

# CARE-MEDIFLORA project, experiences with stakeholders and collaborations with administrations and landowners



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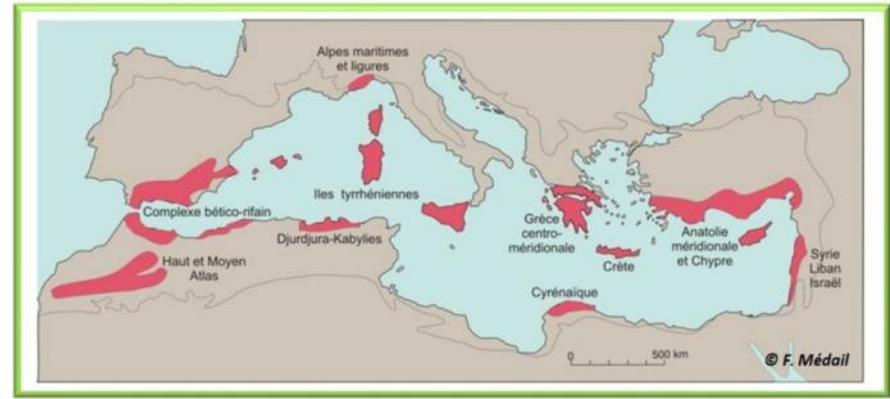
\*\*Office de l'Environnement de la Corse - Conservatoire Botanique National de Corse, France



Supported by:



# INTRODUCTION



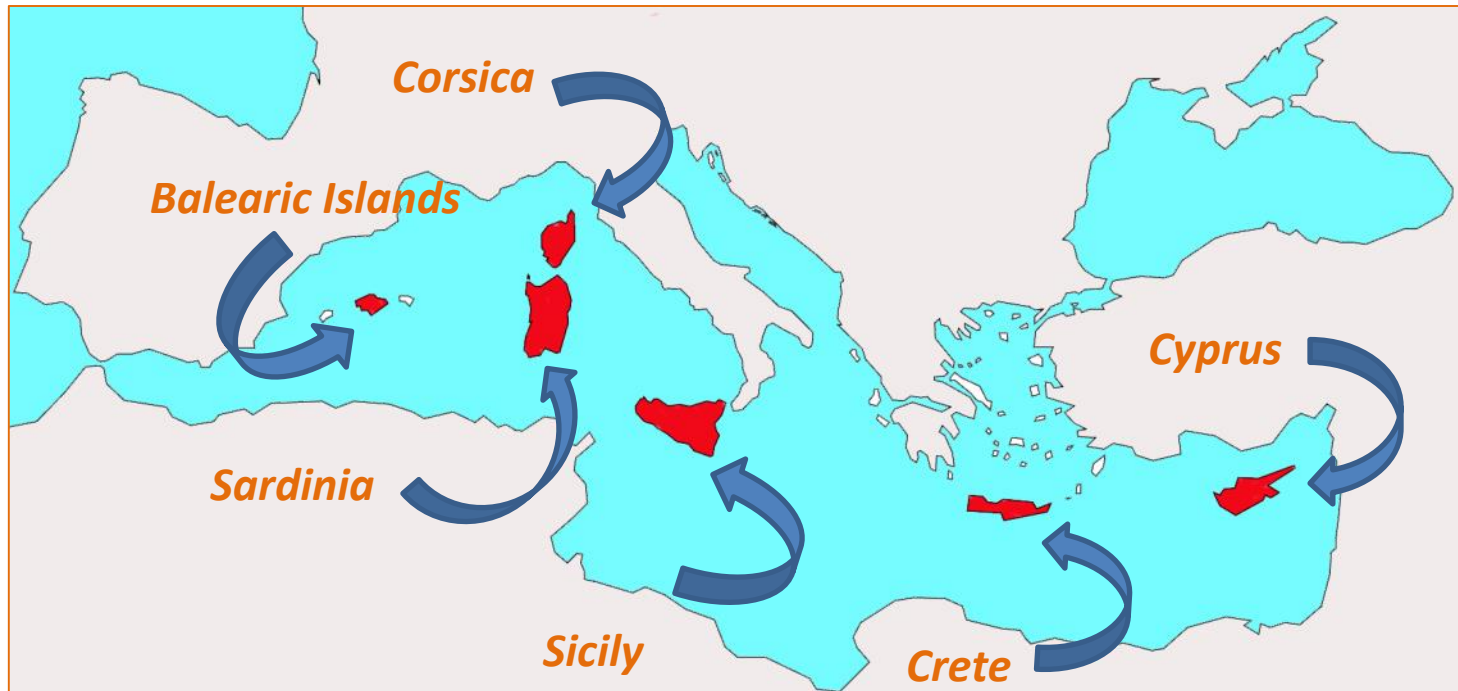
- The Mediterranean Basin is one of the world's most biodiverse regions.
- Roughly 30,000 different plant species, of which approximately 13,000 cannot be found elsewhere (43% Mediterranean endemics) (10% of the world plants).
- This region has been included among the world's 34 biodiversity **hotspots**.
- Higher level of endemics than in mainland floras.



