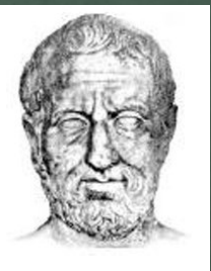




HELLENIC REPUBLIC  
National and Kapodistrian  
University of Athens  
— EST. 1837 —



NKUA  
Seed  
Bank



5MPCW  
CY-2025

## Ex situ seed conservation of the Native flora of Greece

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<sup>2</sup> Green Fund, 14561 Athens, Greece

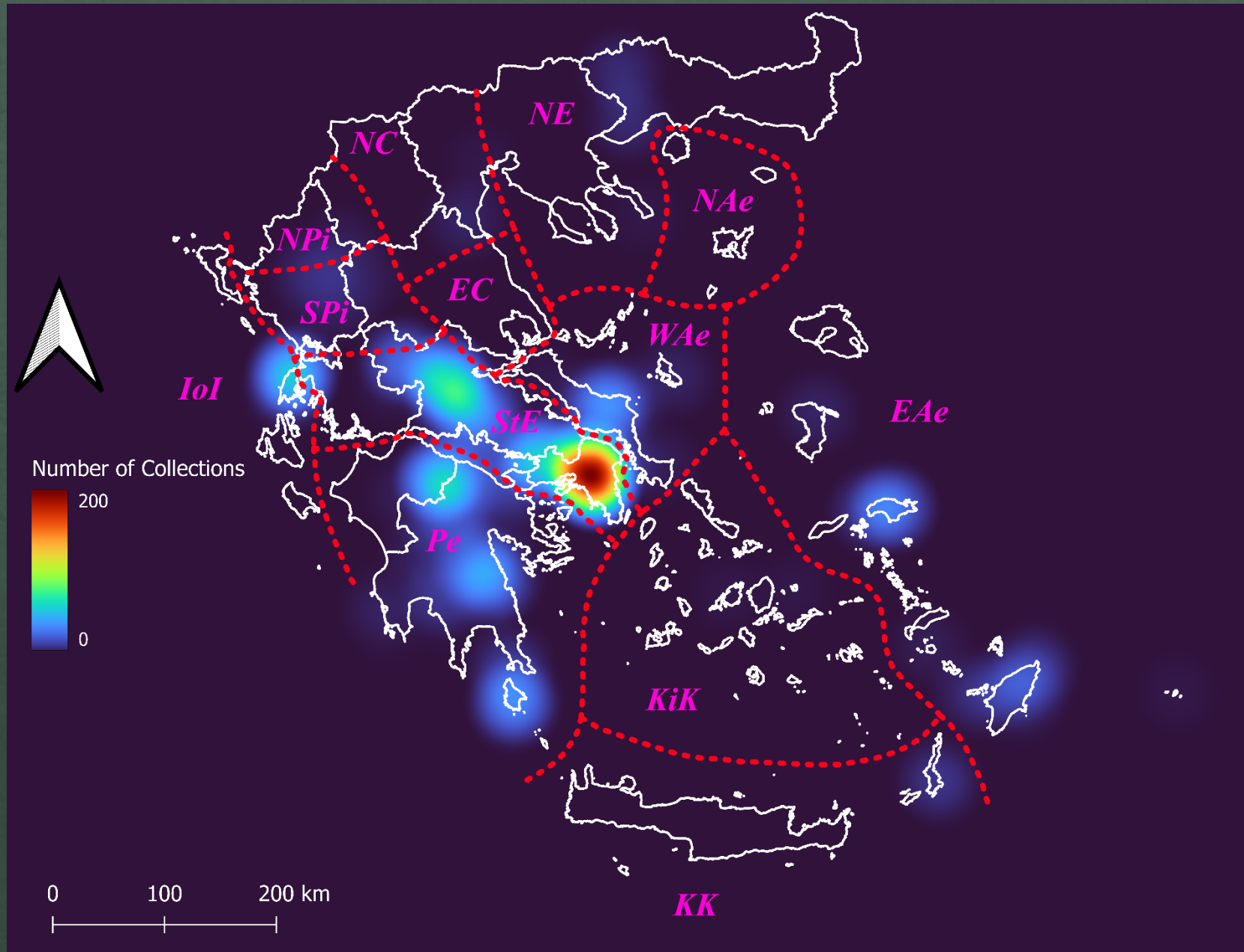
<sup>3</sup> Royal Botanic Gardens, Kew, Millennium Seed Bank, Wakehurst, Ardingly, Haywards Heath, RH17 6TN, U.K.

# Conserving the flora of the Balkans: Native plants of Greece

- 2022 – 2024 (three seed collection years) – extension until June 2025.
- Goal: Collections of seeds from 500 taxa of Greece – 25% endemics.
- Study focused predominantly on Central Greece (StE) and the Peloponnese (Pe).
- Germination experiments for all the collections made during the project with emphasis on the effect of light on species germination.
- During the project (in total): 580 seed lots from 545 taxa (153 lots representing 144 taxa endemic of Greece) stored at the NKUA Seed Bank. **Approximately 60% (82% taking into account only taxa from Greece) increase in total seed lots of the NKUA Seed Bank**
- 508 seed lots representing 502 taxa (6 duplicates but from different locations).
- 130 seed lots of endemic taxa, 129 endemic taxa (1 duplicate but from different location).
- Duplicated and sent/will be sent to Millennium Seed Bank for long term storage.
- Germination testing for all the species and seed lots: So far experiments for 429 collections (421 taxa) are finished.

