

INFORMATION ON ECPGR

L. Maggioni ECPGR Secretary

First meeting of the Cryopreservation Working Group, Prague, Czech Republic, 3-4 May 2023



European Cooperative Programme for Plant Genetic Resources

- 43 years of existence
- Objective: collaboratively conserve PGRFA, provide access and increase use
- Funded by member countries and governed by a Steering Committee of National Coordinators
- Budget for actions (meetings and activities), documentation (EURISCO), and coordination (Secretariat)





ECPGR membership 2023



- ECPGR Membership in Phase X (Letter of agreement signed)
- ECPGR Membership in Phase X (Country did not sign Letter of Agreement, but is paying contributions)
- Countries eligible to join Phase X



ECPGR structure

Steering Committee

Executive Committee

Coordinating Secretariat

Crop Working Groups

Thematic Working Groups

- Allium
- Avena
- Barley
- Berries
- Beta
- Brassica
- Cucurbits
- Fibre Crops (Flax and Hemp)
- Forages
- Grain Legumes

- Leafy Vegetables
- Maize
- Malus/Pyrus
- Medicinal and Aromatic Plants
- Potato
- Prunus
- Solanaceae
- Umbellifer Crops
- Vitis
- Wheat

- Crop Wild Relatives
- Cryopreservation
- Documentation and Information
- On-farm Conservation and Management



Objectives of ECPGR Phase X

http://www.ecpgr.cgiar.org/about/goals-and-objectives

- 1. Ex situ conservation and provision of access through AEGIS and the European Collection
- 2. Documentation of passport and phenotypic information through EURISCO (ex situ and in situ)
- 3. *In situ* conservation and use of crop wild relatives
- 4. Promotion of on-farm conservation and management
- 5. Promote use of PGRFA (EVA)



1. To efficiently conserve and provide access to unique germplasm in Europe through AEGIS and the European Collection

Outputs	Activities	Responsibility	Indicators
1.5 Options and opportunities for a cryopreservation network explored	1.5.1 Organize a meeting to identify cryopreservation needs and aims and consider setting up a dedicated network	1.5.1 Relevant WG members; Secretariat	1.5.1.1 Recommendations published; Framework for a cryopreservation network defined 1.5.1.2 Number of vegetatively propagated accessions cryopreserved



Working Groups operations

- Chair selected by ExCo based on Expressions of Interest
 - A Co-Chair can also be defined
- Members nominated by the respective National Coordinator
 - Number not limited, but contact person recommended
- Expected to organize collaborative activities in line with ECPGR objectives (ECPGR funds + inputs-in-kind)
- Two channels to obtain 'limited' ECPGR funds:
 - Meetings (upon request)
 - Grant Scheme activities (competitive Calls for proposals)



AEGIS – A European Genebank Integrated System



- Decentralized European Collection
- Country membership via Memorandum of Understanding
- Availability through SMTA, including non-Annex I material
- Quality System: agreed standards, peer review and capacity building
- Role of Working Groups for the management of decentralized collection

http://aegis.cgiar.org/



Agreed standards

CROP-SPECIFIC GENEBANK STANDARDS FOR IN VITRO CULTURE AND CRYOPRESERVATION

Agreed by the Allium Working Group

August 2017

Based on FAO Genebank standards for in vitro culture and cryopreservation (2014)



Contents of EURISCO (April 2023)

- 43 countries
- 2,085,425 accessions
- 407 institutes



http://eurisco.ecpgr.org



European Evaluation Network for PGRFA (EVA)



European Evaluation Network





PUBLIC-PRIVATE PARTNERSHIPS

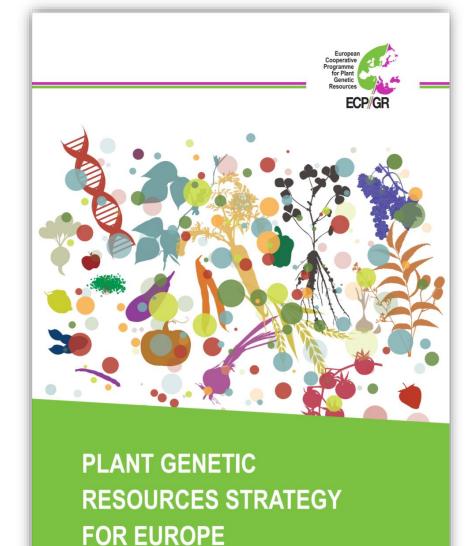
Increasing ECPGR knowledge and opportunities on public—private partnerships for the use of plant genetic resources for food and agriculture.

Genetic Resources:

a NEW open-access journal for the GenRes community



www.genresj.org



ECPGR as part of EC projects

- GenRes Bridge (2019–2021)
 - PGR Strategy for Europe
- AGENT (2021–2025)
 - Genebank peer reviews
 - Trainings
 - EVA extension
- Pro-GRACE (2023–2025)
 - Towards the establishment of a PGR research infrastructure



PLANT GENETIC RESOURCES STRATEGY FOR EUROPE

Approach to achieve genebank standards

 Improving management strategies and methods for clonally-propagated plants (e.g. fruit trees) and recalcitrant seeded plants, as well as for species that have been neglected in current conservation activities. This will also include exploring options and opportunities for a cryopreservation network and complementary on-farm conservation, in particular for fruit trees.



ECPGR Towards Phase XI (2024–2028)

- The SC agreed that the proposed priority objectives of Phase XI correspond with the PGR Strategy
- Revised Terms of Reference for WG members and Chairs
- New Network/WG on genebank management
- Small size budget is expected for activities (100k per year?)
- Decisions to be taken at the next Steering Committee meeting:
 30 May–1 June 2023



Expectation of Steering Committee from Cryo WG

- To develop a concept for the most rational and efficient way to collaboratively conserve under cryopreservation the relevant European material.
- A suitable number of European facilities that could share the tasks could be defined
- Genebanks currently working on cryo to share and further develop their knowledge... to collectively serve regional needs
- Transfer of material to Cryo-vault as secondary duplicates not a priority



Acknowledgments

ECPGR
Secretariat:





