Sa	Co, Sa	
Genista aspalathoides Lam.				P			W	1	1			Si		
Genista cupanii Guss.				P			NE		1			Si	Si	
Genista demarcoi Brullo, Scelsi & Siracusa				P			ENE	1	1			Si	Si	
Genista dorycnifolia Font Quer	P						NE	1	1	1		Ba	Ba	
Genista ephedroides DC.		P	P	P			W		1			Co		
Genista gasparrinii (Guss.) C. Presl				P			ENE	1	1			Si		
Genista hirsuta Ten. var. *trichoacantha* (Font Quer) O. Bolòs & Vigo	P						NE		1			Ba		
Genista lucida Cambess.	P						RE	1	1			Ba	Ba	
Genista madoniensis Raimondo				P			ENE	1	1			Si		
Genista monspessulana (L.) L.A.S.Johnson	P	P	P				W	1	1			Ba		
Genista tricuspidata Desf.	P						W		1			Ba		
Genista tyrrhena Vals. subsp. *pontiana* Brullo & De Marco		P					IE		1			Co	Co	
Genista tyrrhena Vals. subsp. *tyrrhena*				P			NE		1			Si		
Genista valdes-bermejoi Talavera & L. Sáez	P						NE		1			Ba		
Gentiana lutea L. subsp. *lutea*		P	P				W		1	1		Sa		Sa
Geum urbanum L.		P	P	P		P	W	1				Cy	Cy	
Globularia alypum L.	P	P	P	P	P		W		1			Sa, Ba	Sa	
Globularia bisnagarica L.		P					W		1			Co	Co	
Gundelia tournefortii L.						P	RE	1				Cy	Cy	
Halimione portulacoides (L.) Aellen	P	P	P	P	P		W			1	1	Si	Si	
Halopeplis amplexicaulis (Vahl) Ces., Pass. & Gibelli			P	P		P	W		1		1	Sa	Sa	
Haplophyllum buxbaumii (Poir.) G. Don						P	W	1				Cy	Cy	
Hedysarum cyprium Boiss.						P	RE	1	1			Cy	Cy	
Helianthemum apeninum (L.) Mill.	P						W		1			Ba		
Helianthemum caput-felis Boiss.	P		P				W	1	1	1		Ba, Sa	Ba, Sa	
Helianthemum marifolium (L.) Mill. subsp. *origanifolium* (Lam.) G.López	P						IE		1			Ba	Ba	

Taxon (local checklists)	Island(s) of occurrence						Distribution type					Island(s) where taxon prioritised	Island(s) where action(s) implemented	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Helianthemum nummularium (L.) Mill.	P	P	P	P	P		W		1	1		Si	Si	
Helianthemum sanguineum (Lag.) Dunal				D	D	P	W	1				Cy		
Helianthemum scopulicolum L. Sáez, Rossello & Alomar	P						ENE	1	1			Ba		
Helianthemum sicanorum Brullo, Giusso & Sciandrello				P			ENE	1	1			Si		
Helichrysum archimedeum C. Brullo & Brullo				P			NE	1	1			Si		
Helichrysum doerfleri Rech. f.					P		NE	1	1			Cr	Cr	
Helichrysum errerae Tineo				P			NE	1	1			Si		
Helichrysum heldreichii Boiss.					P		NE	1	1			Cr	Cr	
Helichrysum hyblaeum Brullo				P			NE	1	1			Si		
Helichrysum massanellanum Herrando, J.M. Blanco, L. Sáez & Galbany	P						IE		1			Ba	Ba	
Helichrysum microphyllum Willd. subsp. *tyrrhenicum* Bacch, Brullo & Giusso	P	P	P				IE		1			Ba, Sa	Sa	
Helichrysum montelinasanum Em. Schmid.			P				NE		1			Sa		
Helichrysum panormitanum Tineo ex Guss. subsp. *panormitanum*				P			NE		1			Si		
Helichrysum pendulum (C.Presl) C.Presl				P			NE		1			Si	Si	
Helichrysum saxatile Moris subsp. *saxatile*			P				RE		1			Sa	Sa	
Helichrysum stoechas (L.) Moench	P			P	P	P	W		1			Si, Ba	Ba	
Helicodiceros muscivorus (L. fil.) Engl.	P	P	P				IE		1			Sa, Co	Co	
Helictotrichon crassifolium (Font Quer) Röser	P						ENE		1			Ba		
Helleborus lividus Aiton ex Curtis	P						IE		1			Ba	Ba	
Helleborus lividus Aiton subsp. *corsicus* (Briq.) P.F.Yeo		P	P				IE		1			Sa	Sa	
Hippocrepis conradiae Gamisans & Hugot		P					RE		1			Co		
Hippocrepis grosii (Pau) Boira, L. Gil & L. Llorens	P						NE	1	1			Ba		
Holcus lanatus L.	P	P	P	P	P	P	W		1			Si	Si	
Hormuzakia aggregata (Lehm.) Guşul.				P			W	1	1			Si		
Horstrissea dolinicola Greuter, P. Gerstberger & B. Egli					P		ENE	1	1			Cr	Cr	Cr
Hypecoum pendulum L.						P	W	1				Cy	Cy	

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	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Hypericum aciferum (Greuter) N. Robson					P		NE	1	1	1		Cr		
Hypericum hircinum L. subsp. *albimontanum* (Greuter) N. Robson.					P	P	W	1				Cy	Cy	
Hypericum hircinum L. subsp. *cambessedesii* (Coss. ex Nyman) Sauvage	P					D	NE		1		1	Ba	Ba	
Hypericum hircinum L. subsp. *hircinum*		P	P				IE		1		1	Sa	Sa	
Hypericum jovis Greuter					P		RE	1	1			Cr	Cr	
Hypericum kelleri Bald.					P		RE	1	1			Cr	Cr	
Hypericum lanuginosum Lam.						P	W	1				Cy	Cy	
Hypericum perfoliatum L.	P		P	P	P	P	W	1				Cy	Cy	
Hypericum scruglii Bacch., Brullo & Salmeri			P				NE		1		1	Sa	Sa	
Iberis integerrima Moris			P				RE		1			Sa		
Iberis semperflorens L.				P			RE		1	1		Si	Si	
Ifloga spicata (Forssk.) Sch. Bip.						P	W	1				Cy	Cy	
Ilex aquifolium L.	P	P	P	P			W	1	1			Ba		
Isoetes histrix Bory & Durieu	P		P		P		W		1		1	Ba		Ba
Jacobaea ambigua (Biv.) Pelser & Veldkamp				P			NE	1	1			Si		
Jacobaea candida (C.Presl) B. Nord. & Greuter				P			NE	1	1			Si		
Jasione montana L.		P	P	P			W		1	1		Si	Si	
Juncus acutus L.	P	P	P	P	P	P	W				1	Si	Si	
Juncus littoralis C. A. Mey.		P		P	P	P	W				1	Si		
Juncus maritimus Lam.	P		P	P	P	P	W				1	Si		
Juncus subulatus Forssk.	P	P	P	P	P	P	W				1	Si	Si	
Juniperus communis L. subsp. *hemisphaerica* (J. & C.Presl) Arcang.				P			W		1			Si	Si	
Juniperus macrocarpa Sm.	P	P	P	P	P		W		1			Si, Co, Ba	Ba, Co	
Juniperus nana Willd. var. *corsicana* Lebreton, Mossa & Gallet		P	P				IE		1			Sa	Sa	
Juniperus turbinata Guss.	P	P	P	P	P	P	W		1			Ba, Si	Ba, Si	
Jurinea bocconei (Guss.) Guss.				P			NE		1			Si	Si	
Kali basalticum C. Brullo, Brullo, Gaskin, Giusso, Hrusa & Salmeri				P			ENE	1	1			Si		
Klasea cretica (Turrill) Holub					P		RE	1	1			Cr		
Kosteletzkya pentacarpos (L.) Ledeb.	D	P					W	1	1	1	1	Co	Co	Co
Lactuca longidentata Moris			P				RE		1			Sa		
Lactuca undulata Ledeb.						P	RE	1				Cy	Cy	

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Lamyropsis microcephala (Moris) Dittrich & Greuter			P				ENE	1	1	1		Sa	Sa	
Laserpitium siculum Sprengel				P			NE		1			Si	Si	
Lathyrus neurolobus Boiss. & Heldr.					P		RE	1	1		1	Cr	Cr	
Lathyrus palustris L.		P					W	1	1		1	Co		
Launaea fragilis (Asso) Pau				P		P	W		1			Si		
Laurus nobilis L.	P	P	P	P	P	P	W		1		1	Sa		
Lavatera agrigentina Tineo				P			NE		1			Si	Si	
Lavatera maritima Gouan	P	P	P	P			W		1			Ba, Sa	Ba, Sa	
Lavatera plazzae Atzei			P				NE		1			Sa		
Lavatera triloba L. subsp. *minoricensis* (Cambess.) P.Escobar	P						ENE		1			Ba		
Lavatera triloba L. subsp. *pallescens* (Moris) Nyman			P				NE	1	1			Sa	Sa	
Lavatera triloba L. subsp. *triloba*			P				W		1			Sa	Sa	
Leontice leontopetalum L. subsp. *leontopetalum*					P	P	W	1				Cr	Cr	
Leontodon muelleri (Sch. Bip.) Fiori				P			W	1	1		1	Si		
Leopoldia gussonei Parl.				P			NE	1	1	1		Si		Si
Leucanthemum flosculosum (L.) P. Giraud		P	P				IE		1		1	Co, Sa	Co, Sa	
Leucanthemum paludosum (Poir.) Bonnet & Barratte	P						W	1	1		1	Ba		
Leucojum aestivum L. subsp. *pulchellum* (Salisb.) Briq.	P	P	P				W		1		1	Co	Co	
Ligusticum lucidum Mill. subsp. *huteri* (Porta) O.Bolòs	P						ENE	1	1			Ba		
Lilium candidum L.					P		W	1				Cr		
Lilium martagon L.		P					w	1	1		1	Co	Co	
Limbarda crithmoides (L.) Dumort.	P	P	P	P	P	P	W			1	1	Si	Si	
Limoniastrum monopetalum (L.) Boiss.		P	P	P	P		W	1	1			Si	Si	
Limonium algarvense Erben	P						W		1			Ba	Ba	
Limonium antoni-llorensii L.Llorens	P						ENE	1	1			Ba		
Limonium avei (De Not.) Brullo & Erben			P	P		P	W	1	1		1	Sa	Sa	
Limonium bonifaciense Arrigoni & Diana		P					RE	1	1			Co		
Limonium calliopsium A. Mayer					P		NE	1	1			Cr	Cr	
Limonium cossonianum Kuntze	P						W		1			Ba		

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Limonium creticum R. Artelari					P		RE	1	1			Cr	Cr	Cr
Limonium elaphonisicum A. Mayer					P		NE	1	1			Cr	Cr	Cr
Limonium fontqueri (Pau) L.Llorens	P						IE		1			Ba	Ba	
Limonium formenterae L.Llorens	P						RE		1			Ba		
Limonium girardianum (Guss.) Kuntze subsp. *grosii* (Llorens) O. Bolòs, Vigo, Masalles & Ninot	P						ENE		1			Ba		
Limonium hyblaeum Brullo				P			NE	1	1			Si		
Limonium lambinonii Erben		P					NE		1			Co		
Limonium leonardi-llorensii L. Sáez, Carvalho & Rosselló	P						ENE		1			Ba		
Limonium marisolii L.Llorens	P						ENE		1			Ba	Ba	
Limonium migjornense L. Llorens	P						ENE	1	1			Ba		
Limonium minutum (L.) Fourr.	P						W		1			Ba		
Limonium mucronulatum (H. Lindb.) Greuter & Burdet						P	ENE	1	1			Cy	Cy	Cy
Limonium narbonense Mill.	P	P	P	P		P	W			1	1	Si	Si	
Limonium optimae Raimondo				P			ENE	1	1			Si		
Limonium pachynense Brullo				P			ENE	1	1		1	Si		
Limonium pavonianum Brullo				P			ENE	1	1			Si		
Limonium pseudodictyocladum L. Llorens	P						ENE	1	1			Ba	Ba	
Limonium sougiae Erben & Brullo					P		NE		1			Cr	Cr	
Limonium strictissimum (Salzm.) Arrigoni		P	P				IE	1	1	1		Co	Co	
Limonium tarcoënse Arrigoni & Diana		P					ENE	1	1			Co		
Limonium wiedmannii Erben	P						ENE		1			Ba	Ba	
Linaria aeruginea (Gouan) Cav. subsp. *pruinosa* (Sennen & Pau) Chater & Valdés	P						RE		1			Ba	Ba	
Linaria arcusangeli Atzei & Camarda			P				RE		1			Sa	Sa	
Linaria cossoni Barratte			P				W		1			Sa	Sa	
Linaria flava (Poir.) Desf. subsp. *sardoa* (Sommier) A. Terracc.		P	P				IE	1	1	1		Co, Sa	Co	
Linaria multicaulis (L.) Miller subsp. *aetnensis* Giardina & Zizza				P			NE	1	1			Si		
Linaria multicaulis (L.) Miller subsp. *humilis* (Guss.) De Leonardis, Giardina & Zizza				P			NE	1	1			Si		

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Linaria pedunculata (L.) Chaz	P						W		1			Ba		
Linum austriacum L. subsp. *collinum* (Boiss.) Nyman				P			W	1	1			Si		
Linum maritimum L.	P		P			P	W		1			Ba		Ba
Linum punctatum C. Presl				P			NE	1	1			Si		
Linum strictum L.	P	P	P	P	P	P	W		1			Si	Si	
Liparis loeselii (L.) Rich.		P					W	1	1	1	1	Co		
Lolium subulatum Vis.		P			P	P	W	1				Cr		
Lomelosia crenata (Cirillo) Greuter & Burdet				P			W		1			Si	Si	
Lomelosia cretica (L.) Greuter & Burdet	P			P			W		1			Si	Si	
Lonicera pyrenaica L. subsp. *majoricensis* (Gand.) Gand.	P						RE		1			Ba	Ba	
Lotus cytisoides L.	P	P	P	P	P	P	W	1				Cy	Cy	
Lotus halophilus Boiss. & Spruner	P				P	P	W		1			Ba		
Lythrum borysthenicum (Schrank) Litv.		P	P	P	P		W			1	1	Si	Si	
Malus crescimannoi Raimondo				P			ENE		1			Si	Si	
Malvella sherardiana (L.) Jaub. & Spach						P	W	1				Cy	Cy	
Mandragora autumnalis Bertol.			P	P	P	D	W		1			Sa		
Maresia nana (DC.) Batt. var. *glabra* (Meikle) Christodoulou & Hand						P	ENE	1	1			Cy	Cy	Cy
Marsilea strigosa Willd.	P		P				W		1	1	1	Ba		
Matthiola incana (L.) R.Br. subsp. *incana*		P	P	P	P		W		1	1		Si	Si	
Medicago arborea L. subsp. *strasseri* (Greuter, Matthäs & Risse) Sobr.-Vest. & Ceresuela					P		RE	1	1			Cr	Cr	
Medicago arborea L./*Medicago citrina* (Font Quer) Greuter	P	P	P	P	P		W		1			Ba, Sa	Sa	
Mercurialis corsica Coss.		P	P				IE		1			Co		
Mespilus germanica L.				P			W		1			Si		
Micromeria chionistrae Meikle						P	RE		1			Cy		
Micromeria filiformis (Aiton) Benth. subsp. *cordata* (Moris) Pignatti			P				NE		1			Sa	Sa	
Micromeria sphaciotica Boiss. & Heldr. ex Benth.					P		NE		1			Cr	Cr	
Minuartia wettsteinii Mattf.					P		NE	1	1			Cr		
Moluccella spinosa L.				P	P		W	1				Cr	Cr	
Morisia monanthos (Viv.) Asch.		P	P				IE		1		1	Co	Co	

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Myosotis solange Greuter & Zaffran					P		ENE	1	1			Cr	Cr	
Myosurus minimus L.	P		D		P	P	W	1	1		1	Ba	Ba	Ba
Myrtus communis L.	P	P	P		P	P	W		1			Ba	Ba	
Nananthea perpusilla (Loisel.) DC.		P	P				IE		1			Co		
Naufraga balearica Constance & Cannon	P						ENE	1	1	1		Ba		
Nepeta foliosa Moris			P				ENE		1			Sa	Sa	
Nepeta sphaciotica P.H. Davis					P		ENE	1	1	1		Cr	Cr	
Nepeta troodi Holmboe						P	RE		1			Cy	Cy	
Nepeta tuberosa L.				P			W	1	1			Si		
Nerium oleander L.	P	P	P	P	P	P	W		1		1	Co	Co	
Neurada procumbens L.						P	W	1				Cy	Cy	
Nigella ciliaris DC.						P	NE	1				Cy	Cy	
Nigella damascena L.	P	P	P		P	P	W					Co	Co	
Noccaea zaffranii F. K. Mey.					P		NE	1	1			Cr	Cr	
Ochthodium aegyptiacum (L.) DC.						P	W	1				Cy	Cy	
Odontarrhena nebrodense (Tineo) L.Cecchi & Selvi				P			NE		1			Si		
Oenanthe lachenalii C.C. Gmel.	P	P					W		1		1	Ba		
Ononis crispa L.	P						IE		1			Ba	Ba	Ba
Ononis zschackei F. Herm.	P						NE		1			Ba	Ba	Ba
Onosma canescens C. Presl				P			NE	1	1			Si		
Onosma gigantea Lam.						P	W	1				Cy	Cy	
Ophioglossum vulgatum L. subsp. *vulgatum*		P	P	P		P	W		1		1	Sa		Sa
Ophrys eleonorae Devillers-Tersch. & Devillers		P	P		P	P	IE	1	1			Co		
Origanum dictamnus L.					P		RE	1	1	1		Cr	Cr	
Origanum onites L.				P	P		W		1			Si	Si	Si
Ostrya carpinifolia Scop.		P	P	P			W		1		1	Sa, Si	Sa, Si	
Osyris lanceolata Hochst. & Steud.	P						W		1			Ba		
Otanthus maritimus (L.) Hoffmanns. & Link	P	P	P		P	P	W	1	1			Ba	Ba	
Paeonia cambessedesii (Willk.) Willk.	P						IE		1	1		Ba	Ba	
Paeonia corsica Sieber ex Tausch		P	P				IE		1			Sa, Co	Co, Sa	
Paeonia mascula (L.) Mill. subsp. *mascula*		P		D		P	W		1			Co	Co	
Paeonia morisii Cesca, Bernardo & N.G.Passal.		P					IE		1			Co	Co	
Pancratium illyricum L.		P	P				W		1			Sa, Co	Co	

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Pancratium maritimum L.	P	P	P		P	P	W		1			Ba	Ba	
Pastinaca kochii Duby subsp. *kochii* (Duby) Reduron		P	P				RE		1			Co		
Pastinaca kochii Duby subsp. *latifolia* (Duby) Reduron		P					IE		1			Co	Co	
Peganum harmala L.			P		P	P	W	1				Cy	Cy	Cy
Petrorhagia saxifraga (L.) Link subsp. *gasparrinii* (Guss.) Greuter & Burdet		P		P			W	1	1			Si		
Peucedanum paniculatum Loisel.		P					RE		1			Co	Co	
Phagnalon rupestre (L.) DC.			P	P	P	P	W		1			Si	Si	
Phillyrea latifolia L.	P	P	P	P	P	P	W	1				Cy		
Phillyrea media L. var. *rodriguezii* P. Monts	P	P	P				W		1			Sa		
Phleum sardoum (Hackel) Hackel in Franchet			P				NE	1	1			Sa		
Phlomis fruticosa L.			A	P	P	D	W		1			Si	Si	
Phoenix theophrasti Greuter					P		W	1		1	1	Cr	Cr	
Pimpinella bicknellii Briq.	P						RE		1			Ba	Ba	
Pimpinella cypria Boiss.						P	RE		1			Cy	Cy	
Pimpinella lutea Desf.		P	P	P			W		1			Co	Co	
Pinguicula corsica Bernard & Gren.		P					RE		1		1	Co		
Pinguicula crystallina Sm.						P	W	1		1		Cy	Cy	
Pinguicula sehuensis Bacch., Cannas & Peruzzi			P	P			ENE		1			Sa	Sa	
Pinus halepensis Mill.	P		P				W		1			Ba		
Pistacia lentiscus L.	P	P	P	P	P	P	W		1	1		Si	Si	
Pistacia terebinthus L. subsp. *terebinthus*	P		P	P	P	P	W	1	1	1		Sa, Si, Ba	Sa, Si	
Pisum fulvum Sm.						P	RE		1			Cy	Cy	
Plagius flosculosus (L.) Alavi & Heywood		P	P				IE		1				Co, Sa	Co, Sa
Plantago cupanii Guss.				P			RE		1			Si	Si	
Platanus orientalis L.				P	P	P	W		1		1	Si	Si	
Polygala vulgaris L.	P	P	P				W		1			Ba		
Polygonum equisetiforme Sm.	P				P	P	W	1	1			Ba		
Polygonum idaeum Hayek					P		IE	1	1			Cr	Cr	
Potentilla calabra Ten.				P			RE		1			Si	Si	
Potentilla recta L.		P	P	P		P	W	1				Cy	Cy	
Primula acaulis (L.) L. subsp. *balearica* (Willk.) Greuter & Burdet	P						RE		1			Ba	Ba	
Primula vulgaris Huds. subsp. *balearica* (Willk.) W. W. Sm. & Forrest	P						RE		1			Ba	Ba	

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Prospero depressum Speta					P		ENE		1			Cr	Cr	
Prospero idaeum Speta					P		ENE		1			Cr	Cr	
Prospero minimum Speta					P		ENE		1			Cr	Cr	
Prospero rhadamanthi Speta					P		ENE		1			Cr	Cr	
Ptilostemon casabonae (L.) Greuter		P	P				IE		1			Sa	Sa	
Ptilostemon greuteri Raimondo & Domina				P			ENE	1	1			Si		
Ptilostemon niveus (C. Presl) Greuter				P			W	1	1			Si	Si	
Ptychotis sardoa Pignatti & Metlesics			P				NE		1			Sa	Sa	
Putoria calabrica (L.fil.) Pers.				P	P		W	1	1			Si		
Pyracantha coccinea M. Roem.		A	P		P		W		1			Sa		
Pyrus castribonensis Raimondo, Schicchi & Mazzola				P			ENE		1			Si	Si	
Pyrus ciancioi P. Marino, G. Castellano, Raimondo & Spadaro				P			ENE	1	1			Si	Si	
Pyrus sicanorum Raimondo, Schicchi & Marino				P			NE		1			Si	Si	
Pyrus vallis-demonis Raimondo & Schicchi				P			ENE	1	1			Si	Si	
Ranunculus auricomus L.		P					ENE	1	1		1	Co		
Ranunculus bullatus L.	P	P	P		P		W	1	1			Ba	Ba	Ba
Ranunculus elisae Gamisans		P					NE		1			Co	Co	
Ranunculus lateriflorus DC.			P	P	P		W		1			Si		
Ranunculus millefolius Banks & Sol.						P	RE	1				Cy		
Ranunculus rumelicus Griseb.					P	P	IE	1				Cy	Cy	
Ranunculus sylviae Gamisans		P					ENE	1	1		1	Co	Co	Co
Ranunculus veronicae N. Böhling					P		ENE	1	1			Cr	Cr	
Ranunculus weyleri Marès ex Willk.	P						NE		1	1		Ba	Ba	
Reseda minoica Martín-Bravo & Jiménez-Mejías					P	P	IE	1				Cr	Cr	Cr
Retama raetam (Forrskal) Webb subsp. *gussonei* (Webb) Greuter				P			NE	1	1			Si		
Rhamnus alaternus L.	P	P	P		P	P	W		1			Si, Ba	Ba, Si	
Rhamnus alpina L. subsp. *alpina*		P	P				W		1			Sa	Sa	
Rhamnus ludovici-salvatoris Chodat	P						IE		1			Ba	Ba	
Rhamnus persicifolia Moris			P				RE		1		1	Sa	Sa	Sa
Rhus tripartita (Ucria) Grande				P			W		1			Si	Si	

Taxon (local checklists)	Island(s) of occurrence						Distribution type					Island(s) where taxon prioritised	Island(s) where action(s) implemented	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Ribes multiflorum Kit. ex Roem. & Schult. subsp. *sandalioticum* Arrigoni			P				RE	1	1			Sa		Sa
Ribes sardoum Martelli			P				ENE	1	1	1		Sa	Sa	Sa
Romulea ligustica Parl.		P	P				IE	1	1			Co	Co	
Rosa micrantha Borrer ex Sm. subsp. *chionistrae* (H. Lindb.) H. Reichert & Hand					P	P	RE		1			Cy		
Rosa serafinii Viv.		P	P				W		1			Sa	Sa	
Rosa sicula Tratt.				P			W		1			Si	Si	
Rosa squarrosa (A. Rau) Boreau	P						W	1	1			Ba		
Rouya polygama (Desf.) Coincy		P	P				W		1	1		Sa, Co	Co	
Rubia balearica (Willk.) Porta subsp. *caespitosa* (Font Quer & Marcos) Rosselló, L. Sáez & Mus	P						ENE	1	1			Ba		
Rumex aetnensis C.Presl				P			NE		1			Si	Si	
Rumex scutatus L. subsp. *glaucescens* (Guss.) Brullo, Scelsi & Spampinato			P	P			W		1			Sa	Sa	
Ruscus aculeatus L.	P	P	P		P	P	W		1			Ba	Ba	
Ruta corsica DC.		P					RE		1			Co		
Ruta lamarmorae Bacch., Brullo & Giusso del Galdo			P				NE		1			Sa	Sa	
Salix pedicellata Desf.		P	P	P			W		1		1	Si	Si	
Salsola oppositifolia Desf.				P	P		W		1			Si	Si	
Salsola soda L.	P	P	P			P	W	1	1			Ba	Ba	
Salvia fruticosa Mill.				P	P	P	W	1	1			Si		
Salvia hierosolymitana Boiss.						P	W	1				Cy	Cy	
Salvia veneris Hedge						P	RE	1		1		Cy	Cy	
Sambucus ebulus L.	P	P	P	P	P	A	W		1			Sa		
Sambucus nigra L.	P	P	P	P	A	A	W		1		1	Si, Sa	Sa, Si	
Santolina corsica Jord. & Fourr.		P	P				IE		1			Co, Sa	Co, Sa	
Santolina insularis (Gennari & Fiori) Arrigoni			P				RE		1			Sa	Sa	
Santolina magonica Romo	P						W		1			Ba		
Saponaria cypria Boiss.						P	RE		1			Cy	Cy	
Saponaria mesogitana Boiss.						P	RE	1				Cy		
Saponaria ocymoides L.		P	P				IE		1			Co		
Saponaria orientalis L.						P	W	1				Cy	Cy	
Saponaria sicula Raf.			P	P			W	1	1			Si	Si	
Sarcopoterium spinosum (L.) Spach.			P	P	P	P	W		1			Sa, Si	Sa, Si	
Satureja thymbra L.			P		P	P	W		1			Sa, Cy	Sa, Cy	

Taxon (local checklists)	Island(s) of occurrence						Distribution type					Island(s) where taxon prioritised	Island(s) where action(s) implemented	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Saxifraga corsica (Ser.) Gren. & Godr. subsp. *cossoniana* (Boiss. & Reut.) D.A. Webb	P						IE		1			Ba		
Scandix stellata Banks & Sol.						P	W	1				Cy		
Schoenus nigricans L.	P	P	P	P	P	P	W				1	Si		
Scilla lochiae (Meikle) Speta						P	RE	1	1	1		Cy	Cy	
Scilla morrisii Meikle						P	RE	1	1			Cy		
Scirpoides holoschoenus (L.) Soják subsp. *australis* (Murray) Soják	P	P	P	P	P		W				1	Si		
Scleranthus annuus L. subsp. *verticillatus* (Tausch) Arcang.	P				P	P	W		1			Ba		
Scorzonera mollis M. Bieb. subsp. *idaea* (Gand.) Lack					P		RE	1	1			Cr		
Scutellaria columnae All.		P		D			W	1	1			Co		
Secale strictum (C.Presl) C.Presl				P			W		1	1		Si	Si	
Securigera cretica (L.) Lassen					P	P	IE	1				Cy	Cy	
Sedum gypsicola Boiss & Reuter subsp. *trinacriae* Afferni				P			NE	1	1			Si		
Senecio aethnensis Jan ex DC.				P			NE	1	1			Si		
Senecio cineraria DC. subsp. *bicolor* (Willd.) Arcang.		P		P			W	1	1			Si		
Senecio glaber Ucria				P			NE	1	1			Si		
Senecio glaucus L. subsp. *cyprius* Meikle						P	RE		1			Cy	Cy	
Senecio morisii J.Calvo & Bacch.			P				NE		1		1	Sa	Sa	Sa
Senecio siculus All.				P			NE	1	1			Si		
Seseli djianeae Gamisans		P					RE		1			Co		
Seseli praecox (Gamisans) Gamisans		P	P				IE		1			Sa, Co	Co, Sa	
Sesleria doerfleri Hayek					P		IE	1	1			Cr	Cr	
Sesleria insularis Sommier subsp. *barbaricina* Arrigoni			P				NE		1			Sa	Sa	
Sesleria insularis Sommier subsp. *morisiana* Arrigoni			P				NE		1			Sa	Sa	
Sesleria nitida Ten. subsp. *sicula* Brullo & Giusso				P			NE	1	1			Si		
Sibthorpia europaea L.					P		W	1			1	Cr	Cr	
Siculosciadium nebrodense (Guss.) Brullo C., Brullo, Downie & Giusso				P			ENE	1	1			Si		
Sideritis cypria Post						P	RE	1		1		Cy	Cy	
Sideritis sicula Ucria				P			NE	1	1			Si		
Silene ammophila Boiss. & Heldr. subsp. *ammophila*					P		NE	1				Cr	Cr	

Taxon (local checklists)	Island(s) of occurrence						Distribution type					Island(s) where taxon prioritised	Island(s) where action(s) implemented	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Silene cambessedesii Boiss. & Reut.	P						W		1			Ba		
Silene coelirosa (L.) Godr.		P	P	D			W		1			Co		
Silene dichotoma Ehrh.		A			P	P	IE	1				Cy		
Silene dichotoma Ehrh. subsp. *racemosa* (Otth) Hayek					P	P	W		1			Cy	Cy	
Silene fruticosa L.				P	P	P	RE		1	1		Si	Si	
Silene galataea Boiss.						P	RE		1			Cy	Cy	
Silene hicesiae Brullo & Signorello				P			ENE	1	1	1		Si	Si	
Silene hifacensis Rouy ex Willk.	P						W		1	1		Ba		
Silene holzmannii Heldr. ex Boiss.					P		IE	1		1		Cr		
Silene ichnusae Brullo, De Marco & De Marco fil.			P				ENE		1			Sa	Sa	
Silene italica (L.) Pers. subsp. *sicula* (Ucria) Jeanm.				P			W		1			Si	Si	
Silene kemoniana C. Brullo, Brullo, Giusso, Ilardi & Sciandr.				P			ENE	1	1			Si		
Silene nodulosa Viv.		P	P				IE		1			Sa	Sa	
Silene peloritana C. Brullo, Brullo, Giusso, Miniss. & Sciandr.				P			ENE	1	1			Si		
Silene pseudoatocion Desf.	P						W		1			Ba		
Silene sericea All.	P	P	D				W		1			Ba	Ba	
Silene succulenta Forssk.					P		W	1				Cr	Cr	
Silene velutina Loisel.		P	P				IE	1	1	1		Co, Sa	Co, Sa	Co
Sisymbrella dentata (L.) O.E.Schulz				P			ENE	1	1		1	Si		
Smilax aspera L.	P	P	P	P	P	P	W		1			Si	Si	
Soleirolia soleirolii (Req.) Dandy	P	P	P				W		1			Ba	Ba	
Solenopsis antiphonitis Hadjik. & Hand						P	ENE	1				Cy	Cy	
Sorbus aria (L.) Crantz subsp. *aria*	P	P	P	P			W		1			Sa, Si	Si	
Sorbus torminalis (L.) Crantz		P	P	P			W		1			Si		
Stachys arenaria Vahl				P			W	1	1			Si		
Stachys maritima Gouan		P					W		1			Co	Co	
Stipa gussonei Moraldo				P			ENE	1	1			Si		
Stipa sicula Moraldo, Caputo, La Valva & Ricciardi				P			NE	1	1			Si		
Stipa valdemonensis Cataldo, S.A. Giardina, Moraldo & Raimondo				P			ENE	1	1			Si		

Taxon (local checklists)	Island(s) of occurrence						Distribution type					Island(s) where taxon prioritised	Island(s) where action(s) implemented	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Stipagrostis lanata (Forssk.) de Winter						P	W	1				Cy	Cy	
Tamarix minoa J. L. Villar, Turland, Juan, Gaskin, M. A. Alonso & M. B. Crespo					P		ENE		1			Cr	Cr	
Tanacetum audibertii (Req.) DC.		P	P				IE		1			Sa	Sa	
Tanacetum siculum (Guss.) Strobl				P			NE	1	1			Si		
Taxus baccata L.	P	P	P				W	1	1			Ba		
Teesdalia coronopifolia (Bergeret) Thell.		P	P	P	P	P	W	1				Cy		
Telephium imperati L. subsp. *orientale* (Boiss.) Nyman						P	W		1			Cy	Cy	
Teucrium asiaticum L.	P						IE		1			Ba	Ba	
Teucrium balearicum (Pau) Castrov. & Bayon	P						IE		1			Ba	Ba	
Teucrium campanulatum L.	P			P			W	1	1		1	Si, Ba		
Teucrium capitatum L. subsp. *majoricum* (Rouy) T. Navarro & Rosúa	P						IE		1			Ba	Ba	
Teucrium cossonii D.Wood subsp. *punicum* Mayol, Mus, Rosselló & N. Torres	P						RE	1	1			Ba		
Teucrium cuneifolium Sm.					P		RE	1	1			Cr	Cr	
Teucrium fruticans L.		P	A	D			W	1	1			Co	Co	
Teucrium siculum (Raf.) Guss.				P			W		1			Si		
Teucrium subspinosum Pourr. ex Willd.	P		P				IE		1			Ba		
Thapsia garganica L. subsp. *messanensis* (Guss.) Brullo, Guglielmo, Pasta, Pavone & Salmeri				P			ENE	1	1			Si		
Thapsia pelagica Brullo, Guglielmo, Pasta, Pavone & Salmeri				P			ENE	1	1			Si		
Thymbra calostachya (Rech. f.) Rech. f.					P		NE	1	1			Cr	Cr	
Thymus herba-barona Loisel. subsp. *herba-barona*	P	P	P				IE		1			Sa, Ba	Sa	
Thymus richardii Pers. subsp. *ebusitanus* (Font Quer) Jalas	P						RE		1			Ba		
Thymus richardii Pers. subsp. *richardii*	P						RE		1			Ba		
Trachelium lanceolatum Guss.				P			NE	1	1			Si	Si	
Tricholaena teneriffae (L. fil.) Link				P			W	1	1			Si		
Trifolium savianum Guss.				P			ENE	1	1			Si		
Trigonella maritima Poir.				P			W		1			Si		

Taxon (local checklists)	**Island(s) of occurrence**						**Distribution type**					**Island(s) where taxon prioritised**	**Island(s) where action(s) implemented**	
	Ba	Co	Sa	Si	Cr	Cy		RL	RR	HD	WP		*Ex situ*	*In situ*
Triplachne nitens (Guss.) Link	P			P	P	P	W	1				Cy	Cy	
Tripolium pannonicum (Jacq.) Dobrocz.	P	P	P	P	P		W		1		1	Si, Ba	Si	Si
Tripolium sorrentinoi (Tod.) Raimondo & Greuter				P			NE	1	1	1		Si		
Tuberaria macrosepala (Coss.) Willk.	P						W	1	1			Ba		
Tulipa cypria Stapf						P	RE	1	1	1		Cy	Cy	
Umbilicus horizontalis (Guss.) DC.	P	P	P	P	P	P	W		1			Si	Si	
Urtica atrovirens Req. ex Loisel.	P	P	P				IE	1	1			Ba		
Urtica bianorii (Knoche) Paiva	P						RE		1			Ba	Ba	
Urtica rupestris Guss.				P			NE	1	1			Si	Si	Si
Valerianella triceras Bornm.						P	RE	1				Cy		
Verbascum blattaria L.	P	P	P			P	W		1			Ba		
Verbascum boerhavii Friv. ex Nyman	P	P	P				W		1			Ba		
Verbascum conocarpum Moris subsp. *conocarpum*		P	P				W		1			Sa	Sa	
Verbascum plantagineum Moris			P				RE		1			Sa	Sa	
Verbena supina L.	P		P		P	P	W		1			Ba		
Viburnum tinus L.	P		P		D	P	W	1	1			Ba, Cy	Ba, Cy	
Vicia filicaulis Webb & Berthel.	P						ENE	1	1	1		Ba		
Vicia leucantha Biv.	P		P				W		1			Ba		
Vincetoxicum creticum Browicz					P		NE	1	1			Cr		
Viola aethnensis (DC.) Strobl				P			NE	1	1			Si		
Viola corsica Nyman		P	P				RE		1			Co	Co	
Viola jaubertiana Marès & Vigin.	P						NE	1		1		Ba	Ba	
Viola scorpiuroides Coss.					P		W	1				Cr	Cr	Cr
Vitex agnus-castus L.	P	P	P	P	P	P	W		1		1	Ba, Sa, Si	Ba, Sa	
Woodwardia radicans (L.) Sm.		P		D	P		W	1	1	1		Co		

Annex 2 – Germplasm accessions

Balearic Islands

No.	Taxon (local checklist)	Population
1	*Acer granatense* Boiss.	Cami des Cingle, Escorca
2	*Acis autumnalis* (L.) Sweet	Ermita Ferreries, Menorca
3	*Allium commutatum* Guss.	Es Carregador, Capdepera
4	*Anthyllis hystrix (*Barceló) Cardona & al.	Corniola, Menorca
5	*Anthyllis hystrix* (Barceló) Cardona & al.	Favaritx, Menorca
6	*Aster tripolium* L. subsp. *pannonicus* (Jacq.) Soó	Platja de Muro, Muro
7	*Astragalus balearicus* Chater	Coll des Prat, Massanella
8	*Astragalus balearicus* Chater	Far de Cala Figuera, Calvià
9	*Buxus balearica* Lam.	Parc de Llevant
10	*Buxus balearica* Lam.	Vertiente SE Puig de Sa Font
11	*Chamaerops humilis* L.	Ctra. Sant Telm, S'Arraco, Andratx
12	*Chamaerops humilis* L.	Camí des Presos, Parc de Llevant
13	*Chamaerops humilis* L.	Sant Elm, Andratx
14	*Cistus clusii* Dunal	Es Trenc, Campos
15	*Cistus clusii* Dunal	Ses Covetes, Campos
16	*Cistus creticus* L.	El Pilar, Menorca
17	*Cistus creticus* L.	Na Macaret, Menorca
18	*Cladium mariscus* (L.) Pohl	s'Albufera d'Alcúdia
19	*Convolvulus valentinus* Cav.	Pas de sa Senyora
20	*Crithmum maritimum* L.	Sa Punta, Portocolom, Felanitx
21	*Crucianella maritima* L.	Platja de Muro, Muro
22	*Crucianella maritima* L.	Son Bauló, Can Picafort
23	*Crucianella maritima* L.	Ses Covetes, Campos
24	*Crucianella maritima* L.	Es Carnatge, Palma
25	*Damasonium bourgaei* Coss.	Bassa a sa finca s'Aguila, Llucmajor
26	*Damasonium bourgaei* Coss.	Tolleric, Llucmajor
27	*Digitalis minor* L.	Torrent de ses Serres, Andratx
28	*Digitalis minor* L.	Torrent de Mortitx, Escorca
29	*Digitalis minor* L.	Ses Bufaranyes, Formentor
30	*Digitalis minor* L.	Cap de Formentor, Pollença
31	*Digitalis minor* L.	Entre es Coll des Prat i es Coll des Telegraf
32	*Digitalis minor* L.	Na Franquesa, Escorca
33	*Digitalis minor* L.	Els Alocs, Menorca
34	*Digitalis minor* L.	Sa Mesquida, Menorca
35	*Diplotaxis ibicensis* (Pau) Gómez Campo	Far de Llebeig, Sa Dragonera
36	*Diplotaxis ibicensis* (Pau) Gómez Campo	Far de Llebeig, Sa Dragonera
37	*Diplotaxis ibicensis* (Pau) Gómez Campo	Platja des Marques, Colonia de Sant Jordi
38	*Dorycnium fulgurans* (Porta) Lassen	Cap de Formentor, Pollença
39	*Dorycnium fulgurans* (Porta) Lassen	Son Oliveret, Ciutadella, Menorca
40	*Dorycnium fulgurans* (Porta) Lassen	Na Macaret, Menorca
41	*Elatine macropoda* Guss.	Cabrianes, Llucmajor
42	*Elatine macropoda* Guss.	Es Xalet de Betlem, bassa 32
43	*Elatine macropoda* Guss.	Es Xalet de Betlem, bassa 51
44	*Euphorbia dracunculoides* subs. *inconspicua* (Ball) Maire	Caló de n'Esquitxa, Llucmajor
45	*Euphorbia maresii* Knoche	Talaia Moreia, Parc de Llevant
46	*Euphorbia paralias* L.	Son Bauló, Santa Margalida
47	*Euphorbia paralias* L.	Es Trenc, Campos
48	*Euphorbia paralias* L.	Platja de Sa Canova

Balearic Islands

No.	Taxon (local checklist)	Population
49	*Euphorbia paralias* L.	Binimel·la, Menorca
50	*Euphorbia paralias* L.	Algaiarens, Menorca
51	*Genista dorycnifolia* Font Quer	Aprop de Cala Xuclar, Sant Joan, Eivissa
52	*Genista lucida* Cambess.	Sant Salvador, Felanitx
53	*Genista lucida* Cambess.	Camí cap a Sa Torre de Cala en Basset
54	*Genista lucida* Cambess.	Camí vell de Gràcia, Llucmajor
55	*Genista lucida* Cambess.	Montisión, Porreres
56	*Genista lucida* Cambess.	Camí Ermita de Betlem
57	*Helianthemum caput-felis* Boiss.	Pas de sa Senyora, Llucmajor
58	*Helianthemum caput-felis* Boiss.	Es Peregons grans, Campos
59	*Helianthemum marifolium* subsp. *origanifolium* (Lam.) G.López	Es Carnatge, Palma
60	*Helichrysum massanellanum* Herrando, J. M. Blanco, L. Sáez & Galbany	Coll des Prat, Massanella
61	*Helichrysum stoechas (*L.) Moench	Platja des Trenc, Campos
62	*Helichrysum stoechas (*L.) Moench	Sa Punta, Portocolom, Felanitx
63	*Helichrysum stoechas* (L.) Moench	Es Comú, Muro
64	*Helleborus lividus* Aiton ex Curtis	Es Degotador
65	*Hypericum hircinum* subsp. *cambessedesii* (Coss. ex Nyman) Sauvage	s'Entreforc, Escorca
66	*Juniperus turbinata* Guss.	Camí d'es Brolls, s'Estany Pudent, Formentera
67	*Juniperus turbinata* Guss.	Muleta, Sóller
68	*Juniperus macrocarpa* Sm.	Platja de Muro, Muro
69	*Lavatera maritima* Gouan.	Caló de n'Esquitxa, Llucmajor
70	*Lavatera maritima* Gouan.	Pas de sa Senyora, Llucmajor
71	*Lavatera maritima* Gouan.	Es Castell de Santueri, Felanitx
72	*Lavatera maritima* Gouan.	Entre es Cap Enderrocat i Cala Vella
73	*Limonium algarvense* Erben	s'Albufereta, Muro
74	*Limonium fontqueri* (Pau) L. Llorens	Sa Mesquida, Menorca
75	*Limonium fontqueri* (Pau) L. Llorens	Cala morey, Menorca
76	*Limonium marisolii* L.Llorens	Cap Blanc, Llucmajor
77	*Limonium pseudodyctiocladum* L. Llorens	Es Carregador, Capdepera
78	*Limonium wiedmannii* Erben	Salines, Marroig, Formentera
79	*Linaria aeruginea* (Gouan) Cav. subsp. *pruinosa* (Sennen & Pau) Chater & Valdés	Mola de s'Esclop, Andratx
80	*Lonicera pyrenaica* subsp. *majoricensis* (Gand.) Gand.	Massanella, Escorca
81	*Myosurus minimus* L.	Cabrianes, Llucmajor
82	*Myrtus communis* L.	Es Margalló, Sant Miquel, Sant Joan de Labritja
83	*Myrtus communis* L.	Torrent de sa Coma, Sóller
84	*Myrtus communis* L.	Camí Pont Roma, Pollença
85	*Myrtus communis* L.	Torrent de Lluc, Escorca
86	*Ononis crispa* L.	Es Morro d'en Tià, Cabrera
87	*Ononis crispa* L.	Sa Mesquida, Menorca
88	*Ononis crispa* L.	Platja des Bot, Algaiarens, Menorca
89	*Ononis zschackei* F. Herm.	Torrent de ses Serres, Andratx
90	*Ononis zschackei* F.Herm.	Finca de Mina, Escorca
91	*Otanthus maritimus* (L.) Hoffmanns. & Link	s'Arenal d'en Casat, Santa Margalida
92	*Paeonia cambessedesii* (Willk.) Willk.	Es Degotador, Andratx
93	*Paeonia cambessedesii* (Willk.) Willk.	Es Coll des Vent, Artà
94	*Paeonia cambessedesii* (Willk.) Willk.	Ses Bufaranyes, Formentor
95	*Paeonia cambessedesii* (Willk.) Willk.	Sa Cavalleria, Menorca
96	*Paeonia cambessedesii (*Willk.) Willk.	Cala Mitjana, Menorca
97	*Pancratium maritimum* L.	Es Trenc, Campos
98	*Pancratium maritimum* L.	Cala Mandia, Manacor
99	*Pancratium maritimum* L.	Cala Marçal, Portocolom, Felanitx
100	*Pancratium maritimum* L.	Platja de Muro, Muro

Balearic Islands

No.	Taxon (local checklist)	Population
101	*Pimpinella bicknellii* Briq.	Torrent de Mortitx, Escorca
102	*Primula acaulis* (L.) L. subsp. *balearica* (Willk.) Greuter & Burdet	Massanella, Escorca
103	*Primula acaulis* subsp. *balearica* (Willk.) W.W.Sm. & Forrest	Talaia Moreia, Parc de Llevant
104	*Primula vulgaris* subsp. *balearica* (Willk.) W.W.Sm. & Forrest	Talaia Moreia, Parc de Llevant
105	*Ranunculus bullatus* L.	s'Aranjassa, Palma
106	*Ranunculus weyleri* Marès ex Willk.	Talaia Moreia, Parc de Llevant
107	*Rhamnus alaternus* L.	Camí vell de Gràcia, Llucmajor
108	*Rhamnus ludovici-salvatoris* Chodat	Els Olors, Parc de Llevant
109	*Rhamnus ludovici-salvatoris* Chodat	Ses Cases Velles de Tossals
110	*Ruscus aculeatus* L.	Torrent de Esporles, Esporles
111	*Ruscus aculeatus* L.	Camí Pont Roma, Pollença
112	*Salsola soda* L.	Es freus, Menorca
113	*Salsola soda* L.	Albufera des Grau, Menorca
114	*Silene sericea* All.	Platja d'es Marquès, Colonia de Sant Jordi
115	*Soleirolia soleirolii* (Req.) Dandy	Es Degotador, Andratx
116	*Soleirolia soleirolii* (Req.) Dandy	Font d'en Quelota, Escorca
117	*Teucrium asiaticum* L.	Monnàber, Escorca
118	*Teucrium asiaticum* L.	Camí Talaia Moreia, Artà
119	*Teucrium balearicum* (Coss. ex Pau) Castrov. & Bayon	Camí d'es Cosconar, Escorca
120	*Teucrium balearicum* (Coss. ex Pau) Castrov. & Bayon	Camí Talaia Moreia, Artà
121	*Teucrium capitatum* subsp. *majoricum* (Rouy) Nyman	Sa Punta, Portocolom, Felanitx
122	*Teucrium capitatum* subsp. *majoricum* (Rouy) Nyman	Molí d'en Regalat, Artà
123	*Teucrium capitatum* subsp. *majoricum* (Rouy) Nyman	Es Carnatge, Palma
124	*Teucrium capitatum subsp. majoricum (Rouy) Nyman*	Ses Paisses de Cala d'Hort, Sant Josep, Eivissa
125	*Urtica bianorii* (Knoche) Paiva	Camí des Cosconar, Escorca
126	*Urtica bianorii* (Knoche) Paiva	Femenia Vell, Escorca
127	*Viburnum tinus* L.	Carretera Lluc, Gorb Blau
128	*Viola jaubertiana* Marès & Vigin.	Mortitx, Escorca
129	*Viola jaubertiana* Marès & Vigin.	Pla d'en Gumbau, Escorca
130	*Viola jaubertiana* Marès & Vigin.	Torrent de Pareis, Escorca
131	*Vitex agnus-castus* L.	Torrent de Pareis, Escorca
132	*Vitex agnus-castus* L.	Sa Calobra, Escorca
133	*Vitex agnus-castus* L.	Cala Tuent, Escorca