# The project in numbers – The collection areas

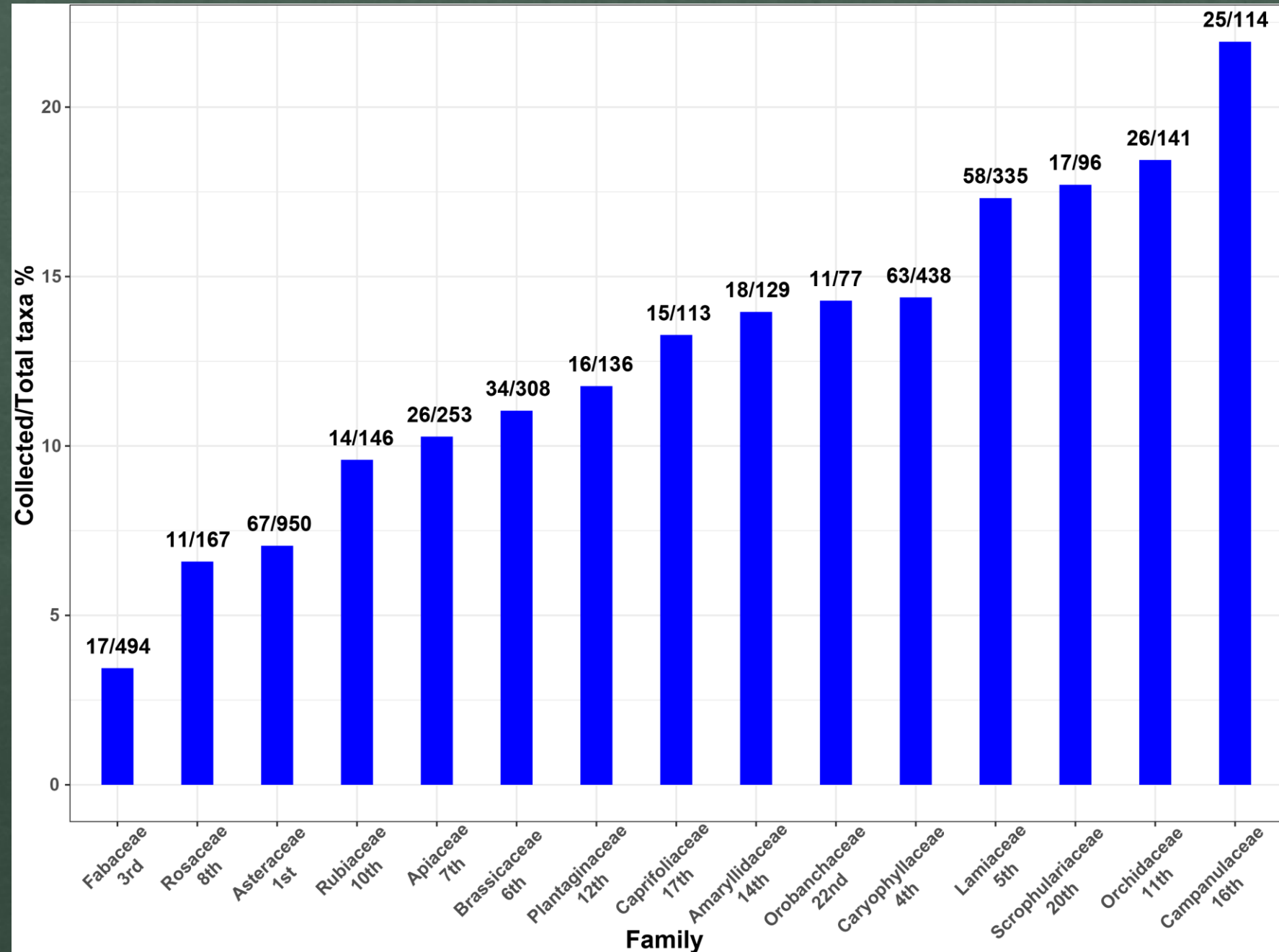
- During the project → Collections from 10/13 phytogeographical areas of Greece.
- Majority (384/580) of seed lots from StE and Pe.
- 125 seed collections from islands.





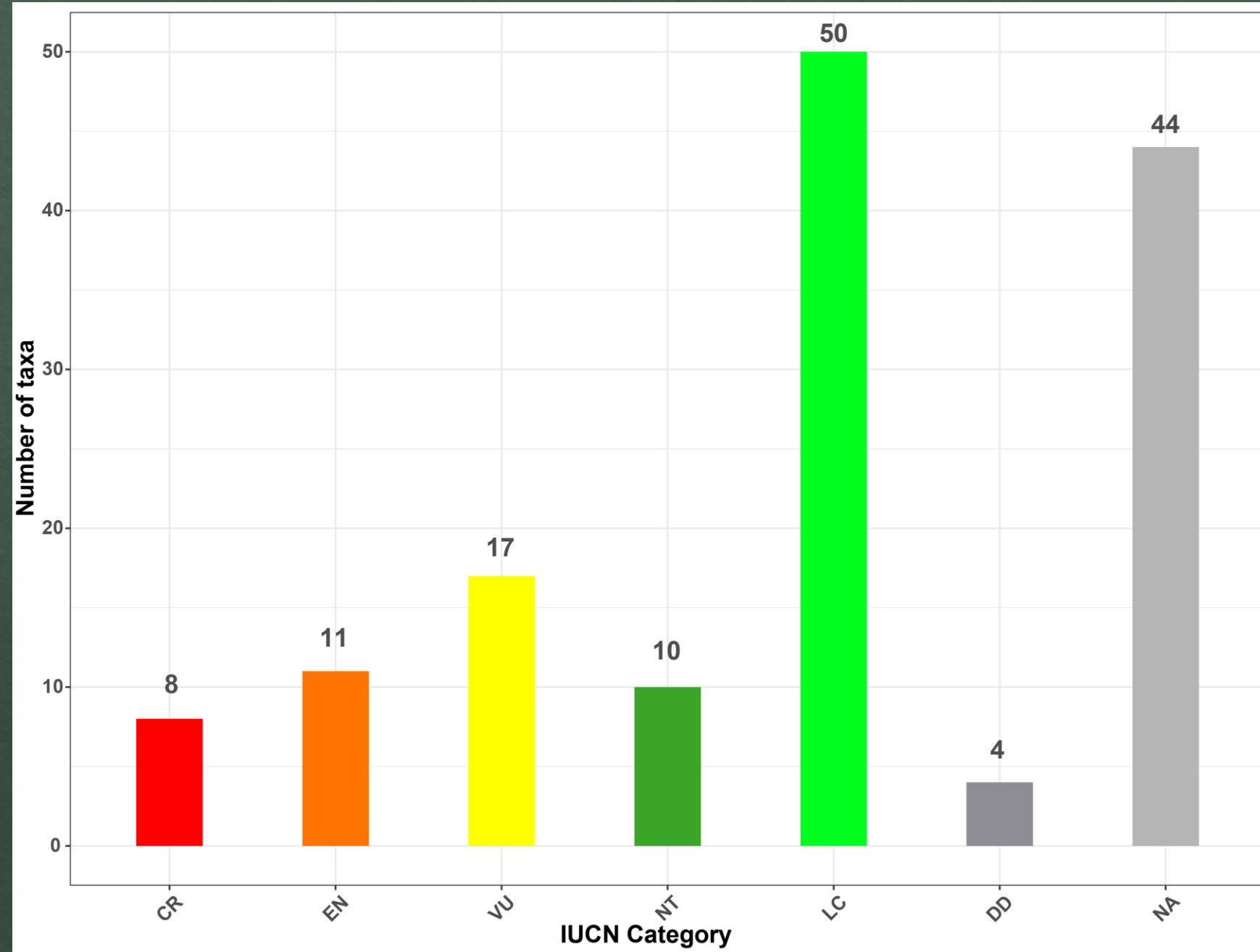
# The project in numbers – The collected families

