



# Lessons learned and goals yet to reach: Mediterranean islands plant conservation ten years after the first edition of the Top 50



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& the Top 50 team

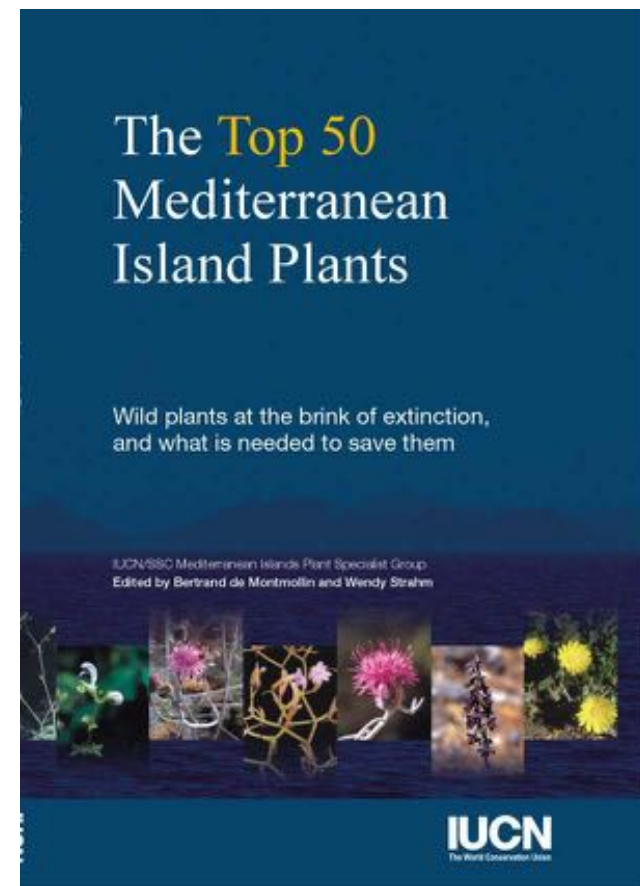


UNIVERSITÉ DE FRIBOURG  
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1<sup>st</sup> Mediterranean Plant Conservation Week - 24-29 October - Ulcinj, Montenegro

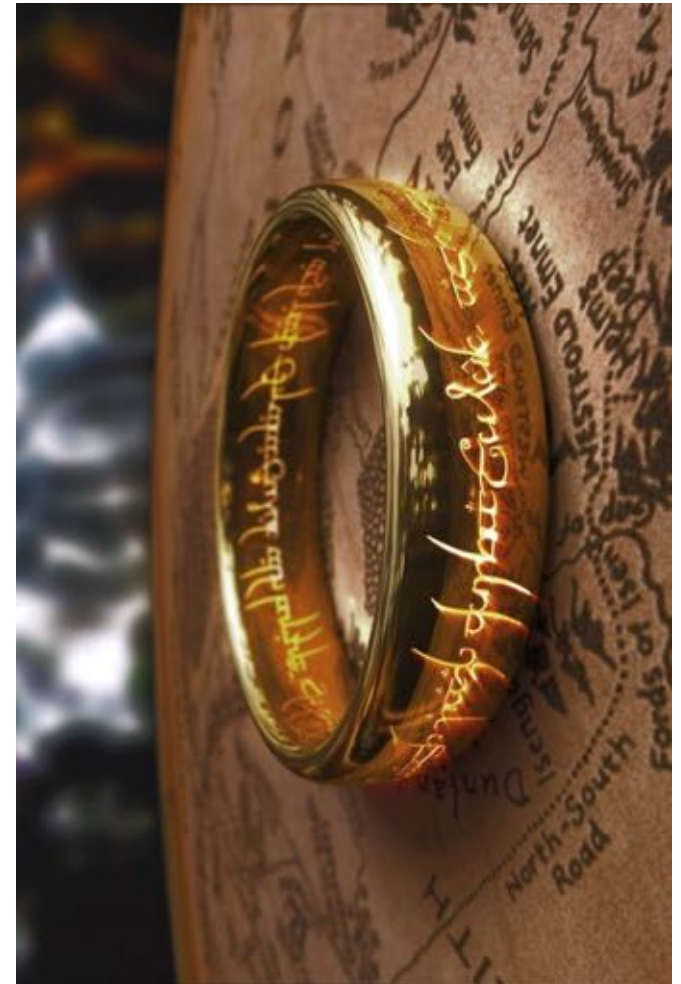
# Why Top 50 2.0?