Corsica

No.	Taxon (local checklist)	Population
1	*Aconitum napellus* L. subsp. *corsicum* (Gáyer) W. Seitz	Plateau du Cuscione, Zicavo
2	*Anchusa crispa* Viv.	Cala Piscona, Olmeto
3	*Anchusa crispa* Viv.	Capu Laurosu, Propriano
4	*Anchusa crispa* Viv.	Portigliolo-Robinson, Propriano
5	*Anchusa crispa* Viv.	Portigliolo-Embouchure, Propriano
6	*Anchusa crispa* Viv.	Favona sud, Conca
7	*Anchusa crispa* Viv.	Cannella, Sari-Solenzara
8	*Anchusa crispa* Viv.	Favona nord, Sari-Solenzara
9	*Anchusa crispa* Viv.	Cannella (Co3), Sari-Solenzara
10	*Anchusa crispa* Viv.	Cala Piscona , Olmeto
11	*Anchusa undulata* L. *subsp. hybrida* (Ten.) Cout.	Nord du port, Porto Vecchio
12	*Anchusa undulata* L. *subsp. hybrida* (Ten.) Cout.	Nord du port, Porto Vecchio
13	*Anthyllis barba-jovis* L.	Petit Sperone, Bonifacio
14	*Anthyllis barba-jovis* L.	Tour de l'Osse Nord, Cagnano
15	*Anthyllis barba-jovis* L. x *A. hermanniae* L. subsp. *corsica* Brullo & Giusso.	Tour de l'Osse Nord, Cagnano
16	*Aquilegia bernardii* Gren. & Godr.	Plateau du Cuscione, Zicavo
17	*Aquilegia bernardii* Gren. & Godr.	Restonica, Corte
18	*Aquilegia litardierei* Briq.	Ruisseau d'Asinao (Solaro)
19	*Armeria pungens* (Link) Hoffmanns. & Link	Piantarella, Bonifacio
20	*Armeria pungens* (Link) Hoffmanns. & Link	Dune de Petit Sperone, Bonifacio
21	*Armeria pungens* (Link) Hoffmanns. & Link	Dune de Grand Sperone, Bonifacio
22	*Armeria soleirolii* (Duby)	Port de Galeria, Galeria
23	*Armeria soleirolii* (Duby)	Fortin Galeria, Galeria
24	*Astragalus genargenteus* Moris var. *greuteri* (Bacch. & Brullo*)* Gamisans	Bocca à a Croce - Arinella, Casamaccioli
25	*Bellevalia romana* (L.) Rchb.	Embranchement de Conca - Favona / Conca
26	*Bellevalia romana* (L.) Rchb.	Embranchement de Conca - Favona / Conca
27	*Biscutella rotgesii* Foucaud	Défilé de l'Inzecca, Ghisonaccia - Ghisoni
28	*Biscutella rotgesii* Foucaud	Salastraco, Pietroso
29	*Biscutella rotgesii* Foucaud	Sortie Nord de Ponte Leccia direction Bastia (Morosaglia)
30	*Brassica insularis* Moris	Punta Calcina, Conca
31	*Brassica insularis* Moris	Monte Terza Battagli (Teghime), Poggio d'Oletta
32	*Brassica insularis* Moris	Défilé de l'Inzecca, Ghisoni
33	*Castroviejoa frigida* (Labill). Galbany & al.	Restonica, Corte
34	*Centranthus trinervis* (Viv.) Bég.	Trinité, Bonifacio
35	*Centranthus trinervis* (Viv.) Bég.	Trinité, Bonifacio
36	*Centranthus trinervis* (Viv.) Bég.	Trinité (Bonifacio)
37	*Cerinthe major* L.	Descente du grain de sable, Bonifacio
38	*Cerinthe tenuiflora* Bertol.	Arja di Stefanu (Zicavo)
39	*Cyanus segetum* Hill	Olmi Capella
40	*Dianthus gyspergerae* Rouy	Roches bleues (Pinia)
41	*Doronicum corsicum* (Loisel.) Poir.	Plateau du Cuscione, Zicavo
42	*Doronicum corsicum* (Loisel.) Poir.	Pont de Sellola, Bocognano
43	*Elytrigia corsica*(Hack.) Holub	Embranchement Sermanu/Bustanicu/Santa Lucia, Sermanu
44	*Elytrigia corsica*(Hack.) Holub	Sortie Ouest de Bustanicu, Bustanicu
45	*Erodium corsicum*Léman	Pertusatu (Bonifacio)
46	*Eryngium pusillum* L.	Musella (Bonifacio)
47	*Ferula arrigonii* Bocchieri	Cimetière marin, Bonifacio
48	*Genista aetnensis* (Biv.) DC.	Cordon littoral de Palo, Serra di Fium'orbu
49	*Genista aetnensis* (Biv.) DC.	Etang de Palo, Solaro
50	*Genista aetnensis* (Biv.) DC.	Pont de Calzatoju, Solaro

Corsica

No.	Taxon (local checklist)	Population
51	*Genista thyrrhena* Vals. subsp. *pontiana* Brullo & de Marco	Mezzu Mare (Sanguinaires), Ajaccio
52	*Globularia bisnagarica* L.	Chioso vescovo (st. épur), Saint florent
53	*Helicodiceros muscivorus* (L. f.) Engl.	Mezzu Mare (Sanguinaires), Ajaccio
54	*Helicodiceros muscivorus* (L. f.) Engl.	Restonica, Corte
55	*Juniperus oxycedrus* subsp. *macrocarpa* (Sm.) Ball.	Punta di Benedetti, Porto-Vecchio
56	*Juniperus oxycedrus* subsp. *macrocarpa* (Sm.) Ball.	Mucchiatana, Venzolasca
57	*Kosteletzkya pentacarpos* (L.) Ledeb.	Etang de Palo, Serra-di-Fiumorbu
58	*Kosteletzkya pentacarpos* (L.) Ledeb.	Cordon littoral de Gradugine, Serra-di-Fiumorbu
59	*Kosteletzkya pentacarpos* (L.) Ledeb.	Pinia, Ghisonaccia
60	*Kosteletzkya pentacarpos* (L.) Ledeb.	Pinia, Marais de Cattolica, Ghisonaccia
61	*Kosteletzkya pentacarpos* (L.) Ledeb.	Etang de Palo, Marina di u Quarciona, Serra di Fium'orbu
62	*Kosteletzkya pentacarpos* (L.) Ledeb.	Etang de Gradugine, Serra di Fium'orbu
63	*Leucojum aestivum* L. subsp. *pulchellum* (Salisb.) Briq.	Pont d'arena, Tallone
64	*Lilium martagon* L.	Monte Sant'Angelu de Tenda, Lento
65	*Limonium strictissimum* (Salzm.) Arrigoni	
66	*Linaria flava* (Poir.) Desf. subsp.*sardoa* (Sommier) A. Terracc.	Ricantu (Ajaccio)
67	*Morisia monanthos* (Viv.) Asch.	Bonifacio
68	*Morisia monanthos* (Viv.) Asch. (=*M.hypogaea* J.Gay)	Bergerie de Liou, Barretali
69	*Nerium oleander* L.	Le long de ruisseau de Luri
70	*Nigella damascena* L.	Saint florent
71	*Paeonia corsica* Tausch	Casa Pitti, Valle di Rustinu
72	*Paeonia mascula* (L.) Mill. subsp. *mascula*	Col de San Quilico (Porni), Soveria
73	*Paeonia mascula* (L.) Mill. subsp. *mascula*	Col de San Quilico (Porni), Soveria
74	*Paeonia mascula* (L.) Mill. subsp. *mascula*	Bistugliu, Tralonca
75	*Paeonia mascula* (L.) Mill. subsp. *mascula*	Forêt de Padula, Rospigliani
76	*Paeonia morisii* Cesca, Bernardo & Passalacqua	Monte Grofiglieta, Meria
77	*Paeonia morisii* Cesca, Bernardo & Passalacqua	San quilicu, Tralonca
78	*Pancratium illyricum* L.	Restonica, Corte
79	*Pancratium illyricum* L.	Bonifacio
80	*Pastinaca kochii* subsp *latifolia*(Duby) Reduron	Restonica, Corte
81	*Peucedanum paniculatum* Loisel	Forêt de Padula, Rospigliani
82	*Pimpinella lutea* Desf.	Ogliastriccione (Favone Nord), Conca
83	*Pimpinella lutea* Desf.	Bocca di a Guardia / Favone, Conca
84	*Plagius flosculosus* (L.) Alavi & Heywood	Baracci, Olmeto
85	*Plagius flosculosus* (L.) Alavi & Heywood	Pont d'Arena, Marais de Pompugliani, Tallone
86	*Ranunculus elisae* Gamisans	Matalza (Zicavo)
87	*Ranunculus elisae* Gamisans	Buchinera (Quenza)
88	*Ranunculus sylviae* Gamisans	Matalza (Zicavo)
89	*Ranunculus sylviae*Gamisans	Cuscionu, Zicavo
90	*Romulea ligustica* Parl.	Cala longa (Bonifacio)
91	*Rouya polygama* (Desf.) Coincy	Marina di Fiori, Porto-Vecchio
92	*Rouya polygama* (Desf.) Coincy	Punta benedettu, Porto-Vecchio
93	*Santolina corsica* Jord. & Fourr.	Col de San Quilico (Porni), Soveria
94	*Seseli praecox (*Gamisans) Gamisans	Port de Galeria, Galeria
95	*Silene velutina* Loisel	Baie de Stagnolu, Porto-Vecchio
96	*Silene velutina* Loisel	Casetta Bianca, Porto-Vecchio
97	*Silene velutina* Loisel	La Chiappa, Porto-vecchio
98	*Silene velutina* Loisel	Tamaricciu (Folachedda), Porto-vecchio
99	*Silene velutina* Loisel	Acciaju, Porto-vecchio
100	*Silene velutina* Loisel	Cavallo, Bonifacio
101	*Stachys maritima* Gouan.	Plage port de Taverna, Valle di Campoloro
102	*Teucrium fruticans* L.	Cala di stentinu, Bonifacio
103	*Viola corsica* Nyman	Chapelle Saint Jean (Siscu)

Sardinia

No.	Taxon (local checklist)	Population
1	*Anchusa crispa* Viv. subsp. *crispa*	Fiume Santo (Porto Torres, Sardinia)
2	*Anchusa crispa* Viv. subsp. *crispa*	Stagno di Pilo (Sassari, Sardinia)
3	*Anchusa crispa* Viv. subsp. *crispa*	Ezzi Mannu (Stintino, Sardinia)
4	*Anchusa crispa* Viv. subsp. *crispa*	Asinara (Porto Torres, Sardinia)
5	*Anchusa crispa* Viv. subsp. *maritima* (Vals.) Selvi *et* Bigazzi	Foce del Coghinas (Badesi, Sardinia)
6	*Anchusa crispa* Viv. subsp. *maritima* (Vals.) Selvi *et* Bigazzi	Torre di Vignola (Trinità d'Ugultu, Sardinia)
7	*Anchusa sardoa* (Illario) Selvi *et* Bigazzi	Mugoni (Alghero, Sardinia)
8	*Anthyllis hermanniae* L. ssp. *ichnusae* Brullo *et* Giusso	Cascata Middai, Seui (OG)
9	*Antirrhinum siculum* Mill.	Monte Zara (Monastir, Sardinia)
10	*Aquilegia barbaricina* Arrigoni et E.Nardi	Monte Spada, Fonni (NU)
11	*Aquilegia cremnophila* Bacch., Brullo, Congiu, Fenu, J. Garrido *et* Mattana	Monte Corrasi (Oliena, Sardinia)
12	*Aquilegia nugorensis* Arrigoni *et* Nardi	Pizzu Andriuttu (Seui, Sardinia)
13	*Aquilegia nugorensis* Arrigoni *et* Nardi	Rio Ermolinus (Seui, Sardinia)
14	*Armeria sardoa* Spreng. subsp. *genargentea* Arrigoni	Monte Spada (Fonni, Sardinia)
15	*Armeria sardoa* Spreng. subsp. *genargentea* Arrigoni	Nodu 'e Littipori (Fonni, Sardinia)
16	*Armeria sulcitana* Arrigoni	Conca de Sa Ruta (Villacidro, Sardinia)
17	*Artemisia campestris* L. subsp. *variabilis* (Ten.) Greuter	Santa Gilla (Cagliari, Sardinia)
18	*Astragalus genargenteus* Moris	Bruncu Spina (Fonni, Sardinia)
19	*Astragalus gennarii* Bacch. *et* Brullo	Useli (Lula, Sardinia)
20	*Berberis vulgaris* L. subsp. *aetnensis* (C.Presl) Rouy *et* Foucaud	Punta Paolinu, Fonni (NU)
21	*Biarum dispar*(Schott) Talavera	Monte Zara (Monastir, Sardinia)
22	*Bituminaria morisiana* (Pignatti *et* Metlesics) Greuter	Is Lisandrus (Buggerru, Sardinia)
23	*Bituminaria morisiana* (Pignatti *et* Metlesics) Greuter	Genna 'e Acca, Seui (OG)
24	*Brassica insularis* Moris	Capo Figari, Golfo Aranci (OT)
25	*Calicotome spinosa* (L.) Link	Torre Argentina (Bosa, Sardinia)
26	*Campanula forsythii* (Arcangeli) Podlech	Pizzu Andriuttu (Seui, Sardinia)
27	*Campanula forsythii* (Arcangeli) Podlech	Monte Corrasi (Oliena, Sardinia)
28	*Campanula forsythii* (Arcangeli) Podlech	Montarbu, Seui (OG)
29	*Campanula forsythii* (Arcangeli) Podlech	Bruncu Arrasialei, Seui (OG)
30	*Carlina macrocephala* Moris subsp. *macrocephala*	Bruncu Spina, Fonni (NU)
31	*Centaurea magistrorum* Arrigoni *et* Camarda	Monte Luas, Villagrande (OG)
32	*Centranthus amazonum* Fridl. *et* A. Raynal	Codula di Luna, Urzulei (NU)
33	*Cerastium supramontanum* Arrigoni	Punta Turruddò (Lula, Sardinia)
34	*Cerastium supramontanum* Arrigoni	Monte Corrasi (Oliena, Sardinia)
35	*Cistus albidus* L.	Monte Albo (Lula, Sardinia)
36	*Clinopodium sardoum* (Asch. & Levier) Peruzzi *et* F.Conti	Monte Corrasi, Oliena (NU)
37	*Cornus sanguinea* L. s.l.	Santa Sofia (Laconi, Sardinia)
38	*Crucianella maritima* L.	Portixeddu, Fluminimaggiore (CI)
39	*Crucianella maritima* L.	Su Giudeu, Domus de Maria (CA)
40	*Delphinium pictum* Willd.	Is Lisandrus (Buggerru, Sardinia)
41	*Delphinium pictum* Willd.	Canale Su Longufresu, Uta (CA)
42	*Dianthus genargenteus* Bacch., Brullo, Casti *et* Giusso	Bruncu Spina (Fonni, Sardinia)
43	*Dianthus morisianus* Vals.	Portixeddu (Buggerru, Sardinia)
44	*Digitalis purpurea* L. var. *gyspergerae* (Rouy) Fiori	Is Terre Molentes (Fonni, Sardinia)
45	*Digitalis purpurea* L. var. *gyspergerae* (Rouy) Fiori	Bruncu Spina (Fonni, Sardinia)
46	*Digitalis purpurea* L. var. *gyspergerae* (Rouy) Fiori	Funtana Abba Fritta (Talana, Sardinia)
47	*Digitalis purpurea* L. var. *gyspergerae* (Rouy) Fiori	Pirastu Trottu, Seui (OG)
48	*Dipsacus ferox* Loisel.	Sa Pannargia (Fonni, Sardinia)
49	*Dipsacus ferox* Loisel.	Rio Mannu (Serramanna, Sardinia)
50	*Dipsacus ferox* Loisel.	Ziu Zolo, Bolotana (NU)
51	*Elymus corsicus* (Hackel) Kerguélen	Su Thuttureli (Oliena, Sardinia)
52	*Ferula arrigonii* Bocchieri	Pranu Sartu (Buggerru, Sardinia)
53	*Genista aetnensis*(Biv.) DC.	Monte Telemula, Talana (OG)

Sardinia

No.	Taxon (local checklist)	Population
54	*Gentiana lutea* L. subsp. *lutea*	Trainu Murcunieddu (Fonni, Sardinia)
55	*Gentiana lutea* L. subsp. *lutea*	Separadorgiu (Fonni, Sardinia)
56	*Gentiana lutea* L. subsp. *lutea*	Nodu 'e Littipori (Fonni, Sardinia)
57	*Gentiana lutea* L. subsp. *lutea*	Is Terr'e Molentes (Fonni, Sardinia)
58	*Gentiana lutea* L. subsp. *lutea*	Monte Spada, Fonni (NU)
59	*Gentiana lutea* L. subsp. *lutea*	Rio Aratu, Fonni (NU)
60	*Globularia alypum* L.	Capo Sant'Elia (Cagliari, Sardinia)
61	*Halopeplis amplexicaulis* (Vahl) Ces., Pass. & Gibelli	Molentargius (Cagliari, Sardinia)
62	*Helianthemum caput-felis* Boiss.	Capo Mannu (San Vero Milis, Sardinia)
63	*Helichrysum microphyllum* Willd. subsp. *tyrrhenicum* Bacch, Brullo *et* Giusso	Pranu Sartu (Buggerru, Sardinia)
64	*Helichrysum microphyllum* Willd. subsp. *tyrrhenicum* Bacch, Brullo *et* Giusso	Ingurtosu (Arbus, Sardinia)
65	*Helichrysum saxatile* Moris subsp. *saxatile*	Is Lisandrus (Buggerru, Sardinia)
66	*Helichrysum saxatile* Moris subsp. *saxatile*	Pizzu Andriuttu (Seui, Sardinia)
67	*Helichrysum saxatile* Moris subsp. *saxatile*	Genna 'e Acca, Seui (OG)
68	*Helleborus lividus* Aiton subsp. *corsicus* (Briq.) P.F.Yeo	S'Arcu 'e Nortiduli, Talana (OG)
69	*Hypericum hircinum* L. subsp. *hircinum*	Canale Mau, Gonnosfanadiga (VS)
70	*Hypericum scruglii* Bacch., Brullo et Salmeri	Funtana Carreghera (Seui, Sardinia)
71	*Juniperus nana* Willd. var. *corsicana* Lebreton, Mossa *et* Gallet	Sa Mandara (Talana, Sardinia)
72	*Juniperus nana* Willd. var. *corsicana* Lebreton, Mossa *et* Gallet	Riu Aratu (Fonni, Sardinia)
73	*Juniperus nana* Willd. var. *corsicana* Lebreton, Mossa *et* Gallet	Montarbu, Seui (OG)
74	*Lamyropsis microcrocephala* (Moris) Dittrich *et* Greuter	Pisargiu (Fonni, Sardinia)
75	*Lavatera maritima* Gouan s.l.	Nebida (Iglesias, Sardinia)
76	*Lavatera triloba* L. subsp. *pallescens* (Moris) Nyman	Pranu Sartu (Buggerru, Sardinia)
77	*Lavatera triloba* L. subsp. *triloba*	Santa Gilla (Cagliari, Sardinia)
78	*Leucanthemum flosculosum* (L.) P. Giraud	Portixeddu (Fluminimaggiore, Sardinia)
79	*Limonium avei* (De Not.) Brullo & Erben	Molentargius (Cagliari, Sardinia)
80	*Linaria arcusangeli* Atzei *et* Camarda	Loc. Arco dell'Angelo, San Vito (CA)
81	*Linaria cossoni* Barratte	Is Solinas (Masainas, Sardinia)
82	*Medicago arborea* L./*Medicago citrina* (Font Quer) Greuter	Nebida (Iglesias, Sardinia)
83	*Micromeria filiformis* (Aiton) Benth. subsp. *cordata* (Moris) Pignatti	Prados, Oliena (NU)
84	*Nepeta foliosa* Moris	Monte Corrasi (Oliena, Sardinia)
85	*Ostrya carpinifolia* Scop.	Sa Ceraxa (Seui, Sardinia)
86	*Paeonia corsica* Sieber *ex* Tausch	Nuraghe Ardasai (Seui, Sardinia)
87	*Pinguicula sehuensis* Bacch., Cannas *et* Peruzzi	Montarbu di Seui (Seui, Sardinia)
88	*Pinguicula sehuensis* Bacch., Cannas *et* Peruzzi	Montarbu di Seui (Seui, Sardinia)
89	*Pistacia terebinthus* L. subsp. *terebinthus*	Masua (Iglesias, Sardinia)
90	*Ptilostemon casabonae* (L.) Greuter	Pranu Sartu (Buggerru, Sardinia)
91	*Ptilostemon casabonae* (L.) Greuter	Monte Corrasi (Oliena, Sardinia)
92	*Ptilostemon casabonae* (L.) Greuter	Pirastu Trottu, Seui (OG)
93	*Ptychotis sardoa* Pignatti et Metlesics	Mesu 'e Gutturus (Lula, Sardinia)
94	*Ptychotis sardoa* Pignatti et Metlesics	Monte Corrasi (Oliena, Sardinia)
95	*Rhamnus alpina* L. subsp. *alpina*	Palumbrosa, Oliena (NU)
96	*Rhamnus persicifolia* Moris	Rio Is Eras (Talana, Sardinia)
97	*Ribes sardoum* Martelli	Monte Corrasi (Oliena, Sardinia)
98	*Ribes sardoum* Martelli	Monte Corrasi, Oliena (NU)
99	*Rosa serafinii* Viv.	Is Terr'e Molentes (Fonni, Sardinia)
100	*Rumex scutatus* L. subsp. *glaucescens* (Guss.) Brullo, Scelsi *et* Spampinato	Conca de Sa Ruta (Villacidro, Sardinia)
101	*Rumex scutatus* L. subsp. *glaucescens* (Guss.) Brullo, Scelsi *et* Spampinato	Riu de Precontini (Burcei, Sardinia)
102	*Ruta lamarmorae* Bacch., Brullo et Giusso del Galdo	Punta La Marmora (Fonni, Sardinia)
103	*Sambucus nigra* L.	Gairo Taquisara, Gairo (OG)
104	*Santolina corsica* Jord. *et* Fourr.	Janna Nurai (Lula, Sardinia)

Sardinia

No.	Taxon (local checklist)	Population
105	*Santolina insularis* (Gennari *et* Fiori) Arrigoni	Pranu Sartu (Buggerru, Sardinia)
106	*Santolina insularis* (Gennari *et* Fiori) Arrigoni	Monte Corrasi (Oliena, Sardinia)
107	*Sarcopoterium spinosum* (L.) Spach.	Capo Sant'Elia (Cagliari, Sardinia)
108	*Sarcopoterium spinosum* (L.) Spach.	Capo Sant'Elia, Cagliari (CA)
109	*Satureja thymbra* L.	Colle San Michele, Cagliari (CA)
110	*Senecio morisii* J.Calvo *et* Bacch.	Anulu (Seui, Sardinia)
111	*Senecio morisii* J.Calvo *et* Bacch.	Anulu, Seui (OG)
112	*Seseli praecox* (Gamisans) Gamisans	Is Lisandrus (Buggerru, Sardinia)
113	*Sesleria insularis* Sommier subsp. *barbaricina* Arrigoni	Punta Turuddò (Lula, Sardinia)
114	*Sesleria insularis* Sommier subsp. *barbaricina* Arrigoni	Su Thuttureli (Oliena, Sardinia)
115	*Sesleria insularis* Sommier subsp. *barbaricina* Arrigoni	Genna 'e Acca, Seui (OG)
116	*Sesleria insularis* Sommier subsp. *morisiana* Arrigoni	Sa Pala Manna (Buggerru, Sardinia)
117	*Silene ichnusae* Brullo, De Marco *et* De Marco fil.	Capo Falcone, Stintino (SS)
118	*Silene nodulosa* Viv.	Punta Turuddò (Lula, Sardinia)
119	*Silene nodulosa* Viv.	Canali Mau, Gonnosfanadiga (VS)
120	*Silene velutina* Loisel.	Abbatoggia, La Maddalena (OT)
121	*Tanacetum audibertii* (Req.) DC.	Separadorgiu (Fonni, Sardinia)
122	*Thymus herba-barona* Loisel. subsp. *herba-barona*	Sa Mandara (Talana, Sardinia)
123	*Thymus herba-barona* Loisel. subsp. *herba-barona*	Is Terr'e Molentes (Fonni, Sardinia)
124	*Verbascum conocarpum* Moris subsp. *conocarpum*	Monte Corrasi, Oliena (NU)
125	*Verbascum conocarpum* Moris subsp. *conocarpum*	Funtana Tunisie, Talana (OG)
126	*Verbascum plantagineum* Moris	Nebida, Iglesias (CI)
127	*Vitex agnus-castus* L.	Murtas, Villaputzu (CA)

Sicily

No.	Taxon (local checklist)	Population
1	*Acer obtusatum* Willd. subsp. *aetnense* (Tineo ex Strobl) C. Brullo & Brullo	Bosco di Milo (Etna)
2	*Aethionema saxatile* (L.) R. Br.	Quacella (Madonie)
3	*Allium commutatum* Guss.	Taormina (Etna)
4	*Amasonium alisma* Mill. subsp. *bourgaei* (Coss.) Maire	Santa Panagia (Siracusa)
5	*Anagyris foetida* L.	Riserva Naturale Micio Conti (Etna)
6	*Anagyris foetida* L.	Riserva Naturale Micio Conti (Etna)
7	*Andryala cossyrensis* Guss.	Pantelleria
8	*Anthemis aetnensis* Schouw in Sprengel	Monti Silvestri (Etna)
9	*Anthemis aetnensis* Schouw in Sprengel	Case del Vescovo (Etna)
10	*Anthemis aetnensis* Schouw in Sprengel	Case del Vescovo (Etna)
11	*Anthemis cupaniana* Tod. ex Nyman	Marineo (Palermo)
12	*Anthemis cupaniana* Tod. ex Nyman	Rocca Busambra (Monti Sicani)
13	*Anthemis cupaniana* Tod. ex Nyman	Piano Battaglia (Madonie)
14	*Anthemis intermedia* Guss.	Monte Gallo (Palermo)
15	*Anthemis pignattiorum* Guarino, Raimondo & Domina	Cavagrande del Cassibile (Iblei)
16	*Anthyllis barba-jovis* L.	Castel di Tusa (Messina)
17	*Arenaria grandiflora* L.	Piano Battaglia (Madonie)
18	*Astragalus huetii* Bunge	Sughereta di Niscemi (Caltanissetta)
19	*Astragalus kamarinensis* C. Brullo, Brullo, Giusso, Miniss. & Sciandr.	Pineta di Vittoria (Ragusa)
20	*Astragalus nebrodensis* (Guss.) Strobl	Case Canna (Madonie)
21	*Astragalus raphaelis* G. Ferro	Cozzo Santa Chiara (Agira)
22	*Astragalus raphaelis* G. Ferro	Cozzo Niglio (Agira)
23	*Astragalus siculus* Biv.	Galvarina (Etna)
24	*Astragalus siculus* Biv.	Case Del vescovo (Etna)
25	*Astragalus siculus* Biv.	Citelli (Etna)
26	*Athamanta sicula* L.	Erice (Trapani)
27	*Aubrieta deltoidea* (L.) DC. subsp. *sicula* (Strobl) Phitos	Rocca Novara (Peloritani)
28	*Berberis aetnensis* C.Presl	Piano Vetore (Etna)
29	*Berberis aetnensis* C.Presl	Monte Conca (Etna)
30	*Berberis aetnensis* C.Presl	Galvarina (Etna)
31	*Berberis aetnensis* C.Presl	Pizzo Carbonara (Madonie)
32	*Betula aetnensis* Raf. ex J.Presl & C.Presl	Monti Sartorius (Etna)
33	*Betula aetnensis* Raf. ex J.Presl & C.Presl	Monti Sartorius (Etna)
34	*Betula aetnensis* Raf. ex J.Presl & C.Presl	Galvarina (Etna)
35	*Betula aetnensis* Raf. ex J.Presl & C.Presl	Galvarina (Etna)
36	*Betula aetnensis* Rafin.	Monti Sartorius (Etna)
37	*Betula aetnensis* Rafin.	Rifugio Citelli (Etna)
38	*Brachypodium sylvaticum* (Huds.) P. Beauv.	Antillo (Peloritani)
39	*Brassica incana* Ten.	Isola Bella (Taormina)
40	*Brassica villosa* Biv. subsp. *brevisiliqua* (Raimondo & Mazzola) Raimondo & Geraci	Monte Cofano (Trapani)
41	*Briza maxima* L.	Petralia Soprana (Madonie)
42	*Bupleurum fruticosum* L.	Gibilmanna (Cefalù)
43	*Celtis aetnensis* (Tornab.) Strobl	Cesarò (Nebrodi)
44	*Celtis aetnensis* (Tornab.) Strobl	Bronte (Etna)
45	*Celtis asperrima* Lojac.	Caltabellotta (Agrigento)
46	*Celtis asperrima* Lojac.	Pizzo Castelluzzo (Monti Sicani)
47	*Celtis asperrima* Lojac.	Gangi (Palermo)
48	*Centaurea giardinae* Raimondo & Spadaro	Piano Vetore (Etna)
49	*Centaurea parlatoris* Heldr. subsp. *parlatoris*	Piano Battaglia (Madonie)
50	*Centaurea sphaerocephala* L.	Sampieri (Scicli)
51	*Cerastium tomentosum* L.	Monti Silvestri (Etna)
52	*Cerastium tomentosum* L.	Piano Battaglia (Madonie)

Sicily

No.	Taxon (local checklist)	Population
53	*Cerastium tomentosum* L.	Quacella (Madonie)
54	*Cerastium tomentosum* L.	Monte Frumento (Etna)
55	*Cerastium tomentosum* L.	Piano Battaglia (Madonie)
56	*Cistus salviifolius* L.	Contrada Scorzone (Madonie)
57	*Colymbada tauromenitana* (Guss.) Holub	Taormina (Etna)
58	*Cotoneaster nebrodensis* (Guss.) K. Koch	Vallone Madonna degli Angeli (Madonie)
59	*Crataegus orientalis* M. Bieb subsp. *orientalis*	Vallone Madonna degli Angeli (Madonie)
60	*Cytisus villosus* Pourr.	Lago Quattrocchi (Nebrodi)
61	*Cytisus villosus* Pourr.	Antillo (Peloritani)
62	*Daphne laureola* L.	Vallone Madonna degli Angeli (Madonie)
63	*Dianthus rupicola* Biv. subsp. *rupicola*	Timpa di Acireale (Etna)
64	*Dianthus siculus* C.Presl	Roccafiorita (Peloritani)
65	*Dioscorea communis* (L.) Caddick & Wilkin	Antillo (Peloritani)
66	*Diplotaxis crassifolia* (Rafin.) DC.	Sant'Angelo Muxaro (Agrigento)
67	*Elatine alsinastrum* L.	Stagno di Cutrofiano (Lecce)
68	*Ephedra fragilis* Desf.	Vendicari (Noto)
69	*Erucastrum virgatum* (J. & C. Presl) C. Presl	Monte Kalfa (Peloritani)
70	*Erysimum brulloi* G. Ferro	Alicudi (Eolie)
71	*Erysimum etnense* Jord.	Galvarina (Etna)
72	*Erysimum etnense* Jord.	Citelli (Etna)
73	*Erysimum etnense* Jord.	Case Del vescovo (Etna)
74	*Erysimum etnense* Jordan	Piano Vetore (Etna)
75	*Euphorbia bivonae* Steud.	Monreale (Palermo)
76	*Euphorbia dendroides* L.	Isnello (Madonie)
77	*Euphorbia dendroides* L.	Rocca Busambra (Monti Sicani)
78	*Galium lucidum* All.	Piano Battaglia (Madonie)
79	*Genista cupanii* Guss.	Pomieri (Madonie)
80	*Genista cupanii* Guss.	Chiesa di San Cosimano (Madonie)
81	*Genista demarcoi* Brullo, Scelsi & Siracusa	Isnello (Madonie)
82	*Halimione portulacoides* (L.) Aellen	Saline di Siracusa (Siracusa)
83	*Helianthemum nummularium* (L.) Mill.	Contrada Scorzone (Madonie)
84	*Helichrysum pendulum* (C. Presl) C. Presl	Isnello (Madonie)
85	*Holcus lanatus* L.	Antillo (Peloritani)
86	*Iberis semperflorens* L.	Favignana (Egadi)
87	*Jasione montana* L.	Case del Vescovo (Etna)
88	*Juncus acutus* L.	Saline di Siracusa (Siracusa)
89	*Juncus subulatus* Forssk.	Saline di Siracusa (Siracusa)
90	*Juniperus communis* L. subsp. *hemisphaerica* (J. & C. Presl) Arcang.	Vallone Madonna degli Angeli (Madonie)
91	*Juniperus hemisphaerica* C.Presl	Galvarina (Etna)
92	*Juniperus hemisphaerica* C.Presl	Vallone Madonna degli Angeli (Madonie)
93	*Juniperus turbinata* Guss.	Acate (Iblei)
94	*Jurinea bocconei* (Guss.) Guss.	Monte Cavallo (Madonie)
95	*Laserpitium siculum* Sprengel	Vallone Madonna degli Angeli (Madonie)
96	*Lavatera agrigentina* Tineo	Sant'Angelo Muxaro (Agrigento)
97	*Lavatera agrigentina* Tineo	Cozzo Niglio (Agira)
98	*Limbarda crithmoides* (L.) Dumort.	Saline di Siracusa (Siracusa)
99	*Limoniastrum monopetalum* (L.) Boiss.	Punta Braccetto (Ragusa)
100	*Limonium narbonense* Mill.	Saline di Siracusa (Siracusa)
101	*Linum strictum* L.	Petralia Soprana (Madonie)
102	*Lomelosia crenata* (Cirillo) Greuter & Burdet	Quacella (Madonie)
103	*Lomelosia cretica* (L.) Greuter & Burdet	Isnello (Madonie)
104	*Lythrum borysthenicum* (Schrank) Litv.	Cozzo Ogliastri (Iblei)
105	*Malus crescimannoi* Raimondo	Floresta (Nebrodi)

Sicily

No.	Taxon (local checklist)	Population
106	*Matthiola incana* (L.) R.Br. subsp. *incana*	Isola Lachea (Catania)
107	*Origanum onites* L.	Teatro di Siracusa (Siracusa)
108	*Origanum onites* L.	Colle Temenite (Siracusa)
109	*Ostrya carpinifolia* Scop.	Roccafiorita (Peloritani)
110	*Phagnalon rupestre* (L.) DC.	Rocca Busambra (Monti Sicani)
111	*Phlomis fruticosa* L.	Gole di Aranciara (Peloritani)
112	*Phlomis fruticosa* L.	Roccafiorita (Peloritani)
113	*Pistacia lentiscus* L.	Riserva naturale di Villasmundo (Siracusa)
114	*Pistacia terebinthus* L. subsp. *terebinthus*	Isnello (Madonie)
115	*Pistacia terebinthus* L. subsp. *terebinthus*	Riserva naturale di Villasmundo (Siracusa)
116	*Plantago cupanii* Guss.	Contrada Pietra Giordano (Madonie)
117	*Platanus orientalis* L.	Valle dell'Anapo (Iblei)
118	*Platanus orientalis* L.	Antillo (Peloritani)
119	*Potentilla calabra* Ten.	Sopra Rifugio Galvarina (Etna)
120	*Ptilostemon niveus* (C. Presl) Greuter	Piano Battaglia (Madonie)
121	*Pyrus castribonensis* Raimondo, Schicchi & Mazzola	Castelbuono (Madonie)
122	*Pyrus ciancioi* Marino, Castellano, Raimondo & Spadaro	Floresta (Nebrodi)
123	*Pyrus sicanorum* Raimondo, Schicchi & Marino	Strada Prizzi-Filaga (Monti Sicani)
124	*Pyrus vallis-demonis* Raimondo & Schicchi	Tassita (Nebrodi)
125	*Rhamnus alaternus* L.	Isola Bella (Taormina)
126	*Rhamnus alaternus* L.	Timpa di Acireale (Etna)
127	*Rhus tripartita* (Ucria) Grande	Cava D'Aliga
128	*Rosa sicula* Tratt.	Piano Battaglietta (Madonie)
129	*Rosa sicula* Tratt.	Vallone Madonna degli Angeli (Madonie)
130	*Rumex aetnensis* C.Presl	Galvarina (Etna)
131	*Rumex aetnensis* C.Presl	Case Del vescovo (Etna)
132	*Rumex aetnensis* C.Presl	Citelli (Etna)
133	*Salix pedicellata* Desf.	Riserva naturale di Villasmundo (Siracusa)
134	*Salsola oppositifolia* Desf.	Presso svincolo per Agira (Enna)
135	*Salsola oppositifolia* Desf.	Valle dei Templi (Agrigento)
136	*Sambucus nigra* L.	Roccafiorita (Peloritani)
137	*Saponaria sicula* Raf.	Galvarina (Etna)
138	*Saponaria sicula* Raf.	Case Del vescovo (Etna)
139	*Saponaria sicula* Raf.	Citelli (Etna)
140	*Sarcopoterium spinosum* (L.) Spach	Cozzo Ogliastri (Iblei)
141	*Secale strictum* (C. Presl) C. Presl	Case del Vescovo (Etna)
142	*Silene fruticosa* L.	Monte Castelluccio (Taormina)
143	*Silene fruticosa* L.	Antillo (Peloritani)
144	*Silene hicesiae* Brullo & Signorello	Panarea (Eolie)
145	*Silene sicula* Ucria	Monti Sartorius (Etna)
146	*Silene sicula* Ucria	Case Del Vescovo (Etna)
147	*Silene sicula* Ucria	Galvarina (Etna)
148	*Smilax aspera* L.	Bosco della Cava (Madonie)
149	*Sorbus aria* (L.) Crantz	Vallone Madonna degli Angeli (Madonie)
150	*Trachelium lanceolatum* Guss.	Pantalica (Iblei)
151	*Tripolium pannonicum* (Jacq.) Dobrocz.	Saline di Siracusa (Siracusa)
152	*Umbilicus horizontalis* (Guss.) DC.	Antillo (Peloritani)
153	*Urtica rupestris* Guss.	Grotta Palombara (Siracusa)
154	*Urtica rupestris* Guss.	Grotta Monello (Siracusa)

Crete

No.	Target species (Local floras)	Population
1	*Alyssum baldaccii* Vierh. ex E.I.Nyár.	Iraklio, Sisarcha to Gonies
2	*Alyssum fragillimum* (Bald.) Rech. f.	Chania, Lefka Ori - Lagonia
3	*Anchusa cespitosa* Lam.	Chania, Lefka Ori - Lagonia
4	*Androcymbium rechingeri* Greuter	Chania, Elaphonisi
5	*Androcymbium rechingeri* Greuter	Chania, Fallasarna (South)
6	*Androcymbium rechingeri* Greuter	Chania, Fallasarna North
7	*Androcymbium rechingeri* Greuter	Chania, Imeri Gramvoussa
8	*Androcymbium rechingeri* Greuter	Chania, Elaphonisi islet
9	*Anthemis glaberrima* (Rech. fil.) Greuter	Chania, Agria Gramvoussa
10	*Anthemis glaberrima* (Rech. fil.) Greuter	Chania, Imeri Gramvoussa
11	*Artemisia inculta* Delile	Chania, Gavdos
12	*Arum purpureospathum* P.C. Boyce	Chania, Agios Ioannis Sphakion
13	*Arum purpureospathum* P.C. Boyce	Chania, Ag.Roumeli old village
14	*Astragalus creticus* Lam. subsp. *minoicus* Brullo & Giusso	Lasithi, Thripti to Afentis Stavros
15	*Astragalus idaeus* Bunge	Iraklio, Dikti-Psari Madara
16	*Bellevalia brevipedicellata* Turril.	Chania, Elaphonisi
17*	*Bellevalia juliana* Bareka, Turland & Kamari	Lasithi, Kolokytha, Elounda
18	*Bolanthus creutzburgii* Greuter subsp. *zaffranii* Phitos & al.	Chania, Palaiochora to Anydri beach
19	*Bupleurum gaudianum* Snogerup	Chania, Gavdos, Ag.Stratigos
20	*Calamintha cretica* (L.) Lam.	Chania, Lefka Ori, Xyloskalo
21	*Calamintha cretica* (L.) Lam.	Chania, Aradena gorge
22	*Callitriche pulchra* Schotsman	Chania, Gavdos
23	*Campanula laciniata* L.	Chania, Sougia before
24	*Campanula laciniata* L.	Lasithi, near to Myrsini village
25	*Campanula laciniata* L.	Chania, Aradena gorge
26	*Campanula laciniata* L.	Chania, Gramvousa - Kalyviani to Ballos
27	*Campanula saxatilis* L. subsp. *saxatilis*	Chania, Akrotiri - Katholiko monastery
28	*Campanula saxatilis* L. subsp. *saxatilis*	Chania, Elaphonisi islet
29	*Centaurea argentea* L. subsp. *chionantha* (Turland & L. Chilton) Greuter	Lasithi, Pachia Ammos, exit of Ha gorge
30	*Centaurea argentea* L. subsp. *chionantha* (Turland & L. Chilton) Greuter	Lasithi, Sphaka village
31	*Centaurea baldaccii* Degen ex Bald.	Chania, Lefka Ori- Gingilos
32	*Centaurea poculatoris* Greuter	Chania, Patsianos village
33	*Centaurea pumilio* L.	Chania, Palaiochora, Grammenos
34	*Chaerophyllum creticum* Boiss. & Heldr.	Chania, Omalos plateau
35	*Crepis auriculifolia* Spreng.	Chania, Ag.Irini gorge
36	*Crepis auriculifolia* Spreng.	Rethymno, Nida, near to Skinakas
37	*Crepis auriculifolia* Spreng.	Rethymno, Kedros
38	*Crepis sibthorpiana* Boiss. & Heldr.	Chania, Lefka Ori - Lagonia Kakovoli
39	*Cynara cyrenaica* Maire & Weiller	Lasithi Istro (Kalo Chorio)
40	*Datisca cannabina* L.	Chania, Samaria gorge
41*	*Dianthus juniperinus* Sm. subsp. *kavusicus* Turland	Lasithi, Mpemponas to Chrysopigi
42	*Dianthus xylorrhizus* Boiss. & Heldr.	Chania, Polirinia
43	*Eryngium ternatum* Poiret	Chania, Aradena gorge
44	*Helichrysum doerfleri* Rech. f.	Lasithi, Mountain Thripti, Afentis Stavros
45	*Helichrysum heldreichii* Boiss.	Chania, Samaria gorge
46	*Helichrysum heldreichii* Boiss.	Chania, Aradena gorge
47	*Horstrissea dolinicola* Greuter & al.	Rethymno, Psiloritis
48	*Horstrissea dolinicola* Greuter & al.	Rethymno, Psiloritis
49	*Hypericum jovis* Greuter	Iraklio, Kamares
50	*Hypericum kelleri* Bald.	Chania, Lefka Ori, Kallergi
51	*Lathyrus neurolobus* Boiss. & Heldr.	Chania, Chliaro
52	*Lathyrus neurolobus* Boiss. & Heldr.	Chania, Sempronas
53	*Leontice leontopetalum* L. subsp. *leontopetalum*	Iraklio, Agioi Deka to Rapti
54	*Leontice leontopetalum* L. subsp. *leontopetalum*	Iraklio, Ag, Varvara
55	*Leontice leontopetalum* L. subsp. *leontopetalum*	Lasithi, Katharo Plateau
56	*Limonium calliopsium* A. Mayer	Rethymno, Petres
57	*Limonium creticum* R. Artelari	Iraklio, Matala
58	*Limonium elaphonisicum* A. Mayer	Chania, Elaphonisi
59	*Limonium sougiae* Erben & Brullo	Chania, Sougia
60	*Medicago arborea* subsp. *strasseri* (Greuter & al.) Sobr.-Vest. & Ceresuela	Rethymno, Petres gorge
61	*Micromeria sphaciotica* Boiss. & Heldr. ex Benth.	Chania, Agia Irini gorge
62	*Micromeria sphaciotica* Boiss. & Heldr. ex Benth.	Chania, Aradena gorge

Crete

No.	Target species (Local floras)	Population
63	*Moluccella spinosa* L.	Chania, Episkopi area towards Argyroupoli
64	*Myosotis solange* Greuter & Zaffran	Chania, Lefka Ori- Agio Pnevma summit
65	*Nepeta sphaciotica* P.H. Davis	Chania, Lefka Ori- Svourichti summit
66	*Noccaea zaffranii* F. K. Mey.	Chania, Lefka Ori- Gingilos
67	*Origanum dictamnus* L.	Chania, Imbros, before Sphakiano gorge
68	*Origanum dictamnus* L.	Chania, Malaxa
69	*Origanum dictamnus* L.	Chania, Therisso gorge - Asteroskopio locality
70	*Origanum dictamnus* L.	Chania, Therisso gorge - Pangaia locality
71	*Origanum dictamnus* L.	Rethymno, Prassiano gorge
72	*Origanum dictamnus* L.	Chania, Palaiochora
73	*Origanum dictamnus* L.	Rethymno, Psiloritis, Mt. Piperos
74	*Phoenix theophrasti* Greuter	Rethymno, Preveli
75	*Phoenix theophrasti* Greuter	Lasithi, Vai and Itanos
76	*Phoenix theophrasti* Greuter	Iraklio, Maridaki
77	*Phoenix theophrasti* Greuter	Chania, Drapano, Almyro
78	*Polygonum idaeum* Hayek	Rethymno, Psiloritis
79	*Prospero depressum* Speta	Chania, Omalos plateau
80*	*Prospero idaeum* Speta	Rethymno, Psiloritis, Nida Plataeu
81	*Prospero minimum* Speta	Chania, Imbros gorge
82	*Prospero rhadamanthi* Speta	Chania, area near Petres village
83	*Ranunculus veronicae* N. Böhling	Chania, Strovles to Archondiko
84	*Reseda minoica* Martín-Bravo & Jiménez-Mejías	Iraklio, Matala
85	*Sesleria doerfleri* Hayek	Rethymno, Kotsifou gorge
86	*Sesleria doerfleri* Hayek	Lefka Ori, Samaria gorge
87	*Sibthorpia europaea* L.	Chania, Sempronas to Ano Kefala
88	*Sibthorpia europaea* L.	Chania, Nea Roumata to Deres
89	*Silene ammophila* Boiss. & Heldr. subsp. *ammophila*	Lasithi, Ormos Kouremenos
90	*Silene succulenta* Forssk.	Chania, Elaphonisi
91	*Silene succulenta* Forssk.	Chania, Grammenos - Palaiochora
92	*Silene succulenta* Forssk.	Chania, Gavdos
93**	*Tamarix minoa* J. L. Villar, Turland, Juan, Gaskin, M. A. Alonso & M. B. Crespo	Chania, Georgioupoli
94	*Teucrium cuneifolium* Sm.	Chania, Palaiochora to Anydri beach
95	*Teucrium cuneifolium* Sm.	Chania, Patsianos village
96	*Teucrium cuneifolium* Sm.	Chania, Komitades, exit of Imbros gorge
97	*Teucrium cuneifolium* Sm.	Chania, Aradena gorge
98	*Thymbra calostachya* (Rech. f.) Rech. f.	Lasithi, Moni Kapsa area
99	*Viola scorpiuroides* Coss.	Chania, Akrotiri - Tersanas
100	*Viola scorpiuroides* Coss.	Lasithi, Cap Mavros near to Vai
101	*Viola scorpiuroides* Coss.	Chania, Elaphonisi
102	*Viola scorpiuroides* Coss.	Chania, Falassarna

All germplasm material collected is seeds except for:
*type of germplasm collected is both seeds and other propagative material
**type of germplasm collected is propagative material other than seeds

Cyprus

No.	Taxon (local checklist)	Population
1	*Achillea cretica* L.	Pyrgos Tillyrias
2	*Acinos troodi* (Post) Leblebici subsp. *troodi*	Chionistra
3	*Agrimonia eupatoria* L.	Pedoulas above Vrysi restaurant
4	*Allium autumnale* P. H. Davis	Filani-Macheras
5	*Allium autumnale* P. H. Davis	Saittas
6	*Allium autumnale* P. H. Davis	Kyprovasa-Lythrodontas
7	*Allium cyprium* Brullo et al. subsp. *cyprium*	Prodromos, above Vyzantio resteurant
8	*Allium exaltatum* (Meikle) Brullo & al.	Madari
9	*Allium exaltatum* (Meikle) Brullo & al.	Rotsia, Adelfoi Forest
10	*Allium guttatum* Steven subsp. *guttatum*	Macheras, Mantra tou Kampiou-Profitis Elias
11	*Allium guttatum* Steven subsp. *guttatum*	Rotsia, Adelfoi Forest
12	*Allium guttatum* Steven subsp. *guttatum*	Kalopanagiotis
13	*Allium marathasicum* Brullo & al.*	Prodromos
14	*Alyssum troodi* Boiss.	Troodos, ski club
15	*Ammophila arenaria* (L.) Link	Lanta (near Ag. Nikandros)
16	*Anthemis tomentosa* L.	Timi, near the Airport
17	*Anthemis tomentosa* L.	Kato Pafos, near Faros
18	*Arrhenatherum album* subsp. *cypricola* H. Scholz	Astrakas cliff-Gerakies junction
19	*Arum rupicola* Boiss.	Selladi tou Staktou to Gkremmos tis Pellis
20	*Arum sintenisii* (Engl.) P. C. Boyce*	Androlikou (cultivated at Lysos)
21	*Astragalus macrocarpus* subsp. *lefkarensis* Kirchhoff & Meikle	Above Lefkara
22	*Astragalus macrocarpus* subsp. *lefkarensis* Kirchhoff & Meikle	Tochni
23	*Astragalus macrocarpus* subsp. *lefkarensis* Kirchhoff & Meikle	Asgata
24	*Astragalus suberosus* Banks & Sol.	Agia Thekla
25	*Astragalus suberosus* Banks & Sol.	Ammos tou Kampouri, near Agia Napa
26	*Brassica hilarionis* Post	1.5 km NE of Chalefka forest station
27	*Campanula podocarpa* Boiss.	Troodos
28	*Chaenorhinum rubrifolium (*DC.) Fourr.	Rizoelia NFP
29	*Crambe hispanica* L.	Cavo Greko
30	*Crepis pusilla* (Sommier) Merxm.	Potamos Liopetriou
31	*Crepis pusilla* (Sommier) Merxm.	Episkopi Tunnel Beach
32	*Crocus cyprius* Boiss. & Kotschy	Below Kionia Picnic site
33	*Crocus hartmannianus* Holmboe	Filania - Macheras
34	*Crocus hartmannianus* Holmboe	Rotsia, Adelfoi Forest
35	*Crypsis hadjikyriakou* Raus & H. Scholz	Almyrolivado
36	*Cyclamen graecum* subsp. *anatolicum* Ietsw.	Livera
37	*Cynanchum acutum* L.	Polis Chrysochous, near camping
38	*Cynara makrisii* Hand & Hadjik.	Agios Ioannis (Paphos)
39	*Cynoglossum troodi* H. Lindb.	Troodos, Chionistra (after giant black pine tree)
40	*Datisca cannabina* L.	Ayia Triada, Gerakes dam
41	*Datisca cannabina* L.	Along Peristerona river
42	*Dianthus tripunctatus* Sm.	Akamas, Petres tis Ineias
43	*Dianthus tripunctatus* Sm.	Near Agia Varvara Pafos
44	*Dichoropetalum kyriakae* (Hadjik. & Alziar) Hand & Hadjik.	Lemesos forest
45	*Echium judaeum* Lacaita	Agios Theodoros
46	*Enarthrocarpus arcuatus* Labill.	Kato Pafos, near Faros
47	*Enarthrocarpus arcuatus* Labill.	Potamos Liopetriou-Agia Thekla
48	*Erica manipuliflora* Salisb.	Stalos, Flamoudi
49	*Erica manipuliflora* Salisb.	Ritzia, Akanthou
50	*Euphorbia aleppica* L.	Lysos, Paradisos
51	*Euphorbia aleppica* L.	Lysos, Lethia
52	*Euphorbia paralias* L.	Nisi beach hotel (Ayia Napa)
53	*Euphorbia paralias* L.	Davlos