- Collections from 66/184 families occurring in Greece.
- Collections from 247/1097 genera occurring in Greece.
- Some big families underrepresented <10 taxa (e.g.):
  - Poaceae: 8/508
  - Plumbaginaceae: 3/103
  - Boraginaceae: 9/159
- From the 118 families not sampled at all:
  1. ~70 families represented by 10 or less taxa in the country (30 of them represented only by 1 taxon). In many cases geographically restricted.
  2. Families with difficulties in collection or post-collection handling e.g. Violaceae, Araceae.



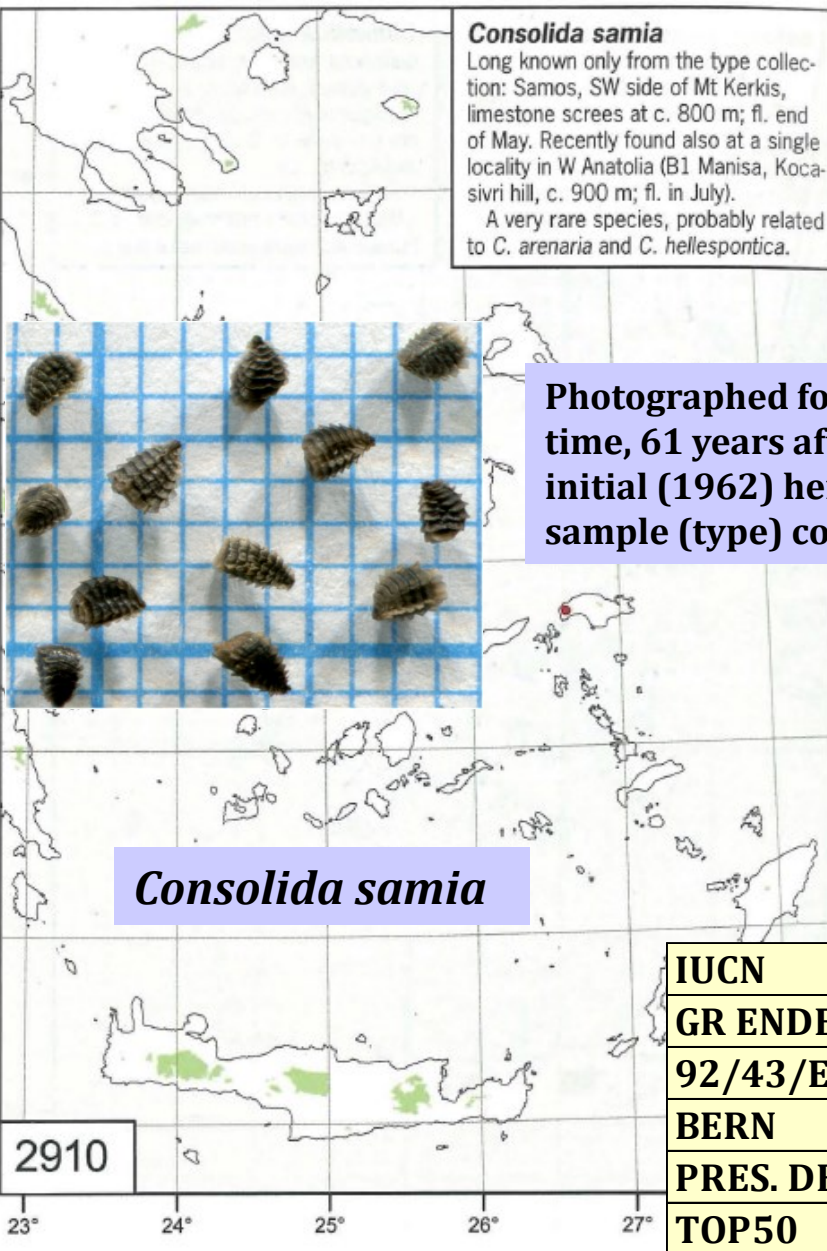
# Species under threat of extinction

- 144 endemics → 36 in a threat category (17-VU, 11-EN, 8-CR) + 10 NT.
- 50 LC.
- 44 not evaluated yet.
- 4 DD.
- 38% under threat of extinction.





Quest to rediscover *Consolida samia* - exploring the screes of Mt Kerketefs (Samos, Greece) (MBZ foundation & MSBP PROJECT)



Photographed for the first time, 61 years after its initial (1962) herbarium sample (type) collection!