- 46 CR (1 mushroom), 2 EN, 1 DD & 1 EW
- A tool for decision-makers (4 languages)
- Mediterranean Islands Plant Specialist Group (MIPSG): 1995-onwards



# Mediterranean islands' plant heritage: **PRECIOUS** yet strongly menaced!

- Key-role for Mediterranean plant richness
- Hot-spots of endemic and exclusive taxa
- Many 'refugees' AND many near extinct
- Precious economic-cultural heritage



# Top 50 species in National & Regional Red Lists during the last 10 years

- National: 11
- Regional: 2
- Total: 23 + 13 = 36



# Habitats – main results

(IUCN version 3.0)

- The classification scheme appears unsatisfactory & misleading
- N° of habitats 1 to 4 (high numbers may depend on poor understanding)
- Most represented habitat-types: shrub communities & (inland + sea) cliffs
- Interesting: 6 species linked to sand dunes and 1 adapted to urban areas!



# Threats – main results

(IUCN version 3.1)

- The classification scheme works quite well and allows semi-quantitative evaluations
- N° of threats (1 to 8!). Better knowledge or overestimation?
- Tourism & recreation activities (connected with Alien Plants)
- (Over)grazing & fire regime management





# Threats – further insights

## Underestimated

- Biotic interactions at community level (turnover/succession)
- Habitat shifting & alteration

## No code available

- Low fitness linked with pop genetics, isolation & size

## Overestimated?

- Global warming
- Intentional gathering
- Rockfall



\*Stop your whining. Don't you know that what doesn't kill you will make you stronger?\*

# Top 50 species & IUCN Risk assessment during the last 10 years

**GOOD NEWS!**



- Upscaling = **NONE**
- Downscaling = **16 (almost 1/3!)**

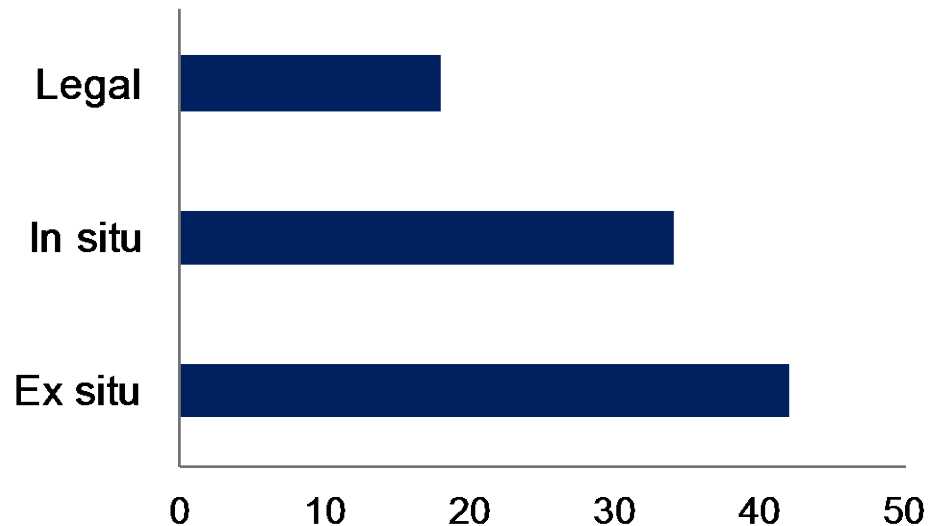


# 10 years of monitoring and scientific research focused on Top 50 species

- ✓ 11 downscaling cases due to knowledge improvement & better use of IUCN criteria (Corsica, Cyprus, Malta & Sicily)
- ✗ Still few data on physiology, reproductive biology & genetics (except from Balears & Sardinia)
- ✓ Strong knowledge improvement in many areas (Balears, Corsica, Italian islands & Malta)
- ✗ No or little knowledge improvement for the Greek Islands (5/6!), Cyprus (2/7) & Sicily (2/9)