But plant species are vulnerable to many threats and some of them require urgent protection measures.

# CARE-MEDIFLORA PROJECT

CONSERVATION PROJECT FOR RARE AND ENDANGERED  
MEDITERRANEAN ISLAND PLANTS USING *IN SITU* AND *EX SITU*  
CONSERVATION ACTIONS



# OBJECTIVES OF THE PROJECT

## Integrating *ex situ* and *in situ* conservation

Using *ex situ* activities to improve *in situ* conservation

- I. Target species selection
- II. In situ conservation actions
- III. Ex situ conservation actions

## IV. Networking and communication activities

- i. Stakeholders network
  - i. Landowners
  - ii. Administration
  - iii. Scientifics



**WHAT METHODS AND MEANS TO ACHIEVE THE ABOVE?**

# NETWORKING AND COMMUNICATION ACTIVITIES

## Important points to get:

- ✓ **Monitoring *in situ* actions for a long time after the project.**
- ✓ **Share results and experience with STAKEHOLDERS NETWORK.**
- ✓ **Get agreements with ADMINISTRATION and local GSPC FOCAL POINTS to contribute to national reports for:**

- **Target 5:** at least 75% of IPAs protected, managed
- **Target 7:** 75% of threatened plants conserved *in situ*.
- **Target 8:** 75% of threatened plants in *ex situ* collections. Country of origin. 20% available for recovery plans.



# STRATEGIES

A3 - *In situ* conservation actions



**Involve all the actors and especially the local actors** to ensure the sustainability of actions

A4 - *Ex situ* conservation actions



**Promote the transfer of experience and information:**

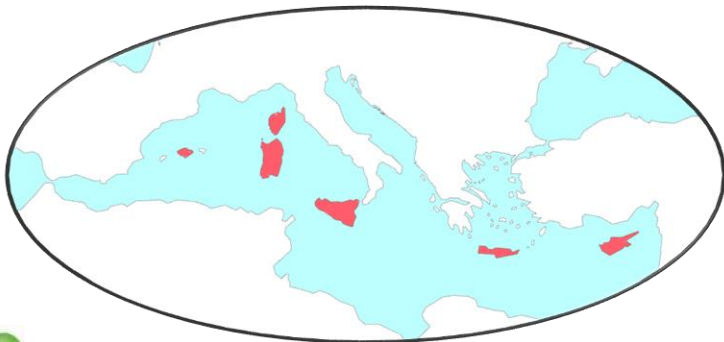
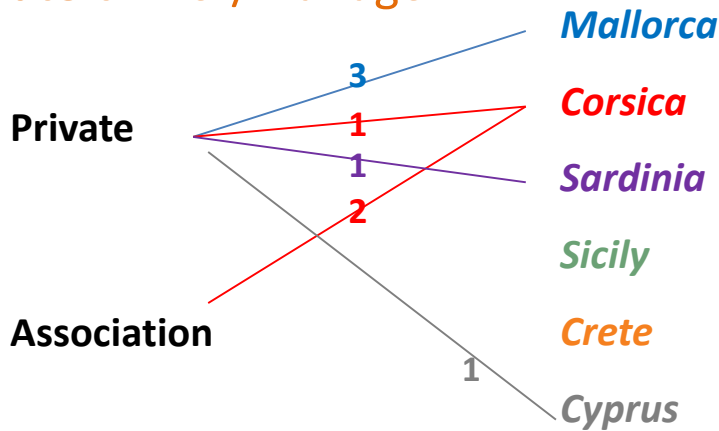
- Among the **partners of the CARE-MEDIFLORA** project, and
- among all the **relevant stakeholders of the Mediterranean Basin** (i.e. GENMEDA)



# Links with local partners

• In total, a large number of partnerships and links with local actors within the framework of the program