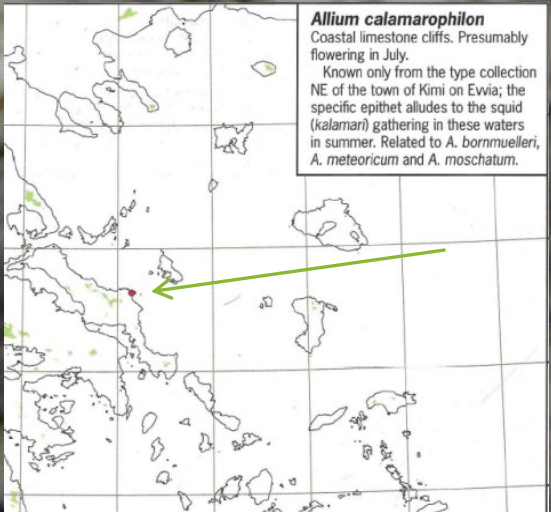
IUCN	CR
GR ENDEMIC	YES
92/43/EEC	YES
BERN	YES
PRES. DEC.	YES
TOP50	YES



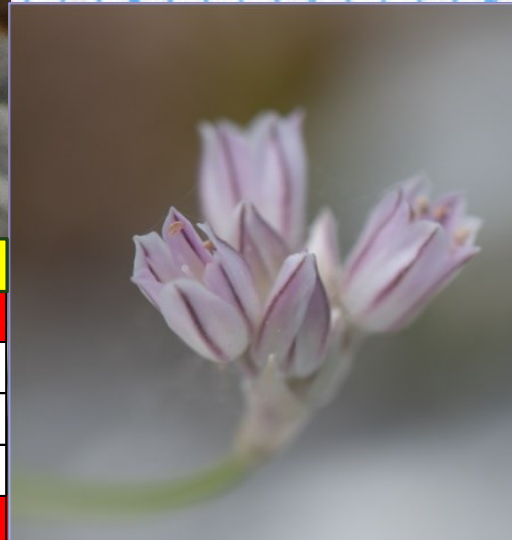


*Allium calamarophilon*

LOST SINCE 1980

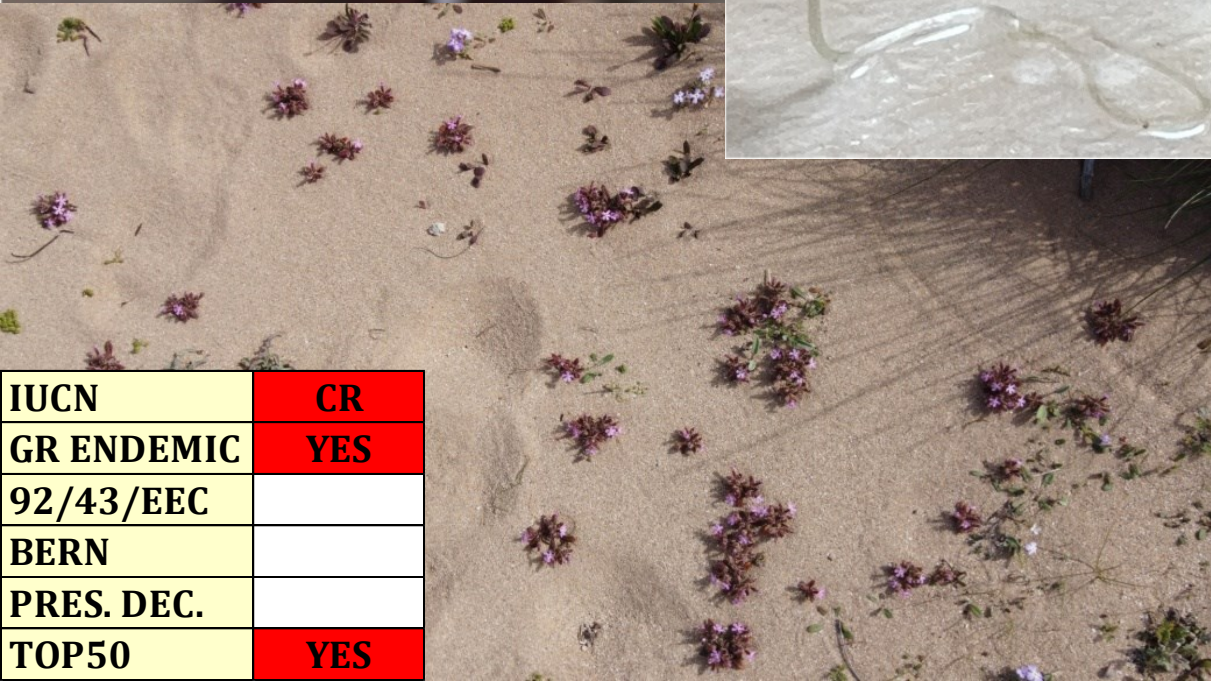
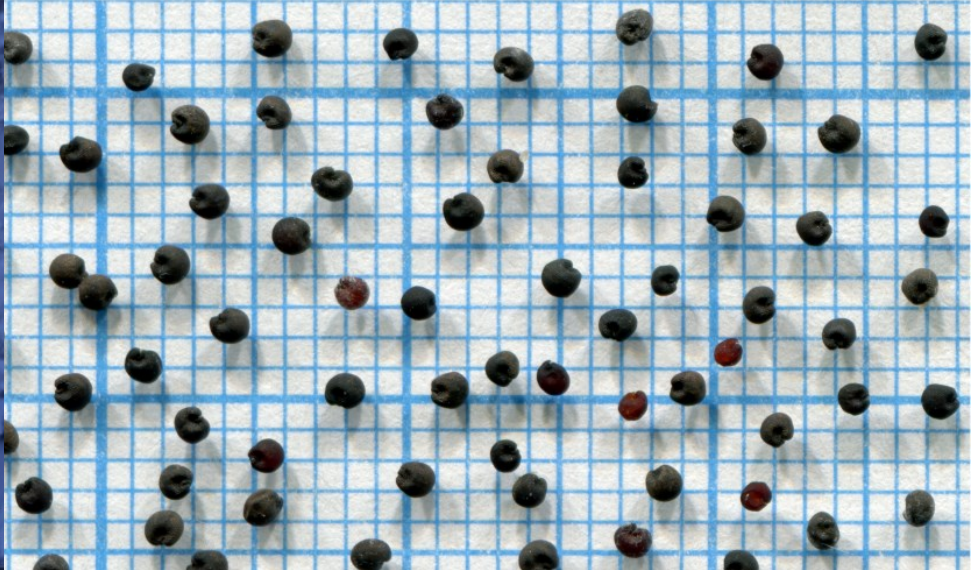