Cyprus

No.	Taxon (local checklist)	Population
54	*Ferula cypria* Post	Keryneia cliff
55	*Filago mareotica* Delile	Alyki Larnakas
56	*Fritillaria persica* L.*	Kritou Tera
57	*Galium tenuissimum* M. Bieb.	Madari
58	*Galium tenuissimum* M. Bieb.	Rotsia, Adelfoi Forest
59	*Geum urbanum* L.	Alona
60	*Gundelia tournefortii* L.	Nata
61	*Haplophyllum buxbaumii* (Poir.) G. Don	Kato Drys
62	*Haplophyllum buxbaumii* (Poir.) G. Don	Agia Varvara
63	*Hedysarum cyprium* Boiss.	Makedonitissa
64	*Hedysarum cyprium* Boiss.	Anthoupoli
65	*Hedysarum cyprium* Boiss.	Agioi Trimithias
66	*Hedysarum cyprium* Boiss.	Above Oroklini, near Pfofitis Elias
67	*Hedysarum cyprium* Boiss.	Klirou-Arediou
68	*Hypecoum pendulum* L.	Kato Moni
69	*Hypecoum pendulum L.*	Kotsiatis
70	*Hypericum hircinum* L.	Argaki Paspalla, Pafos forest
71	*Hypericum hircinum* L.	Elikes - Argaki tou Nourou, Pafos forest
72	*Hypericum lanuginosum* Lam.	Ayia Triada, Geratsies dam
73	*Hypericum perfoliatum* L.	Near Agia forest station
74	*Hypericum perfoliatum* L.	Near Kampos
75	*Ifloga spicata* (Forssk.) Sch. Bip.	Episkopi Tunnel Beach
76	*Lactuca undulata* Ledeb.	Arediou-Politiko
77	*Limonium mucronulatum* (H. Lindb.) Greuter & Burdet	Larnaka salt lake
78	*Lotus cytisoides* L.	Akrotiri peninsusla, near lighthouse
79	*Malvella sherardiana* (L.) Jaub. & Spach	Germasogia dam
80	*Maresia nana* var. *glabra* (Meikle) Christodoulou & Hand	Yialia
81	*Nepeta troodi* Holmboe	Troodos, ski club
82	*Neurada procumbens* L.	Episkopi Tunnel Beach
83	*Nigella ciliaris* DC.	Germasogia dam
84	*Ochthodium aegyptiacum* (L.) DC.	Istinkio
85	*Onosma gigantea* Lam.	Giolou-Stroumpi (near Ag. Tryphon)
86	*Onosma gigantea* Lam.	Filousa-Meladia
87	*Onosma gigantea* Lam.	Nata
88	*Onosma gigantea* Lam.	Statos-Pentalia
89	*Peganum harmala* L.	Athalassa (originating from Lefkosia walls, Pyli Ammochostou)
90	*Pimpinella cypria* Boiss.	1.5 km SW of Antifonitis, on Pentadaktylos range
91	*Pinguicula crystallina* Sm.	Koskinas, above Platania Forest Station, Kanoures
92	*Pinguicula crystallina* Sm.	Kremmos
93	*Pinguicula crystallina* Sm.	Alas
94	*Pisum fulvum* Sm.	Vyzakia
95	*Potentilla recta* L.	Agros - Alona
96	*Potentilla recta* L.	Prodromos (near Zina Kanther house)
97	*Ranunculus rumelicus* Griseb.	Askas
98	*Salvia hierosolymitana* Boiss.	Panagia Eleousa, Karpasia
99	*Salvia veneris* Hedge	Lakkovounara forest, Kythrea
100	*Saponaria orientalis* L.	Troodos, ski club
101	*Saponaria cypria* Boiss.	Kokkini, Prodromos-Trooditissa
102	*Satureja thymbra* L.	Pachyammos Tyllirias
103	*Satureja thymbra* L.	Potos, between Akanthou and Flamoudi
104	*Scilla lochiae* (Meikle) Speta	Above Pedoulas
105	*Scilla lochiae* (Meikle) Speta	Pinewood-Marathos

Cyprus

No.	Taxon (local checklist)	Population
106	*Securigera cretica* (L.) Lassen	Ezousa river, near Episkopi Morou Nerou
107	*Senecio glaucus* subsp. *cyprius* Meikle	Kato Pafos, near Faros
108	*Sideritis cypria* Post	Keryneia cliff
109	*Silene dichotoma* subsp. *racemosa* (Otth) Hayek	Choletria
110	*Silene galataea* Boiss.	Cedar valley
111	*Solenopsis antiphonitis* Hadjik. & Hand	W of Akanthou
112	*Stipagrostis lanata* (Forssk.) de Winter	Episkopi Tunnel Beach
113	*Telephium imperati* subsp. *orientale* (Boiss.) Nyman	Madari
114	*Triplachne nitens* (Guss.) Link	Kato Pafos, near Faros
115	*Triplachne nitens* (Guss.) Link	Timi, near the Airport
116	*Triplachne nitens* (Guss.) Link	Episkopi bay
117	*Triplachne nitens* (Guss.) Link	Potamos Liopetriou
118	*Tulipa cypria* Stapf	Akamas
119	*Tulipa cypria* Stapf	Denia
120	*Tulipa cypria* Stapf	Near Agios Symeon
121	*Viburnum tinus* L. *subsp.* tinus*	Road from Loumata Forest station - Olympos peak Kantara Forest
All germplasm material collected is seeds except for: *type of germplasm collected is propagative material other than seeds		

Annex 3 – Germination results

Balearic Islands

Seedlot No.	Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/hours dark)	Germination (%)
170126	*Anthyllis vulneraria* L.	Non	Agar 0,6%	15ºC	8/16	12%
170220	*Aster tripolium* L.	Non	Agar 0,6%	18ºC	12/12	72%
180048	*Astragalus balearicus* Chater	Non	Agar 0,6%	18ºC	12/12	4%
170108	*Astragalus balearicus* Chater	Non	Agar 0,6%	18ºC	12/12	16%
170077	*Buxus balearica* Lam.	Scarification	Agar 0,6%	18ºC	12/12	47%
170041	*Cistus clusii* Dunal	Scalded	Agar 0,6%	18ºC	12/12	6%
170050	*Convolvulus valentinus* Cav.	Scalded	Agar 0,6%	18ºC	12/12	40%
170191	*Crithmum maritimum* L.	Non	Agar 0,6%	18ºC	12/12	88%
160051	*Crucianella maritima* L.	Imbibition 24 h H2O; bleach 1% 10 min	Agar 0,6%	10/20ºC	12/12	10%
170153	*Crucianella maritima* L.	Non	Agar 0,6%	15ºC	8/16	50%
170123	*Crucianella maritima* L.	Non	Agar 0,6%	15ºC	8/16	34%
170154	*Crucianella maritima* L.	Non	Agar 0,6%	18ºC	12/12	68%
170066	*Damasonium bourgaei* Coss.	Scarification	Agar 0,6%	18ºC	12/12	70%
170055	*Damasonium bourgaei* Coss.	Scarification	Agar 0,6%	18ºC	12/12	65%
170109	*Digitalis minor* L.	Non	Agar 0,6%	18ºC	12/12	88%
170096	*Digitalis minor* L.	Non	Agar 0,6%	18ºC	12/12	98%
170095	*Digitalis minor* L.	Non	Agar 0,6%	18ºC	12/12	88%
170084	*Digitalis minor* L.	Non	Agar 0,6%	18ºC	12/12	100%
170176	*Digitalis minor* L.	Non	Agar 0,6%	18ºC	12/12	92%
170069	*Digitalis minor* L.	Non	Agar 0,6%	18ºC	12/12	88%
170033	*Diplotaxis ibicensis* (Pau) Gómez Campo	Non	Agar 0,6%	18ºC	12/12	94%
170034	*Diplotaxis ibicensis* (Pau) Gómez Campo	Non	Agar 0,6%	18ºC	12/12	83%
170072	*Diplotaxis ibicensis* (Pau) Gomez-Campo	Non	Agar 0,6%	18ºC	12/12	46%
170033	*Diplotaxis ibicensis (Pau) Gómez Campo*	Non	Agar 0,6%	10/20ºC; 18ºC (23/05)	12/12	8%
170034	*Diplotaxis ibicensis* (Pau) Gómez Campo	Non	Agar 0,6%	10/20ºC; 18ºC (23/05)	12/12	11%
170094	*Dorycnium fulgurans* (Porta) Lassen	Scarification	Agar 0,6%	18ºC	12/12	74%
170094	*Dorycnium fulgurans (Porta) Lassen*	Scalded + 48h. imbibition	Agar 0,6%	18	12/12	35%
180034	*Elatine macropoda Guss*.	In water	Agar 0,6%	18ºC	12/12	75%
180035	*Elatine macropoda* Guss.	In water	Agar 0,6%	18ºC	12/12	88%
180036	*Elatine macropoda* Guss.	In water	Agar 0,6%	18ºC	12/12	80%
170047	*Euphorbia dracunculoides* Lam. subsp. *inconspicua* (Ball) Marie		Agar 0,6%	18ºC	12/12	29%
180045	*Euphorbia maresii* Knoche subsp. *maresii*	Non	Agar 0,6%	18ºC	12/12	20%
170085	*Euphorbia paralias* L.	Scarification	Agar 0,6%	18ºC	12/12	100%
170086	*Euphorbia paralias* L.	Scarification	Agar 0,6%	18ºC	12/12	94%
170127	*Euphorbia paralias* L.	Scarification	Agar 0,6%	18ºC	12/12	80%
170063	*Genista lucida* Cambess.	Scalded	Agar 0,6%	18ºC	12/12	66%
170049	*Genista lucida* Cambess.	Scalded	Agar 0,6%	18ºC	12/12	54%

Balearic Islands

Seedlot No.	Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/hours dark)	Germination (%)
170074	*Genista lucida* Cambess.	Scalded	Agar 0,6%	18ºC	12/12	82%
170068	*Genista lucida* Cambess.	Scalded	Agar 0,6%	18ºC	12/12	68%
170078	*Genista lucida* Cambess.	Scalded	Agar 0,6%	18ºC	12/12	57%
170122	*Genista valdes-bermejoi* Talavera & L. Sáez	Non	Agar 0,6%	18ºC	12/12	89%
170194	*Genista dorycnifolia* Font Quer	Scalded	Agar 0,6%	18ºC	12/12	92%
170056	*Helianthemum caput-felis* Boiss.	Scalded	Agar 0,6%	18ºC	12/12	16%
170057	*Helianthemum caput-felis* Boiss.	Scalded	Agar 0,6%	18ºC	12/12	16%
170039	*Helianthemum marifolium* subsp. *origanifolium* (Lam.) G.López	Scalded	Agar 0,6%	18ºC	12/12	84%
170165	*Helichrysum massanellanum* Herr.	Non	Agar 0,6%	18ºC	12/12	76%
170058	*Helichrysum stoechas* (L.) Moench	Non	Agar 0,6%	18ºC	12/12	84%
180029	*Helichrysum stoechas* (L.) Moench	Non	Agar 0,6%	18ºC	12/12	65%
170081	*Helichrysum stoechas* (L.) Moench	Non	Agar 0,6%	18ºC	12/12	65%
170064	*Helleborus lividus*	Non	Agar 0,6%	15ºC	8/16	74%
170184	*Hypericum hircinum* subsp. *cambessedesii*	Non	Agar 0,6%	18ºC	12/12	90%
160049	*Juniperus oxycedrus* subsp. *macrocarpa* (Sm.) Ball	Cold; 4ºC 8 weeks	Agar 1%	10/20ºC	12/12	13%
170035	*Lavatera maritima* Gouan.	Non	Agar 0,6%	10/20ºC; 18ºC (23/05)	12/12	43%
170044	*Lavatera maritima Gouan.*	Scarification	Agar 0,6%	18ºC	12/12	57%
170036	*Lavatera maritima* Gouan.	Imbibed 24 h	Agar 0,6%	18ºC	12/12	64%
170045	*Lavatera maritima* Gouan.	Scarification	Agar 0,6%	15ºC	8/16	60%
170204	*Limonium algarvense* Erben	Non	Agar 0,6%	18ºC	12/12	98%
170051	*Limonium pseudodyctiocladum* L. Llorens	Non	Agar 0,6%	18ºC	12/12	52%
170200	*Limonium wiedmannii* Erben	Non	Agar 0,6%	18ºC	12/12	96%
180037	*Linaria aeruginea* subsp. *pruinosa* (Sennen & Pau) Chater & Valdés	Non	Agar 0,6%	15ºC	8/16	22%
170166	*Lonicera pyrenaica* L. subsp. *majoricensis* (Gand.) Browicz	Cold; 4ºC 2 months	Agar 0,6%	18ºC	12/12	10%
180033	*Myosurus minimus* L.	Non	Agar 0,6%	18ºC	12/12	86%
160125	*Myrtus communis* L.	Imbibition 24 h H2O; bleach 1% 10 min	Agar 0,6%	10/20ºC	12/12	83%
170211	*Myrtus communis* L.	Non	Agar 0,6%	15ºC	8/16	81%
170216	*Myrtus communis* L.	Non	Agar 0,6%	15ºC	8/16	72%
170221	*Myrtus communis* L.	Non	Agar 0,6%	15ºC	8/16	74%
180050	*Ononis crispa* L.	Scarification	Agar 0,6%	18ºC	12/12	100%
170065	*Ononis zschackei* F.Herm.	Scalded	Agar 0,6%	18ºC	12/12	34%
180053	*Ononis zschackei* F.Herm.	Scarification	Agar 0,6%	18ºC	12/12	100%
170124	*Otanthus maritimus* L.	Non	Agar 0,6%	15ºC	8/16	22%
170042	*Pancratium maritimum* L.	Non	Agar 0,6%	18ºC	12/12	29%

Balearic Islands

Seedlot No.	Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/hours dark)	Germination (%)
170192	*Pancratium maritimum* L.	Non	Agar 0,6%	18ºC	12/12	74%
170203	*Pancratium maritimum* L.	Non	Agar 0,6%	18ºC	12/12	46%
170190	*Pancratium maritimum* L.	Non	Agar 0,6%	18ºC	12/12	38%
170087	*Pimpinella bicknellii* Briq.	Non	Agar 0,6%	15ºC	8/16	64%
170080	*Primula acaulis (*L.) L. subsp. *balearica* (Willk.) Greuter & Burdet	Non	Agar 0,6%	18	12/12	90%
170209	*Primula vulgaris* subsp. *balearica* (Willk.) W.W.Sm. & Forrest	Non	Agar 0,6%	18ºC	12/12	96%
170167	*Primula vulgaris* subsp. *balearica* (Willk.) W.W.Sm. & Forrest	Non	Agar 0,6%	18ºC	12/12	83%
180046	*Primula vulgaris* subsp. *balearica* (Willk.) W.W.Sm. & Forrest	Non	Agar 0,6%	15ºC	8/16	92%
170222	*Ranunculus bullatus* L.	Non	Agar 0,6%	15ºC	8/16	95%
180044	*Ranunculus weyleri* Marès	Non	Agar 0,6%	18ºC	12/12	64%
180032	*Rhamnus alaternus* L.	Scarification	Agar 0,6%	15ºC	8/16	48%
180043	*Rhamnus ludovici-salvatoris* Chodat	Scarification	Agar 0,6%	15ºC	8/16	8%
170040	*Silene sericea* All.	Non	Agar 0,6%	18ºC	12/12	100%
170158	*Soleirolia soleirolii (*Req.) Dandy	Non	Agar 0,6%	15ºC	8/16	98%
170071	*Soleirolia soleirolii* (Req.) Dandy	Non	Agar 0,6%	15ºC	8/16	100%
170174	*Teucrium asiaticum* L.	Scalded	Agar 0,6%	18ºC	12/12	48%
180047	*Teucrium asiaticum* L.	Non	Agar 0,6%	18ºC	12/12	32%
180056	*Teucrium balearicum* (Coss. ex Pau) Castrov. & Bayon	Non	Agar 0,6%	18ºC	12/12	68%
170155	*Teucrium capitatum* subsp. *majoricum* (Rouy) Nyman	Non	Agar 0,6%	15ºC	8/16	43%
170195	*Teucrium capitatum* subsp. *majoricum* (Rouy) Nyman	Non	Agar 0,6%	18ºC	12/12	48%
170106	*Teucrium capitatum* subsp. *majoricum* (Rouy) Nyman	Non	Agar 0,6%	18ºC	12/12	32%
170125	*Teucrium capitatum* subsp. *majoricum (*Rouy) Nyman	Non	Agar 0,6%	18ºC	12/12	12%
170115	*Teucrium balearicum* (Coss. ex Pau) Castrov. & Bayon	Scalded	Agar 0,6%	18ºC	12/12	40%
170116	*Urtica bianorii* (Knoche) Paira	Non	Agar 0,6%	18ºC	12/12	92%
170157	*Urtica bianorii (*Knoche) Paira	Non	Agar 0,6%	18ºC	12/12	32%
170089	*Viola jaubertiana* Marès & Vigin.	Scarification + 4ºC 4 weeks	Agar 1% + GA3 (250 mg/L)	10/20ºC	12/12	47%
170090	*Viola jaubertiana* Marès & Vigin.	Scarification + 4ºC 4 weeks	Agar 1% + GA3 (250 mg/L)	10/20ºC	12/12	29%
170091	*Viola jaubertiana* Marès & Vigin.	Scarification + 4ºC 4 weeks	Agar 1% + GA3 (250 mg/L)	10/20ºC	12/12	27%
170052	*Vitex agnus-castus* L.	Scarification	Agar 0,6%	18ºC	12/12	67%
170183	*Vitex agnus-castus* L.	Scarification	Agar 0,6%	18ºC	12/12	32%
170185	*Vitex agnus-castus* L.	Scarification	Agar 0,6%	18ºC	12/12	48%

Corsica

Taxon (local checklist)	Population	Collection date	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/hours dark)	Germination (%)
Aconitum napellus L. subsp. *corsicum* (Gáyer) W. Seitz	Cuscione, Zicavo	12/09/2016	_	germination paper	10°C/15°C/15°C-20°C	_/_/ 12/12	0%
Anchusa crispa Viv.	Cannella, Sari-Solenzara	24/05/2016	_	germination paper	15°C	_	46
Anchusa crispa Viv.	Portigliolu, Propriano	23/05/2016	_	germination paper	15°C	_	16
Anchusa undulata L.	Nord du port, Porto-vecchio	17/05/2017	_	germination paper	10°C	_	2
Anthyllis barba-jovis L.	Petit Sperone, Bonifacio	14/07/16	scarification	germination paper	15°C	_	62%
Aquilegia bernardii Gren. & Godr.	Restonica, Corte	08/08/2017	gibberillic acid	germination paper	25°C	_	52%
Aquilegia litardierei Briq.	Ruisseau d'Asinao (Solaro)	01/08/2018	_	agar		_	0%
Armeria pungens (Link) Hoffmanns. & Link	Dune de Petit Sperone, Bonifacio	14/07/16	_	germination paper	10°C, 15°C, 20°C	_, _ ,12/12	100%, 96%, 98%
Armeria soleirolii (Duby) Godr.	Port de Galeria, Galeria	22/08/2017	_	germination paper	20°C	12/12	90%
Astragalus genargenteus Moris var. *greuteri* (*Bacch.&Brullo)* Gamisans	Bocca à a Croce - Arinella, Casamaccioli	02/08/2017	scarification with glass paper	germination paper	15°C	_	60%
Bellevalia romana (L.) Rchb.	Embranchement de Conca - Favona / Conca	17/05/2017	_	agar	10°C	_	50%
Biscutella rotgesii Foucaud	Défilé de l'Inzecca, Ghisonaccia - Ghisoni	16/06/2017	_	agar	15°C/20°C	_	72%/64%
Biscutella rotgesii Foucaud	Sortie Nord de Ponte Leccia direction Bastia (Morosaglia)	19/06/2018	_	agar	15°C/20°C	_	54%/52%
Brassica insularis Moris	Punta Calcina, Conca	06/06/2017	_	germination paper	10°C	_	72%
Centranthus trinervis (Viv.) Bég.	Trinité, Bonifacio	16/06/2016	_	germination paper	10°C - 15°C	_	18% / 16%
Centranthus trinervis (Viv.) Bég.	Trinité (Bonifacio)	18/06/2018	_	agar	10°C, 15°C, 20°C, 25°C/10°C	–	86,2%/84%/ 72%/96,5%

Corsica

Taxon (local checklist)	Population	Collection date	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/hours dark)	Germination (%)
Cerinthe major L.	Descente du grain de sable, Bonifacio	17/05/2017	_	agar	15°C	_	34%
Cerinthe tenuiflora Bertol.	Arja di Stefanu (Zicavo)	27/06/2018	_	agar	10/15/20°C	_	0%
Cyanus segetum Hill	Olmi Capella	8/8/2018	_	agar	15°C/20°C	_	8%/16%
Dianthus gyspergerae Rouy	Roches bleues (Pinia)	05/07/2018	_	agar	15°C	_	90%
Doronicum corsicum (Loisel.) Poir.	Pont de Sellola, Bocognano	15/09/2017	_	germination paper	15°C	_	26%
*Erodium corsicum*Léman	Pertusatu (Bonifacio)	04/06/2018	_	agar	10°C/15°C	_	90%/86%
Eryngium pusillum L.			_	agar	20°C	_	30%
Ferula arrigonii Bocchieri	Cimetière marin, Bonifacio	28/06/2017	_	agar	15°C	_	56%
Genista aetnensis (Biv.) DC.	Etang de Palo, Solaro	6/9/2016	Scarification with scalpel	germination paper	15°C	_	100%
Genista ephedroides DC = *Genista thyrrhena* Vals. subsp. *pontiana* Brullo & de Marco	Mezzu Mare (Sanguinaires), Ajaccio	01/08/2017	imbibed in ethanol for 24h	germination paper	20°C	12/12	58%
Globularia bisnagarica L.	Chioso vescovo (st. épur), Saint florent	11/07/2017	_	agar	20°C	_	80%
Helicodiceros muscivorus (L. f.) Engl.	Mezzu Mare (Sanguinaires), Ajaccio	01/08/2017	imbibed in ethanol for 24h	germination paper	10°C, 15°C, 20°C, 25°C, 30°C	–	0%
Kosteletzkya pentacarpos (L.) Ledeb.	Etang de Gradugine, Serra di Fium'orbu	21/09/2017	_	agar	15°C	_	42%
Leucojum aestivum L. subsp. *pulchellum* (Salisb.) Briq.	Pont d'arena, Tallone	04/05/2017	_	agar	15°C	_	40%
Morisia monanthos (Viv.) Asch. (=M.hypogaea J.Gay)	Bergerie de Liou, Barretali	11/07/2017	_	agar	15°C	_	32%

Corsica

Taxon (local checklist)	Population	Collection date	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/hours dark)	Germination (%)
Morisia monanthos (Viv.) Asch.	Bonifacio	03/07/2018	_	agar	10°C/20°C	_	54%/40%
Nerium oleander L.	Luri	8/3/2018	_	germination paper	20°C, 25°C, 30°C	12/12,_,_	100%
Nigella damascena L.	Saint florent	26/06/2018	_	agar	20°C	_	4%
Paeonia corsica Tausch	Casa Pitti, Valle di Rustinu	24/8/2017	Stratification	germination paper	10°C, 15°C, 20°C	_	2%
Paeonia mascula (L.) Mill. subsp. *mascula*	Forêt de Padula, Rospigliani	23/8/2017	Stratification	germination paper	10°C, 15°C, 20°C	_	0%
Paeonia morisii Cesca, Bernardo & Passalacqua	Monte Grofiglieta, Meria	3/8/2017	Stratification	germination paper	10°C, 15°C, 20°C	_	0%
Pancratium illyricum L.	Restonica, Corte	04/08/2017	_	germination paper	25°C	_	2%
Peucedanum paniculatum Loisel	Forêt de Padula, Rospigliani	13/09/2017	_	germination paper	20°C	12/12	4%
Pimpinella lutea Desf.	Ogliastriccione (Favone Nord), Conca	25/10/2017	_	agar	15°C	_	16%
Plagius flosculosus (L.) Alavi & Heywood	Baracci, Olmeto	20/08/2017	_	agar	15°C	_	86%
*Ranunculus sylviae*Gamisans	Cuscione, Zicavo	22/07/2016	_	germination paper	15°C/20°C	12/12	66%
Romulea ligustica Parl.			_	agar	15°C	_	46%
Rouya polygama (Desf.) Coincy	Porto-vecchio	19/10/2016	_	germination paper	15°C	_	48
Santolina corsica Jord. & Fourr.	Col de San Quilico (Porni), Soveria	5/9/2016	_	germination paper	20°C	12/12	82%
Seseli praecox (Gamisans) Gamisans	Port de Galeria, Galeria	22/08/2017	_	agar	15°C	_	50%
Silene velutina Loisel	Acciaju, Porto-vecchio	09/09/2016		germination paper	20°C	_	100%
Stachys maritima Gouan.	Plage port de Taverna, Valle di Campoloro	18/08/2017	_	agar	10°C, 15°C, 20°C	_	0%
Teucrium fruticans L.	Cala di stentinu, Bonifacio	28/06/2017	_	agar	20°C	_	4%
Viola corsica Nyman	Chapelle Saint Jean (Siscu)	18/7/2018	_	agar		_	0%

Sardinia

Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light /hours dark)	Germination (%)
Anchusa crispa Viv. subsp. *crispa*	None and Scarification	1% agar	25/10°C	12/12	None = 20%. Scarification = 95%
Aquilegia cremnophila Bacch., Brullo, Congiu, Fenu, J. Garrido *et* Mattana	Cold stratification (2 months at 5°C)	1% agar	25°C	12/12	50%
Berberis vulgaris L. subsp. *aetnensis* (C.Presl) Rouy *et* Foucaud	None	1% agar	15°C	12/12	2%
Brassica insularis Moris	None	1% agar	5°C	12/12	55%
Dianthus morisianus Vals.	None	1% agar	15°C	12/12	85%
Digitalis purpurea L. var. *gyspergerae* (Rouy) Fiori	None	1% agar	20°C	12/12	98%
Ferula arrigonii Bocchieri	None	1% agar	10°C	12/12	60%
Gentiana lutea L. subsp. *lutea*	Cold stratification (3 months at 0°C)	1% agar	15°C	12/12	98%
Gentiana lutea L. subsp. *lutea*	None and Gibberellic Acid (GA_3 250 mg/L)	1% agar and 1% agar + GA_3	10, 15 and 20°C	12/12	None = 0% at 10 and 15°C; 1% at 20°C. Gibberellic Acid = 97% at 10°C, 85% at 15°C and 76% at 20°C
Halopeplis amplexicaulis (Vahl) Ces., Pass. & Gibelli	None	1% agar	25/10°C	12/12	88%
Lavatera triloba L. subsp. *pallescens* (Moris) Nyman	None	1% agar	15°C	12/12	88%
Lavatera triloba L. subsp. *triloba*	None	1% agar	20°C	12/12	82%
Nepeta foliosa Moris	None	1% agar	25°C	12/12	65%
Paeonia corsica Sieber *ex* Tausch	Warming (3 months 25°C)	1% agar	15°C	12/12	60%
Paeonia corsica Sieber *ex* Tausch	Gibberellic Acid (GA_3 250 mg/L)	1% agar + GA_3	15°C	12/12	56%
Pinguicula sehuensis Bacch., Cannas *et* Peruzzi	None	1% agar	5°C	12/12	60%
Rhamnus persicifolia Moris	Cold stratification (3 months at 5°C)	1% agar	20°C	12/12	80%
Ribes sardoum Martelli	Warm stratification (3 months at 25°C)	1% agar	15°C	12/12	60%
Ribes sardoum Martelli	None	1% agar	20°C	12/12	65%
Ruta lamarmorae Bacch., Brullo *et* Giusso del Galdo	Gibberellic Acid (GA_3 250 mg/L)	1% agar + GA_3	10°C	12/12	66%
Santolina insularis (Gennari *et* Fiori) Arrigoni	None and Warm stratification (3 months at 25°C)	1% agar	10, 15 and 20°C	12/12	None = 78% at 10, 79% at 15°C and 98% at 20°C. Warm stratification= 57% at 10°C, 62% at 15°C and 50% at 20°C
Senecio morisii J.Calvo *et* Bacch.	None	1% agar	30°C	12/12	45%
Verbascum plantagineum Moris	None	1% agar	25/10°C	12/12	92%

Sicily

Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/dark)	Germination (%)
Adenocarpus bivonii (C.Presl) C.Presl	None	1% agar	5,10,15,20,25°C	12/12	100%
Aethionema saxatile (L.) R. Br.	none	1% agar	15,20°C	12/12	100%
Andryala cossyrensis Guss.	none	1% agar	25°C	12/12	93,3%
Anthemis aetnensis Spreng.	none	1% agar	15 °C	12/12	33,3 %
Anthemis aetnensis Spreng.	none	filter paper with PEG		12/12	
Anthemis aetnensis Spreng.	none	1% agar at various pH		12/12	
Anthemis aetnensis Spreng.	none	1% agar at various pH + KNO3		12/12	
Anthemis aetnensis Spreng.	none	1% agar		12/12	
Anthemis cupaniana Nyman	none	1% agar	20 °C	12/12	13,3 %
Anthemis cupaniana Nyman	none	filter paper with PEG		12/12	
Anthemis cupaniana Nyman	none	1% agar at various pH		12/12	
Anthemis cupaniana Nyman	none	1% agar at various pH + KNO3		12/12	
Anthemis cupaniana Nyman	none	1% agar		12/12	
Anthemis intermedia Guss.	none	1% agar	25°C	12/12	95%
Astragalus raphaelis G. Ferro	scarification	1% agar	25°C	12/12	80%
Astragalus raphaelis G. Ferro	none	1% agar	10°C	12/12	10%
Astragalus raphaelis G. Ferro	scarification	1% agar	5,10,15,20,25,30°C	12/12	100%
Astragalus siculus Biv.	scarification	volcanic soil	20/10 °C	12/12	100%
Astragalus siculus Biv.	scarification	volcanic soil	20/10 °C	12/12	100%
Aubrieta deltoidea (L.) DC. ssp. *sicula* (Strobl) Phitos	none	1% agar	15°C	12/12	86,6%
Berberis aetnensis C.Presl	90 days 5°C	filter paper with PEG		12/12	
Berberis aetnensis C.Presl	90 days 5°C	1% agar at various pH		12/12	
Berberis aetnensis C.Presl	90 days 5°C	1% agar at various pH + KNO3		12/12	
Berberis aetnensis C.Presl	90 days 5°C	1% agar		12/12	
Berberis aetnensis C.Presl	90 days 5°C	filter paper with PEG		12/12	
Berberis aetnensis C.Presl	90 days 5°C	1% agar at various pH		12/12	
Berberis aetnensis C.Presl	90 days 5°C	1% agar at various pH + KNO3		12/12	
Berberis aetnensis C.Presl	90 days 5°C	1% agar		12/12	
Berberis aetnensis C.Presl	none	1% agar		12/12	

Sicily

Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/dark)	Germination (%)
Berberis aetnensis C.Presl	30 days 5°C	1% agar		12/12	
Berberis aetnensis C.Presl	60 days 5 °C	1% agar		12/12	
Berberis aetnensis C.Presl	90 days 5°C	1% agar		12/12	
Berberis aetnensis C.Presl	none	1% agar + GA3		12/12	
Betula aetnensis Raf.	none	volcanic soil	NA	12/12	0%
Betula aetnensis Raf.	none	1% agar	25°C	12/12	98,8%
Betula aetnensis Raf.	none	volcanic soil	25°C	12/12	100%
Betula aetnensis Raf.	none	1% agar	25/15 °C, 25C°	12/12	100%
Betula aetnensis Raf.	60 days 5°C	1% agar	30°C	12/12	100%
Betula aetnensis Raf.	none	1% agar	20°C	12/12	94,87%
Betula aetnensis Raf.	60 days 5°C	1% agar	30°C	12/12	100%
Betula aetnensis Raf.	none	1% agar	25°Cc	12/12	100%
Betula aetnensis Raf.	Cold stratification (3 months at 5°C)	1% agar	25/30°C	8/16	
Betula pendula var. *fontqueri* (Rothm.) G. Moreno & Peinado	none	1% agar	30°C	12/12	100%
Betula pendula var. *fontqueri* (Rothm.) G. Moreno & Peinado	60 days 5°C	1% agar	30°C	12/12	100%
Betula pendula Roth	none	1% agar	30°C	12/12	100%
Betula pendula Roth	none	1% agar	30°C	12/12	82,94%
Betula pendula Roth	none	1% agar	25°C	12/12	100%
Betula pendula Roth	none	1% agar	25°C	12/12	98,75%
Betula pendula Roth	none	1% agar	30°C	12/12	100%
Betula pendula Roth	60 days 5°C	1% agar	25°C	12/12	100%
Betula pendula Roth	60 days 5°C	1% agar	20,25,30°C	12/12	100%
Betula pendula Roth	60 days 5°C	1% agar	25°C	12/12	100%
Betula pendula Roth	60 days 5°C	1% agar	30°C	12/12	100%
Betula pendula Roth	60 days 5°C	1% agar	30°C	12/12	100%
Brassica villosa Biv. subsp. *brevisiliqua* (Raimondo & Mazzola) Raimondo & Geraci	none	1% agar	15,25°C	12/12	66,7%
Cerastium tomentosum L.	none	1% agar	15,20°C	16/8	95%
Cerastium tomentosum L.	none	filter paper with PEG		12/12	
Cerastium tomentosum L.	none	1% agar at various pH		12/12	
Cerastium tomentosum L.	none	1% agar at various pH + KNO3		12/12	
Cerastium tomentosum L.	none	1% agar		12/12	
Cerastium tomentosum L.	none	filter paper with PEG		12/12	

Sicily

Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/dark)	Germination (%)
Cerastium tomentosum L.	none	1% agar at various pH		12/12	
Cerastium tomentosum L.	none	1% agar at various pH + KNO3		12/12	
Cerastium tomentosum L.	none	1% agar		12/12	
Dianthus rupicola Biv. subsp. *aeolicus* (Lojac.) Brullo & Minissale	none	1% agar	5,10°C	12/12	95%
Dianthus rupicola Biv. subsp. *rupicola*	none	1% agar	10°C	12/12	95%
Erucastrum virgatum (J. & C. Presl) C. Presl	None	1% agar	25°C	12/12	90%
Erysimum bonannianum C.Presl	none	filter paper with PEG		12/12	
Erysimum bonannianum C.Presl	none	1% agar at various pH		12/12	
Erysimum bonannianum C.Presl	none	1% agar at various pH + KNO3		12/12	
Erysimum bonannianum C.Presl	none	1% agar		12/12	
Erysimum brulloi G. Ferro	none	1% agar	20°C	12/12	91,6%
Erysimum etnense Jordan	none	1% agar	20°C	16/8	95%
Erysimum etnense Jord.	none	volcanic soil	20/10 °C	12/12	96%
Erysimum etnense Jord.	none	volcanic soil	20/10 °C	12/12	98%
Erysimum etnense Jord.	none	volcanic soil	20/10 °C	12/12	97%
Erysimum etnense Jord.	none	filter paper with PEG		12/12	
Erysimum etnense Jord.	none	1% agar at various pH		12/12	
Erysimum etnense Jord.	none	1% agar at various pH + KNO3		12/12	
Erysimum etnense Jord.	none	1% agar		12/12	
Genista demarcoi Brullo, Scelsi & Siracusa	none	1% agar	25°C	16/8	76,7%
Helichrysum stoechas (L.) Moench	none	1% agar	20°C	12/12	88,3%
Launaea fragilis (Asso) Pau	none	1% agar	25°C	12/12	85%
Leontodon muelleri (Sch. Bip.) Fiori	none	1% agar	10,15°C	12/12	91,6%
Lomelosia cretica (L.) Greuter & Burdet	none	1% agar	15,20°C	12/12	93,3%
Origanum onites L.	none	1% agar	15, 20°C	12/12	65%
Phlomis fruticosa L.	none	1% agar	25°C	12/12	73,3%
Plantago afra L. subsp. *zwierleinii* (Nicotra) Brullo	none	1% agar	15°C	12/12	100%
Pulicaria sicula (L.) Moris	none	1% agar	15°C	12/12	86,6%

Sicily

Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/dark)	Germination (%)
Rumex aetnensis C.Presl	none	volcanic soil	20/10 °C	12/12	52%
Rumex aetnensis C.Presl	none	volcanic soil	20/10 °C	12/12	93%
Rumex scutatus L. subsp. *glaucescens* (Guss.) Brullo, Scelsi & Spamp.	none	1% agar	25°C	12/12	95%
Salsola oppositifolia Desf.	none	1% agar	10,20°C	12/12	95%
Saponaria sicula Raf.	none	1% agar	15°C	12/12	36,7%
Saponaria sicula Raf.	60 days 5°C	volcanic soil	20/10 °C	12/12	0%
Saponaria sicula Raf.	60 days 5°C	volcanic soil	20/10 °C	12/12	0%
Scorzonera villosa Scop.	none	1% agar	15°C	12/12	95%
Senecio aethnensis Jan ex DC.	None	1% agar	15°C	16/8	13,3%
Silene colorata Poir.	none	1% agar	15°C	12/12	90%
Silene fruticosa L.	none	1% agar	10,15,20°C	12/12	100%
Silene hicesiae Brullo & Signorello	none	1% agar	10°C	12/12	98,3%
Silene nicaeensis All. var. *perennis* Maire	none	1% agar	25°C	12/12	100%
Silene sicula Ucria	none	1% agar	20°C	12/12	95%
Silene sicula Ucria	none	volcanic soil	20/10 °C	12/12	100%
Silene sicula Ucria	none	volcanic soil	20/10 °C	12/12	100%
Silene sicula Ucria	none	volcanic soil	20/10 °C	12/12	100%
Sisymbrella dentata (L.) O.E.Schulz	none	1% agar	25°C	12/12	40%
Sisymbrium erysimoides Desf.	none	1% agar	30°C	12/12	100%
Stipa gussonei Moraldo	none	1% agar	15°C	12/12	85%
Tanacetum siculum (Guss.) Strobl	None	1% agar	25°C	12/12	81,7%
Tripolium pannonicum (Jacq.) Dobrocz.	none	1% agar	5°C	12/12	78,3%
Tripolium pannonicum (Jacq.) Dobrocz.	none	1% agar	15, 20°C	12/12	
Urtica rupestris Guss.	none	1% agar	15,20,25°C	12/12	35%

Crete

Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light /hours dark)	Germination (%)
Alyssum baldaccii Vierh. ex E.I.Nyár.	none	1% agar			92%
Androcymbium rechingeri Greuter	none	1% agar			50%
Androcymbium rechingeri Greuter	Scarification with sand paper	1% agar			80%

Crete

Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light /hours dark)	Germination (%)
Artemisia inculta Delile	none	1% agar			84%
Bellevalia brevipedicellata Turrill	none	1% agar			100%
Bolanthus creutzburgii Greuter subsp. *zaffranii* Phitos & al.	none	1% agar			100%
Campanula laciniata L.	none	1% agar			100%
Campanula saxatilis L. subsp. *saxatilis*	none	1% agar			99%
Centaurea argentea L. subsp. *chionantha* (Turland & L. Chilton) Greuter	none	1% agar			100%
Centaurea poculatoris Greuter	none	1% agar			100%
Chaerophyllum creticum Boiss. & Heldr.	none	1% agar			80%
Cynara cyrenaica Maire & Weiller	none	1% agar			100%
Datisca cannabina L.	none	1% agar			100%
Datisca cannabina L.	none	1% agar			100%
Dianthus xylorrhizus Boiss. & Heldr.	none	1% agar			100%
Helichrysum heldreichii Boiss.	none	1% agar			100%
Horstrissea dolinicola Greuter & al.	none	1% agar			80%
Hypericum jovis Greuter	none	1% agar			82%
Leontice leontopetalum L. subsp. *leontopetalum*	none	1% agar			100%
Limonium calliopsium A. Mayer	none	1% agar			40%
Limonium creticum R. Artelari	none	1% agar			100%
Limonium elaphonisicum A. Mayer	none	1% agar			100%
Micromeria sphaciotica Boiss. & Heldr. ex Benth.	none	1% agar			100%
Moluccella spinosa L.	none	1% agar			100%
Myosotis solange Greuter & Zaffran	none	1% agar			100%
Nepeta sphaciotica P.H. Davis	none	1% agar			100%
Origanum dictamnus L.	none	1% agar			100%
Phoenix theophrasti Greuter	none	1% agar			95%
Phoenix theophrasti Greuter	none	1% agar			100%
Phoenix theophrasti Greuter	none	1% agar			100%
Prospero depressum Speta	none	1% agar			100%
Prospero idaeum Speta	none	1% agar			100%
Prospero minimum Speta	none	1% agar			100%
Prospero rhadamanthi Speta	none	1% agar			100%
Ranunculus veronicae N. Böhling	none	1% agar			100%
Reseda minoica Martín-Bravo & Jiménez-Mejías	none	1% agar			5%
Sesleria doerfleri Hayek	none	1% agar			100%
Sibthorpia europaea L.	none	1% agar			100%
Silene succulenta Forssk.	none	1% agar			100%
Silene succulenta Forssk.	none	1% agar			80%
Teucrium cuneifolium Sm.	none	1% agar			95%
Viola scorpiuroides Coss.	none	1% agar			76%

Cyprus

Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/ hours dark)	Germination (%)
Achillea cretica L.		1% agar	20°C	8/16	97%
Acinos troodi (Post) Leblebici subsp. *troodi*	Cold stratification in water (3 days at 4°C), Scarification	1% agar + GA3	25/10°C	8/16	30%
Agrimonia eupatoria L.	Scarification	1% agar + GA3	20°C	8/16	4%
Allium autumnale P. H. Davis		1% agar + GA4	15°C	Dark	100%
Allium cyprium Brullo et al. *subsp. cyprium*		1% agar	15°C	Dark	100%
Allium exaltatum (Meikle) Brullo, Pavone, Salmeri & Venora		1% agar + GA3	15°C	Dark	67%
Allium guttatum Steven subsp. *guttatum*		1% agar	20°C	8/16	65%
Allium marathasicum Brullo, Pavone & Salmeri		1% agar + GA3	15°C	8/16	100%
Alyssum troodi Boiss.		1% agar	20°C	8/16	53%
Ammophila arenaria (L.) Link	Scarification	1% agar + GA3	20°C	8/16	58%
Anthemis tomentosa L.	Scarification	1% agar	20°C	8/16	65%
Arrhenatherum album subsp. *cypricola* H. Scholz		1% agar	20°C	8/16	95%
Arum rupicola Boiss.		1% agar + GA3	10°C	Dark	0%
Astragalus macrocarpus subsp. *lefkarensis* Kirchhoff & Meikle	Scarification	1% agar	20°C	0/24	96%
Astragalus suberosus Banks & Sol.	Scarification	1% agar	20°C	0/24	100%
Brassica hilarionis Post		1% agar	20°C	8/16	89%
Campanula podocarpa Boiss.		1% agar + GA3	15°C	Dark	76%
Chaenorhinum rubrifolium (DC.) Fourr.	Scarification + heat shock	1% agar + GA3	20°C	8/16	94%
Crambe hispanica L.		1% agar + GA3	20°C	8/16	100%
Crepis pusilla (Sommier) Merxm.		1% agar	15°C	8/16	97%
Crocus cyprius Boiss. & Kotschy	Heat shock, scarification	1% agar + GA3	15°C	Dark	0%
Crocus hartmannianus Holmboe	Scarification	1% agar + GA3	20°C	Dark	2%
Crypsis hadjikyriakou Raus & H. Scholz		1% agar	25°C/10°C	8/16	74%
Cyclamen graecum subsp. *anatolicum* Ietsw.		1% agar + GA3	30°C	Dark	6%
Cynanchum acutum L.		1% agar	20°C	8/16	52%
Cynara makrisii Hand & Hadjik.		1% agar	20°C	8/16	74%
Cynoglossum troodi H.Lindb.	Scarification	1% agar + GA4	20°C	Dark	35%
Datisca cannabina L.		1% agar + GA3	20°C	8/16	80%
Dianthus tripunctatus Sm.		1% agar	20°C	8/16	99%
Dichoropetalum kyriakae (Hadjik. & Alziar) Hand & Hadjik.	Cold stratification in water (10 days at 4°C)	1% agar	20°C	8/16	42%
Echium judaeum Lacaita	Scarification	1% agar + GA3	20°C	8/16	70%
Enarthrocarpus arcuatus Labill.		Filter paper	20°C	8/16	58%
Erica manipuliflora Salisb.		1% agar + GA3	15°C	Dark	22%
Euphorbia aleppica L.	Scarification	1% agar + GA3	20°C	8/16	36%

Cyprus

Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/ hours dark)	Germination (%)
Euphorbia paralias L.	Scarification	1% agar + GA3	20°C	8/16	90%
Ferula cypria Post		Pleated paper	15°C	Dark	83%
Filago mareotica Delile		1% agar	15°C	8/16	93%
Galium tenuissimum M.Bieb.		1% agar + GA3	20°C	8/16	98%
Geum urbanum L.		1% agar	15°C	8/16	97%
Gundelia tournefortii L.		Sand	20°C	8/16	98%
Haplophyllum buxbaumii (Poir.) G. Don	Scarification	1% agar + GA3	20°C	8/16	10%
Hedysarum cyprium Boiss.		1% agar	20°C	8/16	94%
Hypecoum pendulum L.	Scarification	1% agar + GA3	20°C	8/16	50%
Hypericum hircinum L.		1% agar	15°C	8/16	70%
Hypericum lanuginosum Lam.		1% agar	20°C	8/16	82%
Hypericum perfoliatum L.		1% agar + GA3	20°C	8/16	92%
Ifloga spicata (Forssk.) Sch. Bip.		1% agar	15°C	8/16	44%
Lactuca undulata Ledeb.		1% agar	20°C	8/16	60%
Limonium mucronulatum (H. Lindb.) Greuter & Burdet		1% agar	15°C	8/16	88%
Lotus cytisoides L.		1% agar	15°C	8/16	90%
Malvella sherardiana (L.) Jaub. & Spach	Scarification	1% agar + GA3	15°C	Dark	4%
Maresia nana var. *glabra* (Meikle) Christodoulou & Hand		1% agar + GA3	20°C	8/16	86%
Nepeta troodi Holmboe	Cold stratification in water (3 days at 4°C), Scarification	1% agar + GA3	15°C	8/16	8%
Neurada procumbens L.		Sand	20°C	8/16	100%
Nigella ciliaris DC.		1% agar + GA3	20°C	8/16	82%
Ochthodium aegyptiacum (L.) DC.	Scarification	Pleated paper	20°C	8/16	12%
Onosma gigantea Lam.		1% agar + GA3	20°C	8/16	18%
Peganum harmala L.		1% agar	20°C	8/16	89%
Pimpinella cypria Boiss.	Scarification	1% agar + GA3	20°C	8/16	86%
Pinguicula crystallina Sm.		1% agar	15°C	8/16	62%
Pisum fulvum Sm.	Scarification	In water (2 days)	15°C	8/16	67%
Potentilla recta L.		1% agar	15°C	8/16	55%
Ranunculus rumelicus Griseb.		1% agar	30°C	8/16	0%
Salvia hierosolymitana Boiss.	Scarification	1% agar + GA3	15°C	8/16	60%
Salvia veneris Hedge	Scarification	1% agar + GA3	15°C	8/16	6%
Saponaria orientalis L.		1% agar	20°C	8/16	86%
Saponaria cypria Boiss.	Scarification	1% agar	20°C	Dark	42%
Satureja thymbra L.		1% agar + GA3	20°C	8/16	66%
Scilla lochiae (Meikle) Speta		1% agar + GA3	10°C	Dark	49%
Securigera cretica (L.) Lassen	Scarification	1% agar	20°C	12/12	100%

Cyprus

Taxon (local checklist)	Pre-treatment	Substrate	Optimum germination temperaure	Photoperiod (hours light/ hours dark)	Germination (%)
Senecio glaucus subsp. *cyprius* Meikle		1% agar	15°C	12/12	80%
Sideritis cypria Post		1% agar + GA3	15°C	Dark	40%
Silene dichotoma subsp. *racemosa* (Otth) Hayek		1% agar	15°C	8/16	99%
Silene galataea Boiss.		1% agar	15°C	8/16	62%
Solenopsis antiphonitis Hadjik. & Hand		1% agar + GA3	30°C	Dark	82%
Stipagrostis lanata (Forssk.) de Winter		1% agar + GA3	20°C	8/16	90%
Telephium imperati subsp. *orientale* (Boiss.) Nyman	Scarification	1% agar + GA3	15°C	8/16	59%
Triplachne nitens (Guss.) Link		1% agar + GA3	25°C/15°C	8/16	98%
Tulipa cypria Stapf		1% agar	15°C	0/24	66%

Annex 4 – *Ex situ* actions: seed banking and plant production

Balearic Islands – seed banking

In Balearic Isan amount of 133 accessions has been collected and stored at long term conditions (-18^{o}C) at the BGVIB (Soller Botanic Garden Germplasm Bank of Balearic Islands flora). Part of them has been duplicated at two seed banks of REDBAG (Spanish Network of Germplasm Banks for wild plants and native phytoremediates), the seed bank of Barcelona Botanical Garden and the seed bank of Valencia Botanical Garden.