# 10 years of conservation initiatives focused on Top 50 species

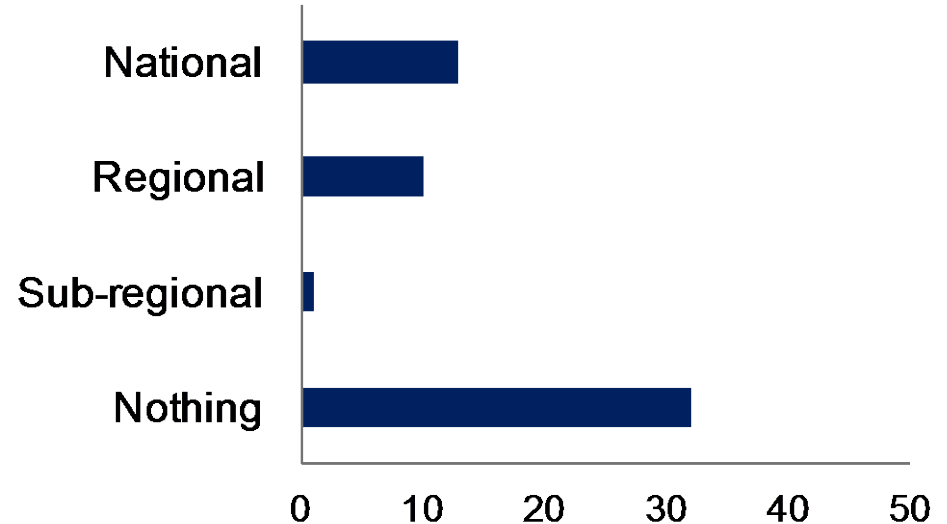
- Legal Measures: 18/50
- *In situ* initiatives: 34/50
- *Ex situ* initiatives: 42/50





# Legal Measures

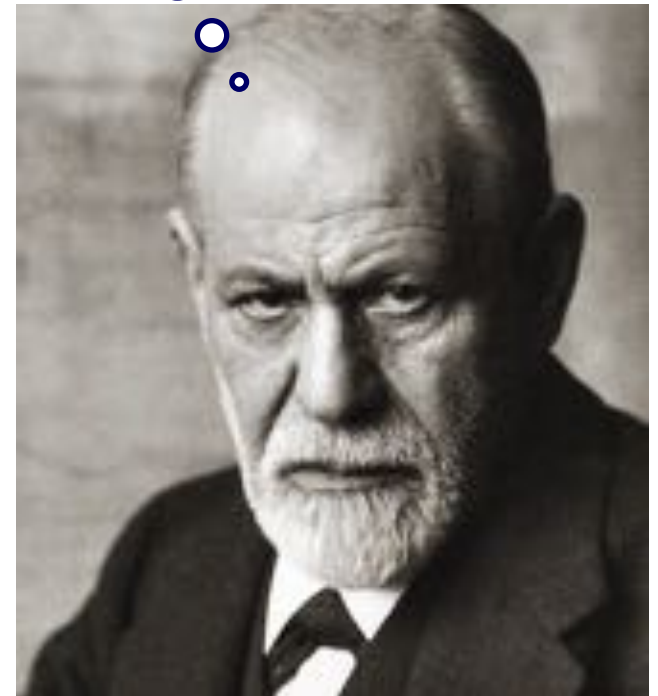
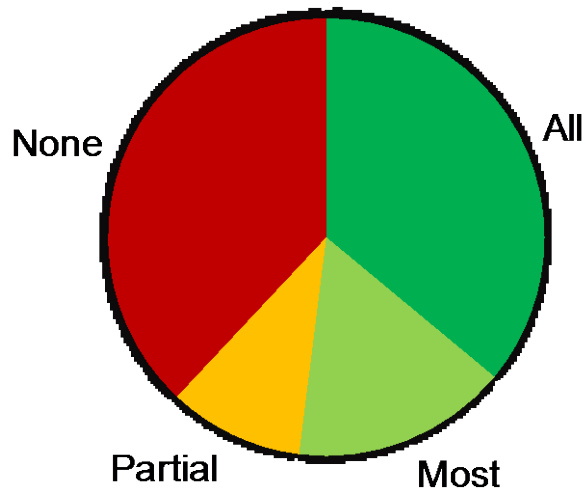
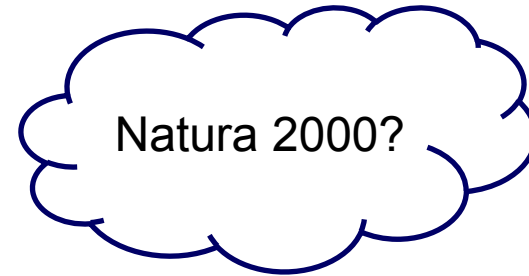
- National: 13/50
- Regional: 10/50
- Sub-regional: 1/50
- Nothing: 32/50...