IUCN	VU
GR ENDEMIC	YES
92/43/EEC	
BERN	
PRES. DEC.	
TOP50	YES





*Saponaria jagelii*



IUCN	CR
GR ENDEMIC	YES
92/43/EEC	
BERN	
PRES. DEC.	
TOP50	YES



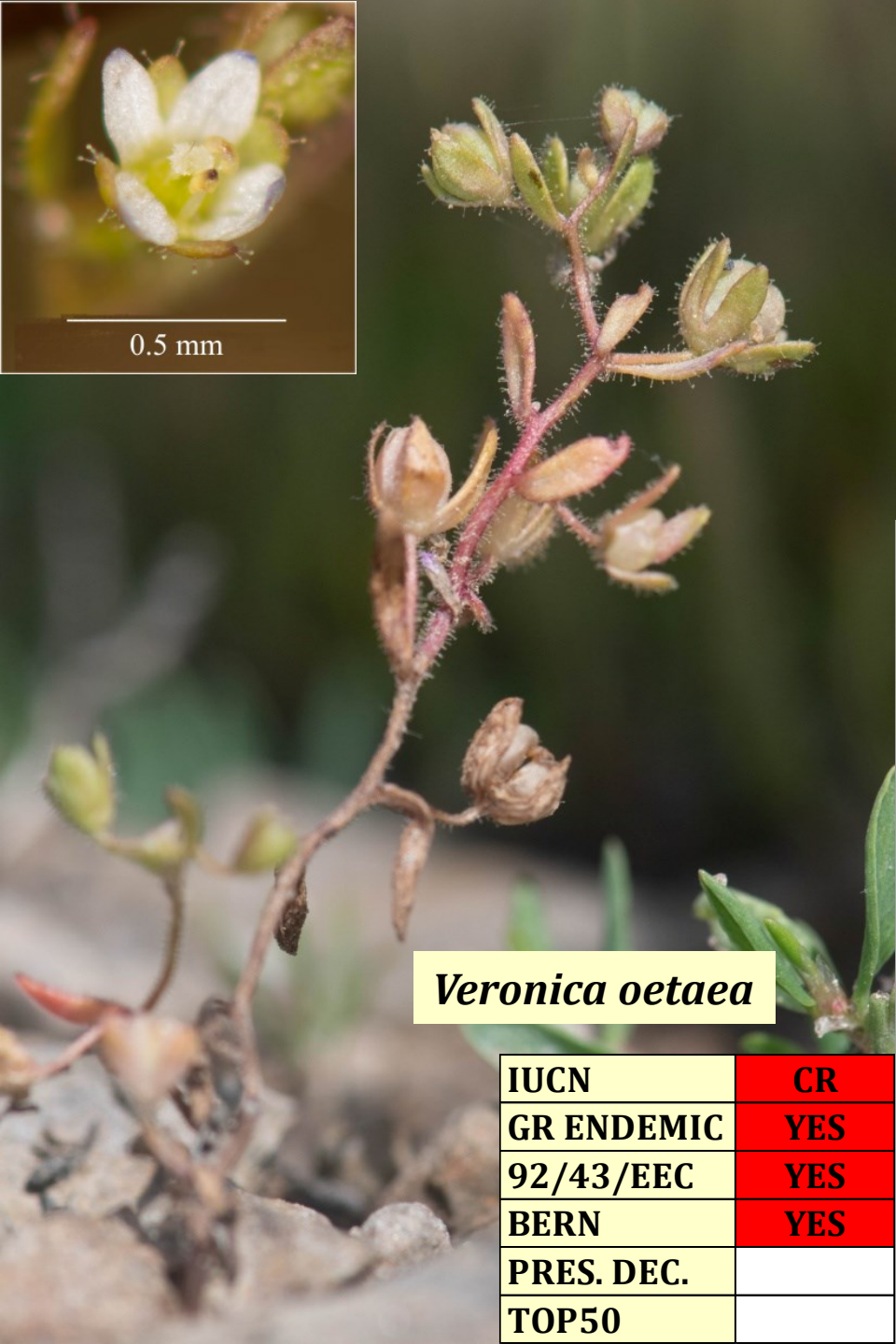