The viability test of all the accessions collected has been done in two ways: a germination test in glass Petri dishes with 0,6% *agar-agar* and controlled conditions of humidity and temperature, for the accessions with enough amount of seeds (more than 3000 units) and a Tetrazolium test for the accessions with poor number of seeds or as well for the accessions with germination difficulties.

Part of the plants obtained in the germination test has been used in the *in-situ* actions for the recovery plans and as well for the Living Plant Collection in Soller Botanic Garden.

Closed tubes with seeds for the Seed Bank

Volunteers cleaning seeds

Seed collection for *Convolvulus valentinus* & *Helichrysum massanellanum*

Seed collection for *Viola jaubertiana*

Balearic Islands – plant production

The plant production, as a part of *ex-situ* actions in the project, has been done in the Soller Botanic Garden nursery. The methodology has been useful to stablish propagation protocols for many endangered and/or rare species. The most difficult protocol which has been started to study has been the one for *Isoetes* species which is still running with some success but more time is needed to improve it.


Germination root trainers & *Viola jaubertiana* living plant collection


Living plant collection nursery

Corsica– seed banking

During CARE-MEDIFLORA program, 104 lots of seeds were collected which represents a total of 57 taxa.

The selection of taxa was based on the following criteria (Figure 1):

- RL: Regional Red List (EN or CR);
- RR: Regional Responsibility;
- HD: Appendices I and IV of the Habitats Directives;
- WP: Wetland plants.

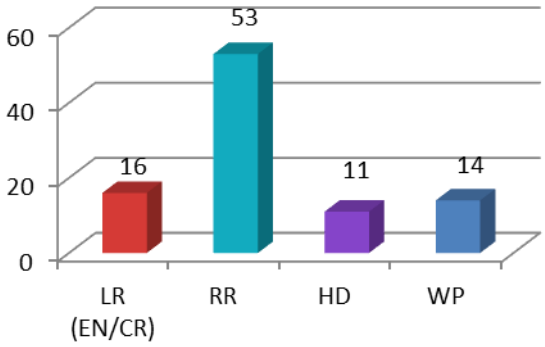


Figure 1. Taxa numbers by selected criteria

The taxa selected have various distribution areas (Figure 2):

- ENE: very strict endemic (only 1 population);
- NE: strict endemic (5 populations);
- ER: regional island endemic (single island);
- IE: island endemic (several islands);
- W: distribution in several islands or in a wider area.

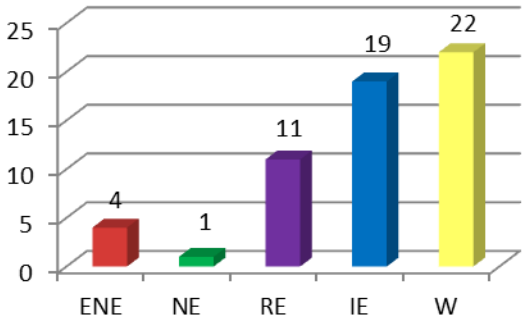


Figure 2. Taxa numbers according to distribution area

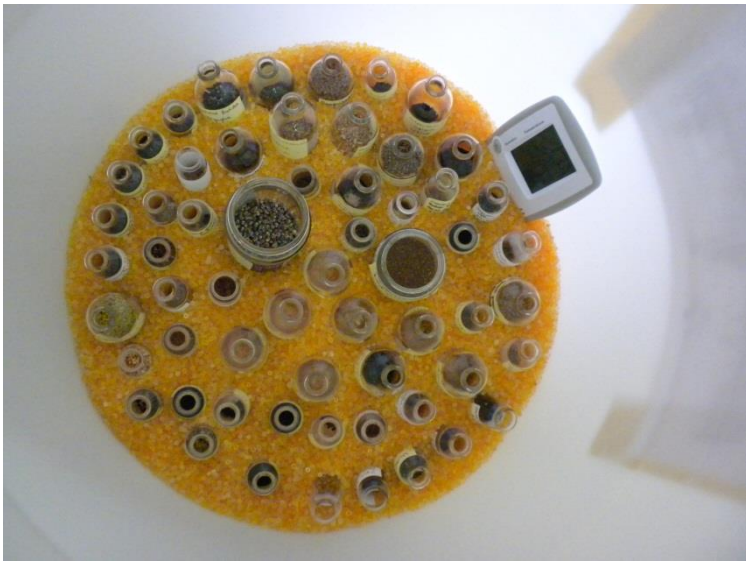


Figure 3. Dessication

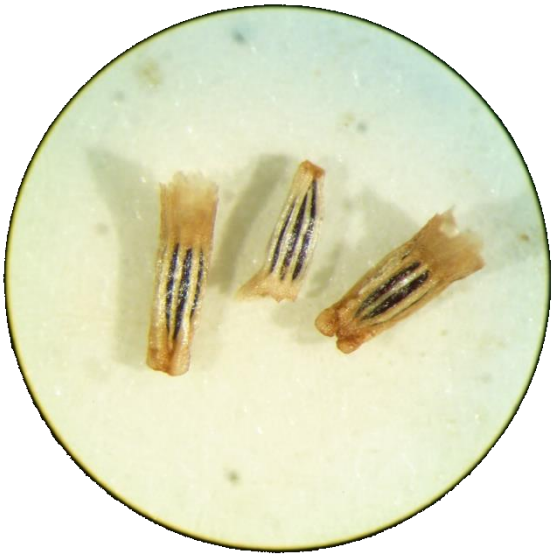


Figure 4. Seeds Picture of *Plagius flosculosus* (L.) Alavi & Heywood with the binocular

To obtain seed lots representative of the genetic diversity of the populations, one or more lots (maximum 7) were collected for each taxon. Seed lots stored on the seedbank of the CBNC at 4 °C and partially duplicated at the National Institute for Agricultural Research (INRA) of San Ghjulianu.

The CBNC develop in collaboration with INRA San Ghjulianu a long-term seed conservation project: cryoconservation. The seeds are kept in tanks filled with liquid nitrogen at -196 ° C.

Figure 5. Cryoconservation

Germination tests were carried out with 50 seed lots. All lots will be tested later. Other tests will be carried after Cryogeny to evaluate the impact of this conservation technique on the seeds.

Figure 6. Germination test of *Brassica insularis* Moris

Corsica – Plant production

During the program, part of the seedlots collected was put into production for: 1) the realization of *in situ* actions; 2) obtaining information on the cultivation of some "wild" species. Thus, 1600 plants were produced; most by a nurseryman specializing in the production of local plants; the rest by the National Botanical Conservatory of Corsica (Office of the Environment of Corsica). In total, 24 taxa were multiplied.

The plants of five taxa, sometimes from several populations, were used for *in situ* conservation actions: introduction, re-introduction or creation of population: *Anchusa crispa, Centranthus trinervis, Kosteletzkya pentacarpos, Ranunculus sylviae, Silene velutina.*

A total of 866 plants out of the 1600 products were used for *in situ* conservation operations.

Production structure at the nursery

First cultivation tests

Seed crop test (*Seseli praecox*)

Cultivation test by cuttings (*Kosteletzkya pentacarpos*)

Production of *Silene velutina* for a reintroduction action on Cornuta Islet

Sardinia– seed banking

The Care-Mediflora project promotes the use of *ex situ* collections to support *in situ* conservation measures. All targets scheduled for e*x situ* conservation actions were achieved by Care-Mediflora team in Sardinia. In particular, collection, curation and storage of seeds/fruits for medium (+5°C) and long term (-25°C) conservation were performed for the selected target species based on national and international regulations and standards. Specifically, *ex situ* actions in Sardinia concerned a total of 127 germplasm accessions collected from 84 *taxa*. Part of the seed collection was dedicated to an "active collection" or medium term seed conservation (+5°C) for the production of plants.

The collected germplasm was subject to a quarantine and post-maturation period, and only afterwards, the seeds were introduced in the bank. Subsequently, each accession was cleaned, quantified, selected and processed. The seed lots were gradually dried at 15°C and 15% of relative humidity (RH), in order to reach ca. 3-5% of internal seed moisture content, and stored at -25°C (as base collections under long-term conservation) and/or at +5°C (as active collections under medium-term conservation).

Ecophysiological aspects of seed germination were investigated and evaluated through different seed germination tests. Germination tests were carried out for the main rare and threatened selected *taxa* in order to support *in situ* conservation actions following the internationally accepted procedures. In particular, during the Care-Mediflora project 23 germination experiments for 20 *taxa* were realized. Germination tests were performed in the laboratories of BG-SAR. Seeds were sown on 1% water agar substrate in plastic Petri dishes of 90 mm diameter and then incubated in a growth chamber (MLR-351, Sanyo, Osaka, Japan) at constant (5, 10, 15, 20, 25 and 30°C) and alternating temperatures (25/10°C), both in the light (12 hours of irradiance per day) and in total darkness. For each condition, four replicates of 25 fruits/seeds were used. The criterion for germination was the visible radicle protrusion (≥ 1 mm). When no additional germination occurred for two consecutive weeks and after at least 1 month from the start of the experiments, tests were stopped, and the viability of each remaining seed was checked by a cut test with a scalpel and subsequent observation of the seed endosperm under a binocular microscope.

Moreover, as a precautionary measure aiming at ensuring the conservation of the collected germplasm, several accessions were also duplicated in the seed banks of other partners of the project; specifically, a total of 52 seed lots belonging to 40 *taxa* were duplicated in the seedbank of Catania University.

Photo 1: Seed cleaning (photo by Marco Porceddu).

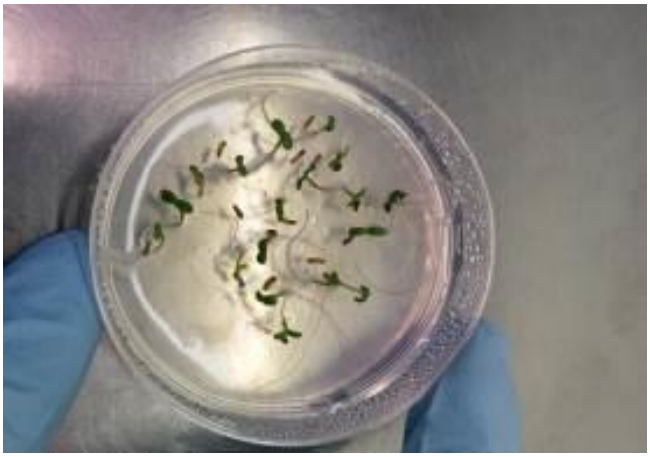


Photo 2: Germinated seeds of *Santolina insularis* (photo by Rosangela Picciau).

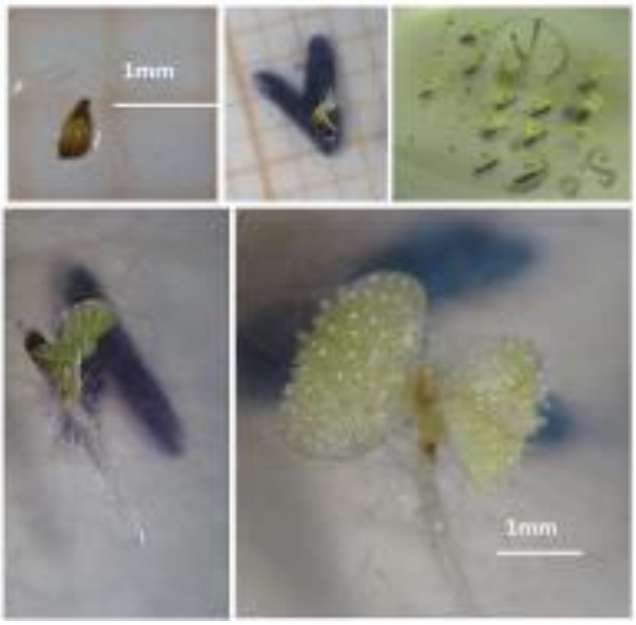


Photo 3: Seeds, radicle emergence and seedlings of *Pinguicula sehuensis* (photo by Alba Cuena)

Photo 4: *Senecio morisii* germinated seeds (top left photo) and seedlings in the BG-SAR greenhouse (Photo Alba Cuena)

Sardinia – plant production

In Sardinia over 10,522 plants of 20 *taxa* were produced for *ex situ* plantations In particular, part of plants produced was used for 5 different translocations, specifically:

1) Plants of *Astragalus gennarii* were propagated both from vegetative stems and seeds in the Fo.Re.S.T.A.S. nursery; 350 plants were translocated near the extant population in Monte Albo (Lula).

2) Plants of *Dianthus morisianus* were propagated from seeds, and cultivated at the Botanical Garden of Cagliari; 38 reproductive plants of the 48 produced were reintroduced in Portixeddu (Buggerru).

3) Plants of *Gentiana lutea* subsp. *lutea* were produced and cultivated in the Fo.Re.S.T.A.S. nursery; a total of 200 plants from the 5900 produced were translocated in Monte Genziana (Talana).

4) Plants of *Rhamnus persicifolia* were produced and cultivated in the Fo.Re.S.T.A.S. nursery; 154 plants were transplanting in Monte Genziana (Talana).

5) Plants of *Senecio morisii*, obtained from seeds directly collected from the wild populations, were produced at the Sardinian Germplasm Bank (BG-SAR) and cultivated at the Botanical Garden; 125 plants were transplanted in Funtanamela (Laconi).

All these translocations involved the HBK team with the strong support of the agents of the public administration “Agenzia Fo.Re.S.T.A.S” (Autonomous Region of Sardinia).

Fig 5. Plant multiplication of *Astragalus gennarii* (photo by Giuseppe Fenu) and Fig. 6. Plant production of *Rhamnus persicifolia* in the Fo.Re.S.T.A.S. nursery (photo by Alba Cuena-Lombraña).

Sicily– seed banking

The objective 4 (e*x situ* conservation actions) was reached by the CARE-MEDIFLORA team of the University of Catania (Sicily). In particular, *ex situ* actions concerned a total of 154 germplasm accessions collected from 109 *taxa*. Seed samples were partly dedicated to the "active collection" or medium term seed conservation (+5°C) for the production of plants. The collected germplasm was subject to a quarantine and post-maturation period, and then moved to the bank. Subsequently, each accession was cleaned, quantified, selected and processed. The seed lots were gradually dried at 15°C and 15% of relative humidity (RH), in order to reach ca. 3-5% of internal seed moisture content, and stored at -23°C (as base collections under long-term conservation) and/or at +5°C (as active collections under medium-term conservation).

Germination tests were carried out for supporting the in situ conservation actions following the international protocols. In particular, 113 germination experiments for 43 taxa were realized. Germination tests were performed in the Seed Bank of the Department of Biological, Geological and Environmental Sciences (BG-CAT). Seeds were sown on filter paper, 1% water agar or volcanic soil. Excluding the latter, all tests were realized using plastic Petri dishes of 90 mm in diameter and then incubated in the growth chambers at constant (5, 10, 15, 20, 25 and 30°C) and alternating temperatures (25/10°C), both in the light (12 hours of irradiance per day) and in total darkness. For each condition, four replicates of 25 fruits/seeds were used. The criterion for germination was the visible radicle protrusion (≥ 1 mm). When no additional germination occurred for two consecutive weeks and after at least 1 month from the start of the experiments, tests were stopped, and the viability of each remaining seed was checked by a cut test with a scalpel and subsequent observation of the seed endosperm under a binocular microscope. The germination tests realized on volcanic soil were performed in small aluminium pots, only at the alternate temperature of 20/10 °C. Five native species from Mt. Etna (Sicily) were sown on soils collected on different sites of the volcano and the effect of the origin of the soil was tested. In these experiments, not only the radicle protrusion (≥ 1 mm), but also the emergence of the cotyledons was used as scoring criteria. Finally, as a precautionary measure, 55 accessions have been duplicated in the seedbank the University of Cagliari.

Figure 1. Seed Bank of the DBGAS (*cleaning room*)

Figure 2. Seed Bank of the DBGAS (*long-term conservation*)

Figure 3. Seed Bank of the DBGAS (*growth chamber*)

Figure 4 Seed Bank of the DBGAS (*germination tests*)

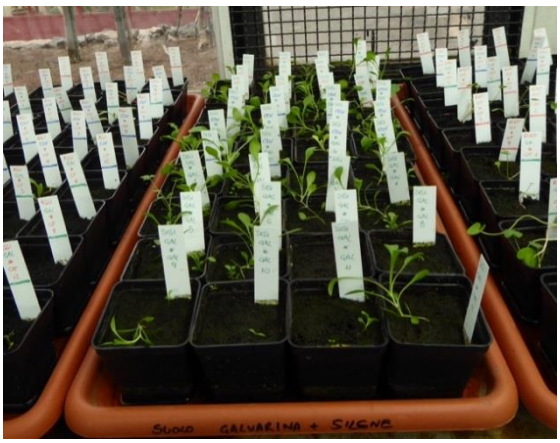


Figure 5. Seed Bank of the DBGAS (*germination tests*)

Sicily – plant production

A total of 2,040 plants from 20 taxa were produced in the greenhouses of the Botanical Garden of the University of Catania, Department of Forestry or a private garden center. The number of plants produced for each species is shown in Tab.1. Almost all the produced plants were used for *in situ* conservation actions (e.g. translocation or reinforcement), while very few were used for exhibition in the botanical garden of the University of Catania. With the exception of *Urtica rupestris* Guss. (Urticaceae), all plants were produced from seeds. Depending on the ecological requirements of the reproduced species, different substrates have been used for the reproduction of plants linked to sandy habitats or rocky stands or clayey environments, as for example.

Table 1: Number of plants produced per species

No.	Taxon	No. plants
1	Astragalus rapahelis	350
2	Dianthus rupicola subsp. rupicola	150
3	Leopoldia gussonei	60
4	Origanum onites	30
5	Tripolium pannonicum	80
6	Urtica rupestris	360
7	Colymbada tauromenitana	50
8	Phlomis fruticosa	50
9	Adenocarpus bivonii	120
10	Brassica incana	100
11	Matthiola incana subsp. incana	140
12	Euphorbia dendroides	48
13	Rhamnus alaternus	52
14	Phillyrea latifolia	50
15	Pistacia lentiscus	88
16	Pistacia terebinthus	88
17	Juniperus oxycedrus subsp. macrocarpa	80
18	Ceratonia siliqua	34
19	Hormuzakia aggregata	68
20	Sysimbrella dentata	42
		tot 2.040

Juvenile plants of *Dianthus rupicola* Biv. subsp*. rupicola* (Caryophyllaceae)

Reproduction of *Urtica rupestris* Guss. (Urticaceae)

Crete– seed banking

A preliminary list was constructed containing seventy eight (78) indigenous threatened taxa of the flora of Crete targeted for *ex situ* conservation. The taxa were selected based on the common criteria setup by the project partners, i.e. threat degree, regional responsibility, taxa included in the Habitat Directive or other legislations, and wetland species. The targeted population(s) for seed collecting for each taxon were identified, providing the relevant justification for the selection, and a provisional schedule for all *ex situ* actions (i.e. seed collecting, curation, duplication, storage) was structured. For all *ex situ* actions, the internationally accepted protocols of European and Euro-Mediterranean networks (ENSCONET and of GENMEDA) were followed.

A total of one hundred and two (102) germplasm accessions, from sixty-three (63) different taxa of the preliminary list were collected. The vast majority (100) were seed accessions, while the rest were vegetative propagative material.

Germination tests were conducted for forty-three (43) accessions (Photo1) and the seed germination of 11 threatened taxa has been investigated for the first time in this project (Table 1). Ecophysiological aspects of seed germination were investigated and evaluated through different seed germination tests. Seeds were sown on 1% water agar substrate in plastic Petri dishes and then incubated in growth chamber (AGP600 - TECNOLAB Spain and Economic Delux - SNIJDERS SCIENTIFIC B.V. Holland) at constant temperatures (5), 10, 15, 20 (25, 30) °C. The effect of white light on germination was studied at all temperatures and compared to the germination of the seeds in continuous darkness at the same temperatures. The duration of the experimental photoperiod per 24 hours was 12 h in each chamber. For each condition, three replicates of 30 (or 50) fruits/seeds were used. The criterion for germination was the visible radicle protrusion (≥ 1 mm).

Germinated fruits/seeds of *Bupleurum gaudianum* (left) and *Myosotis solange* (right)

The 100 seed accessions were curated following the international standards and they were stored in the Seed Bank of MAICh at -20 ^{o}C (Photo 2). Half of the seed accessions were sent for safety duplication to the Seed Bank of the National and Kapodistrian University of Athens, and an official agreement was made for the terms of duplication for conservation purposes.

Accessions stored at -20 °C in the Seed Bank of MAICh.

Seed collection of *Centaurea baldaccii* Degen ex Bald. at the location Gigilos of Lefka Ori Crete.

Crete – plant production

Plants were produced to be used for the10 taxa of the 10 *in situ* actions in Crete. In addition, plants were produced for 30 more taxa which are kept in the nursery of MAICh for future use or were planted in the Botanical Garden of MAICh. In total, over 5300 plants were produced.

Plant production of *Bolanthus creutzburgii* Greuter subsp. *zaffranii* Phitos & al. to be used in *in situ* action

Horstrissea dolinicola seedling

Cyprus– seed banking

A preliminary list was constructed containing one hundred and eight (108) indigenous taxa of the flora of Cyprus targeted for seed collecting. The taxa were selected based on the common criteria setup by the project partners, i.e. threat degree, regional responsibility, taxa included in the Habitats Directive or other legislations, and wetland species. The targeted population(s) for seed collecting for each taxon were identified, providing the relevant justification for the selection, and a provisional schedule for all *ex situ* actions (i.e. seed collecting, curation, duplication, storage) was structured. The schedule was updated during the project according to the dates when ex situ actions were actually performed. For all *ex situ* actions, the internationally accepted protocols of ENSCONET were followed.

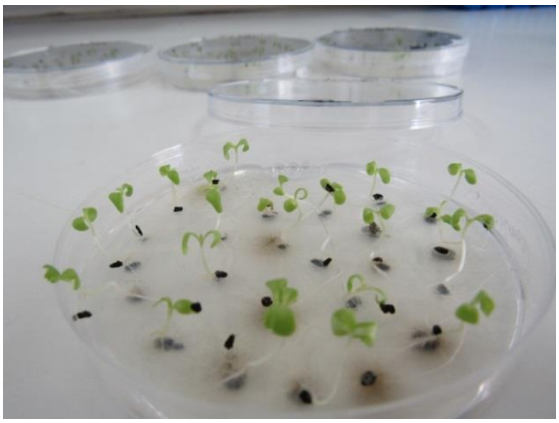
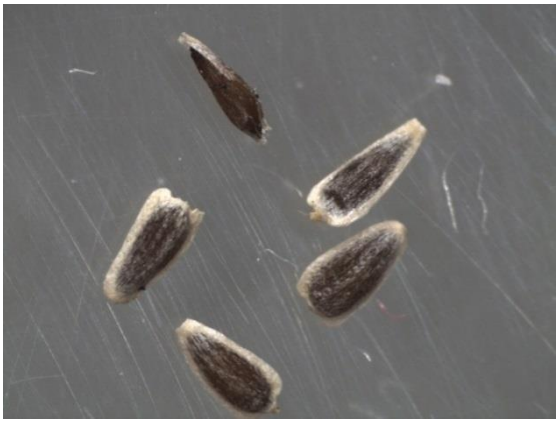
A total of one hundred and twenty-one (121) accessions, from eight-two (82) different taxa were collected. The vast majority of the accessions concerned seed accessions, while the rest were vegetative propagated material. No particular problems were encountered, mainly because seed collecting was carried out by local experts with huge experience in the phenology of the selected taxa. Nevertheless, in some cases, seed collecting required the repeated visiting of the selected population in order to collect enough quantity and quality of seeds. It can be said with certainty that, the experience gained by the CARE-MEDIFLORA project enhanced local expertise on seed collecting.

One hundred and seven (107) accessions out of the 121 were collected from taxa listed to the Red Data Book of the Flora of Cyprus. Seventeen accessions (17) concerned Critically Endangered (CR) taxa, thirty-five (35) Endangered (EN) taxa, fifty-three (53) Vulnerable (VU) taxa and two (2) Near Threatened (NT) taxa. Thirty-seven accessions (37) were from endemic plants of Cyprus, falling to the criterion of Regional Responsibility, and nineteen (19) accessions were from taxa listed to the Annexes of the Habitat Directive. Seeds were collected from 20 different families, although, the most represented ones were Asteraceae, Fabaceae and Poaceae. An excel file containing all the relevant passport data of the accessions was constructed.

Accessions were carefully cleaned following the international standards to remove debris and empty seeds. Most of the accessions were cleaned using the regular lab equipment (sieves, seed blower, threshing machines e.t.c), nevertheless in some cases, cleaned was done by hand. After cleaning, accessions were divided to three parts, taking into account the total available seeds. The two parts are conserved to ARI genebank to the base (-20oC) and active collections (2oC), respectively, while the 3rd part was sent to the Amiantos genebank of the Department of Forests for safety duplication. One hundred and two (102) accessions were sent for safety duplication following an official agreement between the Agricultural Research Institute and the Department of Forests.

Germination tests were conducted to one accession per taxon. In total, seventy-nine (79) germination tests were carried out using different substrates, pretreatments, temperature and light profiles. The overall germination rate was 64,92%, reflecting the high quality of seeds collected and stored by the project. Thirty-seven (37) tests resulted to germination rate over 75%, twenty-one (21) to germination rate ranging from 50-75%, nine (9) to germination rate ranging from 20% to 50%, and twelve (12) tests to germination rate lower than 20%. Germination was 0% for three (3) tests. An excel file containing all the relevant information concerning the germination tests was constructed.


Collecting *Lactuca undulata* from Arediou

Germination tests (left) and *Achillea cretica* seeds (right)

Cyprus – plant production

A total of 1372 plants from 11 taxa were produced in the greenhouses of the genebank of Agricultural Research Institute. The number of plants produced for each species is shown to the **Table 1**. The vast majority of the produced plants were used for the *in situ* conservation actions, while a small number was used for other purposes, such as cultivation to botanical gardens. Plants were produced from seeds, bulbs, tubers or cuttings. Bulbs were used for the cases of *Allium marathasicum*, and *Fritillaria persica*, tubers for *Arum sintenisii*, cuttings for *Viburnus tinus* subsp *tinus*, and seeds for the other species.

In most cases, substrate was adjusted to resemble the soil conditions of the habitat where the species grows. For example, substrate was enriched with sand in the cases of *Maresia nana* var *glabra*, *Anthemis tomentosa*, and *Astragalus suberosus*, organic matter for the cases of *Arum sintenisii* and *Fritillaria persica*, and serpentine for *Dichoropetalum kyriakae*. *Limonium mucronulatum*, which is an endemic plant

restricted to the Salt Lake of Larnaca, did not show dependency to the substrate as it grew well in different soil conditions.

Anthemis tomentosa, *Maresia nana* var *glabra* and *Astragalus suberosus* showed good results when seeds were directly sown to the substrate. *Astragalus suberosus* seeds required scarification before sowing to achieve high percentage of germination. Production of plants for *Limonium mucronulatum*, *Peganum harmala*, *Dichoropetalum kyriakae* and *Crypsis hadjikyriakou* was more efficient if the seeds were first germinated on agar under controlled conditions in growth cabinets and then transplanted to the pots. *Dichoropetalum kyriakae* seeds required pretreatment of cold stratification in water (10 days at 4°C) before sowing. *Peganum harmala* seedlings were very susceptible to fungi infestation after the transplanting to the pots and implementation of fungicide substantially reduced the losses.

Crypsis hadjikiriakou & *Anthemis tomentosa* plant production

Table 1: Number of plants produced per species

No.	Species	Number of plants
1	*Arum sintenisii*	127
2	*Allium marathasicum*	342
3	*Anthemis tomentosa*	162
4	*Astragalus suberosus*	69
5	*Limonium mucronulatum*	230
6	*Peganum harmala*	80
7	*Dichoropetalum kyriakae*	80
8	*Fritillaria persica*	15
9	*Maresia nana* var *glabra*	21
10	*Crypsis hadjikyriakou*	126
11	*Viburnus tinus* subsp *tinus*	120

Annex 5 – *In situ* conservation actions – Species Information Sheets

Project partner: Sóller Botanic Garden Foundation

Island

Balearic Islands
(Mallorca)

Species name (Family)

Dorycnium fulgurans (Porta) Lassen (Fabaceae)

Common name

Socarrell fulgurant, socarrell retús, socarrell alís (locals names).

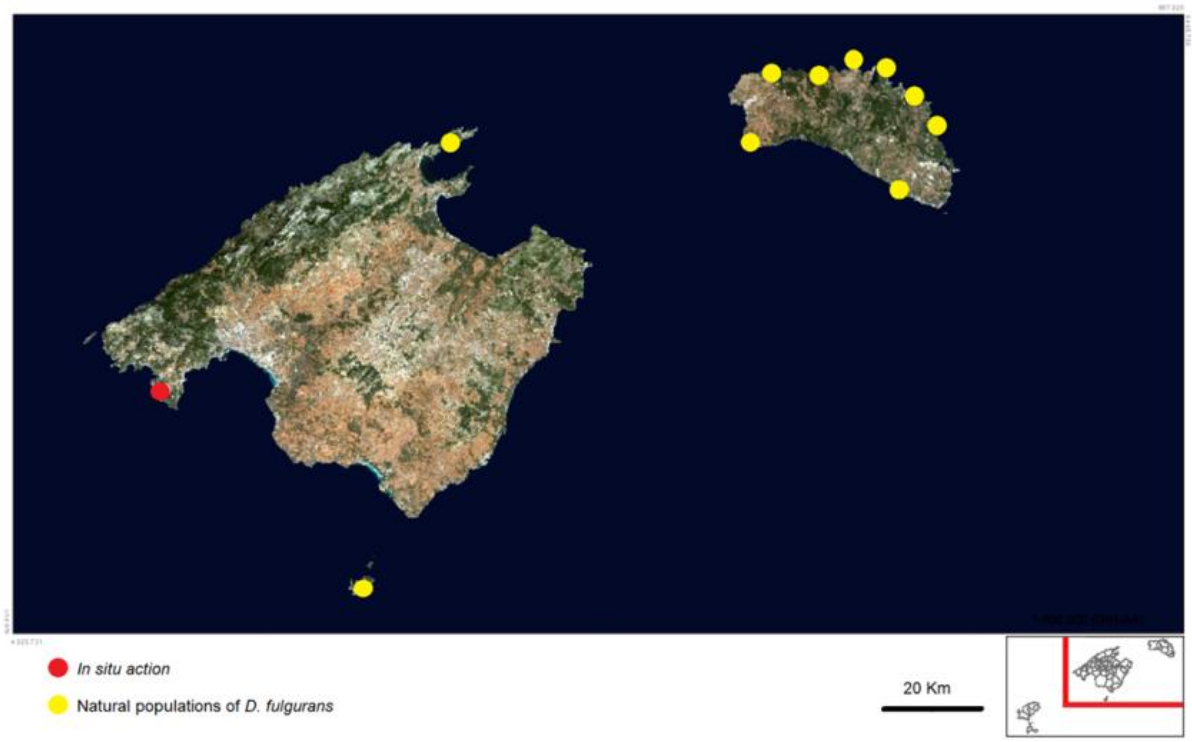
Plant description

- ✓ Spiny cushion shrub with divaricated stems, branched in zigzag. Small white flowers and purple calyx. Ovoid fruit containing 1(2) seeds.
- ✓ Camephyte. Flowering time from April to June. Fruiting time from May to July. Its flowers are pollinated by insects. Seed dispersal by barochory.
- ✓ It lives at calcareous and sandy areas of coastal scrubland, between 0-100 meters above sea level.

Distribution

Endemic strict of Balearic Islands: Mallorca (only two populations), Minorca and Cabrera. The selected population to carry out *in situ* conservation actions is that occurring at Mallorca's South coast (Calvià).

Map



Distribution of *Dorycnium fulgurans* and in red COLOR population restored.

Legal status

It is included at Catalogue of Balearic Islands' Threatened Species as Special Protection Species by Decreed 75/2005. And as well with "special protection" by Balearic Resolution CMA 23/10/2017 (BOIB 131, 26/10/2017).

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Calvià population are:

- Housing and urban areas. Recently, it was started a chalet construction that affected the number of individuals of the population.
- 6.1. Recreational activities. Crowded zone by swimmers and tourists.
- 8.1. Invasive non-native/alien species/diseases. Due to the proximity of housing there are some invasive species like *Limoniastrum monopetalum*.

12. Other threats: the small number of individuals in the population.

Conservation actions carried out in the CARE-MEDIFLORA project

In situ measures:

- Reinforcement of the current population in Punta Prima (Calvià).
- New introduction in Cap Negret (Calvià) 800m far from the original population.

Ex situ measures:

- Seed conservation: collecting seeds in order to store them in the seedbank.
- Living plant collection conserved in the Sóller Botanical Garden.

Photos

Project partner: Sóller Botanic Garden Foundation

Island

Balearic Islands (Mallorca)

Species name (Family)

Myosurus minimus L. (Ranunculaceae)

Common name

Cua de ratolí, miosur (local name)

tiny mousetail (English)

Plant description

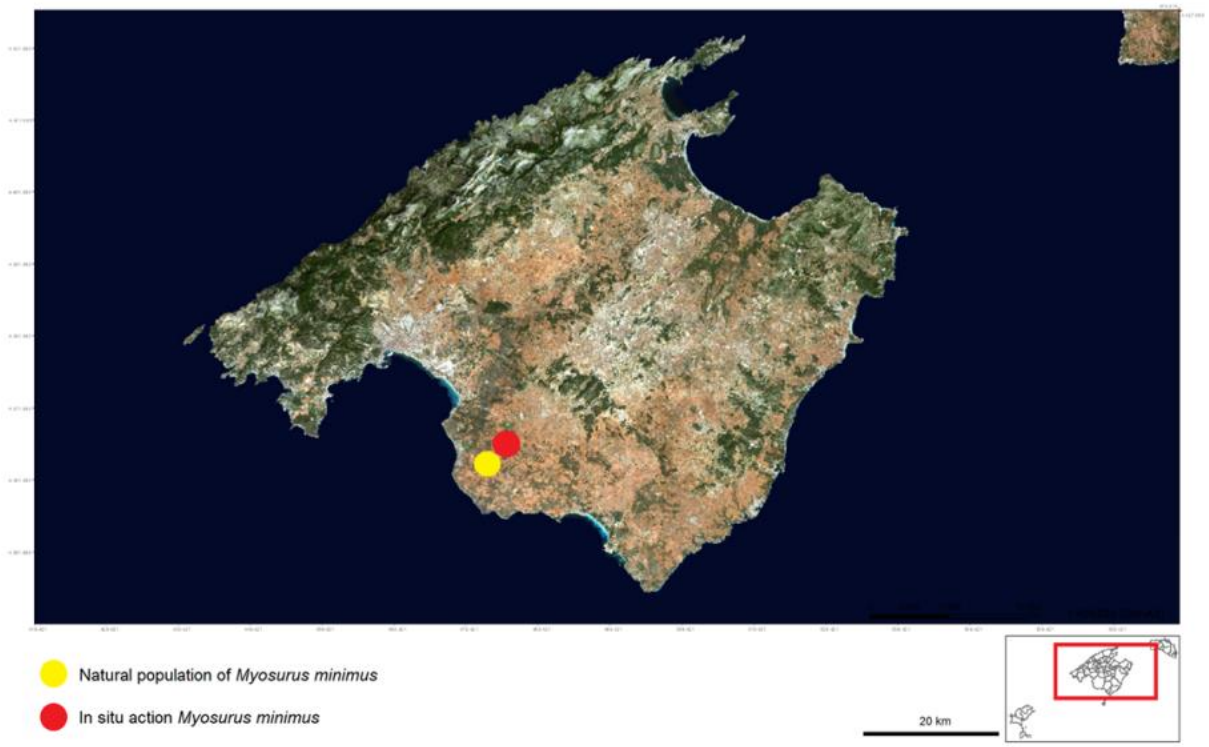
- ✓ Herb from 3-10 cm, narrow, linear and glabrous leaves arranged in basal rosette. Solitary flower with 5 yellowish sepals (3-4 mm) with a spur each; 5 greenish petals (2 mm); 5-10 stamens. Fruit is a poliachene from 2- 10 cm in length.
- ✓ Therophyte. Flowering time from March to May. Fruiting time from April to June.
- ✓ Temporarily flooded soils, humid meadows and sands. From 0 -150 meters over sea level.

Distribution

It is a multiregional species, inhabiting in most part of Europe, North Africa and North America. It is present around the Mediterranean basin either in the continent or in islands (Balearic Islands, Sicily, Crete or Cyprus).

At the Balearic Islands, it is only present in Mallorca. There is only one population located at the south part of the island, in a private land.

Map



Legal status

Habitats Directive 92/43/CEE (3170, Mediterranean temporary ponds.

Main threats and conservation status

According to the IUCN classification scheme, main threats are due to:

- 2.3.2 Small-holder grazing, ranching or farming: the presence of livestock supposes a threat for species populations by grazing and substrate nitrification.

- 11.1 Habitat shifting and alteration: this taxon inhabits at a really unstable habitat, so any habitat alteration supposes a threat for the species.
- 12.1 Other threats: occurring at just one population and having a small number of individuals supposes an increase of its risk of disappearing from Balearic Islands.

The Soller Botanic Garden conserves a collection of seeds from the wild population and as well plants in the living plant collection.

Conservation actions carried out in the CARE-MEDIFLORA project

- Verbal accord with the landowner to keep the pond as natural as possible.
- In order to address the small number of individuals of the population, a new introduction of the species has been done in a closed temporary pond.

Photos

Project partner: Sóller Botanic Garden Foundation

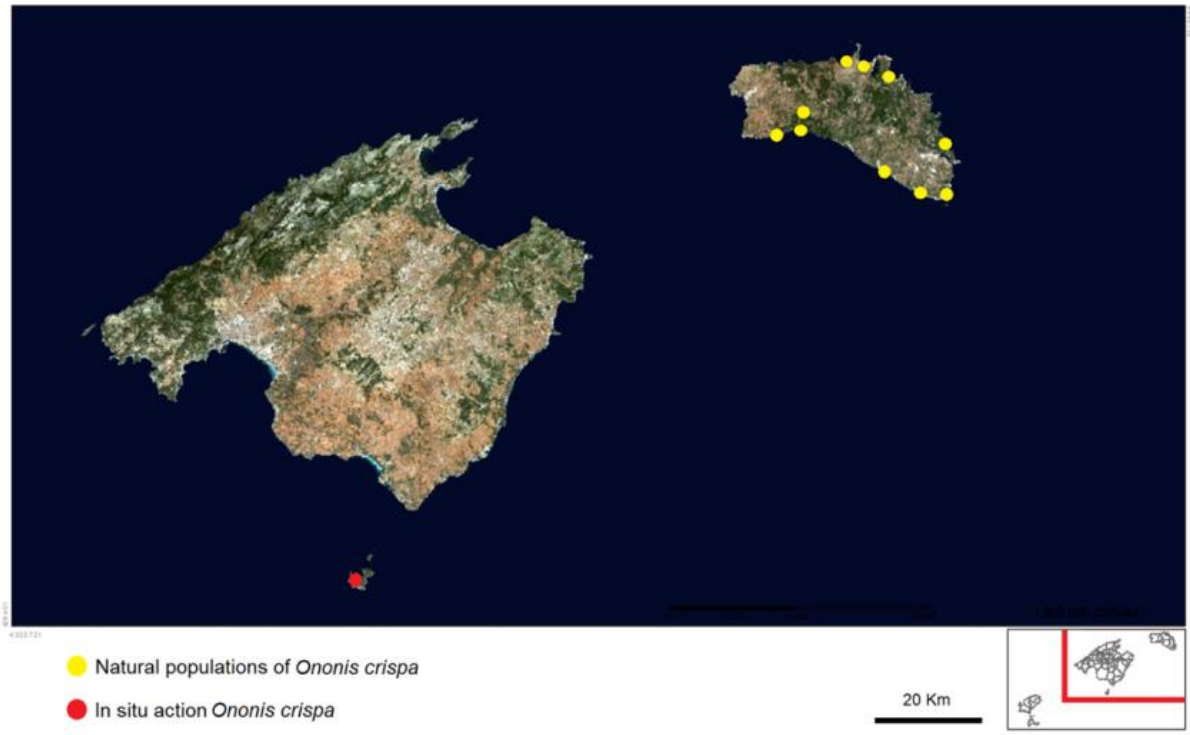
Island
Balearic Islands (Cabrera)

Species name (Family)
Ononis crispa L. (Fabaceae)

Common name
Motxa, ugó (local names)

Plant description
- ✓ Shrub of about 40-60 cm with trifoliate leaves with 5 leaflets. Axillary inflorescences, unifloras, grouped at the apex of the stems. Yellow flowers with purple veins in the biggest petal, the banner or standard. The fruit is a legume with 10-13 reniform seeds.
- ✓ Chamaephyte. Flowering time from April to September. Fruiting time from May to October. Dispersal strategy by barochory.
- ✓ Stony and sandy soils in the littoral of the Islands, but protected of the salt impact.

Distribution
Endemic taxa of Minorca and Cabrera

Map


Legal status
No legal protection.

Main threats and conservation status
The main threats, according to IUCN threats classification, version 3.2, are:

- 11. Climate change & severe weather:
  - 11.1. habitat shifting and alteration: the habitat of this specie is very sensitive
  - 11.4. storms & flooding: extrem salty wind from the sea has been the cause of most of mortality during the last year.
- 12. Other options.
  - 12.1 Other threat:
    - Small distribution area in Cabrera Island

Conservation actions carried out in the CARE-MEDIFLORA project

The selected population of *Ononis crispa* for *in-situ* actions has been the one located in Cabrera Island because is the most threatened due to the salty wind storms occurred during the last pair of years.

In 2018 a reinforcement was carried out with 270 individuals produced with seeds conserved in Sóller Botanic Garden seed bank and collected in 1995 and 1997. The population was monitored once a month and some more reinforcement were been done during the project.

During the first summer the plants reintroduced were watered by the staff of Cabrera National Park to guarantee the survival of them for the first summer period.

Photos

Project partner: Sóller Botanic Garden Foundation

Island

Balearic Islands (Mallorca)

Species name (Family)

Linum maritimum L. (Linaceae)

Common name

Llí marítim (local name)

Sea flax (English name).

Plant description

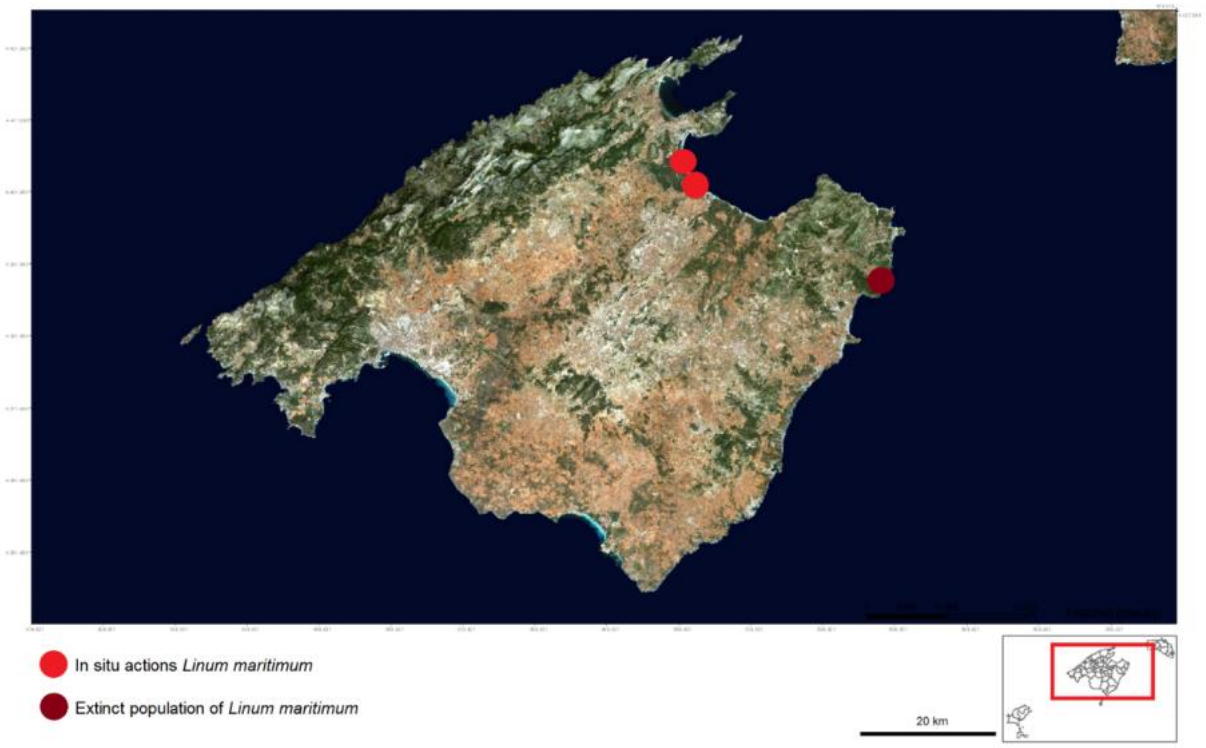
- ✓ Perennial herb 15-60 cm, with woody layer branched. Yellow flowers in clusters forming a corymbiforme panicle. Sepals matching the globular capsule. Ellipsoidal seeds and flattened.
- ✓ Hemicryptophyte. Flowering time from May to August. Fruiting period from July to October. Seed dispersal by barochory.
- ✓ Salt meadows habitat. It grows in humid and slightly saline soils, from 0 to 10 meters over sea level.

Distribution

Mediterranean region, from South Europe to North Africa. Present in some islands such as Mallorca, Corsica, Sardinia or Cyprus.

In Balearic Islands it was only known in Mallorca, in two populations extinct. In one of them, a few individuals were seen in 2006 (Pere Vicens *com. per*.) but never more.

Map



Legal status

- Habitat Directive 92/43/EEC (1410, Mediterranean salt meadows)
- Ley 42/2007 de Patrimonio Natural y Biodiversidad (BOE nº 299) Gobierno de España
- Resolucion Conselleria de Medi Ambient 23/10/2017 (BOIB 131, 26/10/2017)

Main threat(s) and conservation status

According to the IUCN classification scheme version 3.2, the main threats to this taxon in Mallorca are due to:

- 4.1 Roads & Railroads. Secondary roads modifications could destroy the population completely.

- 7.2. Dams & water use: Changing water flow close to the road now, means loose of the habitat.
- 9.3.3. Herbicides and pesticides used to clean the roadside ditches.
- 12.1 Other threats: the small number of populations and of individuals supposes an increase of its risk of disappearing from Balearic Islands.

Conservation actions carried out in the CARE-MEDIFLORA project

There was only one population of *Linum maritimum* in Balearic Islands, located in the North of Mallorca. The last date when the plants where observed was in 2006 (Pere Vicens *com. pers.*). The plants were close to a lagoon in S'Albufera Natural Park.

In situ conservation actions carried on:

- Re-introduction where the plant was last observed.
- Introduction of a new population in a place close to the original one.
- Conservation of seeds and living plants in the collections of Soller Botanic Garden.