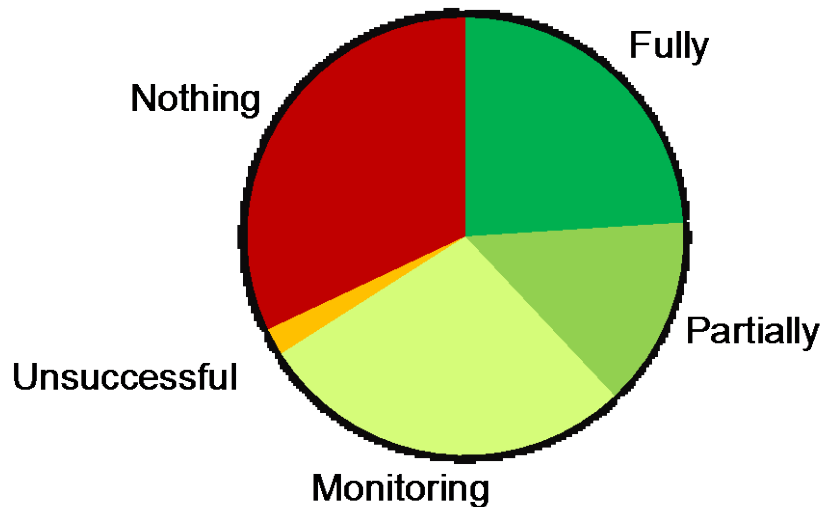
# Natura 2000 Network

- All subpops: 18/50
- Most of subpops: 8/50
- Part of subpops: 5/50
- No subpops? 19/50...



# *In situ* conservation initiatives

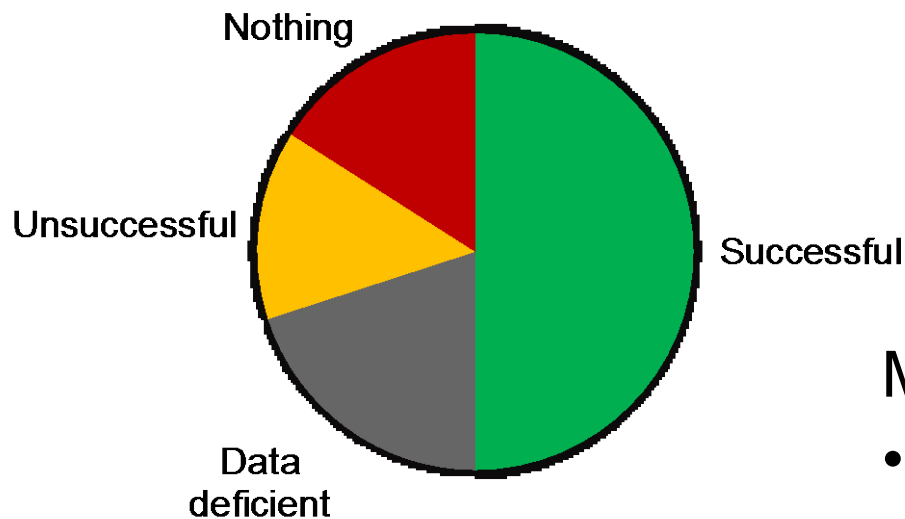
- Fully successful: 12/50
- Partially successful: 7/50
- Monitoring activities: 14/50
- Unsuccessful: 1/50
- No *in situ* initiatives: 16/50



*Centaurea gymnocarpa*

# *Ex situ* conservation initiatives

- Successful: 25/50
- Unsuccessful: 7/50
- No *ex situ* initiatives: 8/50
- Data Deficient: 10/50



More information needed on:

- gathering procedures
- number of provenances

# Conservation efforts - work in progress

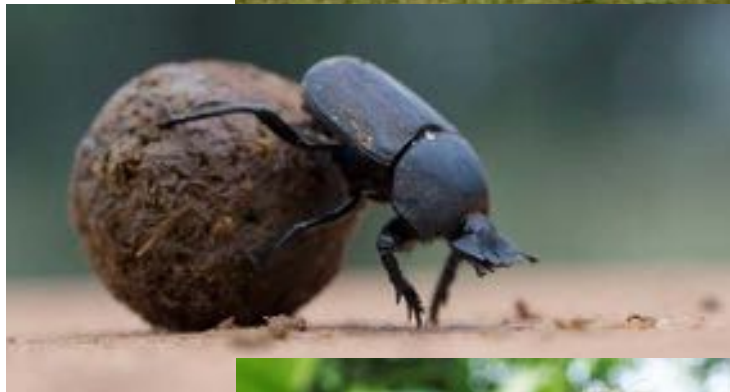
- *Ad hoc* Life Projects: 3 (all in Sicily!)
- 'Multipurpose' Life Projects: 15
- Other *ad hoc* projects: 14
- Other 'multipurpose' projects: 7
  
- Total: 39

*Always look on the bright side of 'Life'...*



# Issues of conservation efforts on risk assessment

- ✓ 5 downscaling cases issue from very successful conservation initiatives (Balearics & Tuscan Archipelago)
- Strong efforts but still poor results elsewhere (Sicily, Corsica & Cyprus)
- ✗ Few or no efforts and no important success on Greek Islands





# Lack of knowledge: paradigms & paradoxes

- *Allium calamarophilon* & co.: where & how much? (the 'Greek Islands' case)
- *Calendula maritima*: just a newcomer?
- *Lysimachia minoricensis*: **unknown niche** → hard to re-introduce
- *Zelkova sicula*: **no sexual reproduction** → need of re-thinking risk assessment + *in situ* and *ex situ* actions



Scottish Natural Heritage  
Commissioned Report No. 440

Literature review: species translocations as  
a tool for biodiversity conservation during  
climate change

Brooker, R., Britton, A.,  
Gimona, A., Lennon, J.  
& Littlewood, N.