*Polygala helenae*



IUCN	EN
GR ENDEMIC	YES
92/43/EEC	
BERN	
PRES. DEC.	YES
TOP50	YES

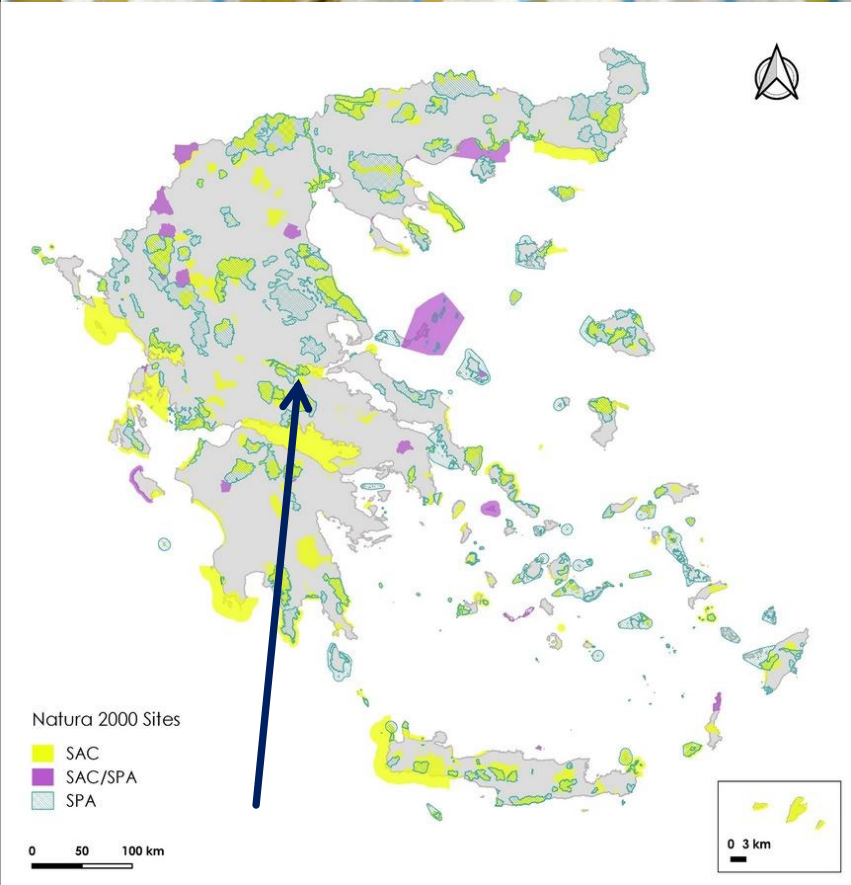
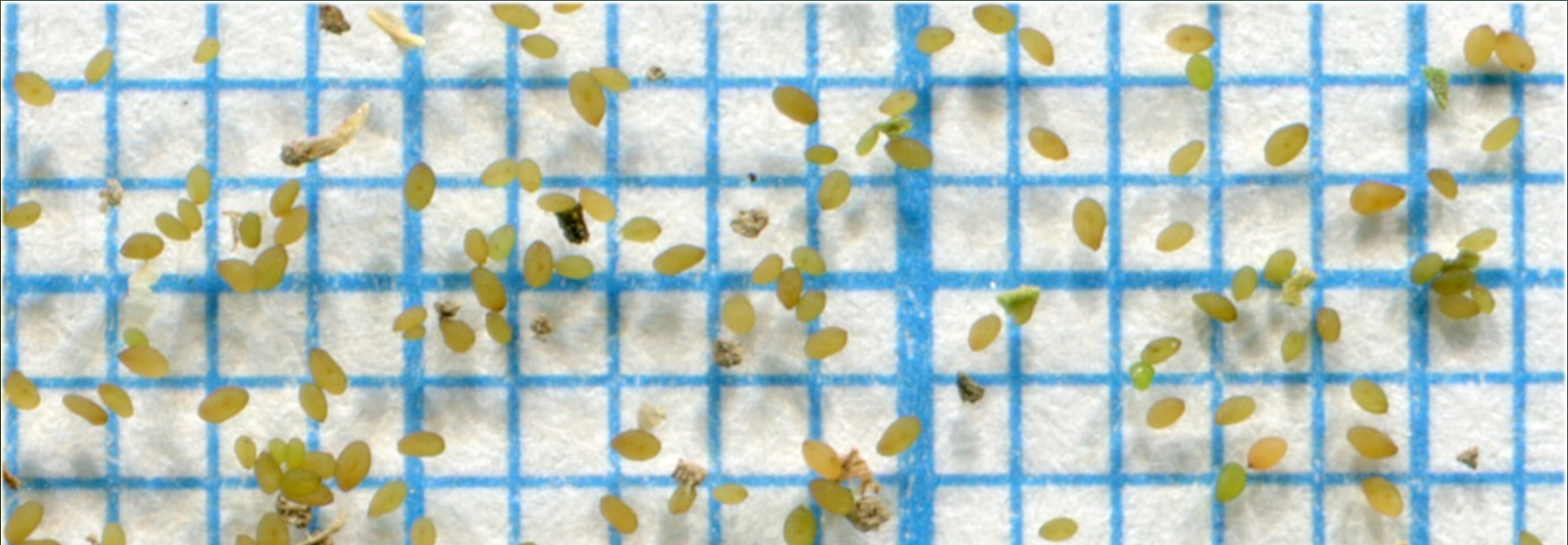