Photo

Project partner: Sóller Botanic Garden Foundation

Island

Balearic Islands (Mallorca)

Species name (Family)

Ononis zschackei F. Herm. (Fabaceae)

Common name

Ugó (local name)

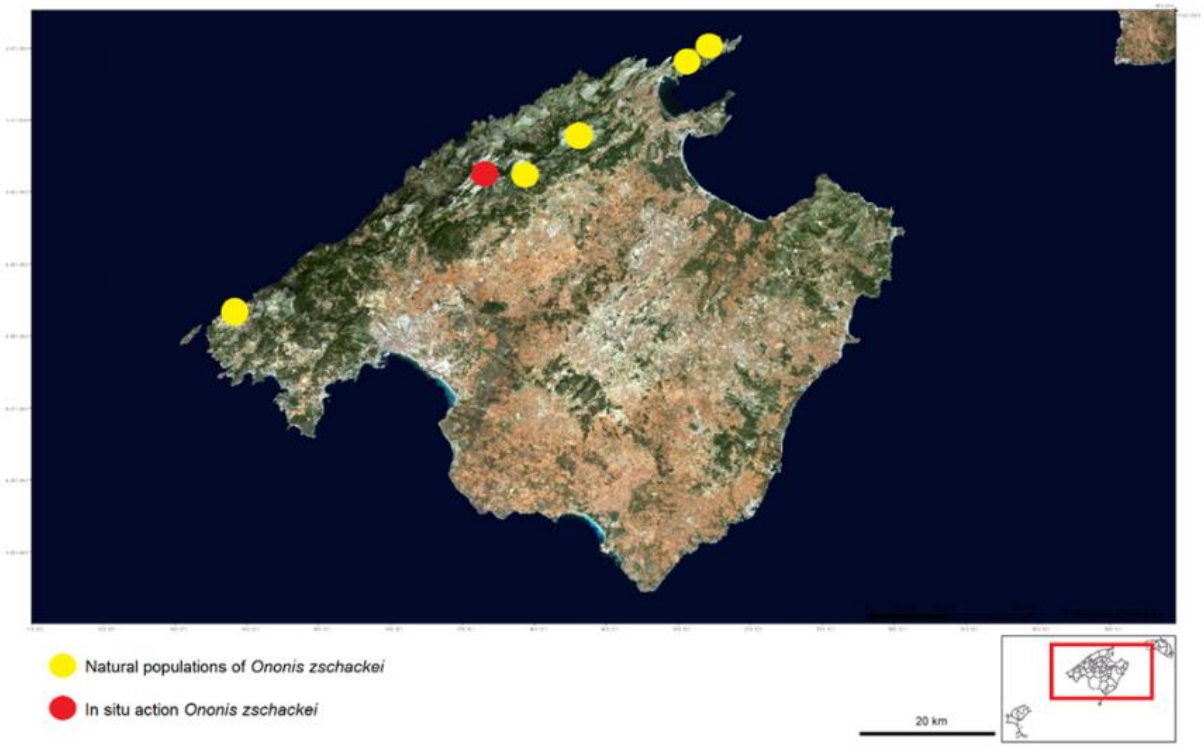
Plant description

- ✓ Perennial woody shrub that can measures until 60 cm height. Alternate and trifoliate (sometimes pentafoliate) leaves. Flowers in terminal leafly racemes pentamerous, zygomorphic. 10 stamens soldered by its filament. Yellow corolla. Fruit is a hairy legume (13-20mm) that contains 10-13 seeds.
- ✓ Flowering time from April to June. The fruit ripens from June to July. Seed dispersal by barochory.
- ✓ It grows in valleys and rocky sites of mountains. It is located between 600-900 meters over sea level.

Distribution

Endemic taxa of Mallorca and is narrow distributed at central zones of Serra de Tramuntana mountains.

Map



Legal status

Protected by regional Catalogue of Balearic Islands endangered species (Decree 75/2015)

Endangered in National Red List of vascular flora of Spain and as well in the Balearic Islands Red Book.

Main threats and conservation status

According to the IUCN classification scheme, main threats are due to:

- 4.1 Roads & railroads. Herbicide application on ditch.
- 6.1. Recreational activities. The location is visited for many people who practice trekking and the plants are trampled.
- 8.2. Problematic native species/diseases. The feral goats who lives in Serra de Tramuntana mountains affects the population.
- 12.1 Other threats. The smal number of individuals per population, and small number of populations.

Conservation actions carried out in the CARE-MEDIFLORA project

The population occurs near the main road that crosses Serra de Tramuntana mountais. At this site the following in situ actions has been realized:

- Reinforcement of the current population. Increase the number of individuals from the populations.
- Fence one by one the individuals to avoid the herbivory and promote the population growth.
- Conservation of seeds and plants in the Soller Botanic Garden.

Photos

Project partner: Sóller Botanic Garden Foundation

Island

Balearic Islands (Mallorca)

Species name (Family)

Isoetes histrix Bory & Durieu and *Isoetes duriei* Bory (Isoetaceae)

Common name

isòet espinós; isòet (local name)

land quillwort; quillwort (English name)

Plant description

- ✓ Small herb with a trilobed underground stem; leaves are linear and thin, arranged in basal rosette. Sporangia are found at leaves base and are covered by its veil. Trilete megaspores and monolete microspores. Both species can be distinguished by the ornamentation of its megaspores.
- ✓ Pteridophyte, spore producing plants. Water dispersion. Dry-season deciduous. It is a geophyte which its phenology is from January to May.
- ✓ Temporarily waterlogged or flooded decarbonated soils. Populations are found between 200 – 400 meters over sea level.

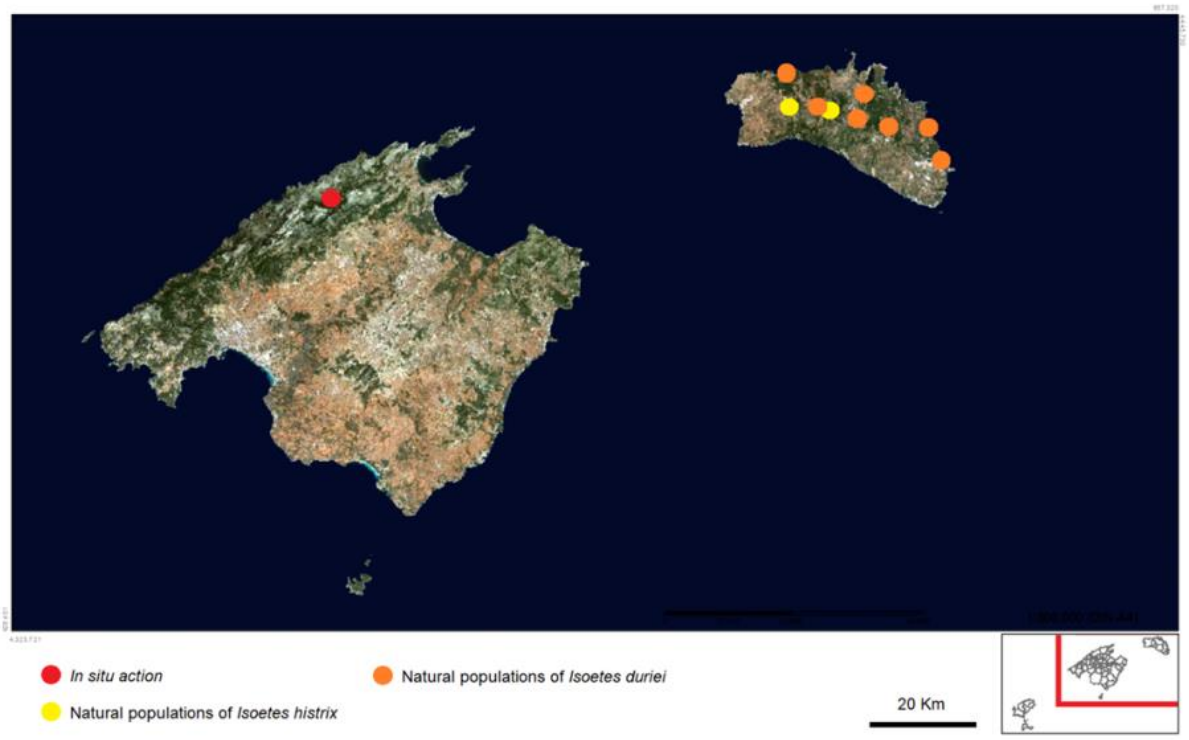
Distribution

Both taxa have a Circun-mediterranean distribution; and *I. histrix* lives as well in Great Britain.

In the islands, *I. histrix* lives in Mallorca, Minorca, Sardinia and Crete.

And *I. duriei* in Mallorca, Minorca, Corsica, Sardinia and Sicily,

Map



Legal status

Mallorca's population of *I. histrix* is considered as Vulnerable, in the Balearic Catalogue of Endangered Plants and "Near Threatened" by the Regional red list of Balearic Plants.

Both taxa are protected by Habitat Directive (3170, Mediterranean temporary ponds)

Main threats and conservation status

According to the IUCN classification scheme, main threats are due to:

2. Agriculture
   2.1. Annual & perennial non-timber crops
      2.1.2. Small holder farming: crop planted for food of animals of the farmer (sheeps)
7. Natural System modifications:
   7.2. Dams & water management/use
      7.2.3. abstraction of surface water for agricultural use.
11. Climate change & severe weather
   11.2. Droughts.
12.1 Other threats: the small number of populations (only one in Mallorca)

Conservation actions carried out in the CARE-MEDIFLORA project

Mallorca's population is found at Serra de Tramuntana (Clot d'Albarca) at the North of the Island. This population occurs inside a small agricultural field in a private land.
Conservation actions carried out:

- Verbal agreement with the owners to border the population to avoid working the field with machines and as well manage the cattle (sheep).
- Slow fences to border the population but allow the cattle with a managing plan.
- Clean the stream of competition species like *Scirpus* spp.
- Delimitation of the both species to map its abundance and distribution for a good monitoring.
- Developed *Ex-situ* reproduction techniques to establish a living plant collection in Soler Botanic Garden.
- Translocation of some individuals of *I. histrix* to the second stream in the same location.

Photos

Project partner: Sóller Botanic Garden Foundation

Island

Balearic Islands (Mallorca)

Species name (Family)

Ranunculus bullatus L. (Ranunculaceae)

Common name

Botons d'or, emprenyavelles (locals names)

Autumn buttercup (English name)

Plant description

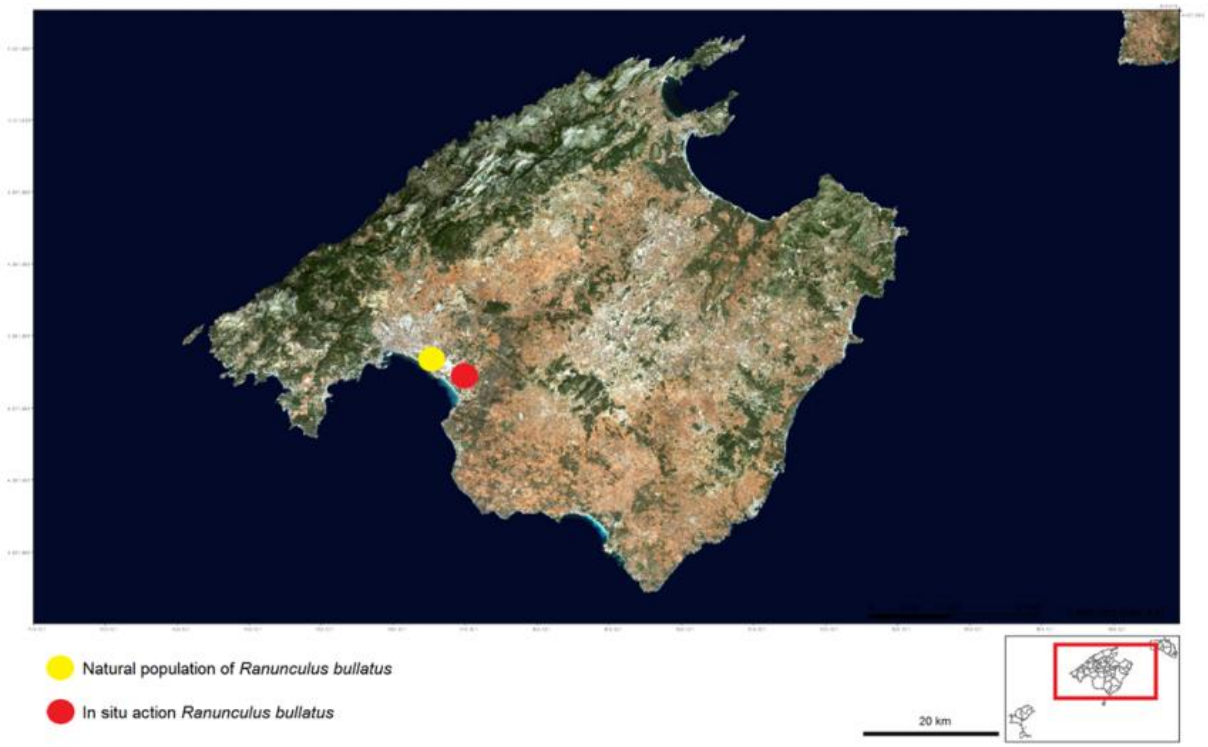
- ✓ Perennial herb with tuberous roots mixed with some tiny fibrous ones. Leaves in a basal rosette. Yellow and solitary flowers.
- ✓ Hemicryptophyte. Flowering time from September to January. Dispersal strategy by barochory.
- ✓ It grows in grasslands where there is elevated soil humidity, often over sandy soils. From 2-5 m.a.s.l.

Distribution

Mediterranean specie, very rare in the western of the region. In the main islands, it is present in Mallorca, Corsica, Sardinia, Malta and Crete.

In Mallorca it is very rare. It was only known from one population in Es Coll den Rabassa, but not seen from many years ago. During the project CARE-MEDIFLORA we found a new population in S'Aranjassa, at about 8 km far away from the known population, which we find again as well between a big road and an urban area.

Map



Legal status

No international protection.

Critically endangered in the regional Red Book of Balearic Islands Flora.

Main threats and conservation status

- 1. Residential & commercial development
- 1.2 Housing & urban areas. One of the populations occurred near an urban area that has experienced great anthropic pressure since 1950.

- 4. Transportations & service corridors.
- 4.1 Roads & railroads. The populations occurred near a road, so any maintenance or improvement works of it can affect severely to this species.

8. Invasive & other problematic species, genes & diseases.

8.1. Invasive non-native/alien species/diseases

8.1.2: Named species. *Opuntia* spp. *Agave* spp. *Lantana camara*, *Oxalis pes-caprae*. (Timing options: in the past before project, but now suspended and likely to return if there are not a control)

11. Climate change & severe weather

11.2 Droughts.

12. Other options

12.1 Small number of individuals. Only two populations.

Ex-situ conservation: since 1990, seeds are conserved in the Soller Botanic Garden seed bank and plants are growing in the living plant collections.

Conservation actions carried out in the CARE-MEDIFLORA project

The population founded in S'Aranjassa, was living in the roadside with invasive species. So, the first action was to eliminate the invasive species competition and advise the road security responsible about the species and the exact location in the road to avoid possible actions like cleaning with herbicides, or only kind of modification of the road.

Secondly, we look for a new place where the plants could be translocated with better guarantee of survival. With a verbal accord with a private landowner, we translocate plants of *Ranunculus bullatus* establishing new population.

Photos

Project partner: National Botanical Conservatory of Corsica of the Office of the Environment of Corsica

Island
Corsica

Species name (Family)
Anchusa crispa Viv. subsp. *crispa* (Boraginaceae)

Common name
French: Buglosse crépue

Plant description
- ✓ Herbaceous taxa, hispid, initially in a rosette of hard leaves, prostrate on the sand, then presenting with floriferous stems, leafy, littlely branched from the rosette. Leaved leaves, oblong, sinuated-crispy, from 4-10 mm broad to 3-20 cm long. Terminal inflorescences fomed uniparous scorpioid cymes, elongating during the flowering period, with bearing flowers onaxils of small hairy bracts. Small, actinomorphous, gamosepal calyx flowers and blue gamopetal corolla. Fruits: 4 achenes per flower, with a very small aril.
- ✓ Flowering occurs between April and May. Fruiting from late May to September. Pollination is done by insects and the seed spread is generally barochorial, even some cases of zoochory is signaled due to ants and caws.
- ✓ *A. crispa* is a sabulicolous, heliophilous, nitrophilous or subnitrophilic plant, xerophilic, well tolerant of sea salt, but very sensitive to sand cover during storms

Distribution
This species is endemic of Corsica and Sardinia. There are: 2 populations located in the east coast of Corsica and 8 populations located on the sand along the North West of Sardinia.

Map

Two subspecies of *A. crispa* exist in Corsica: *A. crispa valincoana* and *A. crispa crispa*. The *crispa* subspecies is only present on the east coast of the island. There are only two populations highly threatened by tourism activities.

Legal status

A. crispa is protected at national level and listed in the Appendix I of the Bern Convention and in the Annex II and IV of the Habitats Directive 92/43/EEC.

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Corsica are:

- 1.3 Tourism & recreation areas and 6.1 Recreational activities. Due to the habitat (sandy beach), the species is really affected by the tourism, and all beach activities during all the year.
- 11.4 Storms & flooding. Big storms are a part of the natural threate: Even if the storms are not really frequent it seems to be the main threat for this species.

A. crispa has been evalued as in danger (EN) in Corsican red list (2015).

Conservation actions carried out in the CARE-MEDIFLORA project

Due to the number of individuals decreasing and the progressive destruction of the habitat, two populations have been created on protected sites belonging to the "Conservatoire du Littoral" (Gradugine and Del Sale). Periodic monitoring of these new populations started since December 2017.

After having flowered and fructified these populations were decimed by a strong storm in October 2018. Currently about 500 seedlings from 2 to 15 cm in diameter are present on both sites.

In addition to these actions, one of the natural stations (Favona) was fenced.

After the end of the project, monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos

Anchusa crispa flowers (left) & General aspect of *A. crispa* (right)

Translocation action

Project partner: National Botanical Conservatory of Corsica of the Office of the Environment of Corsica

Island

Corsica

Species name (Family)

Astragalus alopecurus Pall. (Fabaceae)

Synonym: *Astragalus centralpinus* Braun-Blanq.

Common name

French: Astragale centralpin, English: Centralpine Milk-vetch

Plant description

- ✓ *A. alopecurus* is a perennial, robust, hairy-whitish plant, from 50 cm to 1 meter high. The large leaves are imparipinnates with 20-40 lanceolated leaflets. The flowers from 13 to 18 mm are pale yellow, very numerous and grouped in large dense clusters, ovoid and subsessiles. The 2-4-seeded pod is included in the calyx.
- ✓ *A. alopecurus* flowers from April to the beginning of June, while fruits develop from late June to September. Due to the barochoria dispersion of seeds, spread is done on small distance. This, minimize the spreading of the species on the site.
- ✓ This species is growing in open shrubs, from 1040 to 1055 m of altitude on schisto-calcareous rocks.

Distribution

A. alopecurus has a large distribution's area From Italy, Bulgary, Turquy, Russia, and Central Asia (Altaï, Kazakhstan). In France, if there are numerous populations in Alpes (Hautes-Alpes, Alpes de Haute-Provence), in Corsica there is only one spot discovered in 1988. On this location of Punta Alta (Focicchia), only few plants (less than 10 nowadays instead of 60 in 1996) are still growing.

Map

Only one *A. alopecurus* population is known in Corsica. It counts only a few individuals. Conservation action has been taken for this population: cage installation and direct sowing of scarified and non-scarified seeds. This protocol will identify the most effective conservation methods for this species.

Legal status

A. alopecurus is protected at national level and listed in the Appendix I of the Bern Convention and in the Annex II and IV of the Habitats Directive 92/43/EEC. The population is included in the SCI (Sites of Community Importance) "Massif du San Pedrone" FR9400573.

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Corsica are:

- 2.3.1 Nomadic grazing
- 7.1 Fire
- 8.2.1 Unspecified species (vegetation dynamics)
- 12.1 Other threat: small population made up of old individuals, no recruitment.

A. alopecurus was assessed as critical in danger (CR) in Corsican red list (2015).

Conservation actions carried out in the CARE-MEDIFLORA project

Due to the unicity of the population in Corsica and the small number of individuals, several goals are defined: 1) increase the population; 2) verify that conditions *in situ* of germination and growing; 3) increase knowledge.

200 seeds stored in the seed bank of CBNC, were sown in November 2016 and more 100 in March 2018 on the site of Focicchia, in 3 cages (protecting plantlet from fauna).

The preliminary results of the monitoring show a survival rate of 2.5%. But the number of reinforcement individuals is greater than the number of individuals in the natural population

After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability for the *in situ* actions.

Photos

General appearance of *A. alopecurus*

In situ action : protection and direct sowing (13/12/2016); Appearance of plants after 1 year

Project partner: National Botanical Conservatory of Corsica of the Office of the Environment of Corsica

Island
Corsica

Species name (Family)
Centranthus trinervis (Viv.) Bég. (Caprifoliaceae)

Common name
French: Centrante trinervé, English: Three ribs valerian

Plant description
- ✓ Perennial plant, clumps with woody stems from 20 to 40 cm high. Entire opposite leaves, little pink flowers in panicle. Fruits with a kind of feathery pappus.
- ✓ *C. trinervis* flowers from April to the end of June, while fruits appear from late June to July. There are two types of seeds: one with pappus involved in aerophyllus dispersion, the other without pappus with barochorial dispersion.
- ✓ This species grows from 140 to 155 meters high, on siliceous rocky slopes with chasmophytic vegetation.

Distribution
C. trinervis is a strict endemic of Corsica.

Map


Only one known population in the world located in the south of Corsica, on "Trinité" cliffs (municipality of Bonifacio).

Legal status
This species is protected at national level by law and listed in the Appendix I of the Bern Convention and in the Annex II and IV of the Habitats Directive 92/43/EEC.

Main threats and conservation status

This unique population *in natura* in the world of this taxa is stable and for instance the location doesn't seem threatened.

According to the IUCN Threats Classification Scheme (Version 3.2) the potential threats in Corsica are:

- **7.1** Fire & fire suppression. In 1994, a fire burned the cliffs but without consequences on the species.
- **8.1** Invasive non-native/alien species/diseases. The hybridization with *C. ruber* (L.) DC. was obtained *ex situ* and could one of the biggest threatened for the species due to the fact that *C. ruber* is often in the garden of houses in Bonifaziu and is considered as naturalized in Corsica;
- **8.2** Problematic native species/diseases. Dynamic of vegetation.

Conservation actions carried out in the CARE-MEDIFLORA project

Due to the unicity of the population the goal was to increase the population and to create a new one for security raison on a protected site belonging to the "Conservatoire du Littoral". Periodic monitoring of the created population was started in December 2017.

The preliminary results of the monitoring showed a survival rate of 40 % and about forty seedlings.

After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos

C. trinervis habitat & General aspect

In situ conservation action: creation of a new population for security reason

Project partner: National Botanical Conservatory of Corsica of the Office of the Environment of Corsica

Island

Corsica

Species name (Family)

Elatine brochonii Clavaud (Elatinaceae)

Synonym: *E. hexandra* (Lapierre) DC. subsp. *brochonii* (Clavaud) P. Fourn.

Common name

French: Elatine de Brochon

Plant description

- ✓ Very small annual plant, amphibious, (from 1 to 5 cm). Lying stem, often ramified, rooting at the nodes. Leaves are opposite, stalked more or less.
- ✓ Sessile flowers, tiny, 3 to 5 flowers in cyme. 3 sepals persistants during fruiting season. 3 white petals with pink veins, smaller than the sepals. 6 stamens.
- ✓ Discoid capsule overtopped by the sepals, opening in three valves. many small, reticulated seeds, straight or barely arched.

E. brochonii is a species of temporary Mediterranean pools, characterized by the succession of a flooded automno-spring phase and a dry summer phase. Germination requires bare, congested or flooded soil and severe sunstroke. Flowering and especially fruiting requires a dry substrate.

This hygrophilic and heliophilic plant requires a mesotrophic or oligotrophic acid substrate and seems to be disseminated by ornitochory.

Distribution

This species is distributed sporadically from North Africa (Algeria, Morocco) and the Iberian Peninsula to the south-west of France (Pyrénées-Atlantiques, Landes, Gironde). Of recent discovery in Corsica, *E. brochonii* is present in some temporary pools: Chiuvina in Agriate, Paduleddu near Portivechju Portivechju and cups on the right bank of Cavu, downstream from Purciledda Bridge, near Santa Lucia di Portivechju.

Map

There are only 3 populations of *Elatine brochonii* in Corsica. An invasive species control action was carried out on one of them (Chiuvina) in summer 2018.

Legal status

E. brochonii is protected at national level.

Main threat and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threat in Corsica is:

- 8.2.1 Unspecified species (vegetation dynamics)

Conservation actions carried out in the CARE-MEDIFLORA project

The actions focus on one of the three populations of *Elatine brochonii* of Corsica: Chiuvina (municipality of Santo Pietru di Tenda). Two invasive species *Dittrichia viscosa* and *Paspalum distichum* are growing in this temporary pond of about 1285 m2 and compete with *E. brochonii*. The project provides eradication of the 2 invasive species on all the Chiuvina temporary pond: *Dittrichia viscosa*: 230 m^2, *Paspalum distichum*: 130 m^2, to allow *Elatine*'s development of and other rare or protected species present on the Chiuvina pond: *Isoetes velata, Isoetes histrix, Pilularia minuta, Littorella uniflora, Pulicaria vulgaris, Ranunculus ophioglossifolius, R. revelierei*.

After the end of the project,monitoring activities will be continued, ensuring the long-term sustainability for the *in situ* actions.

Photos

General aspect of *E. brochonii* (left) & *Dittrichia viscosa* (invasive species) in the temporary pond of Chiuvina (right)

Control of *Dittrichia viscosa* in the temporary pond of Chiuvina

Project partner: National Botanical Conservatory of Corsica of the Office of the Environment of Corsica

Island

Corsica

Species name (Family)

Kosteletzkya pentacarpos (L.) Ledeb. (Malvaceae)

Common name

French: Hibiscus à cinq fruits

Plant description

- ✓ Perennial from 1-2 meters high. Leaves with 3 lobes. Flowers solitary on axial line or in cyme. Black caps with five compartments with one seed in each.
- ✓ *K. pentacarpos* flowers from July to September, while fruiting occurs from August to October. Seeds are dispersed by barochory, and hydrochory.
- ✓ Species habitat is partly halophilous reed beds, fringes with helophytes borderingmore or less brackish ponds, almost always in association with *Phragmites australis, Bolboschoenus maritimus, Aster tripolium, Juncus maritimus*.

Distribution

This taxa is located in two main area. The first one in West Mediterranean (Spain, Balearic islands, Corsica, Italy). The second one is more in east with Russia (Caspienne sea). This taxa is absent of the French continent.

In Corsica, the species is located in four places all, on the East coast: 1) Biguglia (the most septentrionale and the most numerous) ; 2) Pinia, where this taxa is decreasing. Only one wasfound in september 2016 instated of four knowned before; 3) Calzarello, nice population; 4) Palo (only few plants). The location of Maora, near Bonifacio, disappeared.

Map

4 populations of *Kosteletzkya pentacarpos* are present in Corsica. 2 are declining.

Legal status

This species is protected at national level and listed in the Appendix I of the Bern Convention and in the Annex II and IV of the Habitats Directive 92/43/EEC.

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Corsica are:

- 1.1 Housing & urban areas. Due to urbanization, the location of Santa Manza disappears.
- 4.1 Roads & railroads. A part of the location of Biguglia was damaged by the road development.
- 8.2.1 Unspecified species. Little locations (Pinia, Palo) are concerned by vegetation's dynamic and environmental remanences associated with storms (large amounts of sand at river mouths). Sometimes they appear due to a fire or the action of stakeholders.

K. pentacarpos was assessed as Endangered (EN) according to IUCN Regional Red List of Corsica (Delage A., Hugot L., 2015).

Conservation actions carried out in the CARE-MEDIFLORA project

The purpose of the action was to maintain these little populations. So:

- 1/ a reinforcement was carried out on the site of Pinia (Ghisonaccia). 226 plants from seeds recollected from the site have been implanted in 4 experimental spots in from a November to December 2017. Periodic monitoring was started in July 2018. The preliminary results of the monitoring showed a survival rate of 28%.
- 2/ and a control of natural vegetation was carried out on the site of Palo (Serra-di-Fiumorbu) to maintain this little population.

After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability for the *in situ* actions.

Photos


General aspects of *Kosteletzkya pentacarpos*


Translocation action & Landscape opening

Project partner: National Botanical Conservatory of Corsica of the Office of the Environment of Corsica

Island
Corsica

Species name (Family)
Ranunculus sylviae Gamisans (Ranunculaceae)

Common name
French: Renoncule de Sylvie, English: buttercup

Plant description
- ✓ Plant of *Ranunculus polyanthemos* L aggr. flowering from May to June, while fruits are coming from June to July. Even pollination is done by insects, seeds are spread by barochoria. Medium and long dispersion is unknown.
- ✓ The species grows in mountanous zone at the altitude of 1400 m, in fruticetum with dwarf juniper on pozzines (mountain wetland).

Distribution
Endemic strict of Corsica, with southern European origin. Very rare plant, present only on the Pianu di Cuscionu (Zicavo commune)

Map


Only one population present in Corsica (only few hundred individuals) and a station created

Legal status
Newly described taxon. Without reglementary protection.

Main threat and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threat in Corsica is:

- 6.1 Recreational activities. A possible development of this tourist site constitutes the biggest threat for this species.

Conservation actions carried out in the CARE-MEDIFLORA project

Due to the unicity of the population the goal is to increase the population and to create a new one for security raison.

Planting took place just after the first snow of November 8th, 2017 with the support of the staff of the Alta Rocca communes Community. The new population was created at 5 km from the "natural" one, near the Quenza refuge, on the southern part of the Cuscione plateau. 48 5-month-old plants were planted on the banks of a creek, in dwarf juniper trees, on «pozzine».

Regular monitoring of the operation will be carried out by the National Botanical Conservatory of Corsica and the agents of the Community of communes of Alta Rocca.

The preliminary results of the monitoring are showing a survival rate of 60 % and some seedlings.

After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the in situ actions.

Photos


General aspects of R*anunculus sylviae* & Plant production for *in situ* action


Translocation (08/11/2017) & Monitoring (25/07/2018)

Project partner: National Botanical Conservatory of Corsica of the Office of the Environment of Corsica

Island

Corsica

Species name (Family)

Silene velutina Loisel (Caryophyllaceae)

Synonyms : *S. mollissima sensu* Briq., non (L.) Pers.

Common name

French: Silène velouté, English: Silenus velvety

Plant description

- ✓ Perennial plant from 20 to 50 cm, robust, whitish tomentose, with branched woody base. Leaves entirely tomentose, lower oblong spatulate, upper lanceolate-acute, smaller. Inflorescence in dense panicle. Pink flowers, rarely white. Bifid petals. Chalice pubescent-glandular, elongated in a club, constricted at the top. Ovoid-oblong capsule, no more longer than the pubescent mucron.
- ✓ The species flowers from May to July, while fruiting occurs from July to October. Seeds are dispersed by barochory on short distance, and ornithochory, zoochorie on longer distance.
- ✓ Near the sea shore, *S. velutina* is associated with littoral distribution species (association *Loto cytisoidis - Silenetum velutinae*: 1240.1 "Vegetations of fissures of limestone cliffs" and 1240.2 "Vegetations of fissures of crystalline cliffs").
- ✓ Farer from the sea, this taxa is found with other phytosociological association (*Pancratio illyrici - Silenetum velutinae*: 8220.20: Thermophilic siliceous cliffs of Corsica).

Distribution

• *S. velutina* is an endemic from Corsica and Sardinia.

• In Corsica, this species grows on the main Island as well as on some islets.

Map

In Corsica, *S. velutina* is growing in the main Island as well as some islets.

Islets: Fazzio, Cala di Sciumara, îlot du silène des Lavezzi, île Lavezzi, Cavallo , Folachedda, Folaca, Capu d'Acciaju, Toro, Ziglione, Stagnolu, Roscana. On the islet of Cornuta, the species disappear since 2000.

Corsica: Capo di Feno, Corba, Bonifacio Cala di Sciumara, Acciaju, Tamaricciu, Chiappa, Porto-Vecchio, Punta d'Arasu.

Legal status

The species is protected at national level and listed in the Appendix I of the Bern Convention and in the Annex II and IV of the Habitats Directive 92/43/EEC.

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Corsica are:

- 8.2.2 Named species. In the cracks, the chasmophytic vegetation seems to be stable. But, on the islets, bird's populations and edaphics conditions are parameters impacting directly locations.
- 1.1 Housing & urban areas. In some case, anthropic activities and urbanization are threatening directly location, either, littoral erosion is involved.

Conservation actions carried out in the CARE-MEDIFLORA project

S. velutina was on the islet of Cornuta until the beginning of the 2000s. The disappearance of the species is linked to the number of seabirds increasing and to vegetation's modification (invasive species, for example *Lavatera arborea*). Otherwise, this taxa is in sharp decline in the sector of Casetta Bianca. For Cornuta, the action aims to reintroduce it on the islet, trying to control the population of *L. arborea* and to minimize the impact of birds. For Casetta Bianca, the action aims to strengthen the population, but also the information and awareness of landowners where stations are located.

November 20th, 2017, 316 plants from 6 months to 1 year old and 300 seeds were introduced on the islet of Cornuta and February 13th, 2019, 90 one-year and eight-month old plants were introduced on Casetta Bianca.

Periodic monitoring is done. Preliminary results are showing a survival rate of 49% of the transplanted individuals on the islet of Cornuta, and 95 % on Casetta Bianca.

After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos

General aspects of *Silene velutina* & Transport of plants on Cornuta Island

S. velutina was present on the islet of Cornuta until 2001. It was reintroduced in December 2017 (left) & Planting *S. velutina* on Cornuta Islet (right)

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island
Sardinia

Species name (Family)
Astragalus gennarii Bacch. & Brullo (Fabaceae)

Common name
Astragalo di Gennari (Italian name), Gennari milkvetch (English name).

Plant description
Astragalus gennarii is a dwarf shrub forming a dense, compact, spiny cushion, 20-80 cm tall. Woody stems, densely branched, tough, with persistent stipules and rachis in the old parts of the branches. Imparipinnate leaves, raceme 2-4 flowered and corolla white to yellowish. Reniform, brown-olivaceous seeds, often blotched, smooth and laterally compressed (Bacchetta and Brullo, 2006).

The species is a chamaephyte, the flowering occurs from May to June and the fruiting from June to July. The reproductive biology of this species has not yet been studied (Cogoni et al., 2014).

A. gennarii is an orophilous plant species occurring at an altitude of 800-1055 m a.s.l., in a very restricted area of Monte Albo (Lula, NU; north-eastern Sardinia). The species grows on Mesozoic limestones. From a bioclimatic point of view, the species can be referred to the Upper Mesomediterranean, Lower Humid, Euoceanic Weak (Cogoni et al., 2014).

Distribution
The species is a narrow endemic plant that grows in a single population located in Punta Turuddò (Monte Albo, Lula, NU) consisting of ca. 40-45 mature plants (Cogoni et al., 2014).

Map


Legal status
The plant is not listed in any international, national or local regulations.

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats are:

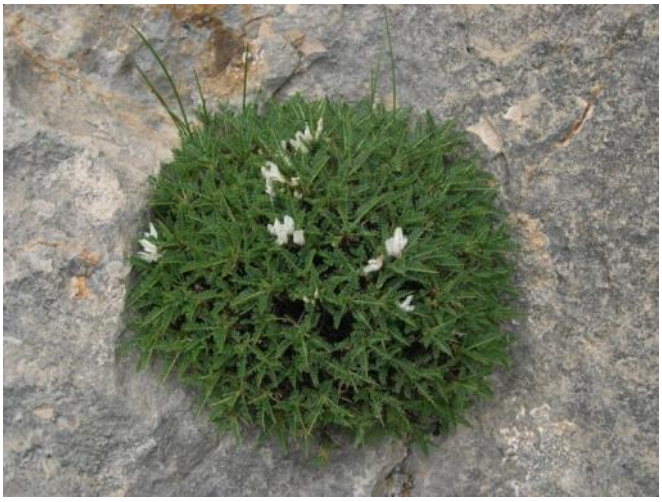
- 10.3: Avalanches/Landslides. This main threat, which consists in the natural evolution of limestone cliffs, could cause a reduction of the population and a modifications in the habitat quality.
- 6.1: Recreational activities. The tourism and recreational activities, in particular the hiking, could represent a serious threat to the species.

The species was assessed as Critically Endangered (CR) at global and regional level (Cogoni et al., 2014; Orsenigo et al., 2018).

Conservation actions carried out in the CARE-MEDIFLORA project

For *A. gennarii* long-time conservation (base collection at -25°C) to ensure the *ex-situ* conservation was carried out in seed bank (BG-SAR). Plants were propagated both from vegetative stems and seeds in the nursery of Fo.Re.S.T.A.S. Agency. A translocation action has been performed to boost the number of mature individuals. It has been conducted near the natural population, where the probability of plant survival and reproduction is greater. Plants were propagated both from vegetative stems and from seeds and then 350 plants, codified with a label for the future monitoring activities, were translocated in March 2018. Fence protection has been placed in order to prevent grazing. Periodic monitoring of the translocated plants was elaborated, and it started in Spring 2018. The preliminary results of the monitoring showed a high survivorship rate of transplanted individuals. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos



Individual of *Astragalus gennarii* (photo by Gianluigi Bacchetta) & Plant production of *Astragalus gennarii* in the Forestas Nurcery (photo by Giuseppe Fenu).

Figure 3: Translocation of *Astragalus gennarii* (photo by Giuseppe Fenu).

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island
Sardinia

Species name (Family)
Centaurea magistrorum Arrigoni & Camarda (Asteraceae)

Common name
Fiordaliso dei maestri (Italian name), knapweed of teachers (English name).

Plant description
- ✓ *Centaurea magistrorum* is a woody suffruticose plant, with erect branches or slightly prostrate. Annual stems of 20-30 cm, with linear glabrous bands alternating with woolly-pubescent strips. Grey-green leaves simple (linear or spatulate) or compounds or irregularly imparipinnate. White flowers or slightly pink of 3-5 mm. Black-shiny achenes with greenish reflections of (3)3.2 × 1-1.3 mm, sparsely hairy, with an apical crown; pappus with simple hairs, 0.4-1.2 mm long (Arrigoni and Camarda, 2003; Cogoni et al., 2014).
- ✓ The species is a chamaephyte; the flowering lasts from July to August, and fruiting from August to September. In some cases, a vegetative propagation by radical stems has been observed (Arrigoni and Camarda, 2003).
- ✓ *C. magistrorum* is a heliophilous species which grows only in a single population on granitic substrata and poor soils. From a bioclimatic point of view, the species can be referred to the Lower Mesomediterranean, Upper Subhumid, Euoceanic Weak (Cogoni et al., 2014).

Distribution
Centaurea magistrorum is a narrow endemic species of central-eastern Sardinia (Italy). The only natural population is located in Monte Luas (Villagrande Strisaili, NU) and consists of ca. 90-100 reproductive plants (Cogoni et al., 2014).

Map


Legal status

Currently, species is not listed in any international, national or local regulations.

Main threat and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats are:

- 2.2: Wood & Pulp Plantations. The main threat of this species is due to the impact of conifer reforestation and the forestry practices in the Monte Luas area, which determined a loss of habitat quality.
- 2.3: Livestock Farming & Ranching. The high presence of unregulated grazing animals (pigs) leads to considerable damage to the population
- 4.1: Roads & Railroads. The creation of forest roads and the continuous maintenance of these roads represent a threat factor for its habitat and cause the fragmentation of the population area.
- 7.1: Fire & Fire Suppression. Stochastic environmental events such as fires could represent significant potential threats.

This species was assessed as Critically Endangered (CR) at Global and regional level (Cogoni et al., 2014; Orsenigo et al., 2018).

Conservation actions carried out in the CARE-MEDIFLORA project

The conservation actions for this species include several actions started in March 2018 to improve the *in situ* conservation status of the only existing population. These include the eradication of the reintroduced conifers and other alien plants (i.e. *Quercus rubra* L.), the cutting of forest to create free-growing space for the natural plant, the erection of protective fences to prevent the grazing and activities related to the reforestation management. A monitoring plan was elaborated and started in Spring 2017. Monitoring activities measure the effectiveness of all management actions by counting the number of reproductive and juvenile plants of *C.magistrorum*. The preliminary results of the management actions show that all plants, juvenile and reproductive, survived, fences positively enhanced the plant's long-term survival and reproductive success. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the in situ actions.

Photos

Plant of *Centaurea magistrorum* (*photo by Gianluigi Bacchetta)* & Fence erection for *C. magistrorum (photo by Giuseppe Fenu).*

Proctective fence for *C. magistrorum (photo by Gianluigi Bacchetta).*

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island
Sardinia

Species name (Family)
Centranthus amazonum Fridl. & A. Raynal (Caprifoliaceae)

Common name
Camarezza sarda (Italian name), amazon valerian (English name).

Plant description
- ✓ *Centranthus amazonum* is a perennial plant of 45-90 cm tall. Opposite glaucous leaves, from oval-lanceolate to lanceolate, 7-9 cm long and 1,5-2,5 cm wide. Inflorescence in bi-trichotomic corymbs, well separated from the vegetative leaves for 1-2 internodes. Flowers are white-pink; seeds are achenes (3-4 mm; Fridlender and Roques, 1998; Bacchetta et al., 2008).
- ✓ *C. amazonum* is a chamephyte, flowering occurs from May to July and the fruiting from June to July (Bacchetta et al., 2008). Wind is the main seed dispersal agent. This species had a higher proportion of empty seeds (Mattana et al., 2010).
- ✓ This taxon grows in limestone karst mountains. From a bioclimatic point of view, the species can be referred from the Lower Mesomediterranean to the Lower Supramediterranean, from Lower Subhumid to Lower Humid, Euoceanic Weak (Bacchetta et al, 2008).

Distribution
C. amazonum is a narrow endemic plant of Central-Eastern Sardinia (Italy). The species occurs in two sites: in "Monte Corrasi" (Oliena, NU) at 1300 m a.s.l. with a population of less than 100 individuals. Few individuals (2-5) have also been found in "Codula di Luna" (Urzulei, NU) at 140 m a.s.l. (Bacchetta et al., 2008).

Map


Legal status

C. amazonum is included in the Annex II of the Habitats Directive 92/43/EEC. Furtheremore, *C. amazonum* is protected by the Municipality of Oliena and it is included in the "category A" (species at very high risk of extinction) on the basis of the municipal resolution n. 7 of 16/02/2007. The growing sites of *C. amazonum* are included in the SCIs (Sites of Community Importance) "Supramonte of Oliena, Orgosolo and Urzulei – Su Sercone" (ITB022212) and "Golfo di Orosei" (ITB020014).

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sardinia are:

- ✓ 5.2.1: Gathering Terrestrial Plants - Intentional Uses. The mains threats for *Centranthus amazonum* were determined by the uncontrolled harvest of individuals or parts of them for scientific or collectionist purposes.
- ✓ 6.1: Recreational Activities. A further threat for the species was due to the trampling by the touristic activities.
- ✓ 10.3: Avalanches/Landslides. This threat consisted in the natural evolution of limestone cliffs which could cause a reduction in the population and modifications in the habitat quality.
- ✓ 2.3.1: Nomadic Grazing. Grazing by mouflons aggravated the conservation status of this taxon.

This *taxon* was assessed as Critically Endangered (CR) at global and regional level (Bacchetta et al., 2008; Orsenigo et al., 2018).

Conservation action carried out in the CARE-MEDIFLORA project

The conservation action consists of a management action aimed to reduce the human disturbance in the population located in Codula di Luna, which was carried out in March 2018. The existent pathway through the population area, highly frequented by tourists during the reproductive season of *Centranthus amazonum*, was moved far for the small population area; continuous management of the pathway was ensured to reduce the human disturbance followed by periodic monitoring of all remnant plants. A monitoring plan of the *in situ* action was elaborated and started in March 2018. Monitoring activities measured the effectiveness of management action, which preliminary results showed that all mature plants in the population regularly completed their reproductive cycle without damages caused by tourists. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos

Left: Flowering of *Centranthus amazonum* (photo by Gianluigi Bacchetta). Middle: Individual of *Centranthus amazonum* (photo by Giacomo Calvia). Right: New path away from the population of *Centranthus amazonum* (photo by Giuseppe Fenu).

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island
Sardinia

Species name (Family)
Dianthus morisianus Vals. (Caryophyllaceae)

Common name
Garofano del Moris, garofano di Moris, garofano sardo (Italian names), Moris's pink (English name).

Plant description
- ✓ *Dianthus morisianus* Vals. is a perennial suffrutex, characterised by numerous woody stocks and erect stems, 20-45 cm long, and by a basal rosette with thin and linear leaves. It presents hermaphroditic and, in low frequency, female flowers, which are normally pink. Fruits consist of cylindrical-oblong capsules containing dark obovate seeds.
- ✓ Moris's pink is a psammophilous chamaephyte. The flowering season lasts from early May to late June, whereas ripe fruits can be found from June to July.
- ✓ This *taxon* grows on stabilised dunes at an altitude of 20-90 m a.s.l. and on slopes with a varied incline and aspect. From a bioclimatic point of view, the species can be referred to the Upper Thermomediterranean, Upper Dry, Euoceanic Strong.

Distribution
D. morisianus is a narrow endemic species of South-West Sardinia (Italy). The only one natural population is found in the Portixeddu coastal dune system, which corresponds to the *locus classicus*.

Map


Legal status
Currently, the species is not listed in any international, national or local regulations.

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats are:

- ✓ 6.1: Recreational Activities. Exploitation of the sites for recreational purposes represented a threat factor for the population and its habitat.
- ✓ 2.3: Livestock Farming & Ranching. Unregulated grazing, mainly due to goats, leads to considerable damage to the population.
- ✓ 2.2: Wood & Pulp Plantations. The conifer reforestation in the Portixeddu area, affects the population of *Dianthus morisianus*, determining a loss of habitat quality.
- ✓ 7.1: Fire & Fire Suppression. Stochastic environmental events such as fires could represent significant potential threats.

This *taxon* was assessed as Endangered in the Italian Red List and as Vulnerable in the Regional Red List. Recently, it is categorised as Critically Endangered on the IUCN Global Red Lists.

Conservation actions carried out in the CARE-MEDIFLORA project

A translocation action was carried out in order to strengthen the population by boosting the number of mature individuals. Plants were propagated from seeds at the greenhouse of the Sardinian Germplasm Bank (BG-SAR). In March 2018, 38 adult plants were reintroduced in a new site, previously protected by fences to reduce human and animal disturbance. This area was fenced by using chestnut poles and metal fences with variable mesh in order to avoid (or substantially reduce) the access of humans and herbivores. Each plant, labelled for future monitoring activities, was placed depending on the availability of suitable microhabitats.

A monitoring plan of translocated plants and the natural fence was elaborated and started in spring 2018 in order to measure the survival, the reproductive traits, the number of seedlings and the effectiveness of the management action.

The preliminary results of the management action showed that fences positively enhanced the plant's long-term survival and reproductive success. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos


Left: *Flower of* Dianthus morisianus *(photo by Donatella Cogoni).* Right: *Individual of* Dianthus morisianus *(photo by Gianluigi Bacchetta).*

Translocation of Dianthus morisianus *(photo by Donatella Cogoni)*..

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island
Sardinia

Species name (Family)
Gentiana lutea L. subsp. *lutea* (Gentianaceae)

Common name
Genziana maggiore (Italian name), yellow gentian (English name)

Plant description
- ✓ *Gentiana lutea* subsp. *lutea* is a rhizomatous plant, which usually develops one unbranched stout stem (rarely two or three) up to 90 cm tall; it has a basal rosette formed by lanceolate-elliptic leaves. Flowers are yellow and have a bicarpellate ovary. The fruits are capsules, which hold a great number of elliptic, flattened and winged seeds. Seeds have a linear underdeveloped embryo and show an intermediate complex morphophysiological dormancy.
- ✓ Yellow gentian is a geophyte rhizomatous plant flowering in summer (June-July) and fruiting in late summer (August). The wind is the main seed dispersal agent. Corolla has an open structure, which facilitates pollinator access (insects belonging to Hymenoptera and Diptera orders.
- ✓ *G. lutea* subsp. *lutea* grows in grasslands, meadows, heather and broom in the upper montane and subalpine pastures, with an altitudinal range from 1200 to 1800 m a.s.l. in Sardinia. From a bioclimatic point of view, the species can be referred to the Lower Supra-temperate, Upper Humid, Semicontinental Weak.

Distribution
G. lutea subsp. *lutea* is an orophilous species distributed in the mountain ranges of South Europe: Sardinia, Corsica, Iberian, Italian, and Balkan Peninsulas and Alps. In Sardinia are present 24 localities in the Gennargentu Massif and 34 historical localities are extinct.

Map


Legal status

G. lutea subsp. *lutea* is included in the Annex V of the Habitats Directive 92/43/EEC and in the Annex D of the Council Regulation 338/97/EC of endangered medicinal plants. The population is located inside the SCI (Sites of Community Importance) "Monti del Gennargentu" (ITB 021103).

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sardinia are:

- ✓ 5.2.1: Gathering Terrestrial Plants - Intentional Uses and 2.3.1: Nomadic grazing. The main threats in Sardinia are the excessive root harvesting and grazing, which caused the extinction of the species in some localities.
- ✓ 11.1: Habitat Shifting & Alteration and 6.1 Recreational activities. In the near future, two main causes of extinction for the species could be the climate change and severe weather, besides the increase of mountain tourism and recreational activities as hiking.

This *taxon* was assessed as Least Concern (LC) at European level, Near Threatened (NT) in the Italian Red List and as Endangered (EN) in Sardinia.

Conservation actions carried out in the CARE-MEDIFLORA project

Seeds of all natural populations were collected and germplasm was stored at the Sardinian Germplasm Bank (BG-SAR) and used for duplicata exchanges with the Seed Bank (BGS-CT) of the University of Catania. Several plants were produced and cultivated in the greenhouse of Fo.Re.S.T.A.S. Agency in Talana (NU). A translocation was carried out where the species was extinct, in the site "Serra Siccorruli" in "Monte Genziana" Talana, fenced before the transplantation. A total of 200 individual plants were translocated, and each plant has been labelled for future monitoring activities. Subsequently, two new fences were built in a different locality near the translocation site where other 200 plants were translocated. A monitoring plan of translocation and the maintenance of the fence was elaborated and started in May 2017 measured the effectiveness of the management activities and the survival rate. Monitoring indicates that the management measures were in optimal conditions and the survival rate of the introduced individuals was acceptable. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos


Left*: Flowering of* Gentiana lutea *subsp*. lutea *(photo by Alba Cuena-Lombraña)*. Right: *Habitat of* Gentiana lutea *subsp*. lutea *(photo by Alba Cuena-Lombraña).*

Translocation of Gentiana lutea *subsp.* lutea *(photo by Gianluigi Bacchetta).*

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island
Sardinia

Species name (Family)
Ophioglossum vulgatum L. (Ophioglossaceae)

Common name
Ofioglosso comune, lingua di serpente (Italian names), adder's-tongue (English name).