## Private owner/manager



## Public owner/manager

### Local communities :

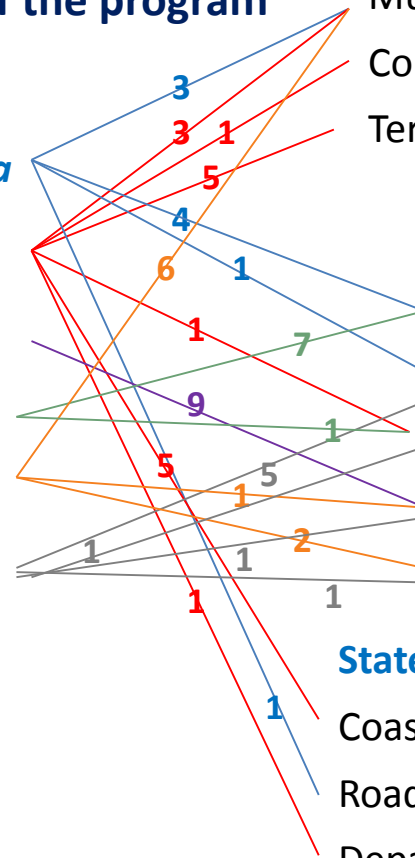
- Municipality Council administration
- Communities of Commons
- Territorial Collectivity

### Other regional organizations

- Nature reserve
- National Park
- Regional Natural Park
- Forest service
- Archeological service

### State services :

- Coastal Conservatory
- Road services administration
- Department of Public Maritime Domain



# EXAMPLES AND RESULTS

## Elaboration of actions

### Working close to:

- 1. Administrations (national and / or regional)**
- 2. Landowners / local partners**
- 3. Managers**
- 4. Researchers / scientific community**



# 1. Working with national and local administrations

## ▪ To obtain legislative and regulatory authorizations

*Procedures more or less long and complex according to the regulations of different states*

**Corsica, Crete:** regulation on the protected species strong: many necessary authorizations

**Mallorca:** authorization needed for legally protected species and from legally protected land.

**Sardinia, Sicily:** no authorization for selected plant species needed

**Cyprus:** No authorization needed

## ▪ Links with other framework documents

*(Natura 2000, National or Regional Action Plan (PNA), Management Plan)*

**Mallorca:** 3 actions related to Natura 2000

**Corsica:** 3 related to Natura 2000, 2 actions related to PNA

**Sicily:** 8 related to Natura 2000

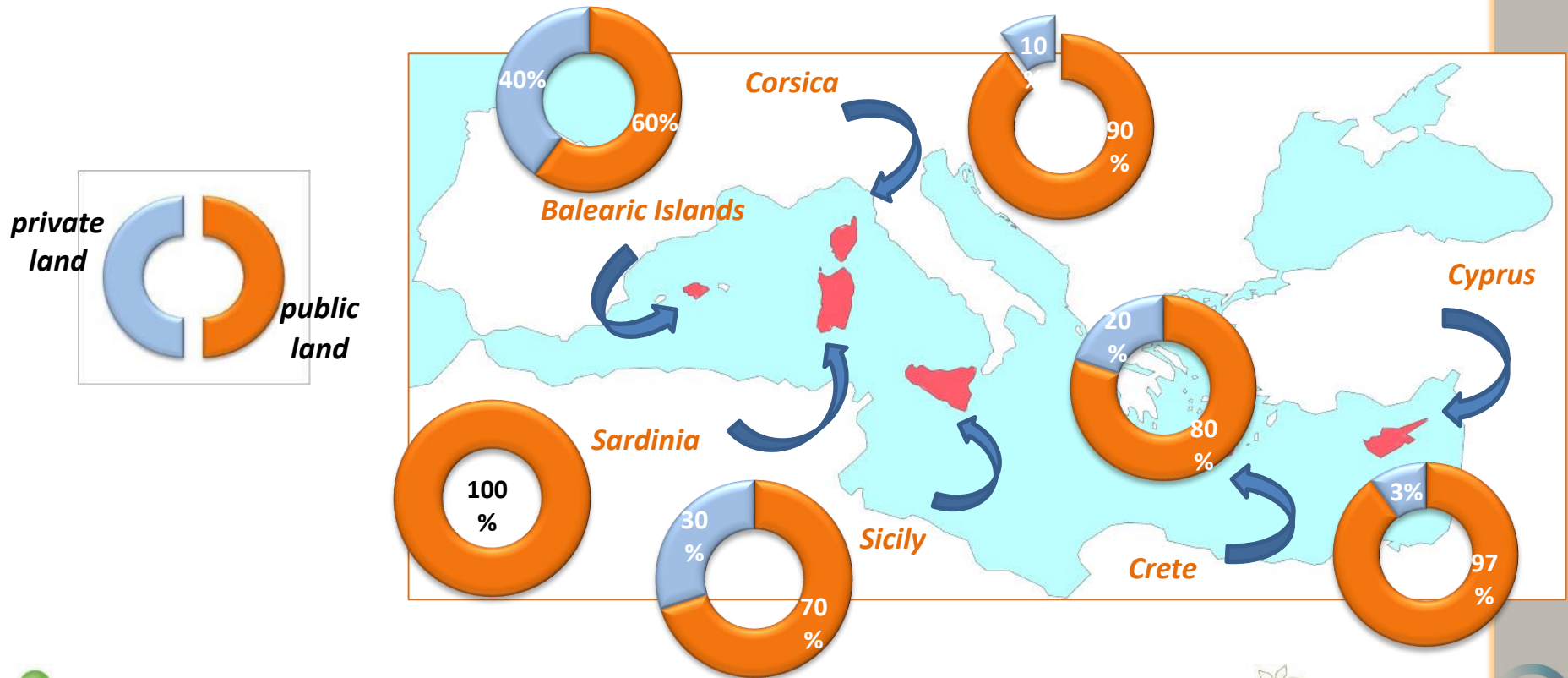
**Crete:** 8 related to Natura 2000

**Cyprus:** 9 related to Natura 2000

# 2. Working with landowners

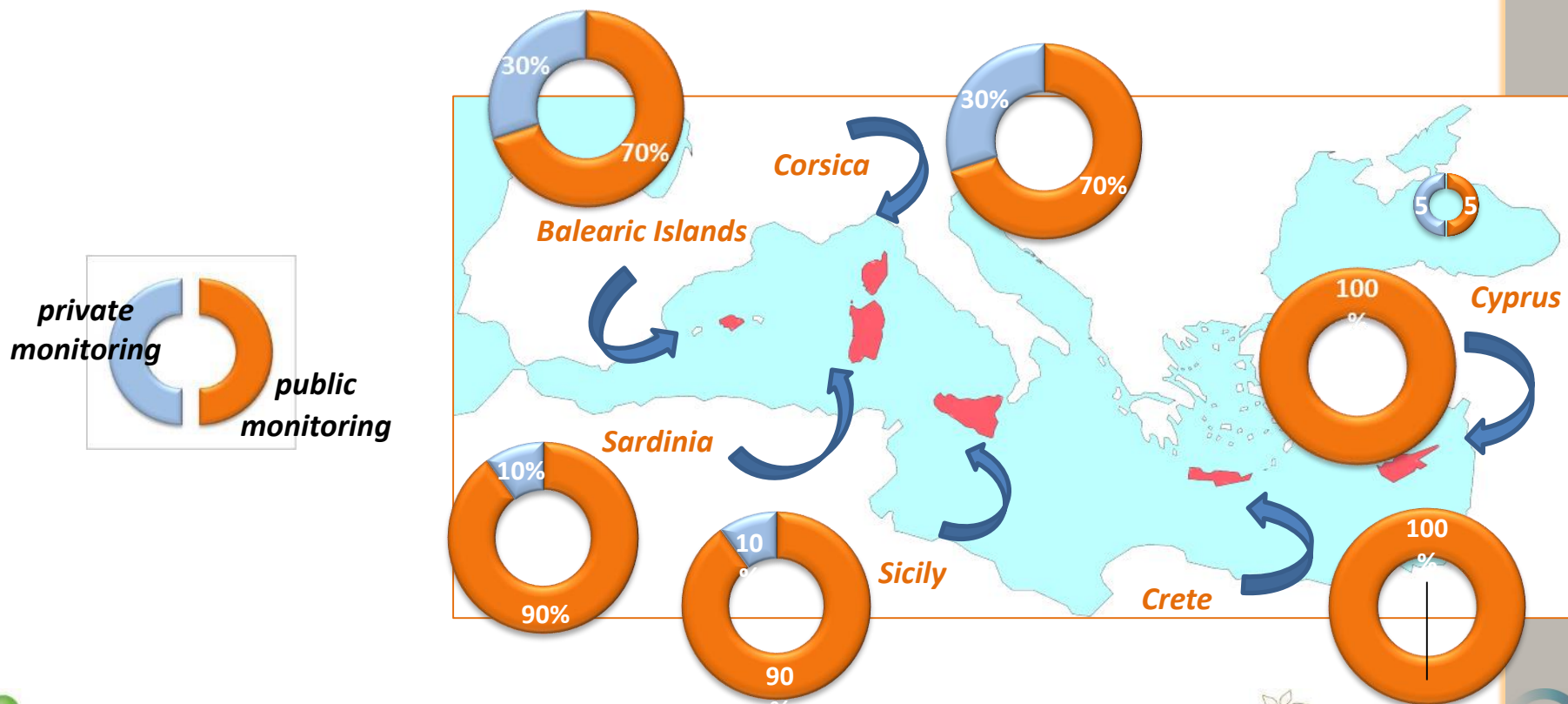
• **Most of the operations were carried out on public land (82 %) :**