*Veronica oetaea*

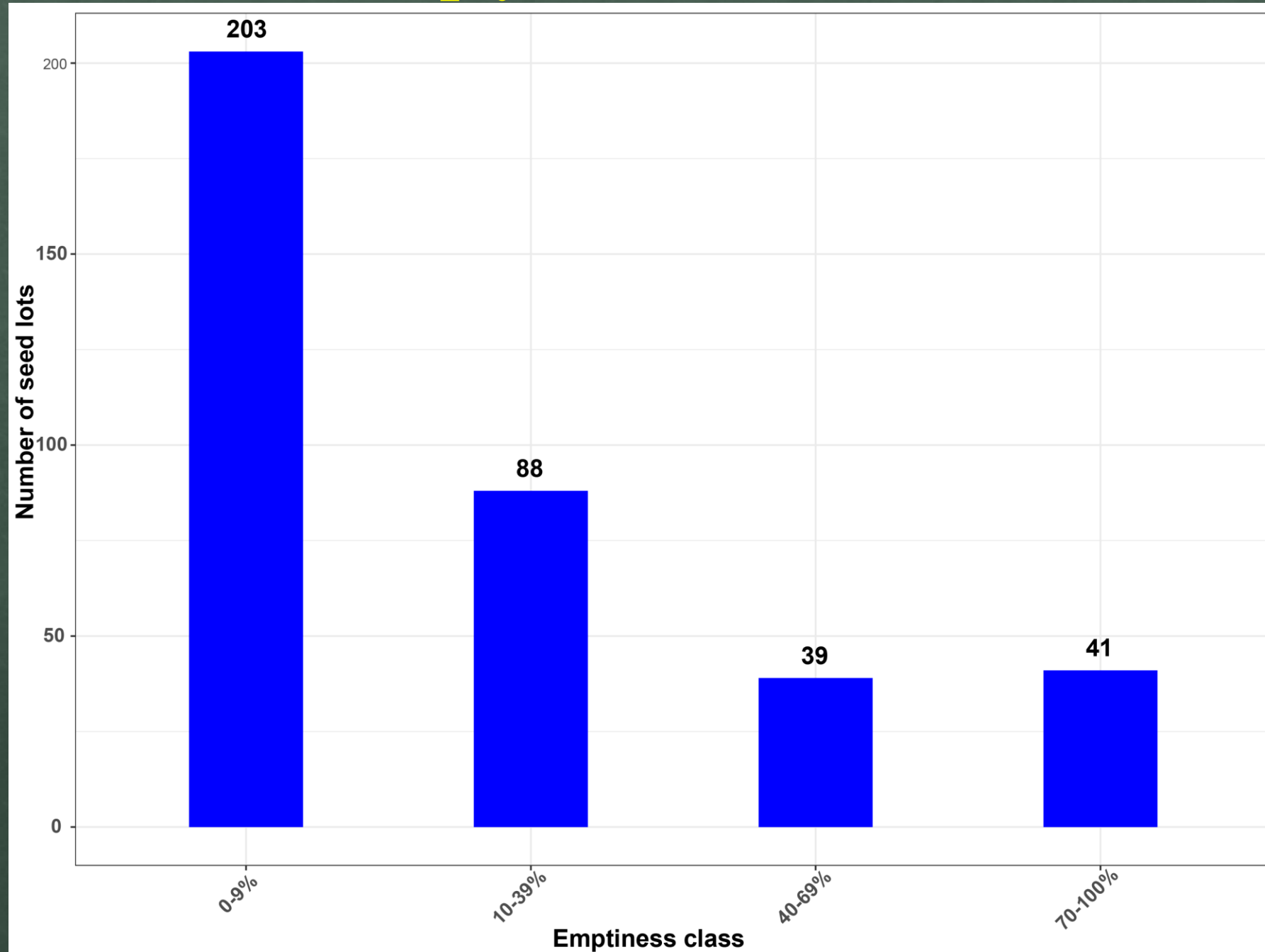
IUCN	CR
GR ENDEMIC	YES
92/43/EEC	YES
BERN	YES
PRES. DEC.	
TOP50	





# Germination of collected taxa – Empty seeds

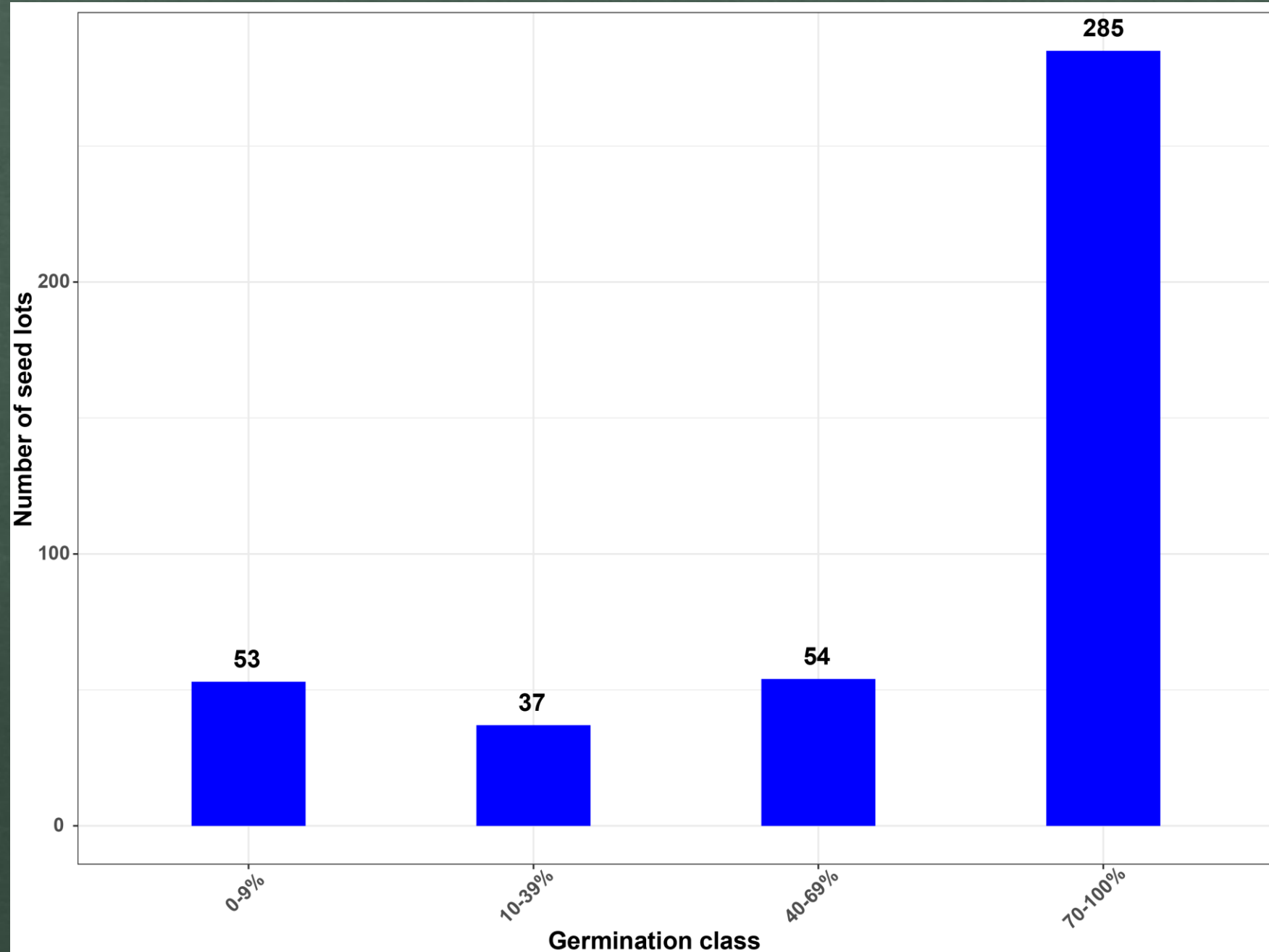
- 60 seed lots with >50% empty seeds.
- 20/60 Asteraceae, 14/60 Lamiaceae





