

CRYOPRESERVATION WG REPORT FOR PHASE X (2019-2023)

Submitted to the 17th Steering Committee Meeting, Oeiras, Portugal, May/June 2023 by: Milos Faltus, Bart Panis

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1. CONTRIBUTION TO ECPGR OBJECTIVES

1.1. Achievements and success stories

- To efficiently conserve and provide access to unique germplasm in Europe through AEGIS and the European Collection
 - The Cryopreservation Working Group contributed to the effective conservation of germplasm in Europe by actively cooperating with the *Allium* Working Group in the preparation of the "Garli CCS Genotyping-by-sequencing of the European garlic collection to develop a sustainable *ex situ* conservation strategy" project proposal.
- To provide passport and phenotypic information of actively conserved European PGRFA diversity ex situ and in situ through the EURISCO catalogue

 The Cryopreservation Working Group was not directly involved in the provision of passport and phenotypic information of actively conserved European PGRFA diversity ex situ and in situ through the EURISCO catalogue.
- To improve *in situ* conservation and use of crop wild relatives

 The Cryopreservation Working Group uses the principle of conserving plant genetic resources through *ex situ* conservation rather than *in situ*.
- To promote on-farm conservation and management of European PGRFA diversity

The Cryopreservation Working Group uses the principle of conserving plant genetic resources through *ex situ* conservation rather than on farm.

To promote use of PGRFA

The cryopreservation Working Group activity contributes to the policy of the International Treaty on Plant Genetic Resources for Food and Agriculture to conserve, sustainably use and fairly and equitably share the benefits of plant genetic resources for food and agriculture, for sustainable agriculture and food security via development of confident and safe conservation method, and by the development of an efficient strategy for cryoconservation of plant genetic resources.

1.2. Gaps or constraints identified

The current, identified gap in the field of cryopreservation consists primarily of the lack of a network of workplaces dealing with the cryopreservation of plant genetic resources. This gap will be filled through the activities of the Cryopreservation Working Group.



2. GRANT SCHEME ACTIVITIES, WG MEETINGS AND EVA ACTIVITIES

- Grant Scheme proposals (submitted:1; approved:1 (Dec 2022))
 - <u>Garli CCS Genotyping-by-sequencing of the European garlic collection to develop a sustainable ex situ conservation strategy</u> (in collaboration with the *Allium* and the Documentation & Information WGs; 6th call)
- Total number of Cryo WG partners involved: 2 from 2 countries
 - ECPGR-funded: 2 from 2 countries
- Meetings held

None

Planned: 1st meeting of the Cryopreservation WG, 3-4 May 2023, Prague, Czech Republic

Reports and related data

None

- Funds mobilized [shared with Allium and Doc/Info WGs]
 - ECPGR granted funds: € 59,997
 - Inputs in-kind declared in Grant activities: € 78,620
 - ECPGR WG meeting: ca € 22,500

3. OTHER ACTIVITIES (CROSS-WORKING GROUP ACTIVITIES, LINKS WITH OTHER NETWORKS, INTERNATIONAL PROJECTS AND INITIATIVES)

- Cross-Working Group activities: In cooperation with the working group for Allium, a garlic cryopreservation course is being prepared as part of a joint project "Garli CCS Genotyping-by-sequencing of the European garlic collection to develop a sustainable ex situ conservation strategy" in Autumn 2023.
- Others: The Cryopreservation Working Group plans virtual meetings with other WG leaders and national coordinators to share the WG's goals and activities.

4. Working Group documents and publications

None

5. EXPECTED ADDITIONAL ACHIEVEMENTS AND FUTURE ACTIVITIES THAT COULD CONTRIBUTE TO THE IMPLEMENTATION OF THE PGR STRATEGY FOR EUROPE

The Cryopreservation Working Group will create an overview of the current use of the method of cryopreservation of plant genetic resources in Europe, based on the data obtained after the first meeting of the Working Group. Other partners for the future use of the cryopreservation method will also be identified.