- **Difficulty to contract with private owners (exception: Mallorca)**
- **Difficulty to mobilize public credits to finance actions on private land**



# 3. Working with local managers

- The choice of partners was oriented towards collaboration with sustainable management structures
  - *Monitoring is essentially done by public partners (87%). Very few operations followed by associations or private (13 %)*



# 4. Working with scientists and local actors

- Numerous exchanges with local scientists during the development of actions:
  - ✓ Regional Scientific Council,
  - ✓ Botanists,
  - ✓ Conservation Specialists



Convention with a climber (for regulation of the activity), public information on the site by the managers. Corsica.

GENMEDA Meeting - May 18, 2017

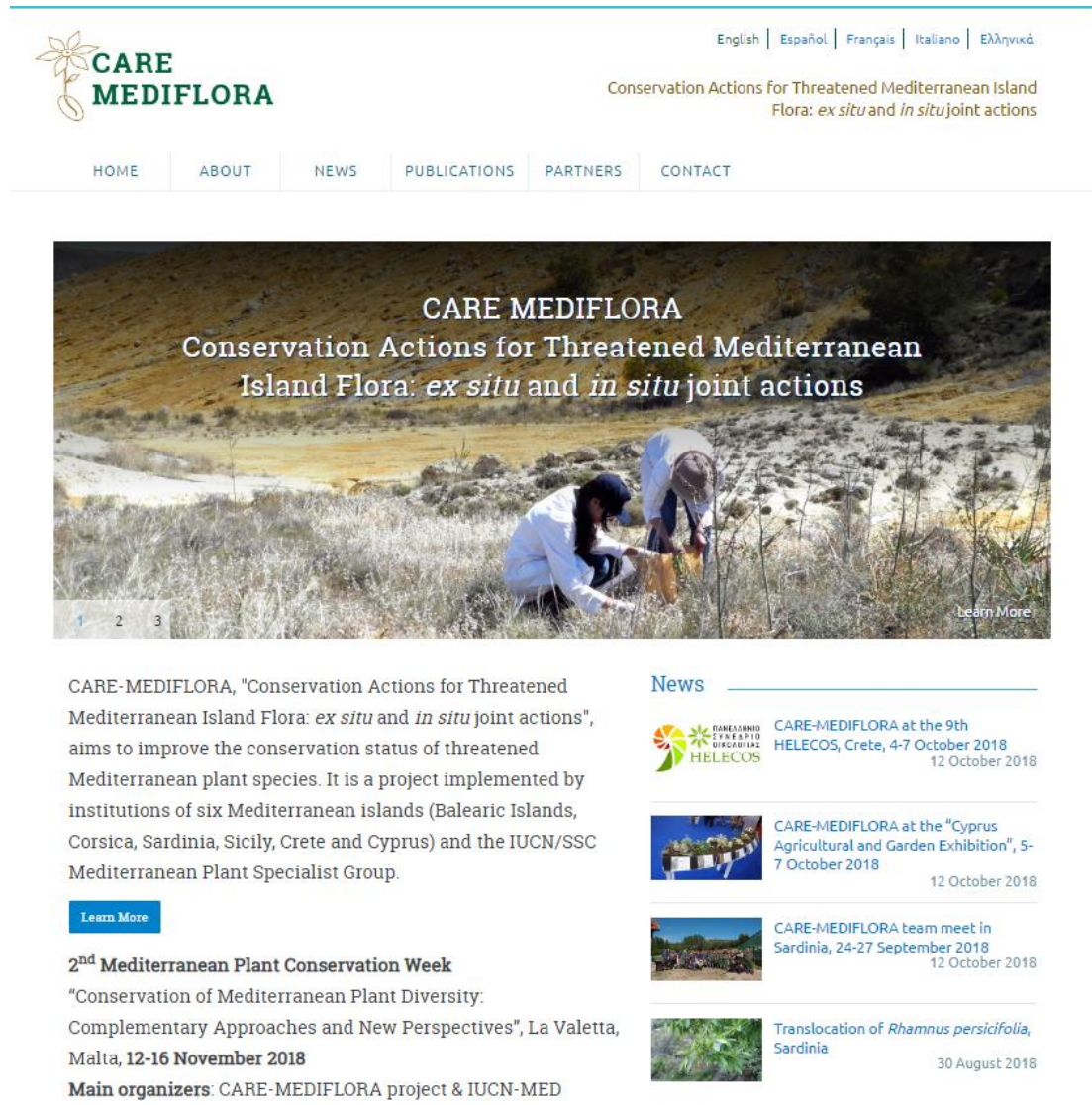
Botanical Garden of the Rome University 'La Sapienza'

- Numerous exchanges between project partners and GENMEDA network

# TRAINING, INFORMATION, COMMUNICATION

Website of the project.