# Germination of collected taxa – Germination results so far

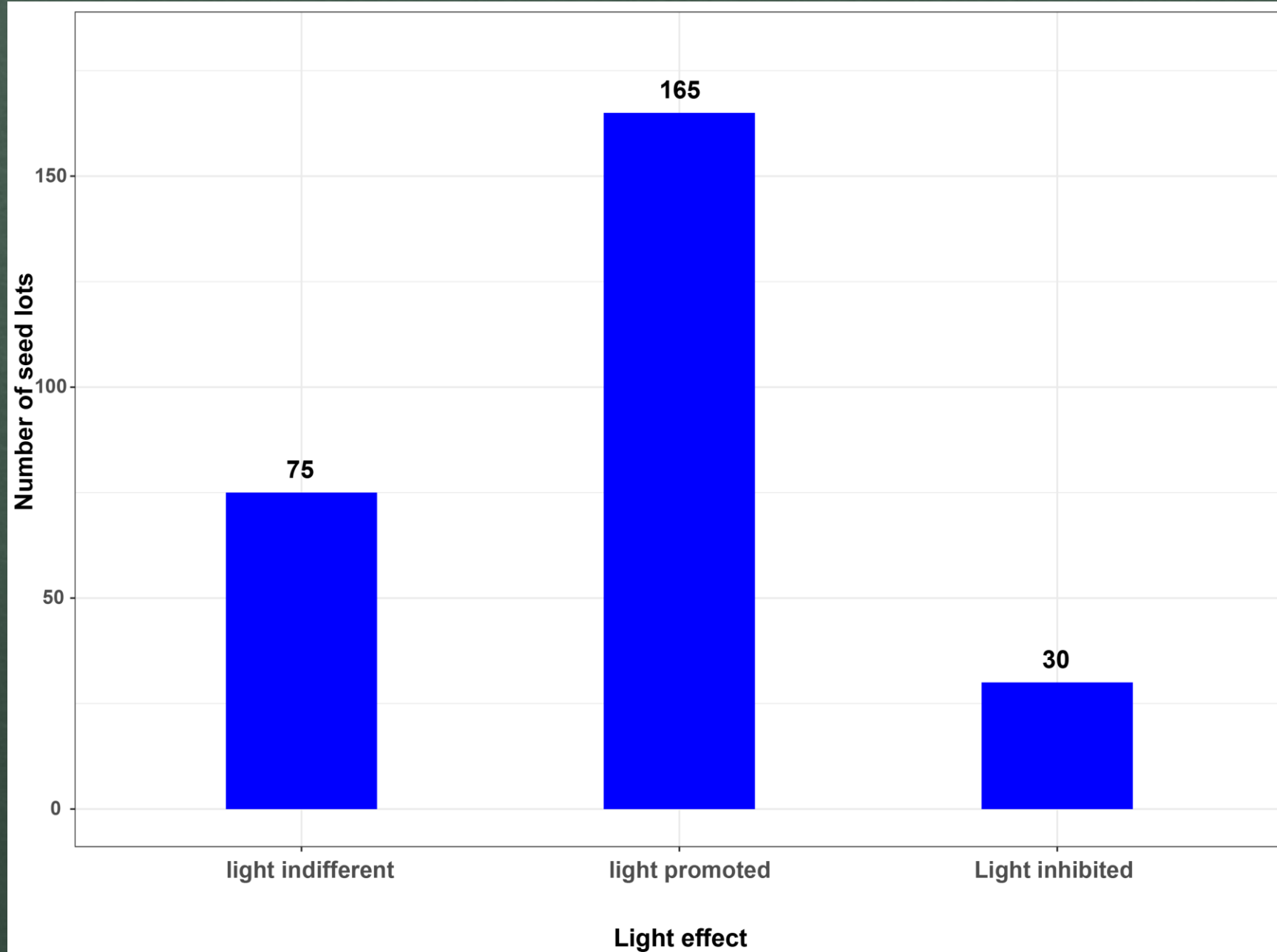
- 80% of the collections → mid to high germination.
- 12% low germination.
- 8% no germination.





# Germination of collected taxa – Light effect on germination

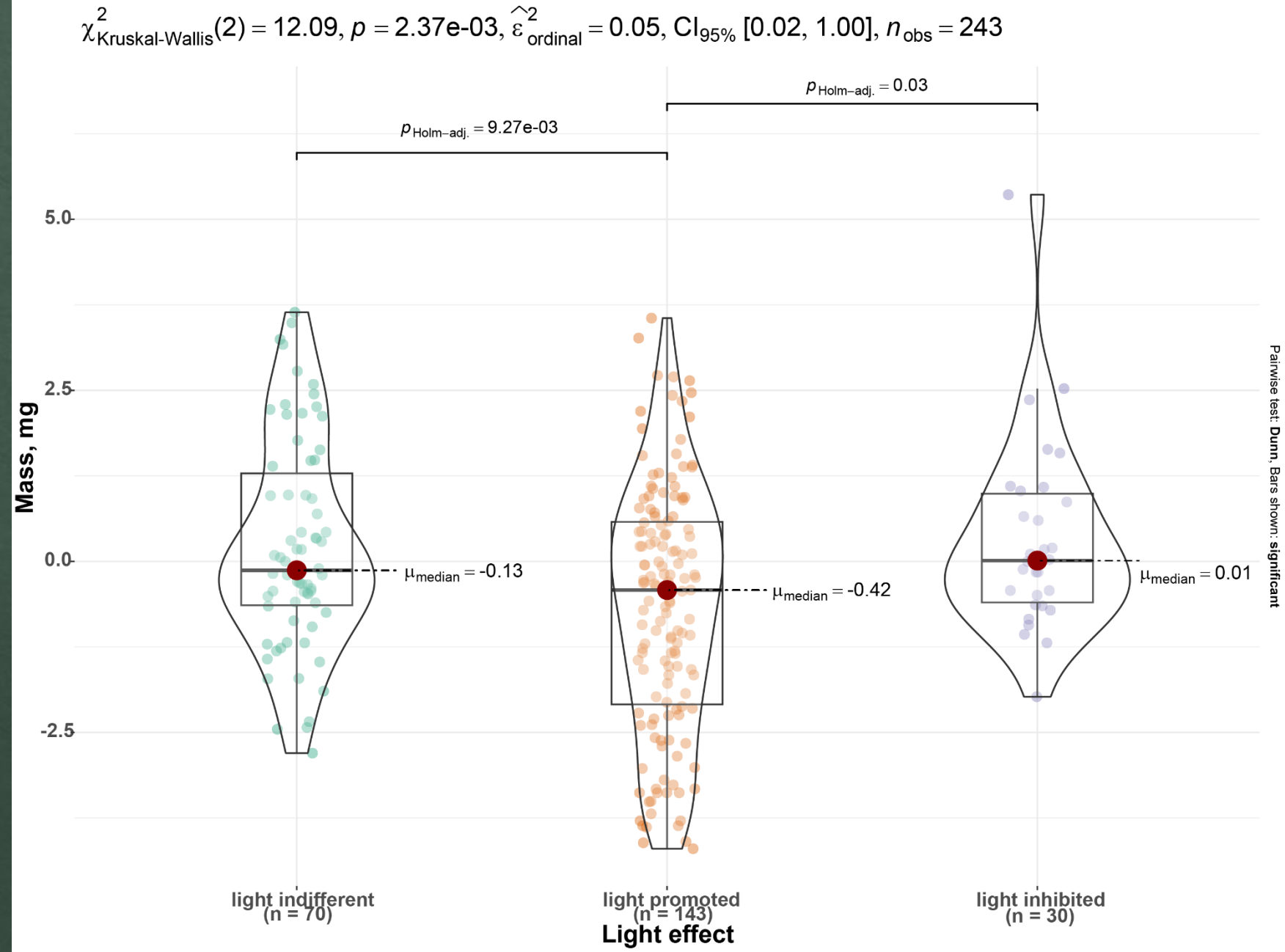
- The effect of presence/absence of light on germination was studied for 270 taxa so far.
- Majority of the taxa → light promoted germination.





# Germination of collected taxa – Light effect on germination

- The effect of presence/absence of light on germination was studied for 270 taxa so far.
- Majority of the taxa → light promoted germination
- Light inhibited taxa. significantly larger mass than the light promoted ones.







Thank You!