Plant description
- ✓ *Ophioglossum vulgatum* is a terrestrial, homosporous, perennial fern, 5-30 cm tall, with a single sterile leaf. The spike consists of a variable number, between 10 and 40, of segments on each side. The rhizome is usually short, erect, bearing one, rarely two, fronds. The frond is simple, entire and ovate, 2-5 × 3-12 cm, with an adaxially placed, fertile spike, showing 15-50 sporangia on each side.
- ✓ *O. vulgatum* is a geophyte, the sporophyll sprouts out in April-June and wind is its main spores dispersal agent.
- ✓ This *taxon* grows in several sites such as bogs, damp sands, wet meadows, moist woods, sandy beaches or hillsides, in Sardinia occurs at 600-900 m a.s.l.. From a bioclimatic point of view, the species can be referred to the Lower Mesomediterranean, Lower Subhumid, Euoceanic Weak.

Distribution
O. vulgatum is grassland species distributed in the temperate regions of the Northern Hemisphere Particularly, in the Mediterranean islands it is present in Corsica, Crete, Malta, Sardinia and Sicily. In Sardinia, this *taxon* grows in two small populations (less than 50 reproductive plants per population) located in “Funtamela” (Laconi, OR) and “Gedili” (Jerzu, NU) localities.

Map


Legal status

O. vulgatum is not listed in any international, national or local regulations.

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats for *O. vulgatum* in Sardinia are:

- ✓ 2.3.1: Nomadic grazing. This is the main threat affecting the Sardinian populations, mainly due to wild boars.
- ✓ 2.3.2: Small-holder Grazing, Ranching or Farming. This threat could affect the conservation status of the species in Sardinia.

This *taxon* has not yet been assessed for the IUCN Red List at Global level. At regional level, Conti et al. (1997) catalogued this species as Critically Endangered (CR) in Sardinia.

Conservation actions carried out in the CARE-MEDIFLORA project

Fence protection was built in order to protect the only small population at Funtanamela locality in the Sarcidano region. Fence protection was also realized in the new site near the old historical population, found in 2018, to prevent the grazing of wild animals within an area managed by the Fo.Re.S.T.A.S. Agency. Each plant of the historical population has been labelled for future monitoring activities. A monitoring plan of the fence protection and the population site was elaborated and started in spring 2017. Monitoring activities in the "Funtanamela" population measured the number of reproductive and juvenile individuals and evaluated the effectiveness of the fence protection. First monitoring year survival was high inside the fenced area. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the in situ actions.

Photos

Ophioglossum vulgatum *details (photo by Carlo Dessì) & Individual of* Ophioglossum vulgatum *(photo by Giuseppe Fenu).*

Protective fence for Ophioglossum vulgatum *(photo by Carlo Dessì)..*

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island
Sardinia

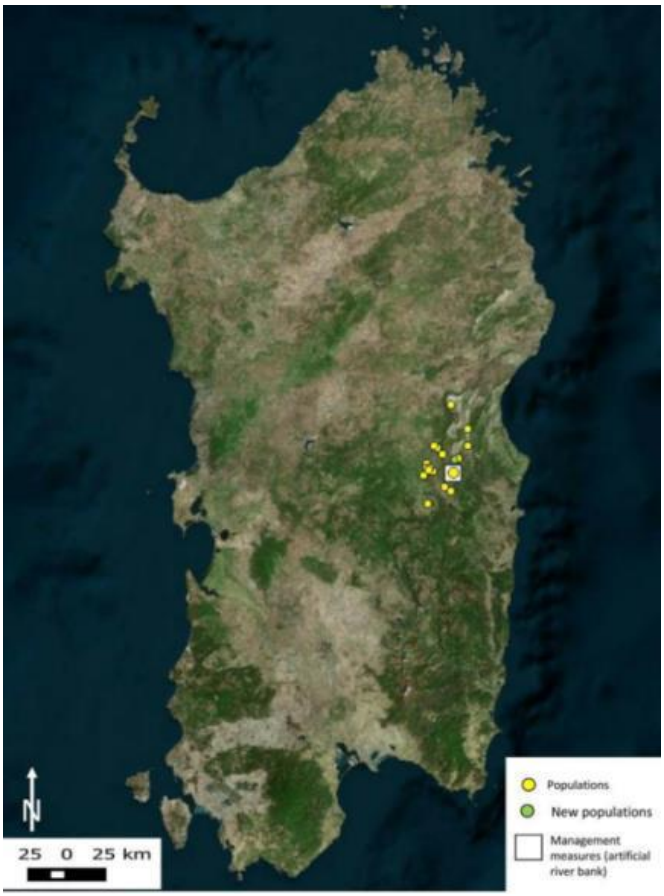
Species name (Family)
Rhamnus persicifolia Moris (Rhamnaceae)

Common name
Alaterno a foglie di pesco (Italian name), buckthorn peachleaf (English name)

Plant description
- *Rhamnus persicifolia* is a small tree or shrub, 2-5 m tall, characterised by long growing branches with thorny apex. Leaves are dark, green, elliptic, serrate, upper glabrous and pubescent above. Tetrameric yellow-green flowers. Fruits consist of a multi-stoned drupe with 3-4 sectoroid and slightly flattened pyrenes with a small triangular scar, a distinct longitudinal ridge and the seed completely enclosed.
- *R. persicifolia* is probably pollinated by insects and/or wind. The flowering period occurs from May to June, while fruits develop from August to October. Seeds show a physiological dormancy with overwintering cold stratification requirement and spring germination.
- This *taxon* grows both on limestone and siliceous substrata, at 500- 1500 m a.s.l. This species occurs in scattered groups or as single trees, in riparian woods or hygrophilous scrub along mountainous streams and in deep gorges. From a bioclimatic point of view, the species can be referred to the Upper Mesomediterranean, Lower Humid, Semicontinental Weak.

Distribution
R. persicifolia is endemic to central-eastern Sardinia (Italy). The populations are located in the Supramontes region and Gennargentu Massif. To date, only six main populations are known, half of these are threatened by low plant numbers or an unbalanced *sex ratio*.

Legal status
The plant is not listed in any international, national or local regulations.

Map


Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats are:

- 2 Agriculture and Aquaculture - 2.3 Livestock Farming & Ranching - 2.3.1 Nomadic grazing. These were the main threats affecting the seedling survival and causing the habitat loss and fragmentation.
- 7 Natural system modifications - 7.3 Other ecosystem modifications. The seasonal flooding could severely damage the species causing the complete exposure of the roots and a risk of crash.
- 8. Invasive and Other Problematic Species, Genes & Diseases - 8.1 Invasive Non-Native/Alien Species/Diseases. Non-native species trees were planted during the last decades for forestry policies, which increased alien and non-native species in the area.
- 11 Climate change and severe weather - 11.3 Temperature extremes - 11.1 Habitat shifting.

R. persicifolia was assessed as Endangered (EN) at national level.

Conservation actions carried out in the CARE-MEDIFLORA project

The selected actions for this target species include two *in situ* conservation actions. The long term (base collection at -25°C) germplasm conservation was carried out at the Sardinian Germplasm Bank (BG-SAR).

The first *in situ* conservation action was performed for the biggest individual (Patriarch) of this species in Sardinia, located in "Rio Is Eras" population. In collaboration with Fo.Re.S.T.A.S. Agency, an artificial river bank was built to protect this plant from flooding events and to prevent the risk of a crash. However, a few months after its construction two consecutive and large-scale flooding events destroyed the artificial river bank just built; more recently this action was repeated again. The second *in situ* conservation action consisted of a translocation to boost the number of individuals and restore the natural habitat of the species. Plants multiplied in the Fo.Re.S.T.A.S. nursery were successful transplanting in the selected site "Monte Genziana", near the extant population and each plant was labelled for the future monitoring activities. A monitoring plan of the artificial bank effectiveness and the conservation status of the patriarch was elaborated and started in January 2017. In addition, a monitoring plan of plant translocation was elaborated and started in April 2018. Success indicator for the translocation action was the survival rate of the 154 translocated individuals. The preliminary results of the monitoring showed a high survivorship rate of transplanted individuals. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos

Left: *Individual of* Rhamnus persicifolia *(photo by Gianluigi Bacchetta).* Right: *Plant of* Rhamnus persicifolia *translocated in Monte Genziana (Talana; photo by Alba Cuena Lombrana).*

Rhamnus persicifolia *patriarch in Rio Is Eras population (Talana; photo by Gianluigi Bacchetta).*

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island

Sardinia

Species name (Family)

Ribes multiflorum Kit. ex Roem. et Schult. subsp. *sandalioticum* Arrigoni (Grossulariaceae)

Common name

Ribes multifloro di Sardegna (Italian name), manyflower currant (English name)

Plant description

- ✓ *Ribes multiflorum* subsp. *sandalioticum* is a woody shrub (1.0–3.5-m high), with adult smooth branches, and juvenile grey pubescent branches. The plant is characterised by sub rounded leaves 6-7 cm wide, with 3-5 small lobes, denticulated, glabrous in the upper part, hairy and glandular above, in particular along the leaf ribs. Inflorescences raceme, bent, 7-8 cm long. Yellow-green small bisexual flowers. The mature fruits are dark red - black berries, containing 3-5 seeds with linear underdeveloped embryo.
- ✓ *R. multiflorum* subsp. *sandalioticum* is a dioecious plant. The flowering period occurs from April to May, while fruits develop from June to September. Pollinators are insects and birds and mammals are probably the main seed dispersal agents.
- ✓ *R. multiflorum* subsp. *sandalioticum* grows in fresh and shady valleys and on different substrata in the mountain environment from 1000 to 1600 m a.s.l.. From a bioclimatic point of view, the species can be referred to the range of Upper Mesomediterranean, Lower Subhumid and Euoceanic Weak to Lower Supramediterranean, Lower Humid, Semicontinental Weak, but frequently to the Temperate Oceanic (Submediterranean variant), Lower Humid.

Distribution

Ribes multiflorum subsp. *sandalioticum* is an endemic species of Central-North Sardinia (Italy). The *taxon* consists of 13 small populations distributed in the Gennargentu-Supramontes regions and in the Limbara and Marghine mountains.

Map

Legal status

Currently, the species is not listed in any international, national or local regulations.

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats are:

- ✓ 2.3.1: Nomadic Grazing and 6.1: Recreational Activities. The main threats were represented by the overgrazing and the activities of tourists.
- ✓ 11.1 Habitat Shifting & Alteration. In the near future, other two threats for the species could be the climate change and severe weather and mountain tourism development. In addition, the small population size of this plant could raise the risk of extinction, representing a serious threat to the species.

Ribes multiflorum subsp. *sandalioticum* was assessed as Endangered (EN)) on the IUCN Global Red List and Italian Red List.

Conservation actions carried out in the CARE-MEDIFLORA project

The conservation action for this species was the restoration and maintenance of the fence protection, by now ineffective and abandoned, in the biggest population of Monte Novo San Giovanni (Orgosolo, NU). This action was carried out in spring 2018 in order to prevent damages related to the grazing and trampling of wild ungulates. Ten plants selected randomly within the population were labelled for future monitoring activities. A monitoring plan of the new fence protection was elaborated and started in March 2018. Monitoring activities measured the effectiveness of the management action. The preliminary results of the monitoring showed the integrity of the protective fence. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos


Left: Inflorescence of *Ribes multiflorum* subsp. *sandalioticum* (photo by Gianluigi Bacchetta). Right: Individual of *Ribes multiflorum* subsp. *sandalioticum* (photo by Gianluigi Bacchetta).

Protective fence for *Ribes multiflorum* subsp. *sandalioticum* (photo by Giuseppe Fenu).

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island
Sardinia

Species name (Family)
Ribes sardoum Martelli (Grossulariaceae)

Common name
Ribes di Sardegna (Italian name), Sardinian currant (English name).

Plant description
- *Ribes sardoum* is a small woody shrub (0.8-2.0 m tall), with alternate leaves and a hairy, glandular leaf stalk. Small and inconspicuous greenish-yellow flowers that are solitary with short stalks. The mature fruit is a red ovate berry, containing ca. 3 seeds per fruit with linear underdeveloped embryo.
- *R. sardoum* flowers from April to the beginning of June, while fruits develop from late July to October. The pollination of the species is not known, while the seeds are probably dispersed by animals.
- This *taxon* grows in dolomitic limestones at ca. 1160 m a.s.l.. From a bioclimatic point of view, the species can be referred to the Upper Mesomediterranean, Upper Subhumid, Euoceanic Weak.

Distribution
R. sardoum is a relict endemic plant of Central-Eastern Sardinia (Italy). The only population is located in "Prados" (*locus classicus*, Monte Corrasi, Oliena, NU) and consists of ca. 80 reproductive plants in a surface area of ca. 700 m^2.

Map


Legal status
R. sardoum is listed in the Appendix I of the Bern Convention and in the Annex II of the Habitats Directive 92/43/EEC. The population of *Ribes sardoum* is included in the SCI (Sites of Community Importance) "Supramonte di Oliena, Orgosolo e Urzulei – Su Sercone" (ITB022212).

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sardinia are:

- 2.3.1: Nomadic Grazing. This species was affected by uncontrolled livestock grazing.
- 6.1: Recreational Activities. The tourist and recreation activities, in particular hiking, could represent a serious threat to the species.

R. sardoum was assessed as Critically Endangered (CR) according to IUCN Red List Categories at global and regional level.

Conservation actions carried out in the CARE-MEDIFLORA project

A translocation of 23 plants, propagated from seeds, was carried out in March 2017 in a new site close to the historical population. In addition, natural fence protection was built in order to prevent damages caused by grazing and trampling of wild ungulates. Periodic monitoring of the translocated population was started in spring 2017. Monitoring activities measured the survival rate of the introduced individuals. The preliminary results of the monitoring showed an acceptable survival rate of the transplanted individuals. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the in situ actions.

Photos

Left: *Fruits of* Ribes sardoum *(photo by Gianluigi Bacchetta).* Right: *Population of* Ribes sardoum *(Photo by Giuseppe Fenu).*

Translocation of Ribes sardoum *(Photo by Giuseppe Fenu).*

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

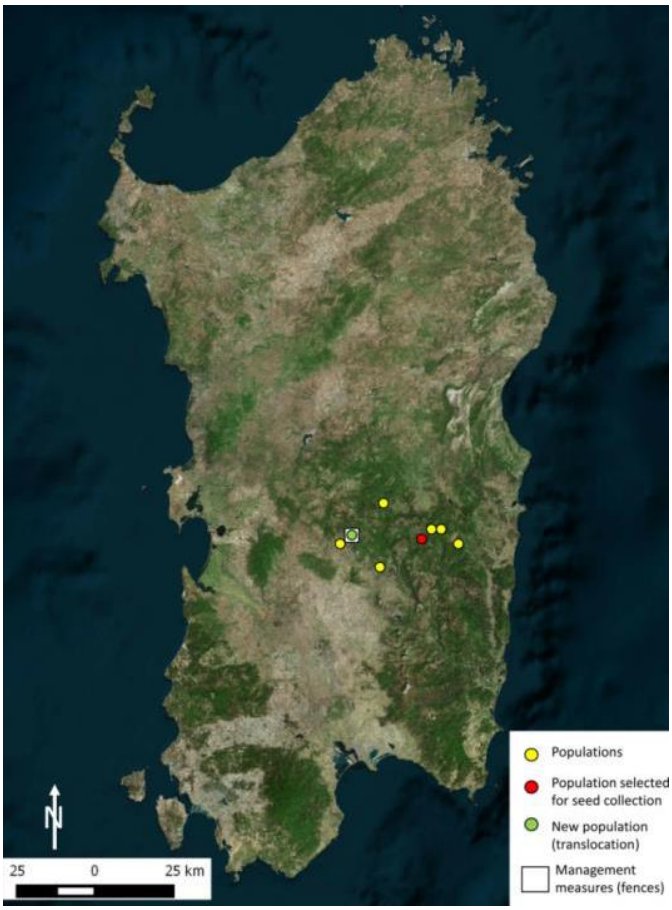
Island
Sardinia

Species name (Family)
Senecio morisii J. Calvo & Bacch. (Asteraceae)

Common name
Senecio di Moris (Italian name), Moris groundsel (English name).

Plant description
- *Senecio morisii* is a rhizomatous plant, 0.5–1.5 m tall. Basal leaves are oblanceolate, subentire to distantly dentate, glabrescent. Cauline leaves are lanceolate, semiamplexicaul and concolorous. Ligulate florets 6-8, 6-8.9 mm long. Achenes 3.2-3.8 mm long, subcylindrical, glabrous.
- *S. morisii* is a geophyte rhizomatous plant flowering in summer (May-June) and seeds ripen in July-August. Wind is the main seed dispersal agent.
- *S. morisii* growing in watercourses of plain to montane levels.

Distribution
S. morisii is a narrow endemic species growing in the Sarcidano and Ogliastra regions, Central-Eastern Sardinia. Only six populations are currently known.

Map


Legal status
The species is not listed in any international, national or local regulations.

Main threats and conservation status
According to the IUCN Threats Classification Scheme (Version 3.2), the main threats in Sardinia are:

- 2.3 Livestock Farming & Ranching - 2.3.1 Nomadic grazing. The main threat was the grazing, which caused the disappearance of stems during the flowering period then the less seed dispersion in some populations.
- 4.1 Roads & Railroads. The extension of the current roads could increase the risk of population damage.
- 6.1 Recreational activities. For several populations like Funtanamela, located within a public area, the recreational activities were a threat for the remnant reproductive plants.

Senecio morisii was assessed as Vulnerable (VU) on the IUCN Italian Red List.

Conservation actions carried out in the CARE-MEDIFLORA project

Seeds from a representative population were collected for *in situ* conservation actions. Plants were cultivated in the greenhouse of the Sardinian Germplasm Bank (BG-SAR). We selected two different sites in Funtanamela population with the same ecological conditions, near the wild population but within an area managed by the Fo.Re.S.T.A.S. Agency. Before the *in situ* action, in these two sites located along the same stream, all the alien species were eradicated and the natural vegetation was removed to create the open areas for the plant translocation. Both areas were fenced to avoid the grazing of wild horses and boars. In March 2018, a total of 125 individuals ex situ multiplicated, were transplanted in these two sites (64 and 51 individuals, respectively) and each plant was labelled for the future monitoring activities. The monitoring plan of the translocation and the fence protection started in spring 2018. Success indicators for the translocation action were the effectiveness of fence protection and the survivorship rate of transplants. The preliminary results of the monitoring showed the integrity of the protective fences and a high survivorship rate of the transplanted individuals. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos


Left: *Flowering of* Senecio morisii *(photo by Alba Cuena Lombraña).* Right: *Individual of* Senecio morisii *(photo by Gianluigi Bacchetta).*

Translocation of Senecio morisii *(Photo by Giuseppe Fenu)*

Project partner: Department of Biological, Geological and Environmental Sciences, University of Catania

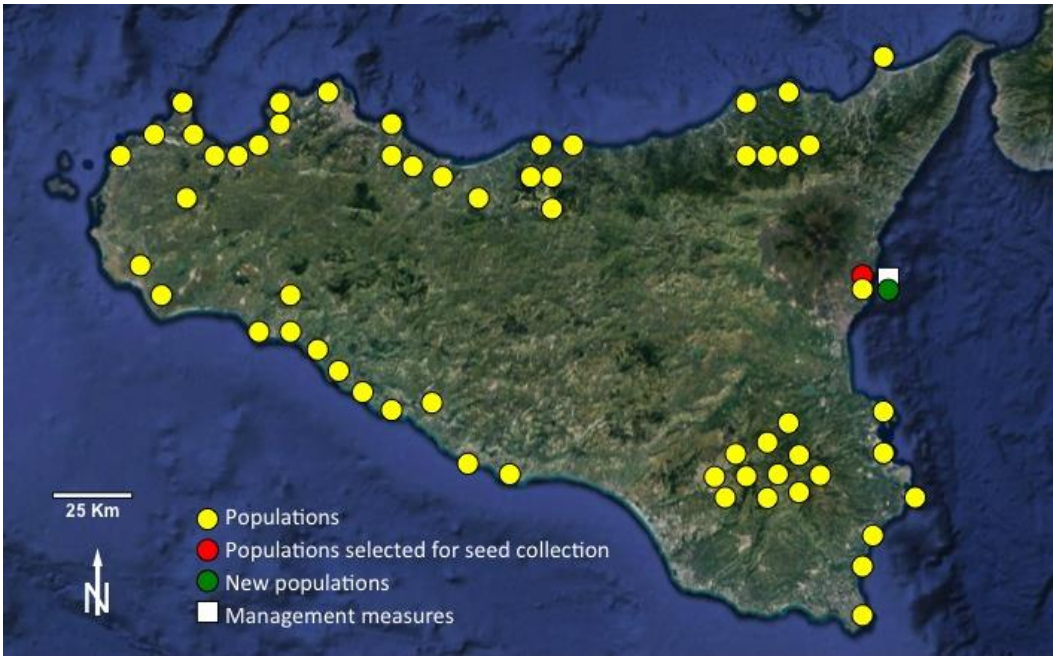
Island
Sicily

Species name (Family)
Dianthus rupicola Biv. subsp. *rupicola* (Caryophyllaceae)

Common name
Garofanino delle rupi (Italian name), Jarofalu sarvaggiu (Sicilian names), rupestrin pink (english name)

Plant description
- *Dianthus rupicola* subsp. *rupicola* is a small shrub, 50 cm tall. Stems with many branches, with leaves green, fleshy, acuminate. Petals pink- purplish to purplish, 37-40 mm long, spathulate at the limb. Fruits are capsules with seeds black and flattened. Plant with hermaphrodite flowers blooming from late Spring to early Autumn. Main pollinators are insects, probably *Lepidoptera*, while seeds do not show evident morphological adaptations for dispersion, that is simply due to falling from mother plant, waving movements of the capsules (semachory) or by rain drops hitting the capsules (ombrochory).
- This species grows on the cliffs or walls of different substrates (e.g. limestone, dolomite, gypsum or, more rarely, volcanic rocks) within the thermo- or meso-Mediterranean belts, ranging from the sea level up to 800 m of altitude.

Distribution
It is endemic to southern Italy (Campania, Basilicata and Calabria) and Sicily.

Map


Legal status
D. rupicola is included in the Annex II and V of the Directive 92/43/EEC.

Main threats and conservation status
According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sicily are:
- Threat 1.3 Tourism & recreation areas.
- Threat 7.3 Ecosystem modifications, such as quarries or wall cleaning where *D. rupicola* grows.
- Threat 8.1.2 Invasive non-native/alien species, such as *Opuntia* sp. pl., can contribute to a population decline of the taxon.

At European level, this *taxon* is classified as Near Threatened (NT), while Least Concern (LC) in the Italian Red List.

Conservation actions carried out in the CARE-MEDIFLORA project

- Seed collection
- A new population of *Dianthus rupicola* subsp. *rupicola* was established within the Nature Reserve "*Isola Lachea e Faraglioni dei Ciclopi"* (eastern Sicily)
- An area of ca. 10.000 sqm was manually eradicated. Actually, a huge part of the nature reserve is invaded by *Opuntia ficus-indica* L. (Cactaceae), which represents a severe threat for the coastal rocky vegetation of Sicily.
- In order to preserve the new population and, particularly, for avoiding damages caused by visitors or small animals a wooden fencing was realized.
- A restoration plan of the natural vegetation was implemented by using native thermo-xerophilous species.

Photos

Left: Flowers of *Dianthus rupicola* subsp. *rupicola*; Middle: Seedlings of *Dianthus rupicola* subsp. *rupicola*; Right: Juvenile plant of *Dianthus rupicola* subsp. *rupicola*

Translocated plants of *Dianthus rupicola* subsp. *rupicola* (N.R. "Isola Lachea e Faraglioni dei Ciclopi")

Eradication of *Opuntia ficus-indica* from the Lachea islet

Project partner: Department of Biological, Geological and Environmental Sciences, University of Catania

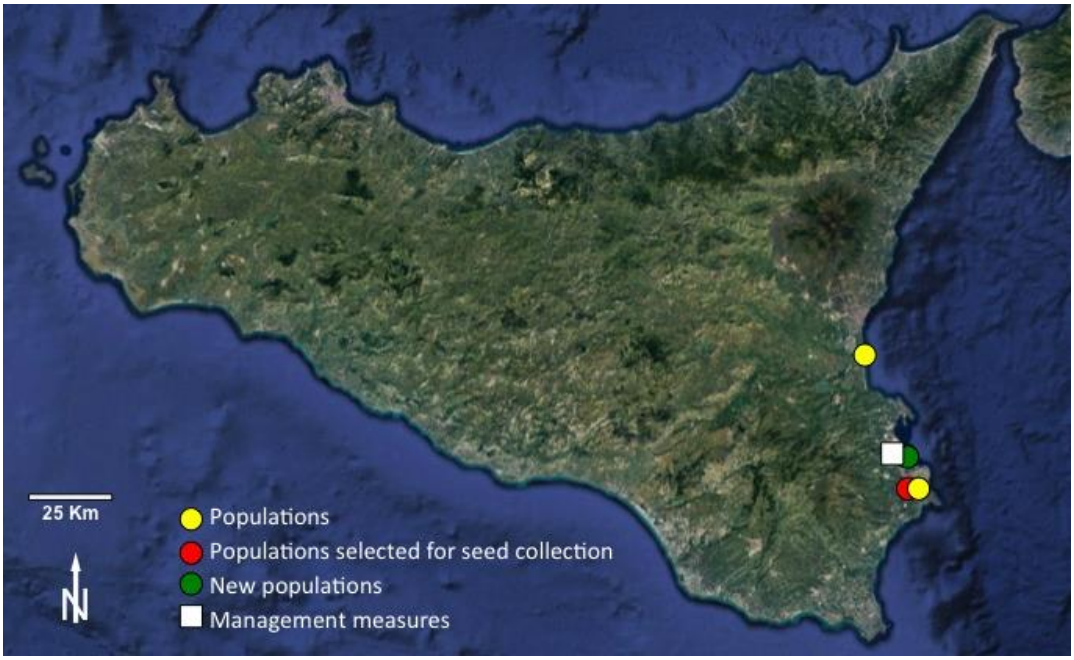
Island
Sicily

Species name (Family)
Tripolium pannonicum (Jacq.) Dobrocz.

Common name
Astro marino (Italian name), Sea aster (English name).

Plant description
- ✓ *Tripolium pannonicum* is an herbaceous plant, up to 120 cm tall, with short rhizome. Stems erect or ascending, glabrous, fleshy, enlarged at the base, striatum and branched at the top. Leaves alternate, scabrous or smooth, fleshy; the basal ones, gathered in rosette, have oblanceolate-spathulate blade and a petiole 12-25 cm long and 4-5 cm wide; the upper ones are narrower and sessile.
- ✓ Monoecious plant with hermaphrodite flowers, which blooms in late summer or autumn (August-November). Pollination is entomophilous, while fruits are achenes with a pappus allowing dispersion by wind.
- ✓ This species grows at the edges of salt marshes, often submerged for short time, close to the coast. It exclusively grows on salty substrates.

Distribution
T. pannonicum is a species with an Euro-Asiatic distribution. In Sicily, it is currently known for 2 localities of south-eastern Sicily, i.e. N.R. "*Oasi del Simeto*" (Catania) and N.R. "*Fiume Ciane e Saline di Siracusa*" (Syracuse).

Map


Legal status
none

Main threats and conservation status
According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sicily are:
- ✓ Threat 1.1 (Housing & Urban Areas)
- ✓ Threat 1.3 (Tourism & Recreation Areas)
- ✓ Threat 6.1 (Recreational Activities)
- ✓ Threat 8.1 (Invasive Non-Native/Alien Species/Diseases)

Conservation actions carried out in the CARE-MEDIFLORA project

- Seed collection
- A new population of *Tripolium pannonicum* was established within the Nature Reserve "*Saline di Priolo*" (SE Sicily)
- An area of ca. 1.300 sqm was manually eradicated. Actually, a huge part of the nature reserve is invaded by *Acacia saligna* L. (*Fabaceae*), which represents a severe threat for the natural vegetation of the Sicilian coasts.
- A restoration plan of the natural vegetation by using native species was implemented.

Photos

Left: *Tripolium pannonicum* from the N.R. "Fiume Ciane e Saline di Siracusa" (Syracuse). Middle: Inflorescences of *Tripolium pannonicum* from the N.R. "Oasi del Simeto" (Catania). Right: Salt marshes with *Tripolium pannonicum* (N.R. "Fiume Ciane e Saline di Siracusa").

Left: Restoration of the natural vegetation in the N.R. "Saline di Priolo" (SE Sicily). Right: Translocated plant of *Tripolium pannonicum* within the N.R. "Saline di Priolo" (SE Sicily).

Left: Eradication of *Acacia saligna* in the N.R. Saline di Priolo (SE Sicily). Right: Localization of the new population of *Tripolium pannonicum* within the N.R. "Saline di Priolo" (SE Sicily)

Project partner: Department of Biological, Geological and Environmental Sciences, University of Catania

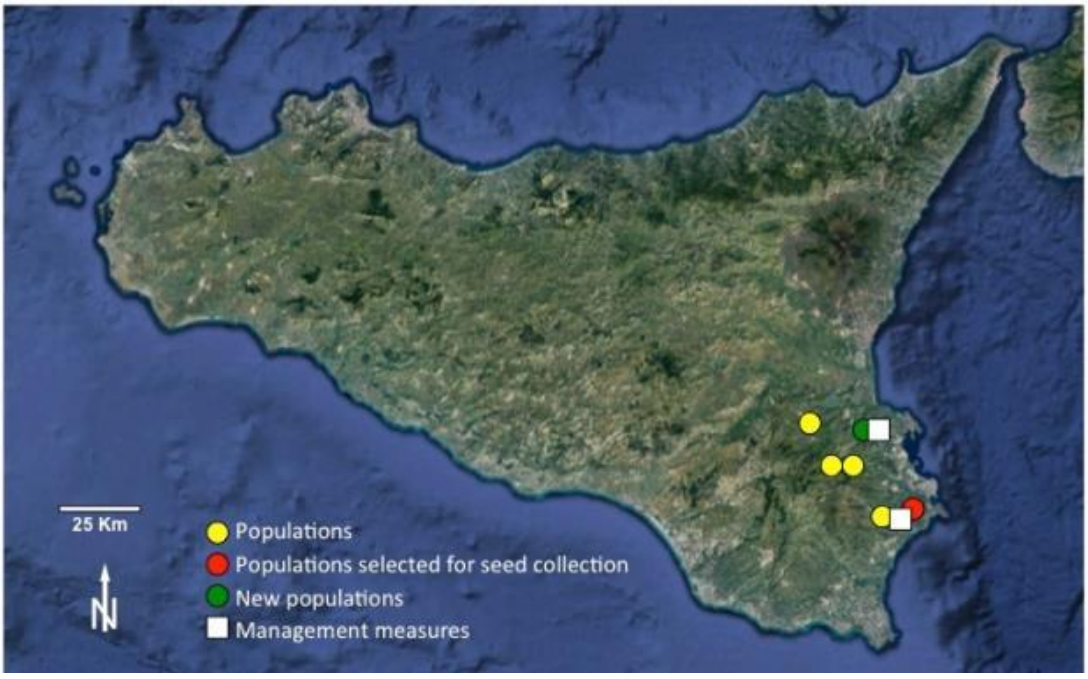
Island
Sicily

Species name (Family)
Urtica rupestris Guss. (Urticaceae)

Common name
Ortica rupestre (Italian name)

Plant description
- *Urtica rupestris* is a perennial herb, 30-100 cm tall. Stems erect, sometimes woody at the base. Leaves ovate-acuminate, almost glabrous and without urticating hairs. Fruit is an achene, usually enclosed by persistent perianth.
- Dioecious plant with female and male racemes, flowering in spring (April-May). Pollination is anemophilous.
- This species grows within sciaphilous plant communities colonizing the rocky outcrops within mesophilous holm oak woods, in the meso- and thermo-mediterranean belt (0-600 m a.s.l.). It occurs on carbonatic substrates.

Distribution
It is a narrow endemic species of south-eastern Sicily. In Sicily are known 8 localities and 2 historical extinct localities, all located within the Hyblaean Plateau.

Map


Legal status
none

Main threats and conservation status
According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sicily are:
- Threat 7.1.1. Fire may affect the Holm oak woodlands where the species is found.
- Threat 2.3.1. Nomadic grazing.
- Threat 11.2. Climate changes and, particularly, severe drought may cause severe stress for the species.

The IUCN assessment *for Urtica rupestris* is VU.

Conservation actions carried out in the CARE-MEDIFLORA project

- Seed collection.
- Two new populations of Urtica rupestris were established within the Nature Reserve "Complesso speleologico Villasmundo-Sant'Alfio" (SE Sicily).
- An existing population within the Nature Reserve "Grotta Monello" was reinforced (SE Sicily).
- The single population found in the Nature Reserve "Grotta Palombara" was fenced. Similarly, 3 populations (2 new and 1 existing) in the Nature Reserve "*Complesso speleologico Villasmundo-Sant'Alfi*o" were fenced.

Photos


Urtica rupestris from Villasmundo (SE Sicily) & Carbonatic outcrops under the canopy colonized by *Urtica rupestris* (Villasmundo-S.Alfio)


Seedlings of *Urtica rupestris* & Translocated plant of *Urtica rupestris* (N.R. Villasmundo-S.Alfio)


Translocated plants of *Urtica rupestris* (N.R. Villasmundo-S.Alfio)


Fencing the population of *Urtica rupestris* from the N.R. "Grotta Palombara"

Project partner: Department of Biological, Geological and Environmental Sciences, University of Catania

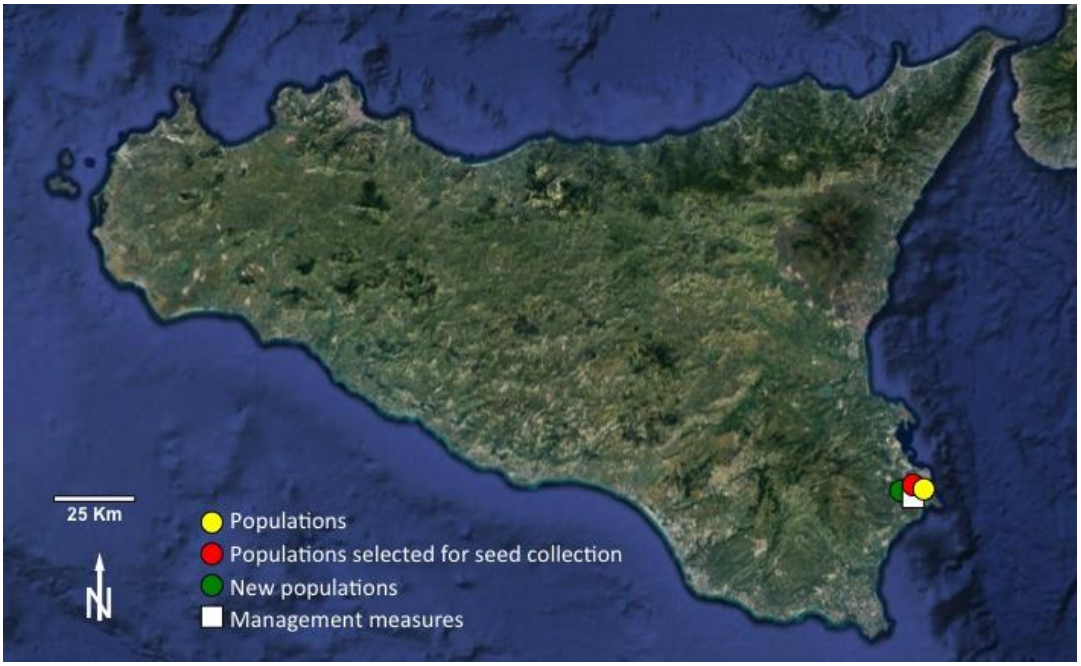
Island
Sicily

Species name (Family)
Origanum onites L. (Lamiaceae)

Common name
Origano siciliano (Italian name), Cretan oregano, Turkish oregano (English name)

Plant description
- ✓ *Origanum onites* is a subshrub or perennial herb, 30-50 cm tall. Stem erect or ascending, woody. Leaves aromatic, opposite, simple, sessile or subsessile, ovate to subrounded, truncate or cordate at the base. Inflorescence arranged in a dense spike, pseudo-corymbose, subglobose or ovate. Flowers bilabiate, white. Fruits are brown nutlets.
- ✓ Monoecious (rarely gynodioceous) plant with unisexual or hermaphrodite flowers, which blooms in late spring (May-June); flowers consisting of sympetalous zygomorphic corolla, with 4 protruding stamens. Pollination is entomophilous. Seeds remain within the calyces during the summer and are released after the early Autumnal rains.
- ✓ This species grows on very dry rocky stands, within the thermo-Mediterranean bioclimatic belt (0-200 m a.s.l.). In Sicily, it is exclusively found on carbonatic substrates.

Distribution
It has a wide distribution range ranging from SW-Turkey, Crete, southern Greece up to Sicily, where it represents the westernmost population of the species. In Sicily, it is recorded for 3 localities, all within or very close to the archaeological area of Syracuse (SE Sicily).

Map


Legal status
none

Main threats and conservation status
According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sicily are:
- ✓ Threat 1.1. Urban development can affect some populations;
- ✓ Threat 5.2.1. Gathering terrestrial plant as intentional uses;

- ✓ Threat 6.1. Recreational activities.

This taxon was catalogued as Vulnerable (VU) in the Red List of Sicilian flora.

Conservation actions carried out in the CARE-MEDIFLORA project

- Seed collection.
- A new population of *Origanum onites* was established within the Nature Reserve "*Grotta Palombara*" (Syracuse, SE Sicily).

Photos

Left: Natural population of *Origanum onites* (Syracuse); Right: Juvenile plant of *Origanum onites*

Localization of the new population of *Origanum onites* within the N.R. "Grotta Palombara

Translocated plant of *Origanum onites* (N.R. Grotta Palombara, Syracuse)

Project partner: Department of Biological, Geological and Environmental Sciences, University of Catania

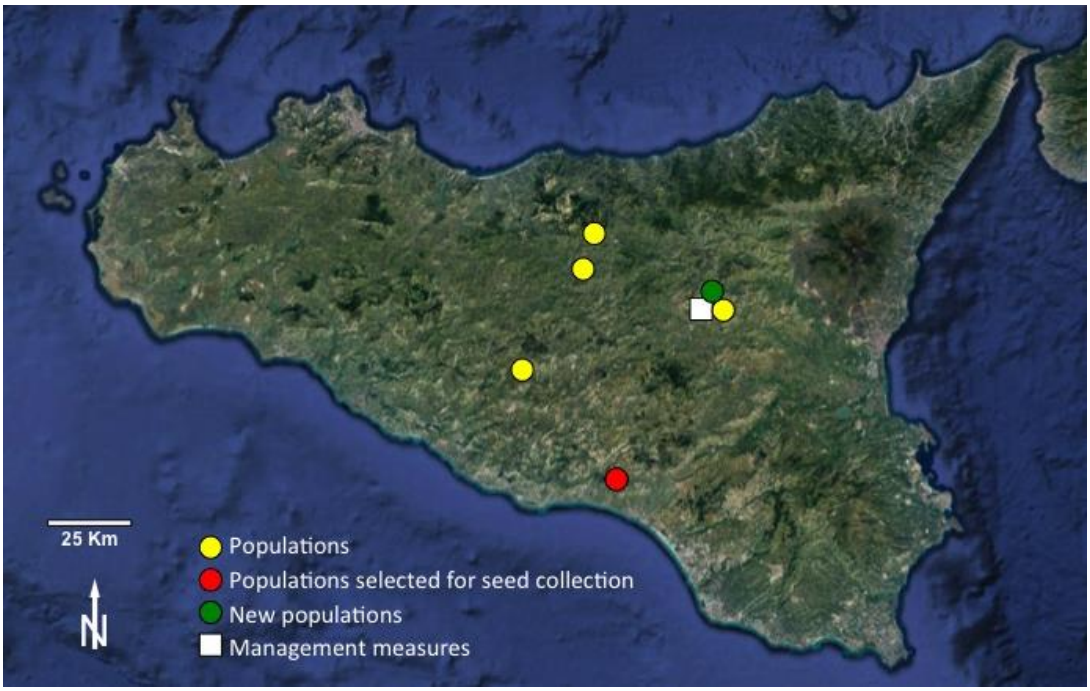
Island
Sicily

Species name (Family)
Astragalus raphaelis G. Ferro (Fabaceae)

Common name
Astragalo di Ciferri (Italian name), Ciferri milk vetch (English name)

Plant description
- ✓ *Astragalus raphaelis* is a therophytic plant, with stem branched only at the base; it shows a main stem erect and numerous ascending basal stems, densely tomentose. Leaves petiolate, composed by 7-11 pairs of green leaflets. Calyx tubular, with tube shorter than teeth. Flowers pale blue, slightly longer than calyx. Fruits are erect legumes, oblong, blackish, rounded at the base, ending in a patent straight beak. Self-pollination is very typical for this species, while seeds are dispersed by wind or by small insects (e.g. ants or ground beetles).
- ✓ This species typically colonizes the clearings of the *Lygeum spartum*-dominated dry grasslands, within the thermo-Mediterranean dry and sub-humid bioclimatic belt (80-230 m a.s.l.).

Distribution
Narrow endemic species of Sicily, exclusively growing on clayey substrates of central and southern Sicily. Currently, 5 localities and 1 historical extinct locality where the species has been recorded falling within the Enna, Caltanissetta and Palermo provinces.

Map


Legal status
None

Main threats and conservation status
According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sicily are:
- ✓ Threat 2.3.2, Small-holders grazing, ranching or farming.
- ✓ Threat 11.1, Habitat shifting & alteration.

Currently, the IUCN assessment for *Astragalus raphaelis* is CR.

Main threats addressed in the project

The main threat addressed by the project is to create new populations featured by similar ecological conditions.

Conservation actions carried out in the CARE-MEDIFLORA project

- Seed collection.
- New populations of *Astragalus raphaelis* were established within the Nature Reserve "*Vallone Piano della Corte*" (Enna, central Sicily).

Photos


Left: *Astragalus raphaelis* from Enna (central Sicily). Right: Translocation of *Astragalus raphaelis* (N.R. "Vallone Piano della Corte", Enna)


Left: Translocation of *Astragalus raphaelis* (N.R. "Vallone Piano della Corte", Enna). Right: Translocated plant of *Astragalus raphaelis* (N.R. "Vallone Piano della Corte", Enna)

Localization of the new populations of *Astragalus raphaelis* within the N.R. "Vallone Piano della Corte" (Enna)

Project partner: Department of Biological, Geological and Environmental Sciences, University of Catania

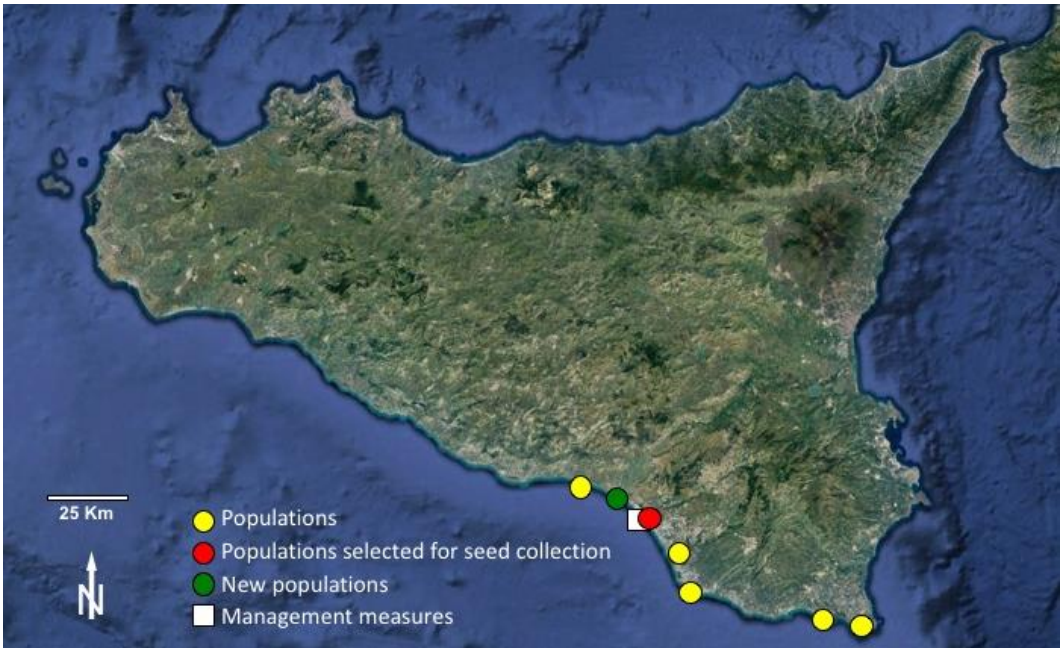
Island
Sicily

Species name (Family)
Leopoldia gussonei (Parl.) Nyman (Asparagaceae)

Common name
Giacinto dal pennacchio di Gussone (Italian name).

Plant description
- ✓ *Leopoldia gussonei* is a small, herbaceous geophyte, with ovoid and brown bulbs. Scape erect, 8-25 cm long, generally one. Inflorescence is a cylindrical raceme. Fertile flowers with yellow corolla, 5-5,5 mm long; perigonium globular at the base, restricted in the median part and enlarged in the upper part with small ovate and reflected lobules. Sterile flowers bluish. Capsule trigonous, with two seeds per loculus.
- ✓ Bulbous plant with hermaphrodite flowers blooming in early spring (March-April). Pollination is entomophilous. Fruits are capsules without evident morphological adaptations for dispersion, that is simply due to falling from mother plant.
- ✓ *L. gussonei* occurs on ephemeral meadows growing on sandy, flat surfaces, usually behind maritime dunes, within the thermo-Mediterranean belt (0-150 mt a.s.l.).

Distribution
L. gussonei is narrow endemic species with a distribution restricted to southern Sicily.

Map


Legal status
L. gussonei is included in the Annex II and V of the Directive 92/43/EEC.

Main threats and conservation status
According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sicily are:
- ✓ Threat 2.1.3, Agriculture and especially greenhouse crops represents the most important threat.
- ✓ Threat 1.3, Residential & commercial development, particularly Tourism and recreation areas.
- ✓ Threat 1.1, Urbanization.
- ✓ Threat 7.3, Ecosystem modification, in particular the shoreline erosion.
- ✓ Threat 8.1 Invasive non-native/alien species, such as *Carpobrotus edulis*, *Acacia saligna* and others.

- ✓ Threat 9.3, Pollution of agricultural effluents such as pesticides and herbicides.

Currently, the IUCN assessment for *Leopoldia gussonei* is Endagered (EN).

Conservation actions carried out in the CARE-MEDIFLORA project

- Seed collection.
- A new population of *Leopoldia gussonei* was established within the Nature Reserve "*Biviere di Gela*" (southern Sicily).

Photos

L. gussonei from Manfria (Gela, southern Sicily) & Fructified *L. gussonei* (Macconi di Gela, southern Sicily)

Natural stands of *L. gussonei* on sandy coast in southern Sicily & Establishment of new population of *L. gussonei* within the N.R. "Biviere di Gela"

Localization of the new population of *L. gussonei* within the N.R. "Biviere di Gela"

Project partner: Department of Biological, Geological and Environmental Sciences, University of Catania

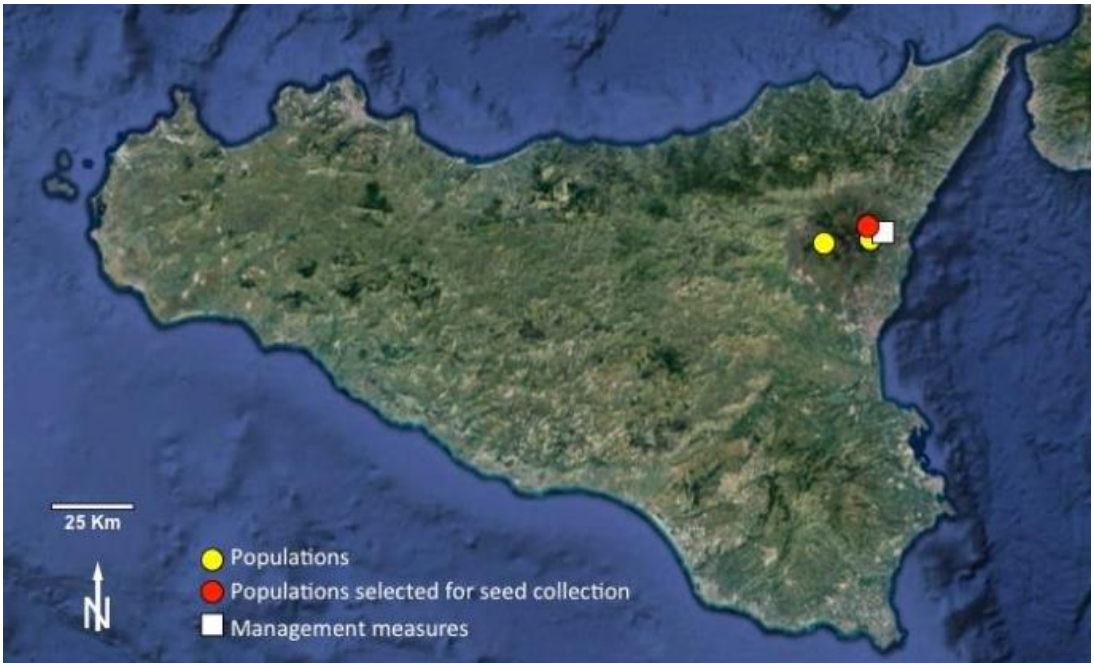
Island
Sicily

Species name (Family)
Betula aetnensis Raf. (Betulaceae)

Common name
Betulla dell'Etna (Italian name), Bituddo, Vitudda (Sicilian names), Etnean birch (English name)

Plant description
- ✓ *Betula aetnensis* is a small to medium-sized tree or shrub, 4-15 m tall. Stem with whitish bark. Leaves deciduous with triangular or rhomboidal lamina.
- ✓ Flowers are monoecious; fruits are small brown conical nuts with wings 2-3 times wider than fruit. Male flowers blooms in late summer or autumn, remaining quiescent for all winter, the female one in spring with patent scales, Pollination is anemophilous. Fruits of *B. aetnensis* are winged nuts that promote wind dispersion.
- ✓ *B. aetnensis* typically forms small and floristically poor pioneer woodlands within the supra-Mediterranean bioclimatic belt with humid-subhumid ombrotypes. Optimal altitude is ranging from 1500 mt up to 2000 mt a.s.l.