[www.care-mediflora.eu](http://www.care-mediflora.eu)



The screenshot shows the CARE-MEDIFLORA website. At the top left is the logo, a stylized plant with the text 'CARE MEDIFLORA'. To the right are language options: English | Español | Français | Italiano | Ελληνικά. Below that is the project title: 'Conservation Actions for Threatened Mediterranean Island Flora: *ex situ* and *in situ* joint actions'. A navigation menu includes HOME, ABOUT, NEWS, PUBLICATIONS, PARTNERS, and CONTACT. The main banner features a photograph of two people in a field, with the text 'CARE MEDIFLORA Conservation Actions for Threatened Mediterranean Island Flora: *ex situ* and *in situ* joint actions' overlaid. Below the banner is a 'Learn More' button. The 'News' section lists several events: 'CARE-MEDIFLORA at the 9th HELECOS, Crete, 4-7 October 2018', 'CARE-MEDIFLORA at the "Cyprus Agricultural and Garden Exhibition", 5-7 October 2018', 'CARE-MEDIFLORA team meet in Sardinia, 24-27 September 2018', and 'Translocation of *Rhamnus persicifolia*, Sardinia'. A 'Learn More' button is also present below the news items.

English | Español | Français | Italiano | Ελληνικά

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

HOME ABOUT NEWS PUBLICATIONS PARTNERS CONTACT

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

Learn More

CARE-MEDIFLORA, "Conservation Actions for Threatened Mediterranean Island Flora: *ex situ* and *in situ* joint actions", aims to improve the conservation status of threatened Mediterranean plant species. It is a project implemented by institutions of six Mediterranean islands (Balearic Islands, Corsica, Sardinia, Sicily, Crete and Cyprus) and the IUCN/SSC Mediterranean Plant Specialist Group.

Learn More

**2<sup>nd</sup> Mediterranean Plant Conservation Week**  
"Conservation of Mediterranean Plant Diversity: Complementary Approaches and New Perspectives", La Valetta, Malta, 12-16 November 2018  
**Main organizers:** CARE-MEDIFLORA project & IUCN-MED

News

CARE-MEDIFLORA at the 9th HELECOS, Crete, 4-7 October 2018  
12 October 2018

CARE-MEDIFLORA at the "Cyprus Agricultural and Garden Exhibition", 5-7 October 2018  
12 October 2018

CARE-MEDIFLORA team meet in Sardinia, 24-27 September 2018  
12 October 2018

Translocation of *Rhamnus persicifolia*, Sardinia  
30 August 2018

2nd Mediterranean Plant Conservation Week, La Valetta, Malta, 12-16 November 2018

# TRAINING, INFORMATION, COMMUNICATION

Exchange trips among partners



# TRAINING, INFORMATION, COMMUNICATION

## ☐ Manager Training



# TRAINING, INFORMATION, COMMUNICATION

Information for local actors and the general public

(local media : TV, newspaper, radio, social networks, production of information material, local events, information on site by managers)



2nd Mediterranean Plant Conservation Week, La Valetta, Malta, 12-16 November 2018



# TRAINING, INFORMATION, COMMUNICATION

▣ Scientific publications, symposiums, congress assistance...

[\[PDF\] Seed conservation actions for the preservation of plant diversity: the case of G-SAR](#)



[Plant ...](#), 2017 - [researchgate.net](#)  
 ...ation, management and conservation (eg, HEI-PLADI  
 PLADI/elearning/), as well as practical training for  
 ect by **CARE-MEDIFLORA**; [http://ww...](http://www...)  
 os Las 2 versiones »

... for the conservation of f  
**Mediterranean island flora: the CARE-MEDIFLORA pr**  
 M Kyrtzsis, CS Christodoulou, G Bacchetta - [scienzadellavegetazione](#)

Abstract The Mediterranean Basin is one of the world's most biodive,  
 roughly counts 30,000 different plant taxa, of which approximately 50% c  
 the region. Thus, this area has been recognized among the world's 34 bio.

culos relacionados Las 2 versiones »

Plant Sociology, Vol. 54, No. 2, Suppl. 1, December 2017, pp. 101-110  
 DOI 10.7338/pls2017542S1/10



