

Slovenian plant genebank and CWR

Presentation on EURISCO meeting, Sadovo,
Bulgaria, 18-19 June 2024

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Slovenian plant genebank [SPGB]

- ***In situ* genebank** conservation not yet exist
- ***Ex situ* genebank** established in 1990s
 - Field crops (e.g. buckwheat, maize)
 - Vegetable crops (e.g. lettuce, common bean)
 - Forage crops (e.g. ryegrass, red clover)
 - Fruit crops (e.g. apple, pear)
 - Medicinal | Hop | Grapevine crops
 - ...



SPGB: Organization

Coordination & Central database

- Ministry of agriculture, forestry and food

Participating institutions

- Agricultural Institute of Slovenia
- Biotechnical Faculty
- Slovenian Institute for Hop Research and Brewing
- Faculty of Agriculture and Life Sciences
- NGO | Botanical gardens | Schools ...



REPUBLIC OF SLOVENIA
MINISTRY OF AGRICULTURE,
FORESTRY AND FOOD



Agricultural Institute of Slovenia



BF

UNIVERSITY OF LJUBLJANA
Biotechnical Faculty



**INŠTITUT ZA HMELJARSTVO
IN PIVOVARSTVO SLOVENIJE**
Slovenian Institute of Hop Research and Brewing



University of Maribor

Faculty of Agriculture
and Life Sciences

SPGB: Main activities (tasks)

- Collecting landraces | Ecotypes
- *Ex situ* conservation
- Characterization | Evaluation
- Accession regeneration
- Data documentation
- International genebank tasks



Slovenia and CWR

Area and diversity

- 20,273 km²
- Very diverse [taxa → landscape]
- Identified species
 - 15,000 animal sp.
 - 6,000 plant sp.
 - 5,000 fungi sp.



Potential for CWR conservation

Two main ecosystems

Native forest (12,000 km²)

- CWR of permanent crops (e.g. apple, chestnut)

Permanent grasslands (2,800 km²)

- CWR of some crops (e.g. forages, medicinal)

Forage species and CWR

Interesting situation

- Both CWR and cultivated plants
- Anthropophilic [\neq Domesticated]
- Cultivation \rightarrow Distribution
- Red clover example



Trifolium pratense
[tetraploid variety]



Trifolium pratense
[wild ecotype]

SPGB: Challenge [future plans]

Upgrade the existing genebank with CWR activities:

- Develop a CWR national checklist
- Identify priority CWR taxa for active conservation
- Identify populations for *in situ* and *ex situ* conservation
- Identify relevant stakeholders of CWR
- Establish a multi-stakeholder committee on CWR conservation
- Make a preliminary evaluation of the potential CWR sites
- Prepare national CWR conservation strategy and action plans