





# ESCAPE Ex-situ conservation of Finnish native plant species

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## **Motivation**

- Rapid anthropogenic changes globally and locally
- Urgent need for protection in the form of gene banks to back up and complement in situ conservation.
- EU is committed to halt the loss of biodiversity by 2020 in Europe
- Ecosystem services and ecosystem restoration may need ex situ conserved material



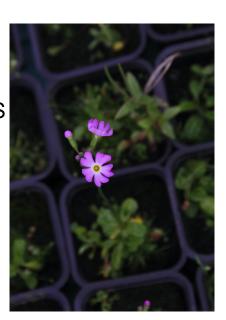


#### **ESCAPE** in a nutshell



- Ex situ Conservation of Finnish Native Plant Species
- A 5-year project funded by EU LIFE+ 2011Biodiversity program
  - From 1 Sept 2012 to 31 Aug 2017
- Targets set to fulfill parts of the national action plan for plant ex situlons
   conservation
- Total budget c. 2 M €
- Ministry of the Environment as a co-financier
- Four partners/beneficiaries
  - Coordinator Finnish Museum of Natural History LUOMUS
  - Botanical Garden, University of Oulu
  - Metsähallitus Natural Heritage Services
  - Finnish Environment Institute







# Five main targets of ESCAPE



Secure the extant ex situ collections

Increase the number of *ex situ* conserved taxa

conservation
methods for
boreal and arcticalpine taxa

IV

Use ex situ material in re-introductions, assisted migration and potentially also in restoration

V

Use ex situ collections in education and public outreach

**SUMOUL** 



#### ..and what have we done thus far:



- 1. Priority list of 180 native taxa to be collected (1-3 populations)
- 2. National seed-bank founded in Kumpula Botanic Garden
- 3. Collected material (seeds, plant tissues) stored either in the seed bank or as micropropagated tissue in a cryogenic storage
  - 27 taxa of 39 origins in seed bank, 1 in cryo, 7 in micropropagation
  - dublicates in Millennium Seed Bank, Wakehurst
- 4. Ex-situ collections checked periodically: vitality, data accuracy
- 5. Accession duplication (at least in two gardens) under progress







#### ..to be continued...



- 6. 71 accessions of threatened taxa in ex-situ collections
- 7. Reintroductions started: Crepis tectorum var. nigrescens, Melica ciliata
- 8. Population enlargement: Hypericum montanum
- 9. Bryophytes: cryo-method development, population background study on three focal spp.
- 10. Trials of assisted migration started: Primula nutans var. jokelae, (materials produced for e.g. Salix pyrolifolia, Puccinellia phryganoides...)
- 11. Several publications, presentations and web-materials produced
- 12. Educational work; method documentation; co-operative projects initiated: Astragalus glycophyllus, Cinna latifolia





# More Information available at www.luomus.fi/escape





### Thanks for your attention!