## Active management actions for the conservation of the endangered Mediterranean island flora: the CARE-MEDIFLORA project

G. Fenu<sup>1</sup>, G. Giusso del Galdo<sup>2</sup>, B. Montmolin de<sup>3</sup>, P. Gotsiou<sup>4</sup>, D. Cogoni<sup>5</sup>, C. Piazza<sup>6</sup>, C. Fournarakis<sup>7</sup>, A.C. Kyrtzsis<sup>8</sup>, M. Vicens<sup>9</sup>, C.S. Christodoulou<sup>9</sup>, G. Bacchetta<sup>1,2</sup>  
<sup>1</sup>Centre for the Conservation of Biodiversity (CCB), Life and Environmental Sciences Department, University of Cagliari, Viale S. Ignazio da Laconi 11-13, 09123 Cagliari, Italy.  
<sup>2</sup>Department of Biological, Geological and Environmental Sciences, University of Catania, Italy.  
<sup>3</sup>Mediterranean Plant Specialist Group (IUCN/SSC).  
<sup>4</sup>CIHEAM Mediterranean Agronomic Institute of Chania (MAICh), Greece.  
<sup>5</sup>Hortus Botanicus Karalitanus (HBK), University of Cagliari, Italy.  
<sup>6</sup>Office de l'Environnement de la Corse (OEC), France.  
<sup>7</sup>Agricultural Research Institute, Ministry of Agriculture, Rural Development and Fisheries, Val de l'Est, Spain.  
<sup>8</sup>Jardi Botànic de Sóller Foundation (JBS), Spain.  
<sup>9</sup>Department of Forests, Ministry of Agriculture, Rural Development and Fisheries, Greece.

### Abstract

The Mediterranean Basin is one of the world's most biodiverse regions and it roughly counts 30,000 different plant taxa, of which approximately 50% are endemic taxa to the region. Thus, this area has been recognized among the world's 34 biodiversity hotspots. The Mediterranean Basin is one of the world's most biodiverse regions and it roughly counts 30,000 different plant taxa, of which approximately 50% are endemic taxa to the region. Thus, this area has been recognized among the world's 34 biodiversity hotspots. The Mediterranean Basin is one of the world's most biodiverse regions and it roughly counts 30,000 different plant taxa, of which approximately 50% are endemic taxa to the region. Thus, this area has been recognized among the world's 34 biodiversity hotspots.



**Introduction of Yellow gentian on Mount Genziana, CE**  
 Fenu, A Cuena-Lombraña... - ... : 2018. Case studies ..., 2018 - [researchgate.net](#)

The translocation was firstly supported by a specific project of the Region of Sardinia and, then, by the international project **Care-Mediflora** (funded by the MAVA Foundation). Post-planting monitoring ...

culos relacionados Las 2 versiones »

**Variability of the first-generation of *Ribes sardoum*, a threatened relic species, and germination behaviour of *Ribes microphyllum* subsp. *tyrrhenicum* during translocation measures**

Fenu, M Porceddu, I Bruni... - Plant Bioscience ..., 2018 - [plantbioscience.com](#)

culos relacionados Las 3 versiones »

... and germination behaviour of *Ribes microphyllum* subsp. *tyrrhenicum* during translocation measures

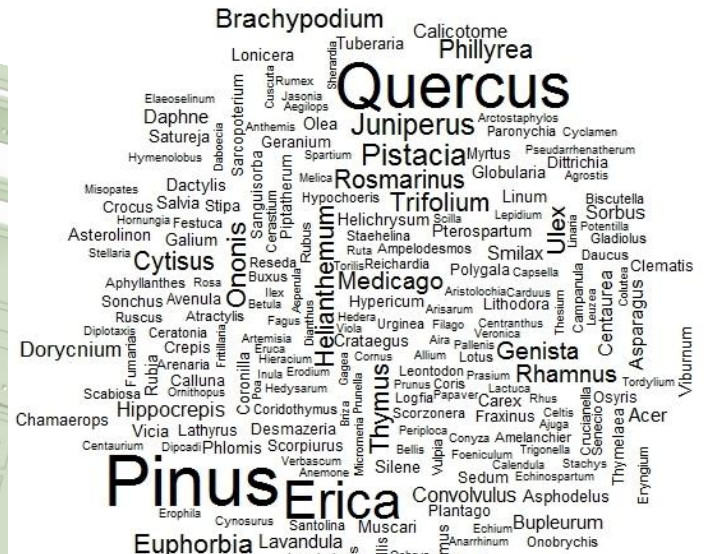
Serra, M Porceddu, G Bacchetta - Plant Bioscience ..., 2018 - [plantbioscience.com](#)

... grateful to the anonymous reviewers, who provided valuable comments. This study has been partially supported by **CARE-MEDIFLORA** project (funded by the MAVA Foundation). Page 16. Accepted Article This article is protected by copyright ...