Distribution
B. aetnensis is a narrow endemic plant from Mt. Etna, mostly localized on the north-eastern vent of the volcano. This species grows on initial volcanic soils, particularly rich in skeleton and with no or few litter, thus showing its remarkable pioneer role.

Map


Legal status
none.

Main threat(s) and conservation status
According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sicily are:
- ✓ Threat 1.3 (Tourism & Recreation Areas)
- ✓ Threat 2.3.1 (Nomadic grazing)
- ✓ Threat 6.1 (Recreational Activities)

- ✓ Threat 8.2.2 (Problematic native species/diseases, e.g. some pathogens belonging to the Armillaria and Heterobasidion genera may cause radical necrosis and consequently death of the weakened individuals)
- ✓ Threat 10.1 (Volcanoes)

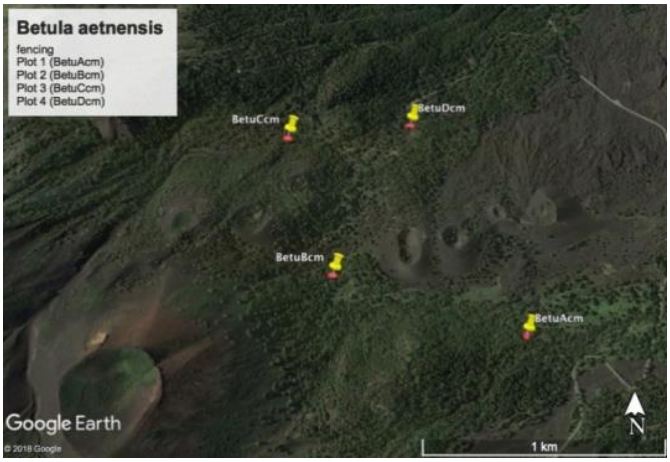
No IUCN status

Conservation actions carried out in the CARE-MEDIFLORA project

- Seed collection.
- Four areas of about 400 sqm were fenced within the widest natural population of *Betula aetnensis* of Mt. Etna (altitude 1700-1900 mt a.s.l.).

Photos


Individual of *Betula aetnensis* (Mts. Sartorius, NE Etna) & Inflorescences (male) of *Betula aetnensis* (Mt. Galvarina, W Etna)

Betula aetnensis-dominated woodland (Mts. Sartorius, NE Etna) & Localization of the fenced areas of *Betula aetnensis* (NE Etna)


Fenced area with *Betula aetnensis*

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

Island
Crete

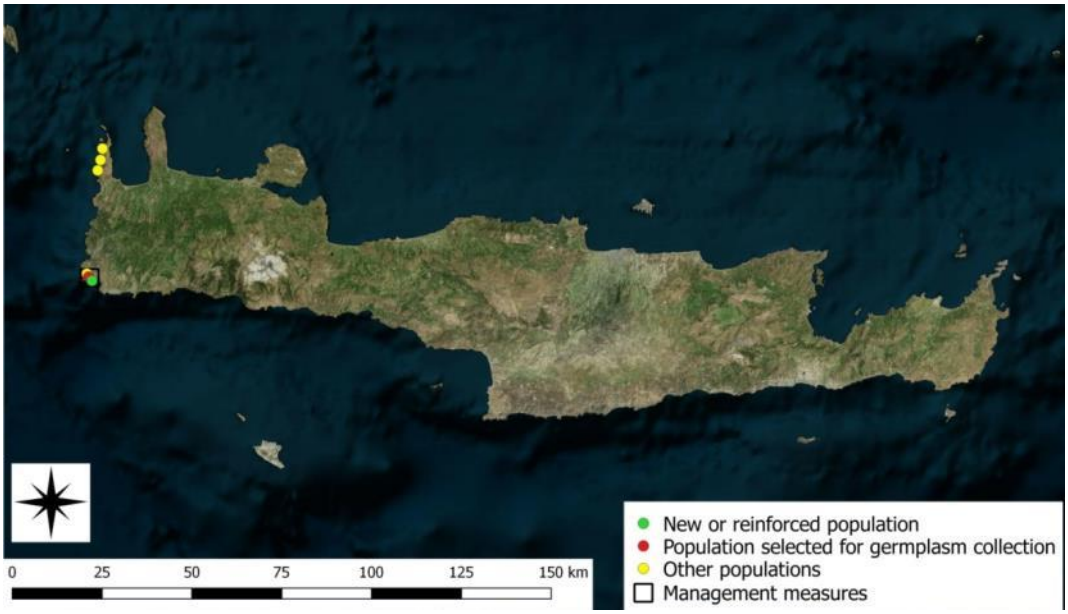
Species name (Family)
Androcymbium rechingeri Greuter (Colchicaceae)

Common name
No common name.

Plant description
- ✓ Corn tuberous, slender, with coriaceous tunics. Stem very short, underground. Leaves several, narrowly lanceolate, spreading, ± curved, forming a flat rosette, glossy green. Flowers white with pinkish veins, usually 5–10 in a dense cluster.
- ✓ Life form: Geophyte; flowering: December-February; fruiting: May-June; dispersal strategy: The whole above ground of the plant dries up and gets rolled around by the wind, releasing seeds along the way.
- ✓ The species grows in coastal phrygana on shallow sandy soil on calcareous substrate, but not on moving sands, 0-50 m.

Distribution
Crete – Coastal areas of N Africa from Tunisia to NW Egypt (Strid 2016).

Locally abundant on the islet of Elaphonisi SW Crete, where it was first discovered in 1962, subsequently found in 3 other localities in W Crete.

Map


Legal status
Androcymbium rechingeri is listed as priority species on Annex II of the Habitats Directive and under Appendix I of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention). The species is also protected by the Greek Presidential Decree 67/81.

Main threats and conservation status
The main threats are recreational activities and tourism, overgrazing, agricultural activities and construction of roads.

Threat categories according to IUCN classification scheme, version 3.2:
- ✓ 1.3 Tourism and recreation areas
- ✓ 2.1 Annual & Perennial Non-Timber Crops - 2.1.3 Agro-industry Farming
- ✓ 2.3 Livestock farming & ranching - 2.3.1 Nomadic grazing

- ✓ 6.1 Recreational activities

It is included in the Red Data Book of Greece as Endangered (Phitos et al. 1995). The species is characterized as Endangered (EN), according to criteria B1ab(iii)+2ab(iii) (IUCN 2001) (Delipetrou 2011).

Conservation actions carried out in the CARE-MEDIFLORA project

The selected actions for this target species population in Elafonisi include *in situ* and *ex situ* conservation. Seed collections were made during May of 2016 from the wild population. Part of this accession is kept in the seed bank of MAICh (*ex situ* conservation).

The remaining seedlot was used for *in situ* conservation actions, namely the reinforcement of the natural population. Seeds were either used to produce seedlings to be planted on the selected sites, or were sown directly in the soil. Other management measures included placement of protective structures designed to protect the plants from trampling, fencing and placement of information signs.

Photos

Androcymbium rechingeri in flowering

Metal grid stabilization & Planting of seedlings within fenced area

Reinforcement actions outside fenced area & View of protective structure

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

Island
Crete

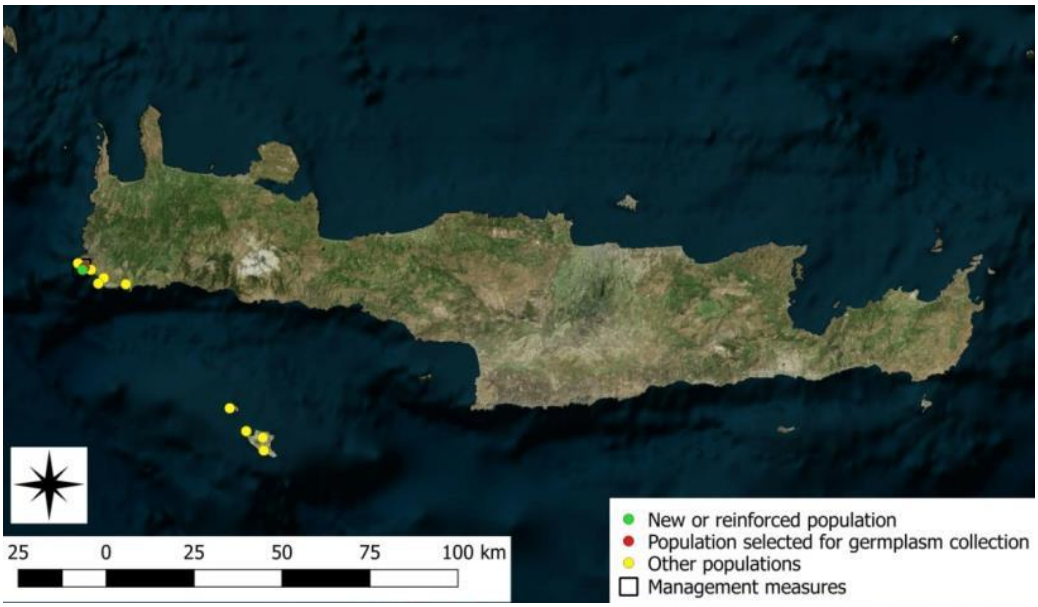
Species name (Family)
Bellevalia brevipedicellata Turrill (Hyacinthaceae)

Common name
No common names exist for this species

Plant description
- ✓ Perennial bulbous plant. Leaves 2 or 3, linear-lanceolate, up to 20 × 3.5 cm, flat or slightly canaliculated with straight margins, somewhat fleshy, obscurely veined, glaucous-green, glabrous. Raceme 10–25-flowered. Perianth white, ±campanulate. Seeds spherical, black, approximately 2 mm in diam.
- ✓ Life form: Geophyte; flowering: January-March; fruiting: April; dispersal strategy: the dispersal units are the seeds or sometimes the entire capsule.
- ✓ In soil pockets with phrygana on rugged slopes and flats of hard limestone, 0-250 m.

Distribution
Endemic to the extreme south-western part of Crete.

An early – flowering bulbous species endemic to a limited area in the lowlands of south-western Crete, an area which is increasingly becoming affected by tourism.

Map


Legal status
The species is protected by the Presidential Decree 67/81.

Main threats and conservation status
Threat categories according to IUCN classification scheme, version 3.2:
- ✓ 1.3 Tourism and recreation areas
- ✓ 6.1 Recreational Activities
- ✓ 2.1 Annual & Perennial Non-Timber Crops - 2.1.3 Agro-industry Farming
- ✓ 2.3 Livestock Farming & Ranching - 2.3.1 Nomadic Grazing
- ✓ 5.2 Gathering Terrestrial Plants - 5.2.1 Intentional Use (species being assessed is the target)

It is included in the Red Data Book of Greece and it is characterized as Endangered (EN) following the D criterion of IUCN (2001).

Conservation actions carried out in the CARE-MEDIFLORA project

The actions for this target species included both *in situ* and *ex situ* conservation for the Elafonisi population.

Seeds stored in the Seed Bank of MAICh (origin Elaphonisi, 2000) were used for *in situ* conservation, namely the reinforcement of the natural population. Seeds were either used in order to produce seedlings to be planted at the selected sites, or were sown directly. Prior to the selection of the planting sites a detailed inventory of the distribution of the individuals of *B. brevipedicellata* in the area was conducted. Three areas were chosen for the reinforcement, with respect to threats and negative impacts due to human activities (grazing, tourism, recreation, etc.); one where the impact was high (next to a parking area), one where it was medium (close to another parking area) and one where there was almost no disturbance at all (inside a fenced area). Other management measures included placement of information signs.

For the *ex situ* conservation of the species, seeds were collected from the population in Elaphonisi in April 2017.

Photos

Bellevalia brevipedicellata at full flowering

Elaphonisi area with *Bellevalia brevipedicellata* population

Bellevalia brevipedicellata reinforcement map

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

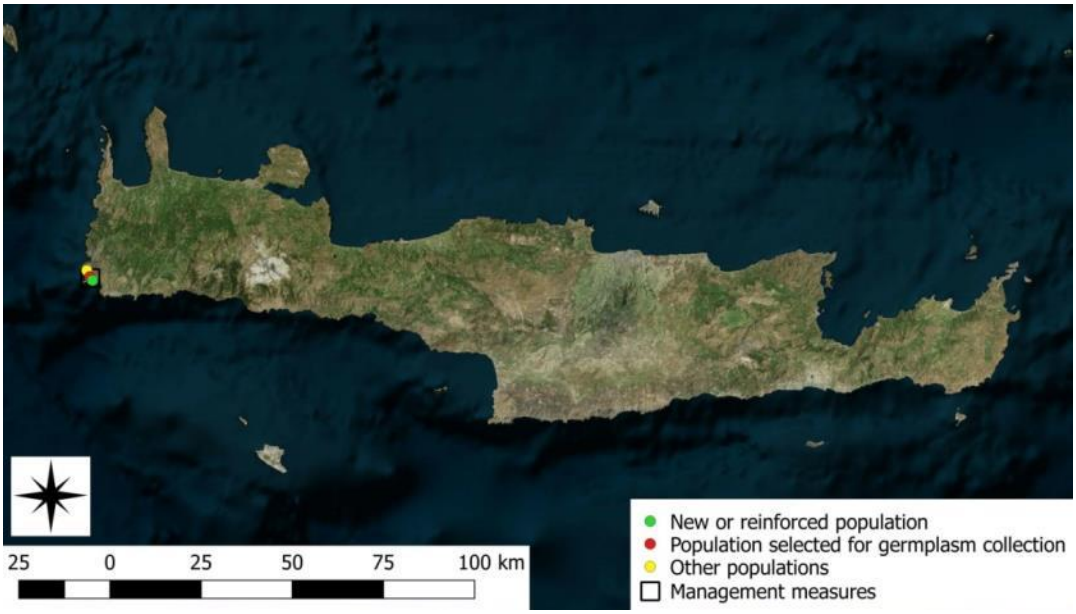
Island
Crete

Species name (Family)
Limonium elaphonisicum A. Mayer (Plumbaginaceae)

Common name
No common names

Plant description
- ✓ Plant perennial, glabrous, forming a sub-shrub 25–50 cm tall. Corolla pale blue.
- ✓ Life form: Chamaephyte, Flowering: June-October, Fruiting: September-November.
- ✓ Calcareous rocky coast and sandy places.

Distribution
Confined to the southwestern coast of Crete, between Cape Elaphonisi and Cape Krios (Brullo & Erben, 2016).

Map


Legal status
L. elaphonisicum is a threatened endemic species of Greece and is protected by the Law 3937/2011. The species can be characterized as potentially ornamental and is therefore also protected by the Greek Presidential Decree (80/90).

Main threats and conservation status
Threat categories according to IUCN classification scheme, version 3.2:

- 1.3 Tourism and recreation areas
- 2.3 Livestock farming & ranching - 2.3.1 Nomadic grazing
- 6.1 Recreational activities

The species is characterized as vulnerable (VU) according to the Red Data Book of threatened plants of Greece (Phitos et al. 2009) following the criteria D1+2 of the IUCN (2001).

Conservation actions carried out in the CARE-MEDIFLORA project
The selected actions for this target species include *in situ* and *ex situ* conservation for the population in Elafonisi.

A seed collection was made in October 2016 from the wild population, part of which was stored in the Seed Bank of MAICh.

The remaining seedlot was used for *in situ* conservation, namely the reinforcement of the natural population. Seeds were either used to produce seedlings to be planted at the selected sites, or were sown directly in the soil. Other management measures included individual fencing with protective structures for plants planted in unfenced areas, fencing and placement of information signs.

Photos

Limonium elaphonisicum at flowering stage

Elaphonisi area (Southwest Crete) where *Limonium elaphonisicum* is found

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

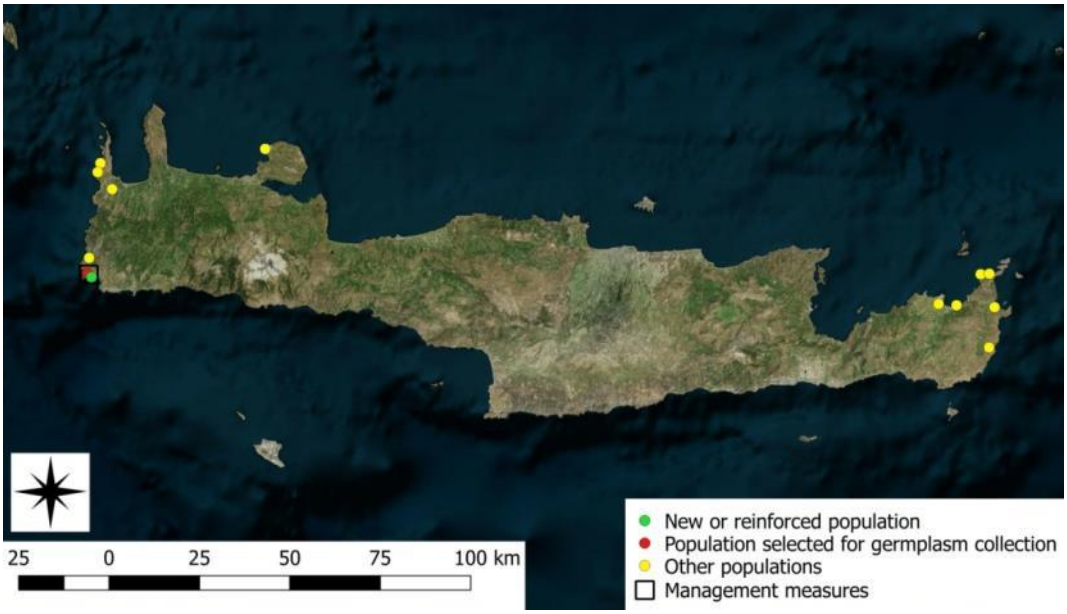
Island
Crete

Species name (Family)
Viola scorpiuroides Coss. (Violaceae)

Common name
Martaki (in Greek)

Plant description
- ✓ Procumbent to ascending shrublet with herbaceous flowering shoots. Leaves glabrescent above, with short, deflexed hairs on petiole and underside of blade; leaf blade elliptic-oblanceolate, gradually narrowed to slender petiole. Corolla bright to deep yellow with 2 dark brownish-purple spots at base of lower petal; Capsule broadly obovoid to subglobose, glabrous (Strid 2016).
- ✓ Life form: Chamaephyte; flowering: January-May; fruiting: April-June; dispersal strategy: Diplochory, the species combines ballistic (explosive ejection of the seeds away from the parent plant) and myrmecochory (Beattie& Lyons, 1975).
- ✓ Dry rocky slopes with phrygana, generally on hard, rugged limestone altitude 0-600 m (Strid 2016).

Distribution
S-Aegean Isl. (Kithira), Crete, Libya, Egypt (Great Southwestern Desert, NW-coastal Egypt).

Map


Legal status
The species is protected by the Greek Presidential Decree 67/1981.

Main Threats and conservation status
Threat categories according to IUCN classification scheme, version 3.2:
- ✓ 1.3 Tourism and recreation areas
- ✓ 6.1 Recreational Activities
- ✓ 3. Energy Production & Mining - 3.2 Mining & Quarrying
- ✓ 2.1 Annual & Perennial Non-Timber Crops - 2.1.3 Agro-industry Farming
- ✓ 2.3 Livestock Farming & Ranching - 2.3.1 Nomadic Grazing
- ✓ Residential & Commercial Development - 1.2 Commercial & Industrial Areas

- ✓ 6. Human Intrusions & Disturbance - 6.2 War, Civil Unrest & Military Exercises
- ✓ 5.2 Gathering Terrestrial Plants - 5.2.1 Intentional Use (species being assessed is the target)

It is included in the Red Data Book of Greece as Endangered and characterized as Rare (R) (Phitos *et al*. 1995).

Conservation actions carried out in the CARE-MEDIFLORA project

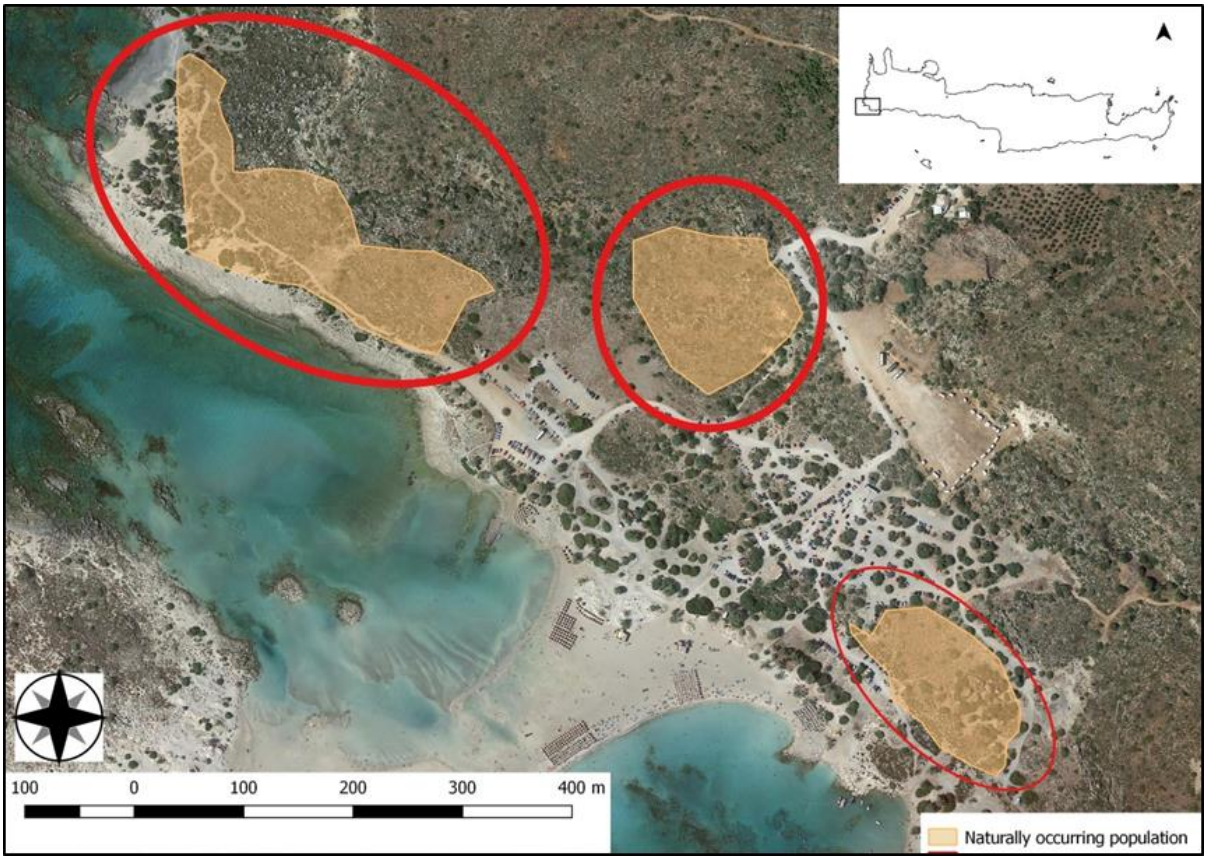
The selected actions for this target species include *in situ* and *ex situ* conservation for the population in Elafonisi.

A seed collection was made in March 2017 from the wild population, part of which was stored in the Seed Bank of MAICh.

The remaining seedlot was used for *in situ* conservation, namely the reinforcement of the natural population. Seeds were either used to produce seedlings to be planted at the selected sites, or were sown directly in the soil. Other management measures included individual fencing with protective structures for plants planted in unfenced areas, fencing and placement of information signs.

Photos

Viola scorpiuroides at flowering stage & Elaphonisi area where *Viola scorpiuroides* population is found.



Detailed distribution map of *Viola scorpiuroides* in the Elaphonisi area, where the conservation actions were implemented.

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

Island

Crete

Species name (Family)

Bolanthus creutzburgii Greuter subsp. *zaffranii* Phitos, Turland & Bergmeier (Caryophyllaceae)

Common name

No common names

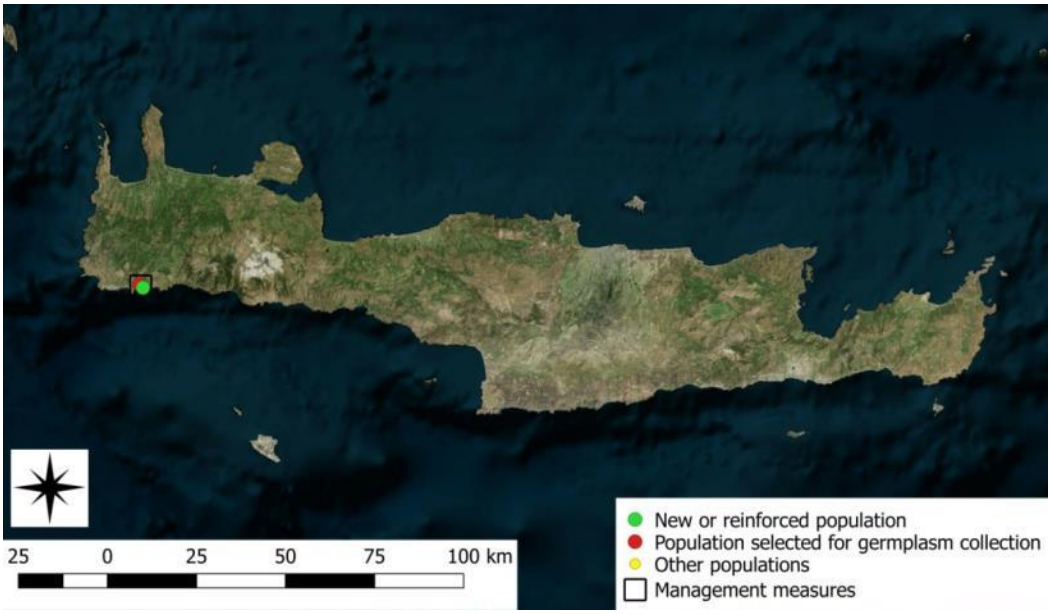
Plant description

- ✓ Dwarf, laxly caespitose perennial, woody at base. Stems ascending to erect, 1.5 – 6 cm. Petals linear-spathulate, somewhat exceeding calyx, white with deep purple transverse stripe near middle of base.
- ✓ Life form: Chamaephyte; flowering: April; fruiting: April-May
- ✓ Sedimentary rock, screes and boulders, consisting of limestone and sandstone conglomerate with calcareous cementing material. The soil is sandy and skeletal. The vegetation is very open (15% or less) with scattered plants.

Distribution

It is locally endemic to the coast of SW Kriti. The population of *Bolanthus creutzburgii* subsp. *zaffranii* is apparently restricted to a single locality.

Map



Legal status

The species is protected by the Presidential Decree 67/81.

Main threats and conservation status

Threat categories according to IUCN classification scheme, version 3.2:

- ✓ 1.3 Tourism and recreation areas
- ✓ 2.3.1 Nomadic grazing
- ✓ 3.2 Mining & Quarrying
- ✓ 4.1 Roads & Railroads
- ✓ 6.1 Recreational Activities

According to Phitos et al. (2011): the population of *B. creutzburgii* subsp. *zaffranii* is apparently restricted to a single locality.

Conservation actions carried out in the CARE-MEDIFLORA project

The actions for this target species included both *in situ* and *ex situ* conservation for the unique population in Gialiskari, Palaiochora.

Seeds stored in the Seed Bank of MAICh (collection 2014) were used for *in situ* conservation, namely the reinforcement of the natural population. Prior to the actions for the reinforcement, a detailed inventory of population boundaries and density was conducted in order to find the appropriate places for the implementation of plantings. Seeds were either used in order to produce seedlings to be planted at the selected sites, or were sown directly. Other management measures included placement of protective structures for the emergence of the new seedlings.

For the *ex situ* conservation of the species, seeds were collected from the population in May 2017.

Photos


Bolanthus creutzburgii subsp. *zaffranii* at flowering stage & The area of Gialiskari (next to Palaiochora at the Southwest of Crete), where reinforcement actions took place.


B. creutzburgii subsp. *zaffranii* seedlings at the greenhouse of MAICh & Seeds sown in paper pots and covered with protective structure

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

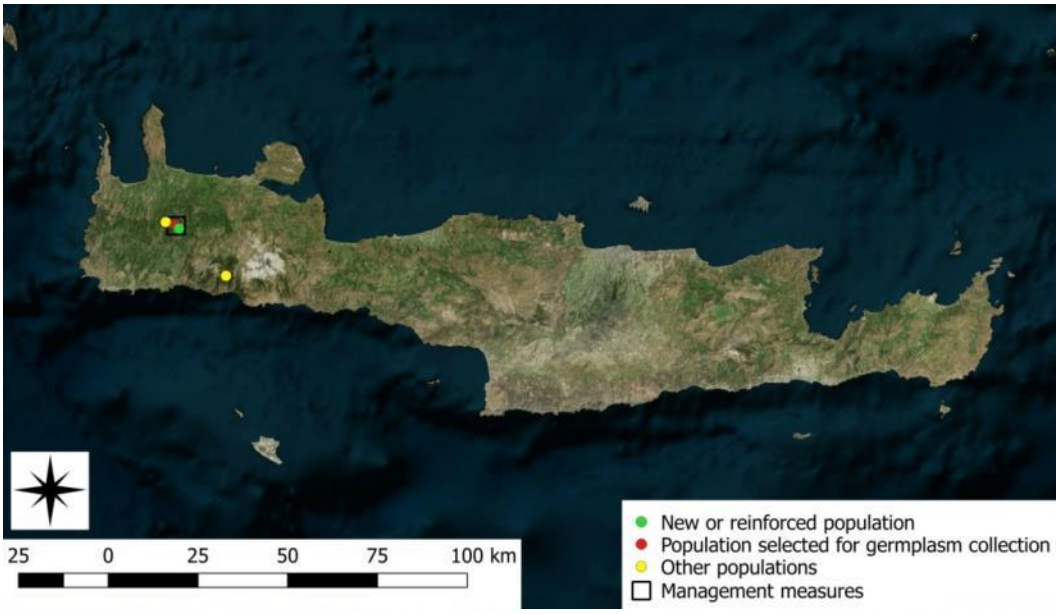
Island
Crete

Species name (Family)
Datisca cannabina L. (Datiscaceae)

Common name
English name: akalbir

Plant description
- Erect, dioecious, glabrous perennial herb 1–2.5 m tall. Leaves alternate, imparipinnate, with 2–4 pairs of lanceolate, sharply serrate leaflets (somewhat resembling *Cannabis*, hence the name).
- Life form: Hemicryptophyte; flowering: May-August; fruiting: October-November; dispersal strategy: water might play an important role for the dispersal of this taxon.
- In Crete, *Datisca cannabina* grows on moist stream banks in woodlands largely composed of *Cupressus sempervirens* with *Platanus orientalis* along the watercourses, at an altitude of c.1000 m. It also grows in moist places in road sides in shale soil and moist, sandy meadows at an altitude of 300-350 m.

Distribution
In Greece known only from two localities in Western Crete and from the East Aegean islands of Samos and Lesvos. It has been known to occur in Crete for over 350 years, but has only recently been discovered in Samos and Lesvos. Outside Greece, the species is distributed in Cyprus, Israel-Jordan, Lebanon-Syria, Turkey to the Transcaucasia region (Azerbaijan, Armenia and Georgia).

Map


Legal status
The species is protected by the Greek Presidential Decree 67/1981. One of the populations in Crete falls within the Samaria Gorge National Park and is, therefore, protected.

Main threats and conservation status
Threat categories according to IUCN classification scheme, version 3.2:
- 1.3 Tourism & Recreation Areas
- 4.1 Roads & Railroads
- 7.2.4 Abstraction of surface water

According to the Red Data Book of Rare and Threatened Plants of Greece it is characterized as Vulnerable (VU).

Conservation actions carried out in the CARE-MEDIFLORA project

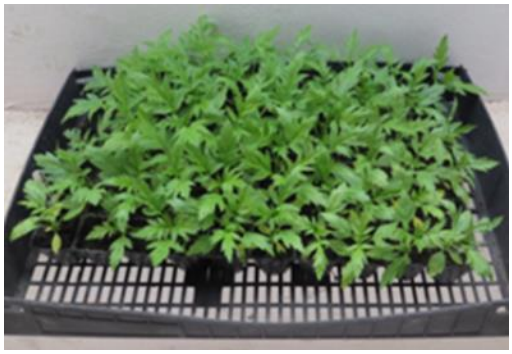
The selected actions include *in situ* and *ex situ* conservation. The *in situ* conservation actions involve eradication of the ornamental species from the area of occupancy of *D. cannabina* and prevention of their re-establishment at the locality between Nea Roumata and Papadiana as well as reinforcement of the population and light fencing to protect the newly planted individuals and the naturally growing young plants (result of natural regeneration of the population). Communication actions targeting the local authorities, inhabitants and visitors of the area were also implemented.

However, damages were caused due to a religious festival that takes place in the vicinity of the plants. Although the reinforcement of the population was repeated the following year, 2018, all the plants were lost during the severe weather conditions of 23-26 February 2019 which caused great destruction in all the region.

Seed collection for *ex situ* conservation was performed for both populations in Crete.

Photos





D. cannabina in flowering; *D. cannabina* habitat; Seedlings of *D. cannabina* ready to be planted


Removal of ornamental species; Light fencing and planting of *D.ca cannabina* seedlings

Information sign at the location of the action

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

Island

Crete

Species name (Family)

Chaerophyllum creticum Boiss. & Heldr. (Apiaceae)

Common name

No common names exist for this species.

Plant description

Erect biennial or perennial, sparingly branched, up to 60 cm tall. Leaves triangular in outline, 2- or 3-pinnate. Rays up to 25, 3–5 cm, subequal. Umbellules with up to 15 flowers, but usually only a few developing fruits. Flowers golden yellow. Fruit 13–25 mm, linear-oblong, with low, robust ridges.

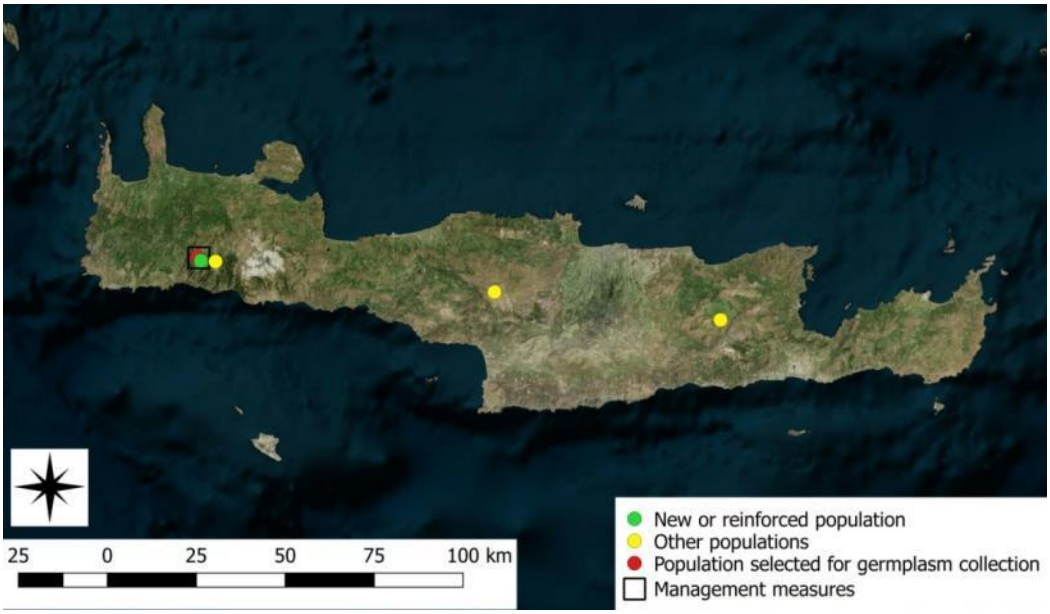
Life form: Hemicryptophyte; flowering: May-June; fruiting: July-August; pollination: by Insects

The habitat of the species is deep clayey soil on limestone, among spiny plants, especially *Berberis cretica* and stony places and openings among *Zelkova abelicea* and *Acer sempervirens* forest, 1000-1500 m.

Distribution

A rare Cretan endemic, according to Strid (2016) known only from a few collections in the three main mountains massifs. Previously it was known only from two localities at the Lefka Ori massif in western Crete, Omalos plateau and a second, higher altitude locality approximately 4 km to the East, at the head of a valley (1450 m).

Map



Legal status

It is protected by the Greek Presidential Decree 67/1981.

Main Threats and conservation status

Threat categories according to IUCN classification scheme, version 3.2:

2.3.1 Nomadic grazing

2.1.3 Agro-industry Farming

The category VU (Vulnerable) is proposed for the species based on (IUCN 2001), meeting the criteria B1a,b (ii,iii,iv,v), c(iv)+2a,b(ii,iii,iv,v),c(iv),C2a(i) and D1+2.

Conservation actions carried out in the CARE-MEDIFLORA project

The actions included both *in situ* and *ex situ* conservation for the population in Omalos plateau.

Seeds stored in the Seed Bank of MAICh (collection 2015) were used for *in situ* conservation, namely the translocation of the population to a nearby public area. Communication actions targeting the local authorities, farmers and shepherds of the area and visitors were also implemented.

Photos


Chaerophyllum creticum in flowering; *C.* creticum seedlings ready to be planted


Pots planted with *C.* creticum mericarps covered with protective structure; Information sign at the site of the translocation

Distribution of naturally occurring subpopulation of *C. creticum* on Omalos plateau, in West Crete, and translocation area.

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

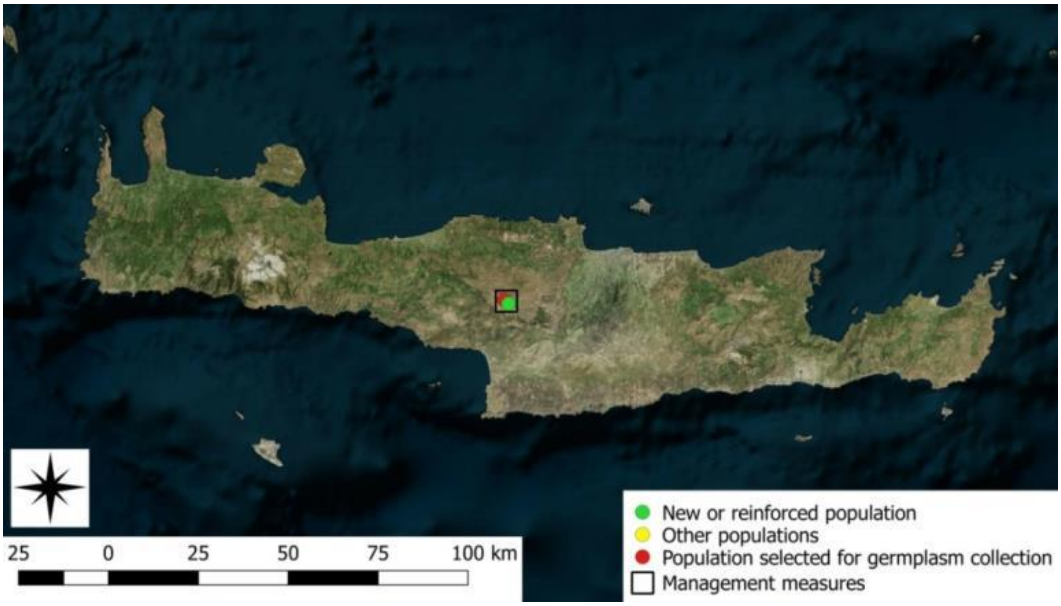
Island
Crete

Species name (Family)
Horstrissea dolinicola Greuter, Gerstberger & Egli (Apiaceae)

Common name
No common names exist for this species

Plant description
- Perennial with a fusiform to cylindrical taproot 1–2 cm in diam. Stem and petioles mostly underground and ± flexuous, only 2–5 cm appearing above ground. Inflorescence terminal, almost globular, 10–15 mm wide. Petals minute, incurved, white or pinkish.
- Life form: Geophyte; flowering: July-August; fruiting: September-October; pollination: with insects
- It grows only in a few limestone sinks (dolines) at an altitude of 1500 m in a region where many goats and sheep graze during the summer season. These sinks are seasonally flooded as they work as outlets for rain (from autumn to spring) and for melting snow (spring). Habitat 6.4: Miscellaneous inland habitats with very sparse or no vegetation.

Distribution
This species is only found in the Mt. Ida (Psiloritis) mountain range of central Crete.

Map


Legal status
Currently there is no legal protection for this species. The plant is indirectly protected, as its population falls within the Natura 2000 site GR4330009.

Main threats and conservation status
Threat categories according to IUCN classification scheme, version 3.2:
- 2.3.1 Nomadic grazing, 2.3.2 Small-holder grazing, ranching or farming
- 9.3 Agricultural & forestry effluents
- 11.1 Habitat shifting & alteration
- 4.1: Roads and railroads

This species has been categorized as CR (Critically Endangered) according to IUCN Red List Criteria B1ab(ii,v)+2ab(ii,v); C2a(i); D ver 3.1. (Iatroú & Fournaraki 2006)

Conservation actions carried out in the CARE-MEDIFLORA project

The actions included both *in situ* and *ex situ* conservation for the unique population on Mt. Ida (Psiloritis mountain). *In situ* conservation involved the reinforcement of the population and actions for the establishment of a Plant Micro-Reserve (PMR) in the area, in the context of which the plant will be legally protected. For *ex situ* conservation, seeds were collected in 2017.

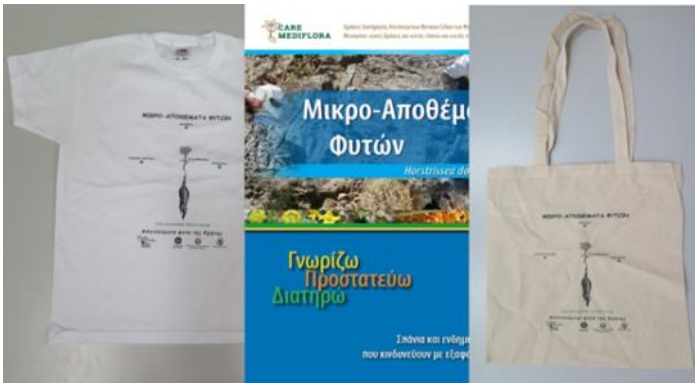
For the reinforcement seeds stored in the Seed Bank of MAICh (collection 2007) were used to produce seedlings to be planted at selected sites, or were sown directly. Other management measures included placement of protective structures to protect the re-introduced individuals from human activities and prevent their grazing by animals.

Actions for the establishment of the PMR were initiated in cooperation with the Municpality of Anogeia, the Forest Directorate of Rethymno and local shepherds. A detailed inventory of population boundaries and density was conducted and four dolines, about 4 ha total area, were proposed to constitute the PMR. Existing livestock installations were relocated outside the proposed PMR and a small plot was fenced for long term monitoring of the effect of grazing on the species. Dissemination actions were implemented for the local stakeholders (information day, leaflets, t-shirts, etc.).

Photos


Horstrissea dolinicola habitat; *H. dolinicola* in flowering


Livestock and installations prior to their relocation & fencing of the area; Protective structure for pots planted with seeds/seedlings

Information day for local stakeholders at Anogeia Primary School; Dissemination materials for *H. dolinicola* Micro-Reserve

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

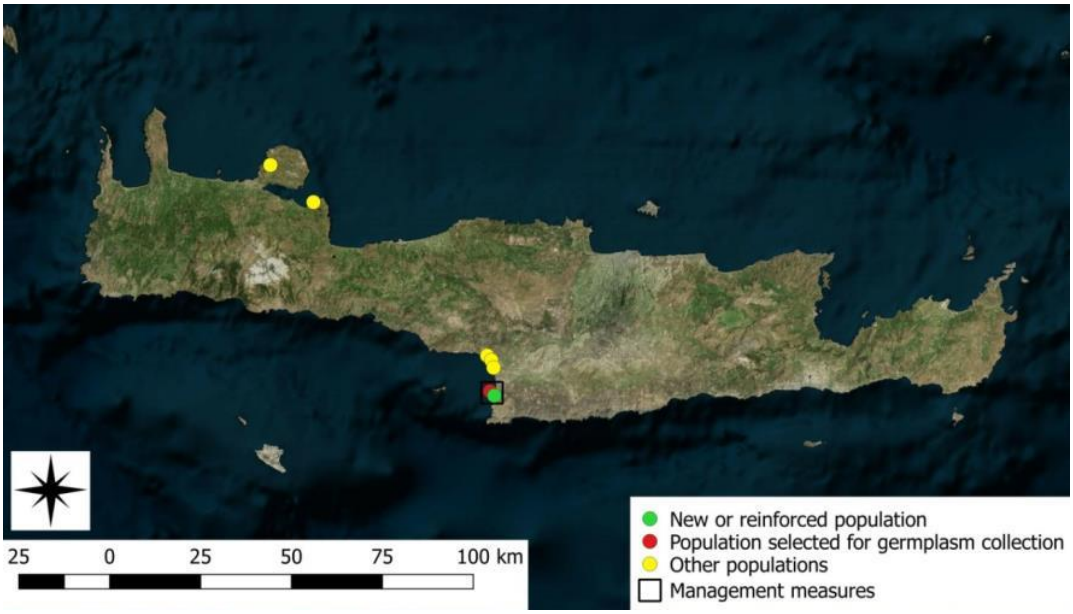
Island
Crete

Species name (Family)
Limonium creticum R. Artelari (Plumbaginaceae)

Common name
No common names exist for this species.

Plant description
- Plant perennial, glabrous, forming a sub-shrub 20–50 cm tall, with few erect stems and a robust taproot. Leaves coriaceous, flat, rigid, grey-olivaceous, scabrous, spathulate to oblanceolate. Calyx 5.1–6.4 mm long, exceeding the inner bract by 0.5–1.5 mm; calyx tube more or less sparsely long hairy. Corolla violet.
- Life form: Chamaephyte; flowering: June-September; fruiting: October-November; dispersal strategy: water and humidity possibly play a role in seed dispersal.
- The species grows in coastal phrygana on shallow sandy soil on calcareous substrate, but not on moving sands.

Distribution
Restricted to Crete, where it grows in the northwest coast between Chania and Cape Drapano and in the central-southern part between Timbaki and Kali Limenes .

Map


Legal status
The species can be characterized as potentially ornamental and is protected by the Greek Presidential Decree (80/90).

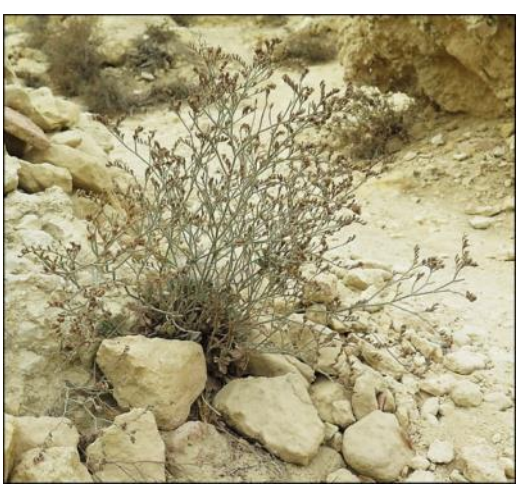
Main threats and conservation status
Threat categories according to IUCN classification scheme, version 3.2:
- 6. Human Intrusions & Disturbance - 6.1 Recreational Activities - 6.3 Work & Other Activities
- Residential & Commercial Development - 1.1 Housing & Urban Areas - 1.3 Tourism & Recreation Areas

Rare according to the Red Data Book of Threatened Plants of Greece (1995). A new assessment is needed.

Conservation actions carried out in the CARE-MEDIFLORA project
The selected actions include *in situ* and *ex situ* conservation for the population in Matala. The *in situ* conservation actions involve eradication of the invasive species *Carpobrotus edulis* from the area of occupancy of *L. creticum*

within and around the archaeological site of Matala and prevention of its re-establishment as well as reinforcement of the population and light fencing to protect the newly planted individuals and the naturally growing young plants (result of natural regeneration of the population). All actions were implemented with the agreement of the Archaeological Service. Communication actions targeting the personnel responsible for the maintenance of the area and visitors were also implemented.