# Urgent

- To share a hierarchic, coherent & ‘dummies-friendly’ habitat identification-key
- Let botanists go back to the field: Red Lists MUST rely on up-to-date information



## Handbook for Surveillance and Monitoring of European Habitats

First Edition

R.G.H. Bunce  
G.B. Groom  
R.H.G. Jongman  
E. Padoa-Schioppa  
(Eds)

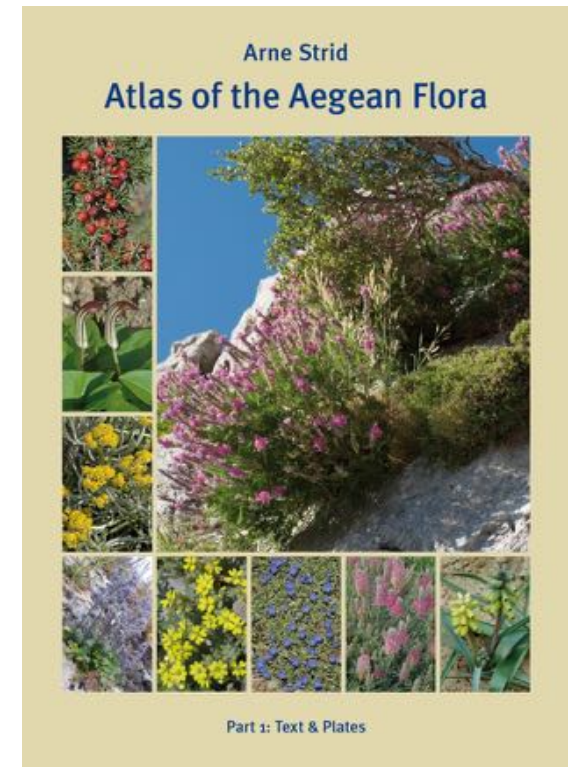
### Annex 3 List of General Habitat Categories

GHC (vernacular name)	Primary code
<b>URBAN</b>	
Artificial (buildings and tarmac)	URB/ART
Non Vegetated (cleared land)	URB/NON
Crops (Vegetable gardens)	URB/VEG
Herbaceous (garden, parks and recreation)	URB/GRA
Woody (trees/shrubs in gardens and parks)	URB/TRE
Artificial / Non-Vegetated	URB/ART/NON
Artificial / Crops	URB/ART/VEG
Artificial / Herbaceous	URB/ART/GRA
Artificial / Woody	URB/ART/TRE
Non Vegetated / Crops	URB/NON/VEG
Non Vegetated / Herbaceous	URB/NON/GRA
Non Vegetated / Woody	URB/NON/TRE
Crops / Herbaceous	URB/LEG/GRA
Crops / Woody	URB/LEG/TRE
Herbaceous / Woody	URB/GRA/TRE
<b>CULTIVATED</b>	
Bare Ground (ploughed land and bare fallow)	CUL/SPA
Herbaceous Crops (crops)	CUL/CRO
Woody Crops (orchards, vineyards, olive groves)	CUL/WOC
Herbaceous/Woody Crops	CUL/CRO/WOC
<b>SPARSELY VEGETATED</b>	
Sea (sea)	SPV/SEA
Tidal (exposed marine substrates)	SPV/TID

→ Wageningen Environmental  
Research (Alterra)  
www.wur.nl

# Urgent

- To share a hierarchic, coherent & 'dummies-friendly' habitat identification-key
- Let botanists go back to the field: Red Lists MUST rely on up-to-date information
- More accurate data on AOO & EOO to perform correct risk assessment
- Strong funding effort to promote research & conservation in less covered areas



# Last hints & comments

- Conservation without regular monitoring activities is simply **IMPOSSIBLE!**
- Big & small islands have different stories to tell!
- Enjoy (and get inspired from) successful projects & best practices...



**PIM** (2005-onwards)

[www.initiative-pim.org](http://www.initiative-pim.org)

# Thank you!



## Any questions?

### The Top 50.2.0 Team

- Editors: 2 Swiss + 1 'Swis-cilian'
- Authors: 36 local + 2 Swiss experts
- 27 Public Research Institutions from 6 Mediterranean countries (Spain, France, Italy, Malta, Greece & Cyprus) + University of Fribourg (Switzerland)
- Many infos & photos from other experts & naturalists (thank you Aline, Pietro & Fotis!)
- **Online version ASAP**