# TRAINING, INFORMATION, COMMUNICATION

Establishment of an online database (in project)



The screenshot shows the "Gestión Banco de Germoplasma" interface. It displays a table of registered accessions with the following columns: Cod. Acceso, A.S.C., Cod. Reg., Or. Determinación, Localidad Proveniente, and Or. Localización. The table lists various plant species and their collection details.

Cod. Acceso	A.S.C.	Cod. Reg.	Or. Determinación	Localidad Proveniente	Or. Localización
801081430	1	801081430	Leucadion submontanum L.	S'Errita de Ferreries	801 30
801081430	1	801081430	Leucadion submontanum L.	S'Errita de Ferreries	801 30
801081000000	1	130000000	Myrtus minor L.	Bassa 3, Marina de Lloçar	801-000 mediterráneo
80108130008	1	1300008	Asperula fruticosa L.	Parq de Sant Miquel	PELLERINUM SEED BANK
80108130006	1	1300006	Myrtus minor L. subsp. angustifolia (Lange ex Winkl.)	Cap Blanc	PELLERINUM SEED BANK
80108130008	1	1300008	Myrtus minor L. subsp. angustifolia (Lange ex Winkl.)	Cap Blanc	PELLERINUM SEED BANK
80108130006	1	1300006	Myrtus minor L. subsp. angustifolia (Lange ex Winkl.)	Cap Blanc	PELLERINUM SEED BANK
80108130005	1	1300005	Myrtus minor L.	Cap Blanc	PELLERINUM SEED BANK
80108130007	1	1300007	Myrtus minor L.	Cap Blanc	PELLERINUM SEED BANK
80108100047	1	100047	Halimolobos latifolius (L.) Winkl.	Parq de Ferreries	PELLERINUM SEED BANK
80108100000	1	100000	Myrtus minor L. subsp. angustifolia (Lange ex Winkl.)	Cap Blanc	PELLERINUM SEED BANK
80108100002	1	100002	Myrtus minor L. subsp. angustifolia (Lange ex Winkl.)	Cap Blanc	PELLERINUM SEED BANK
80108100000	1	100000	Myrtus minor L. subsp. angustifolia (Lange ex Winkl.)	Cap Blanc	PELLERINUM SEED BANK
80108100003	1	100003	Myrtus minor L. subsp. angustifolia (Lange ex Winkl.)	Cap Blanc	PELLERINUM SEED BANK
80108100001	1	100001	Myrtus minor L. subsp. angustifolia (Lange ex Winkl.)	Cap Blanc	PELLERINUM SEED BANK
80108100002	1	100002	Myrtus minor L. subsp. angustifolia (Lange ex Winkl.)	Cap Blanc	PELLERINUM SEED BANK

# BALANCE SHEET

## Sustainability (CARE) of the actions done

- ✓ Necessary a previous work more or less important with the **administrations** according to the regulations in force in the different countries.
- ✓ **Partnerships** with the local institutions, variable in number according to the islands and according to the structural organization of the territories.
- ✓ Actions mostly on **public land**: (78%).
- ✓ Partners :
  - managers : mostly public.
  - information and sensibilization of socio-professionals on the sites, but few partnerships with the private sector.
- ✓ On the other hand, common tools for disseminating information: BDD, conferences, publications,...

# CONCLUSIONS

- ✓ **Target list** species defined with scientific criteria (rarity, threats, endemism, protection status...).
  - ✓ **60 *in situ* actions** done. BUT to evaluate them... we need monitoring for many years after the project to learn all the necessary lessons. **CARE-**
    - ✓ The **choice of actions** depends on many factors:
      - Regulation,
      - status of land,
      - presence or absence of manager,
      - possibility of funding partners.
- ➡ All of these factors can introduce a bias in the choice of actions.
- ✓ **networks (STAKEHOLDERS)** available to **CARE** the *in situ* & *ex situ* actions done.

# THANK YOU FOR YOUR ATTENTION

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

### Partners



Mediterranean Plant Specialist Group  
(IUCN/SSC)



Sóller Botanical Garden Foundation,  
Balearic Islands



Office of the Environment of Corsica -  
National Botanical Academy of Corsica



Hortus Botanicus Karalitanus, Sardinia



University of Catania, Sicily



Mediterranean Agronomic Institute of  
Chania, Crete



Agricultural Research Institute, Cyprus



Department of Forests, Cyprus