Photos



Limonium creticum plant, inflorescence & habitat


Invasive species, *Carpobrotus eduliis* & its removal



Limonium creticum seedlings to be planted; *L. creticum* established new plant; Information sign and light fencing

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

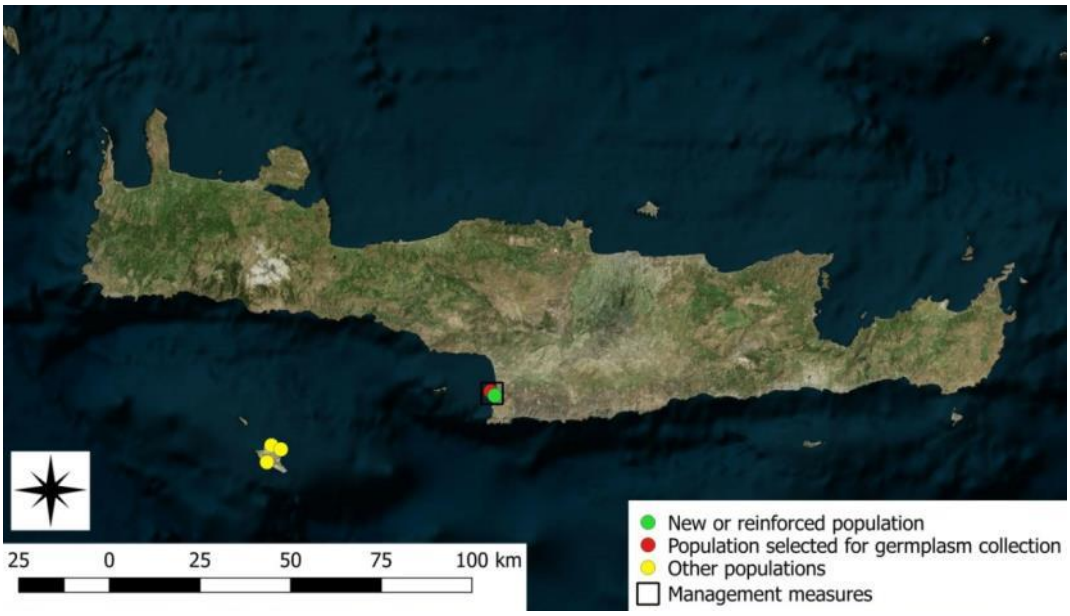
Island
Crete

Species name (Family)
Reseda minoica Martín-Bravo & Jiménez-Mejías (Resedaceae)

Common name
No common names exist for this species.

Plant description
- Annual to short-lived perennial. Stems 10–70 cm, decumbent to suberect, usually branched from the base. Leaves entire or 3(–5)-lobbed, ± papillose-hispidulous on veins and margin.
- Flowers in a lax raceme; pedicels erecto-patent, 3–7 mm at anthesis, to 12 mm in fruit. Sepals and petals 5 or 6. Upper petals trisect with lateral lobes further divided into linear-spathulate segments. Carpels 3. Capsule 7–12 mm, obovoid to ellipsoid, with short teeth. Seeds 1.6–1.8 mm, rugulose.
- Life form: Therophyte, Hemicryptophyte; flowering: March-May; fruiting: May-June; dispersal strategy: the seeds of Reseda are myrmecochorous.

Distribution
Turkey (Anatolia), Cyprus and Greece (Strid 2016): Crete (Matala and Gavdos), Anafi, Salamis, Attica.

Map


Legal status
The species can be characterized as potentially ornamental and is protected by the Greek Presidential Decree (80/90).

Main threats and conservation status
Threat categories according to IUCN classification scheme, version 3.2:
- 6. Human Intrusions & Disturbance - 6.1 Recreational Activities - 6.3 Work & Other Activities
- Residential & Commercial Development - 1.1 Housing & Urban Areas - 1.3 Tourism & Recreation Areas

The species is characterized as Vulnerable (VU) according to the RDB of Threatened plants of Greece (2009); criteria B1a,b(iii)+2a,b(iii) and D2 of IUCN (2001). The subpopulation in Crete is included in NATURA 2000 site (GR4310004).

Conservation actions carried out in the CARE-MEDIFLORA project

The selected actions include *in situ* and *ex situ* conservation for the population in Matala. The *in situ* conservation actions involve eradication of the invasive species *Carpobrotus edulis* from the area of occupancy of *R. minoica* within and around the archaeological site of Matala and prevention of its re-establishment as well as light fencing to protect the naturally growing young plants (result of natural regeneration of the population). The population was reinforced and the newly planted individuals were covered with protective structures. All actions were implemented with the agreement of the Archaeological Service. Communication actions targeting the personnel responsible for the maintenance of the area and visitors were also implemented.

Photos


Reseda minoica plant & habitat


Invasive species, *Carpobrotus eduliis* & its removal


Information sign and light fencing; Pots with seeds covered with a protective structure

Project partners: Department of Forests & Agricultural Research Institute, Ministry of Agriculture, Rural Development and Environment of Cyprus

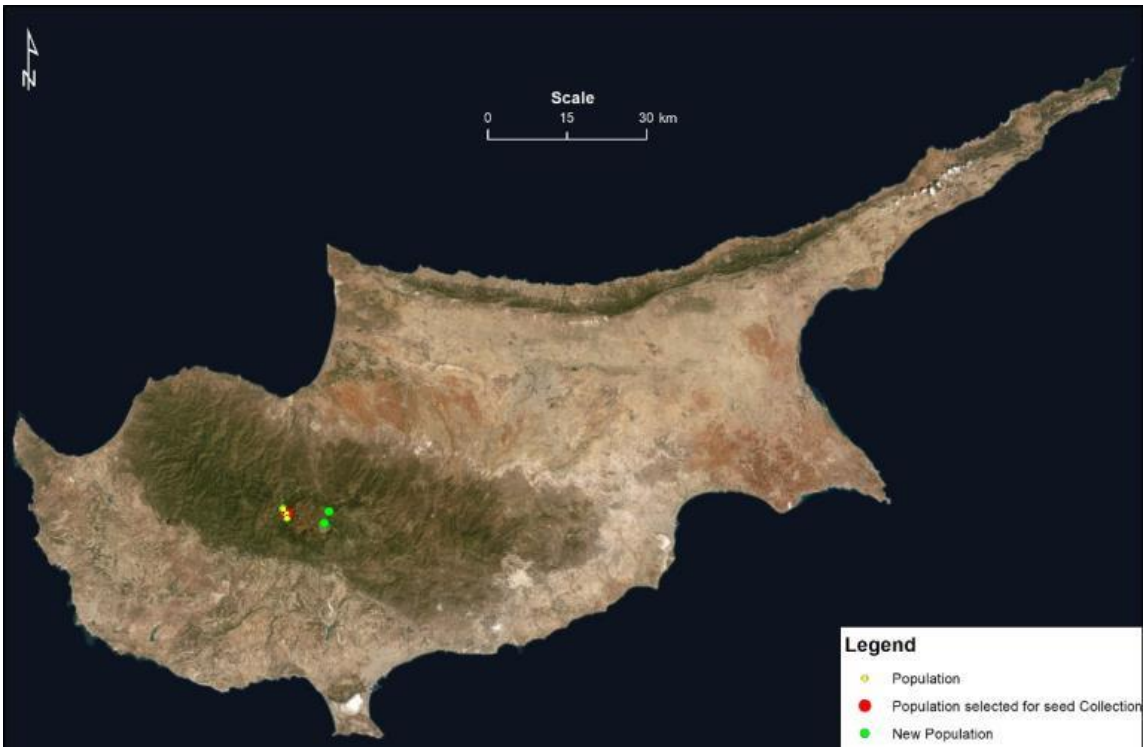
Island
Cyprus

Species name (Family)
Allium marathasicum Brullo & al. (Amaryllidaceae)

Common name
None

Plant description
- ✓ Erect, bulbous herb, 30-50 cm high. Leaves 3-4, fistulose, extending to the middle of the stem. Inflorescences lax, with 20-60 flowers. Perigone greenish-white, tinged brown.
- ✓ Perennial species (geophyte), flowering from May to August and fruiting from August until the end of September.
- ✓ Grows in irrigated tree orchards and at their edges, from 1300-1400m altitude.

Distribution
Allium marathasicum is an endemic species to Cyprus. It is found at one location only, between Prodromos and Trikoukkia. Total population size is approximately 500-1200 individuals, with some fluctuations every year due to irregular removal of weeds, which affects the species.

Map


Legal status
It is not listed in any international, national or local regulations.

Main threats and conservation status
According to the IUCN Treats Classification Scheme (Version 3.2) the main threats are:
Housing & Urban Areas (land development)
- ✓ 7.3 Other Ecosystem Modifications (land abandonment)
- ✓ 9.3 Agricultural & Forestry Effluents (weed control practices)

It is included in the Red Data Book of the Flora of Cyprus and in the IUCN Red list at Global Level as CR: B1ab(iii)+2ab(iii).

Conservation actions carried out in the CARE-MEDIFLORA project

In situ conservation actions included the population reinforcement of the species to the wider Troodos area at four sites. 1. Prodromos (Forestry college), 2. Trikoutsia (Trikoutsia monastery), 3. Amiantos Botanical Garden and 4. Platania Forest Nursery. A periodic monitoring of the *in situ* actions was started.

Photos


Umbel of *Allium marathasicum* & Production of plants from bulbs for the *in situ* activities.

Population reinforcement at Platania forest nursery (Troodos mountain)

Project partners: Department of Forests & Agricultural Research Institute, Ministry of Agriculture, Rural Development and Environment of Cyprus

Island
Cyprus

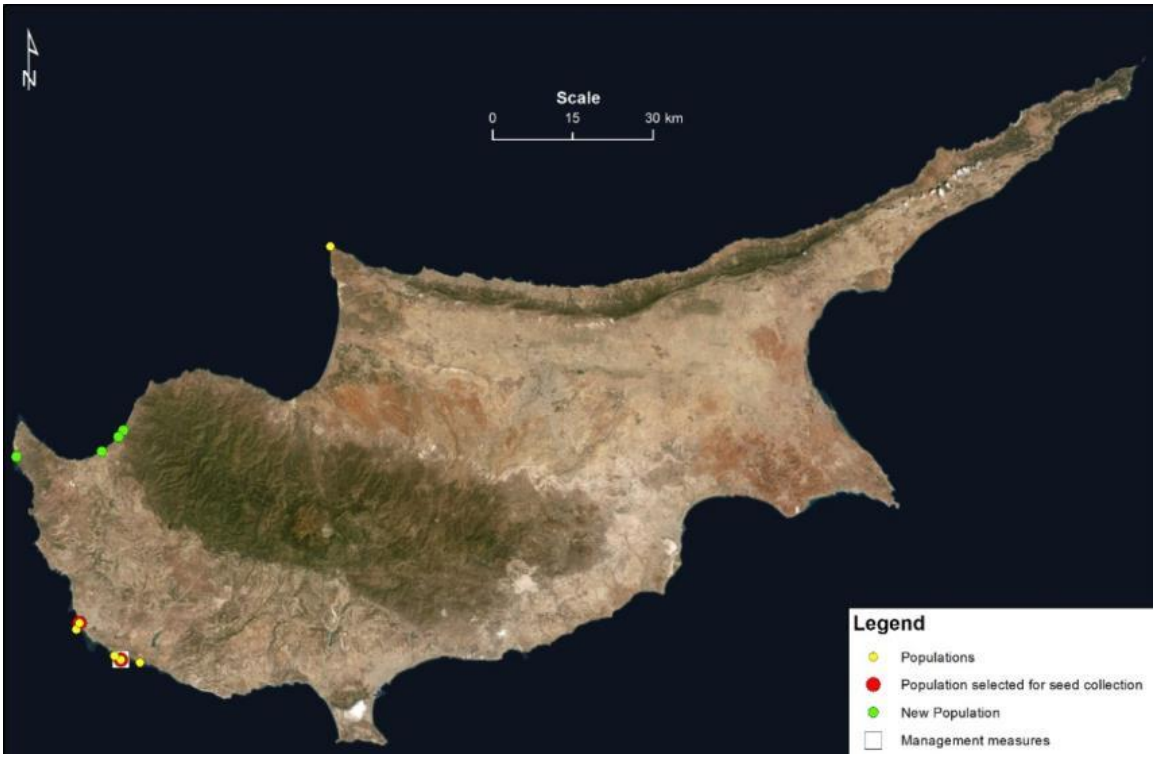
Species name (Family)
Anthemis tomentosa L. (Asteraceae)

Common name
Woolly Chamomile

Plant description
- ✓ Procumbent or erect, annual, grey-tomentose (therophyte herb). Stems 10-30 cm long, usually branched from the base. Lower and median leaves 2-pinnatisect. Capitularadiate peduncles thickening at maturity. Outer florets white, inner yellow. Achenes obconical, about 2 mm long, almost smooth, pale or with dark streaks.
- ✓ Flowering from (late March-) April to May and fruiting from May to July, depending on weather conditions.
- ✓ Occurs on sandy and gravelly coasts (habitat type 2110 Embryonic shifting dunes), near the sea level.

Distribution
Anthemis tomentosa occurs in Cyprus, Greece and southwest Turkey. In Cyprus, it is found in four locations, the first at Timi coast near Pafos airport (largest subpopulation, about 1500 individuals), the second at Kato Pafos and two at Kormakitis and Agia Irini coasts. Total population size is approximately 3000-4000 individuals, with some fluctuation every year.

Legal status
It is not listed in international, national or local regulations. The subpopulation at Kato Pafos occurs within a Natura 2000 site.

Map


Main threats and conservation status
According to the IUCN Treats Classification Scheme (Version 3.2) the main threats are:
- ✓ 1.3 Tourism & Recreation Areas (heavy use of the cost)

- ✓ 6.1 Recreational Activities (off road driving along the cost)
- ✓ 8.1 Invasive Non-Native/Alien Species/Diseases (*Acacia saligna*).

It is included in the Red Data Book of the Flora of Cyprus as EN: B1ab(iii,v)+2ab(iii,v). The species has not been assessed for the IUCN Red List at Global level.

Conservation actions carried out in the CARE-MEDIFLORA project

The largest subpopulation in Timi is negatively affected by recreational activities and the invasion of *Acacia saligna*. *In situ* conservations actions included:

- Translocation of the species to Akamas and Yialia.
- Placement of restriction barriers at Timi to prevent access to vehicles.
- Control of invasive species, *Acacia saligna* at Timi.

A periodic monitoring of the in situ actions was started. Seeds were collected and *ex situ* conserved at the Agricultural Research Institute genebank and at Amiantos Botanical Garden.

Photos


An overview of *Anthemis tomentosa* & Plants at flowering from the translocation of the species to Akamas area

Restriction barriers at Timi area to prevent access to vehicles & Control of invasive species (*Acacia saligna*) at Timi area

Project partners: Department of Forests & Agricultural Research Institute, Ministry of Agriculture, Rural Development and Environment of Cyprus

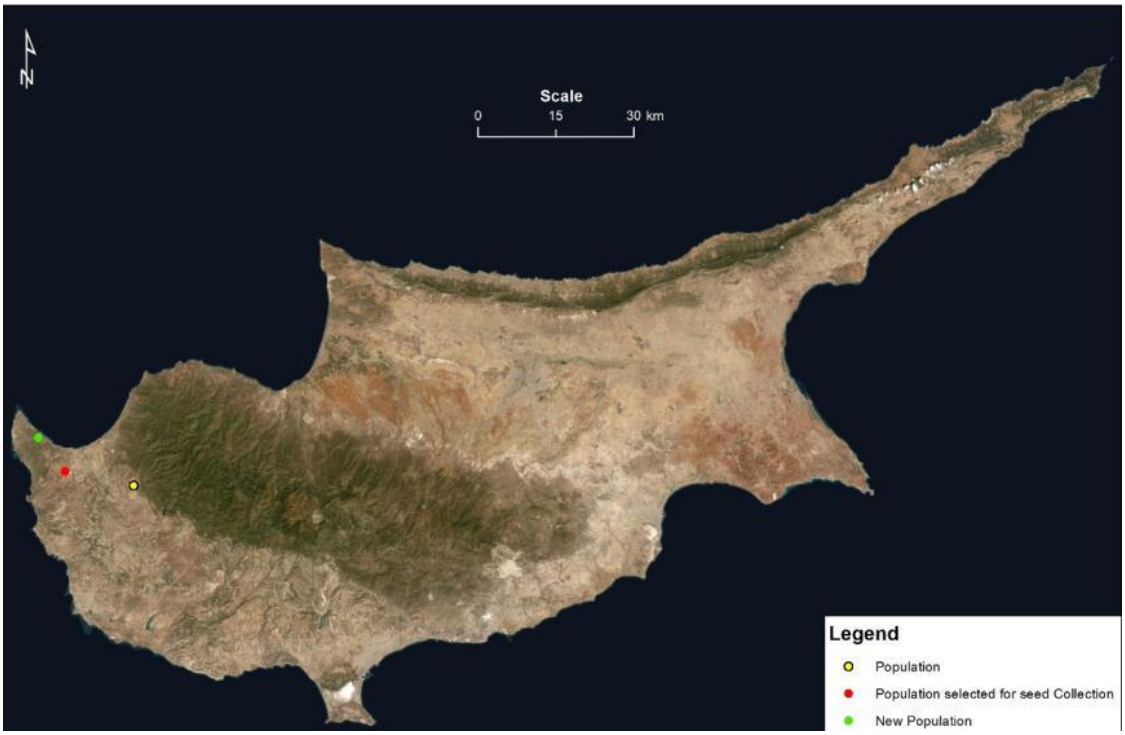
Island
Cyprus

Species name (Family)
Arum sintenisii (Engl.) P. C. Boyce (Araceae)

Common name
None

Plant description
- ✓ Perennial tuberous (geophyte) herb, up to 65 cm, sweet-scented. Inflorescences peduncle equaling leaf petiole or much shorter. Spathe purplish internally, spandix also purplish, appendix stipitate.
- ✓ Flowering from April to May and fruiting from May until June.
- ✓ Occurs in olive plantations and in moist places, at 250-600 m altitude.

Distribution
Arum sintenisii is an endemic species to Cyprus. It was recorded in three locations, at Kythrea village, at Fasouri area and at Androlikou village.

Map


Legal status
It is not listed in international, national or local regulations.

Main threats and conservation status
According to the IUCN Treats Classification Scheme (Version 3.2) the main threats are:
- ✓ 1.1 Housing & Urban Areas (Expansion of built-up areas)
- ✓ 2.3 Livestock Farming & Ranching (Overgrazing)
- ✓ 9.3 Agricultural & Forestry Effluents (Extensive use of herbicides)

It is included in the Red Data Book of the Flora of Cyprus as VU:D1+2. The species has not been assessed for the IUCN Red List at Global level.

Conservation actions carried out in the CARE-MEDIFLORA project

- The subpopulation in Adrolikou village was recently destroyed.
- Tubers were collected before the destruction of the subpopulation and *ex situ* conserved.
- Tubers from the *ex situ* conserved genetic material were used for the reintroduction of the species to Akamas National Forest Park.

A periodic monitoring of the *in situ* actions was started.

Photos

An overview of *Arum sintenisii* & Plants at flowering from the reintroduction of the species to Akamas National Forest Park

Project partners: Department of Forests & Agricultural Research Institute, Ministry of Agriculture, Rural Development and Environment of Cyprus

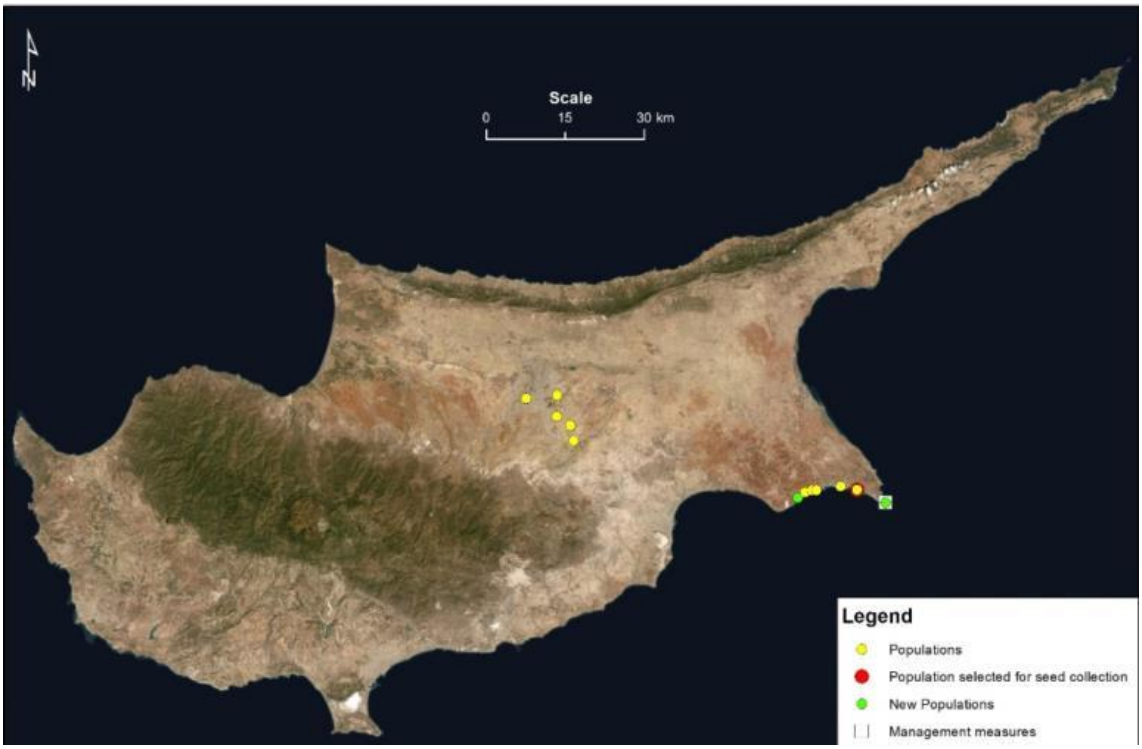
Island
Cyprus

Species name (Family)
Astragalus suberosus Banks & Sol. (Fabaceae)

Common name
None

Plant description
- ✓ Biennial or perennial, prostrate or decumbent herb. Stems 15-30 cm long, clothed with white or black hairs. Petals creamy-white or purplish. Pod with recurved beak.
- ✓ The Cyprian plants have been assigned to 2 varieties, the typical with pubescent pods and the var. *hartmannii* (possibly endemic) with glabrous, less rugose pods.
- ✓ Flowering from March to April and fruiting at May.
- ✓ Occurs in cultivated fields and fallow land, sandy coasts and sparse phrygana, at altitude 0-200m.

Distribution
Astragalus suberosus occurs in Balkans, Turkey, Syria, Lebanon, Israel, Jordan, Iran and Iraq. In Cyprus, there are five known subpopulations; at Potamos tou Liopetriou-Agia Thekla (the largest subpopulation with about 1000 individuals), at Agia Napa (200 plants), at Geri-Latsia (30 plants), at Strovolos (10 plants) and at south of Geri (5 plants). Total population size is approximately 1300 individuals.

Map


Legal status
It is not listed in international, national or local regulations.

Main threats and conservation status
According to the IUCN Treats Classification Scheme (Version 3.2) the main threats are:
Housing & Urban Areas (Expansion of built-up areas)

- ✓ 1.3 Tourism & Recreation Areas (Tourism development)
- ✓ 6.1 Recreational Activities (Extensive use of the coast)

It is included in the Red Data Book of the Flora of Cyprus as EN: B1ab(iii,v)+2ab(iii,v). The species has not been assessed for the IUCN Red List at Global level.

Conservation actions carried out in the CARE-MEDIFLORA project

The largest subpopulation at Potamos tou Liopetriou – Agia Thekla was recently destroyed due to tourism development. Seeds were collected from this subpopulation before the initiation of the works and used for the conservations actions. The i*n situ* activities included:

- Translocation of the species to Potamos Liopetriou and Cavo Greko-Somera.
- Control of the invasive species (*Acacia saligna*) at the translocation site Cavo Greko-Somera.

A periodic monitoring of the *in situ* actions was started. Seeds were collected and *ex situ* conserved at the Agricultural Research Institute genebank and at Amiantos Botanical Garden.

Photos

An overview of *Astragalus suberosus*

Plant at fruiting at the Cavo Greko-Somera translocation site & A close look of the control of the invasive species (*Acacia saligna*) at the Cavo Greko-Somera translocation site

Project partners: Department of Forests & Agricultural Research Institute, Ministry of Agriculture, Rural Development and Environment of Cyprus

Island
Cyprus

Species name (Family)
Crypsis hadjikyriakou Raus & H. Scholz (Poaceae)

Common name
None

Plant description
- ✓ Annual grass, with erect or prostrate culms, 1-4 cm long. Leaf-blades glaucous green, with conspicuous ribs. Inflorescences a spiciform panicle. Caryopsis oblong.
- ✓ Flowering from July to August and fruiting from August to September.
- ✓ Occurs at an alkaline fen, at 1650 m altitude.

Distribution
Crypsis hadjikyriakou is an endemic to Cyprus. It is found at only one location in the area of Almyrolivado (Troodos mountain). The total population size is approximately 550 individuals, distributed in small groups in a very small area of 1000 m².

Map


Legal status
It is not listed in international, national or local regulations. However, it's habitat is protected and lies within the Troodos National Forest Park.

Main threats and conservation status
According to the IUCN Treats Classification Scheme (Version 3.2) the main threats are:
- ✓ 7.1 Fire & Fire Suppression
- ✓ 6.1 Recreational Activities
- ✓ 7.2 Dams & Water Management/Use (Changes in the hydrological conditions of its habitat)

It is included in the Red Data Book of the Flora of Cyprus as CR: B1ab(iii)+2ab(iii) and in the IUCN Red list at Global Level as VU: D1+2.

Conservation action(s) carried out in the CARE-MEDIFLORA project

In situ conservations actions included:

- Translocation of the species to Pashia Livadi.
- Control of the naturalized species (*Cirsium arvense*) to Pashia Livadi.
- Reinforcement of the population in Almyrolivado.
- Trimming of herbaceous vegetation at Almyrolivado.

A periodic monitoring of the *in situ* actions was started. Seeds were collected and *ex situ* conserved at the Agricultural Research Institute genebank and at Amiantos Botanical Garden.

Photos

An overview of *Crypsis hadjikyriakou*

Production of plants for the *in situ* actions & Tranlocation of the species by removing a patch of soil with mature plants from the existing population (Almyrolivado) and transplanting it to the translocation area (Pashia Livadi)

Project partners: Department of Forests & Agricultural Research Institute, Ministry of Agriculture, Rural Development and Environment of Cyprus

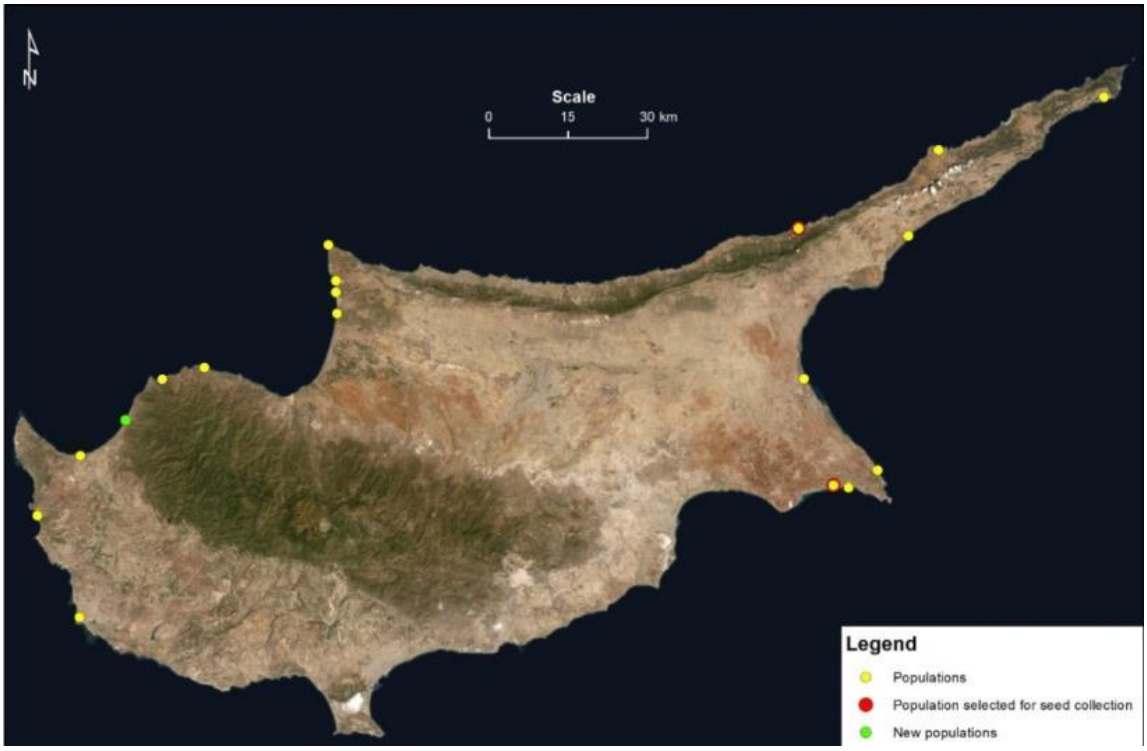
Island
Cyprus

Species name (Family)
Euphorbia paralias L. (Euphorbiaceae)

Common name
None

Plant description
- ✓ Glabrous, glaucous, caespitose perennial with numerous leafy shoots arising from a woody stock. Inflorescences a cyathium with 2 horned-glands. Fruit a trilobate regma.
- ✓ Flowering from February to December. The fruiting starts early, but ripening and dissemination of seeds starts at October and last for several months.
- ✓ Occurs on sandy coasts, near sea level.

Distribution
Euphorbia paralias occurs in West Europe and Mediterranean towards Black sea. In Cyprus, it has been recorded at 11 locations, from Apostolos Andreas to Salamina and Agia Eirini, Protaras and Agia Napa. The largest subpopulations are found between Agia Eirini and Kormakitis (1920 plants) but in most cases they number only 3-20 plants each. Total population size is approximately 3100 individuals.

Map


Legal status
It is not listed in international, national or local regulations.

Main threats and conservation status
According to the IUCN Treats Classification Scheme (Version 3.2) the main threats are:
- ✓ 1.3 Tourism & Recreation Areas (Tourism development and use, Clearance of sandy beaches).
- ✓ 6.1 Recreational Activities (Trampling).

It is included in the Red Data Book of the Flora of Cyprus as EN: A4ac. The species has not been assessed for the IUCN Red List at Global level.

Conservation actions carried out in the CARE-MEDIFLORA project

In situ conservations actions included the reintroduction of the species to Yialia, a protected area with small pressure from tourism activities. A periodic monitoring of the *in situ* actions was started. Seeds were collected and *ex situ* conserved at the Agricultural Research Institute genebank and at Amiantos Botanical Garden.

Photos

An overview of *Euphorbia paralias*

Young seedlings from the reintroduction of the species at Yialia area

Project partners: Department of Forests & Agricultural Research Institute, Ministry of Agriculture, Rural Development and Environment of Cyprus

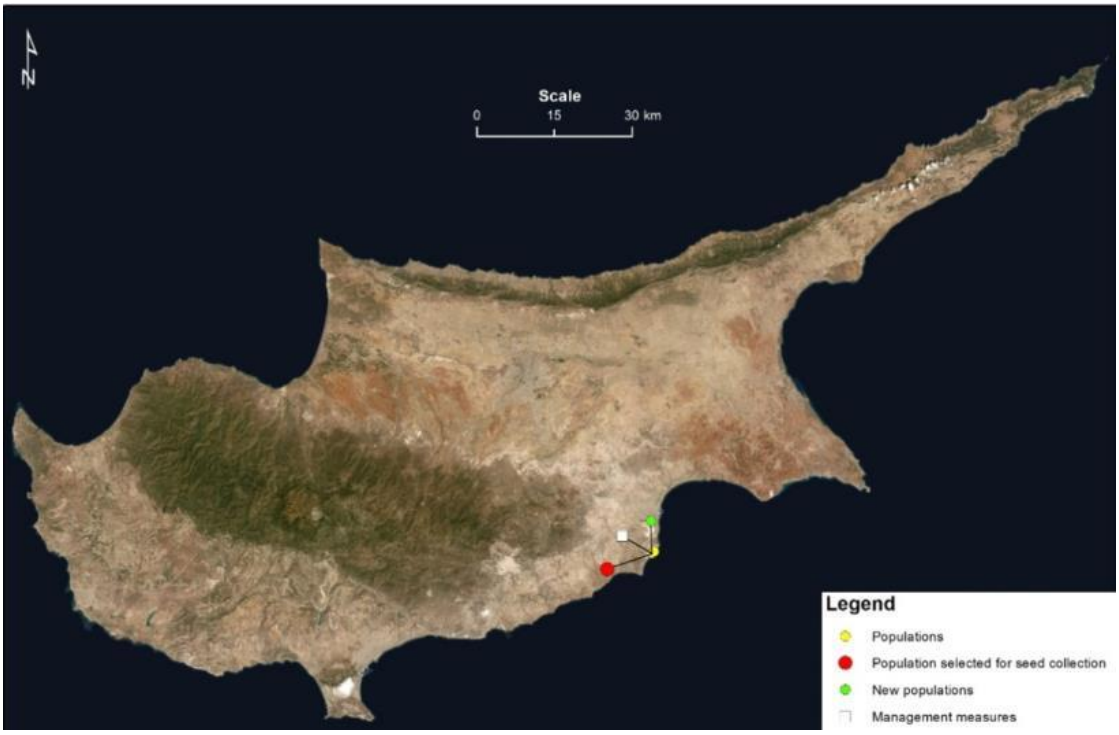
Island
Cyprus

Species name (Family)
Limonium mucronulatum (H. Lindb.) Greuter & Burdet (Plumbaginaceae)

Common name
None

Plant description
- ✓ Erect, glaucous perennial herb, up to cm high, with a woody rootstock. Leaves in a dense basal rosette, rhomboid, spathulate, or broadly elliptic, 3-5 x 1.2-2 cm, narrowed to a petiole 2-6 cm long. Apex with a filiform mucro 2-3 mm long. Corolla lavender blue.
- ✓ Flowering from June to August (September) and fruiting from July to September.
- ✓ Occurs on the margins of the salt lake, in openings of halophytic scrub, at sea level.

Distribution
Limonium mucronulatum is an endemic to Cyprus. It is found only to one location, at Larnaka salt lake. Total population size is approximately 700 individuals.

Map


Legal status
It is not listed in international, national or local regulations. However, the species occurs within a NATURA 2000 site.

Main threats and conservation status
According to the IUCN Treats Classification Scheme (Version 3.2) the main threats are:
- ✓ 6.1 Recreational Activities (uncontrolled vehicle traffic through its habitat),
- ✓ 8.1 Invasive Non-Native/Alien Species/Diseases (*Acacia saligna*)
- ✓ 8.2 Problematic Native Species/Diseases (*Phragmites australis*)
- ✓ 9.4 Garbage & Solid Waste

It is included in the Red Data Book of the Flora of Cyprus as CR: B1ab(iii,v)+2ab(iii+v); C2a(ii). The species has not been assessed for the IUCN Red List at Global level.

Conservation actions carried out in the CARE-MEDIFLORA project

In situ conservation actions included:

- Reinforcement of the population at Aliki Larnakas.
- Soft fencing in order to prevent uncontrolled vehicle driving through the habitat of the plant.
- Eradication of invasive species (*Acacia saligna*) and control of the competing vegetation (*Phragmites australis*).

A periodic monitoring of the *in situ* actions was started. Seeds were collected and *ex situ* conserved at the Agricultural Research Institute genebank and at Amiantos Botanical Garden.

Photos

An overview of *Limonium mucronulatum* & Plant established as part of the reinforcement actions just before flowering

Soft fencing in order to prevent uncontrolled vehicle driving through the habitat of the plant & Control of the competing vegetation (*Phragmites australis*)

Project partners: Department of Forests & Agricultural Research Institute, Ministry of Agriculture, Rural Development and Environment of Cyprus

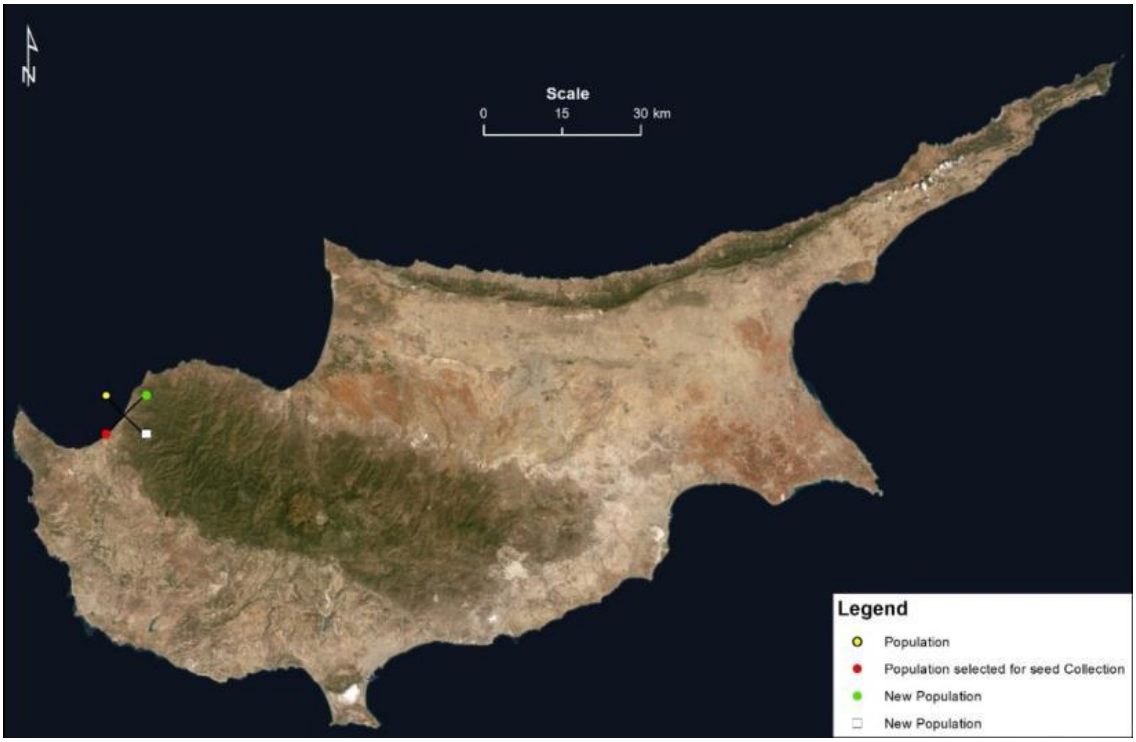
Island
Cyprus

Species name (Family)
Maresia nana var. *glabra* (Meikle) Christodoulou & Hand (Brassicaceae)

Common name
None

Plant description
- ✓ Erect or spreading annual herb, 3-20 cm high, with glabrous stems. Leaves glabrous, entire or irregularly lobed, lanceolate. Flowers mauve or pink. Fruit a glabrous, cylindrical silique.
- ✓ Flowering from March to April and fruiting from April to May.
- ✓ Occurs, on sandy coasts.

Distribution
Maresia nana var. *glabra* is an endemic variety to Cyprus. It is found at one location, between Polis Chrysochous and Agia Marina coast, near sea level. Total population size is about 80 individuals.

Map


Legal status
It is not listed in international, national or local regulations. However, the species occurs within state forest land and NATURA 2000 site.

Main threats and conservation status
According to the IUCN Treats Classification Scheme (Version 3.2) the main threats are:
- ✓ 8.1 Invasive Non-Native/Alien Species/Diseases (Invasion of *Acacia saligna*).
- ✓ 6.1 Recreational Activities (Clearance works on the beach).

It is included in the Red Data Book of the Flora of Cyprus as CR: B1ab(iii,iv)+2ab(iii,iv); C2a(ii). The species has not been assessed for the IUCN Red List at Global level.

Conservation actions carried out in the CARE-MEDIFLORA project

In situ conservation actions included the reinforcement of the population and the control of invasive species (*Acacia saligna*) in Yialia area. A periodic monitoring of the *in situ* actions was started. Seeds were collected and *ex situ* conserved at the Agricultural Research Institute genebank and at Amiantos Botanical Garden.

Photos

Fig 2: An overview of *Maresia nana var. glabra*

Production of plants for the *in situ* actions & Control of the invasive species (*Acacia saligna*)

Project partners: Department of Forests & Agricultural Research Institute, Ministry of Agriculture, Rural Development and Environment of Cyprus

Island
Cyprus

Species name (Family)
Peganum harmala L. (Nitrariaceae)

Common name
None

Plant description
- ✓ Erect perennial herb, 25-70 cm high, with a woody rootstock and glabrous stems. Leaves sessile, irregularly divided into linear lobes. Flowers solitary, whitish or greenish.
- ✓ Flowering from May to June and fruiting from May to August.
- ✓ Occurs along roads and waste ground, at 0-350 m altitude.

Distribution
Peganum harmala occurs in Southeaster Europe, Mediterranean region and to the east towards central Asia and northwest India. In Cyprus, it has been found only at one location, near the walls of the old city of Lefkosia, on waste ground.

Map


Legal status
It is not listed in international, national or local regulations.

Main threat and conservation status
According to the IUCN Treats Classification Scheme (Version 3.2) the main threat is:
- ✓ 1.1 Housing & Urban Areas (Intense human activities in the area).

It is included in the Red Data Book of the Flora of Cyprus as CR: B1ab(i-v)+2ab(i-v); D1. The species has not been assessed for the IUCN Red List at Global level.

Conservation actions carried out in the CARE-MEDIFLORA project

In situ conservation actions included the reintroduction to Nicosia old walls, where the plant has gone extinct during the last decade. A periodic monitoring of the *in situ* actions was started.

Photos

An overview of *Peganum harmala*

Plants at flowering from the reintroduction of the species to Nicosia old walls

Project partners: Department of Forests & Agricultural Research Institute, Ministry of Agriculture, Rural Development and Environment of Cyprus

Island
Cyprus

Species name (Family)
Dichoropetalum kyriakae (Hadjik. & Alziar) Hand & Hadjik (Apiaceae)

Common name
None

Plant description
- ✓ Erect perennial herb, 30-80(-100) cm high. Rootstock usually divided at apex. Basal leaves present at flowering time, lamina 2-pinnatisect, narrowly oblong to deltoid in outline, 8-18 x 6-14 cm. Upper leaves smaller, reduced gradually to sheaths. Flowers in umbels, rays (2-)4-8 unequal, sepals absent, petals white internally, tinged purple externally. Fruit oblong to obovate 4-6 x 3-4 mm.
- ✓ Flowering from May to June and fruiting from June to July.
- ✓ Occurs in open *Pinus brutia* forest, on serpentinised substrate, at 450-550 m altitude.

Distribution
Dichoropetalum kyriakae is an endemic to Cyprus. It is found only to one location (0.5 km², less than 250 plants) near Parekklisia, in the Lemesos state forest.

Map


Legal status
It is not listed in international, national or local regulations.

Main threats and conservation status
According to the IUCN Treats Classification Scheme (Version 3.2) the main threats are:
- ✓ 7.1 Fire & Fire Suppression (Forest fires)
- ✓ 4.1 Roads & Railroads (Road maintenance)
- ✓ 3.2 Mining & Quarrying (Habitat degradation)

It is included in the Red Data Book of the Flora of Cyprus as EN: D1. The species has not been assessed for the IUCN Red List at Global level.

Conservation actions carried out in the CARE-MEDIFLORA project

In situ conservation actions included the reinforcement of the population at Limassol forest. A periodic monitoring of the *in situ* actions was started. Seeds were collected and *ex situ* conserved at the Agricultural Research Institute genebank and at Amiantos Botanical Garden.

Photos

An overview of *Dichoropetalum kyriakae*

Young plant established as part of the reinforcement actions. An irrigation system was installed to provide water support.

Annex 6 – List of project scientific publications

Articles

- Fenu, G., F., Bacchetta, G., Christodoulou, C., Fournaraki, C., Giusso del Galdo, G., Gotsiou, P., Kyratzis, A., Piazza, C., Vicens, M., V., Pinna, M.S., Montmollin, B. de, An early evaluation of translocation actions for endangered plant species on Mediterranean islands, Plant Diversity, https://doi.org/10.1016/j.pld.2019.03.001.
- Fenu, G., Giusso del Galdo, G., Montmollin, B. de, Gotsiou, P., Cogoni, D., Piazza, C., Fournaraki, C., Kyratzis, A., Vicens, M., Christodoulou, C., Bacchetta, G. (2017) Active management actions for the conservation of the endangered Mediterranean island flora: the CARE-MEDIFLORA project. Plant Sociology, Vol. 54, No. 2, Suppl. 1, pp. 101-110.DOI: 10.7338/pls2017542S1/10Available online at http://www.scienzadellavegetazione.it/sisv/documenti/Articolo/pdf/622.pdf
- Sciandrello, S., Giusso del Galdo, G., & Minissale, P. (2017) Ecology and conservation status of Muscari gussonei (Parl.) Nyman in Sicily: a narrow endemic species threatened by habitat reduction. Plant Sociology, Vol. 54, No. 2, Suppl. 1, pp. 85-96.Available online at http://www.scienzadellavegetazione.it/sisv/documenti/Articolo/pdf/620.pdf

Oral presentations

Fournaraki C., Gotsiou P, Markaki E., Kokkinaki A. 2019. Preliminary results of actions to reinforce natural populations of threatened plant species in Crete. Pag. 47. Book of Abstracts. 16th Panhellenic Scientific Conference of the Hellenic Botanical Society, Athens, 10-13 October 2019.

Montmollin B. de, Gotsiou P., Bacchetta G., Christodoulou C.S., Cogoni D., Fournaraki C., Giusso del Galdo G.P., Kokkinaki A., Kyratzis A., Piazza C., Vicens M., Fenu G. 2019. Ex situ and in situ joint conservation actions for threatened Mediterranean island flora: lessons learnt from the CARE-MEDIFLORA project. Pag. 86-87. Book of Abstracts. XVI OPTIMA Meeting, Agricultural University of Athens, Greece, 2-5 October 2019.

Poster presentations

Fournaraki, C., Gotsiou, P., Markaki, E., Kokkinaki, A., Sfoungari, I., Katsikani, K. (2018) Project 'CARE-MEDIFLORA': Conservation of threatened plant species in Crete. 9th Panhellenic Ecology Conference (HELECOS), Heraklion, Crete, 4-7 October 2018. Book of Abstracts, p. 155

De Montmollin B., Gotsiou P., Fenu G., Cogoni D., Fournaraki C., Kyratzis A., Christodoulou C., Giusso del Galdo G., Piazza C., Vicens M., Bacchetta G. (2017) The Project CAREMEDIFLORA: Conservation actions for endangered island mediterranean flora. 6th Global Botanic Gardens Congress, 26-30 June 2017, Geneva, Switzerland. Book of Abstracts, p.82-83

CARE-MEDIFLORA presentations at the Mediterranean Plant Conservation Weeks

2nd Mediterranean Plant Conservation Week, La Valetta, Malta, 12-16 November 2018.

Main organisers CARE-MEDIFLORA and IUCN

- Kyratzis A. (on behalf of all CARE-MEDIFLORA project) (2018) Ex situ conservation actions of the project "CARE-MEDIFLORA". Abstract on Booklet p. 13 (pdf)

- Fenu G. (on behalf of all CARE-MEDIFLORA project) (2018) Contribution of translocations to enhance the conservation status of the threatened Mediterranean island flora: the CARE-MEDIFLORA project. Abstract on Booklet p. 24 (pdf)
- Giusso del Galdo G. (on behalf of all CARE-MEDIFLORA project) (2018) Invasive alien species in the Mediterranean islands: the CARE-MEDIFLORA project. Abstract on Booklet p. 25 (pdf)
- Vicens M. & Piazza C. (on behalf of all CARE-MEDIFLORA project) (2018) CARE-MEDIFLORA project, experiences with stakeholders and collaborations with administrations and private proprietaries. Abstract on Booklet p. 37 (pdf)

1st Mediterranean Plant Conservation Week, Ulcinj, Montenegro, 24-29 October 2016.
Main organisers GREEN HOME and IUCN Centre for Mediterranean Cooperation

- Bacchetta, G., Cogoni, D., Fenu, G., Fournaraki, C., Gotsiou, P., Kyratzis, A., Christodoulou, C. (2016) The project CAREMEDIFLORA: conservation actions for rare and endangered island mediterranean flora. Abstract on Booklet p. 31 (pdf)

Website for Mediterranean Plant Conservation Weeks: http://www.medplantsweek.uicnmed.org/.

Other project presentations

Seguí, J., Vicens, M., Gotsiou, P., Fenu, G. & Montmollin, B. de (2018) In situ conservation activities on threatened plant species in Balearic Islands: the CARE-MEDIFLORA project. VII Environment Congress of the Balearic Islands organised by the Society of Natural History of the Balearic Islands, 28-30 November 2018, University of the Balearic Islands, Palma, Spain. VII Jornades de Medi Ambient de les Illes Balears (ISBN 978-84-09-06632-2), pp. 364-367

Vicens, M., Vidal, J., Bibiloni, M., Cirer, E., Seguí, J., Fenu, G., Montmollin, B. de (2018) Actions for conservation of the endangered mediterranean islands flora: the care-mediflora project in balearic islands. EUROGARD VIII – Eight European Botanic Gardens Congress: "Botanic Gardens, People and Plants for a Sustainable World", 7-11 May 2018, Lisbon, Portugal. Book of Abstracts pp. 152-153.

Fournaraki C., Gotsiou P., Markaki E., Mavroeidi L. Perrakis A., Kokkinaki A., Thanos C.A. (2017) Joint actions for the conservation of threatened plant species in the Mediterranean islands - The case of Crete. 15th Panhellenic Scientific Conference of the Hellenic Botanical Society (HBS), 14-17 September 2017, MAICh Conference Centre, Chania, Greece. Book of Abstracts, p.61.

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