

ECPGR Phase X

Lorenzo Maggioni (ECPGR Secretariat)

EUBRASWILD Activity, Kick-off meeting, 30 November 2020, online

ECPGR long-term goal

Stakeholders in Europe collaboratively,
rationally and effectively **conserve ex situ and
in situ PGRFA**, provide **access** and increase
sustainable **use**

www.ecpgr.cgiar.org

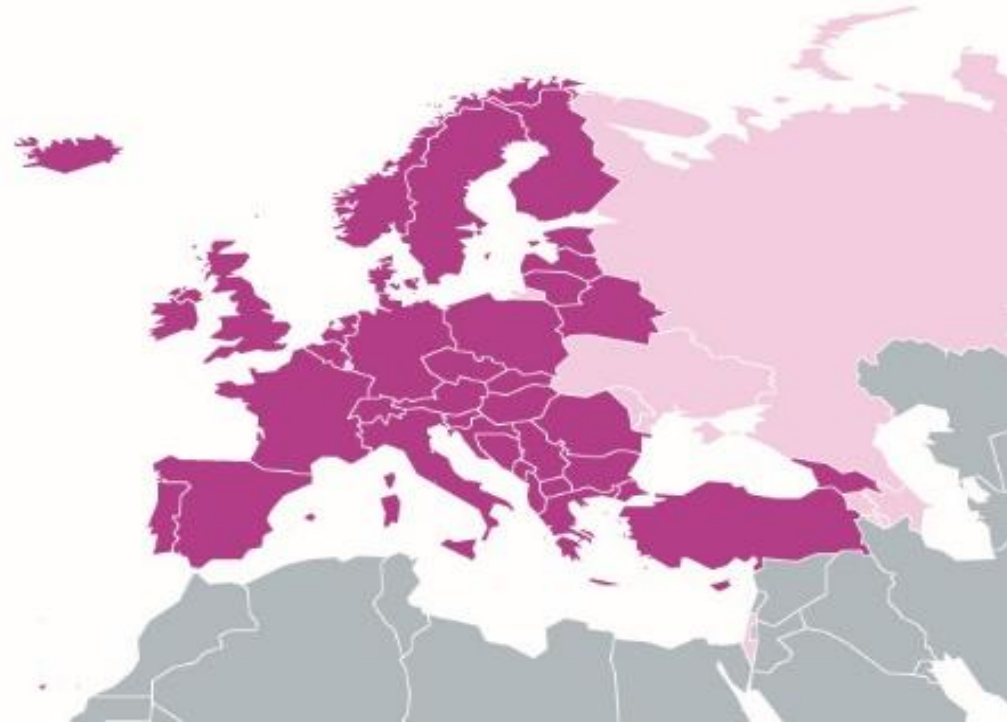
Objectives of ECPGR Phase X (2019–2023)

1. To efficiently conserve and provide access to unique germplasm in Europe through **AEGIS** and the **European Collection**
2. To provide passport and phenotypic information of actively conserved European PGRFA diversity *ex situ* and *in situ* through the **EURISCO** catalogue
3. To improve *in situ* conservation and use of **crop wild relatives**
4. To promote **on-farm** conservation and management of European PGRFA diversity
5. To promote **use** of PGRFA

Membership and funding

Ten Phases (1980-2023)

- Member countries contribute funding (ca. € 540 000 per year)
- National Coordinators are nominated at governmental level
- Use of funds:
 - Coordination
 - Working Group activities
 - Maintenance of EURISCO



Structure



Executive Committee

Steering 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*

- *Wild Species Conservation in Genetic Reserves*
- *On-farm Conservation and Management*
- *Documentation and Information*

Brassica Working Group

ECPGR *Brassica* Working Group

[ECPGR Homepage](#) / [ECPGR Working Groups](#) / [ECPGR *Brassica* Working Group](#)



CHAIR

Ferdinando Branca

[✉ fbranca@unict.it](mailto:fbranca@unict.it)

Confirmed as Chair for Phase X in February 2019

[View CV](#)

Grant Scheme Activities

Phase X

Third Call
2020)

- Capturing Brassica Wild Relative

Phase IX

First Call (2014)

- Collection, CHaracterization

Working Group activities and relat

November 2020

The First meeting of the ECPGR Activity EUBRASWILD, *Capturing Brassica Wild Relatives Diversity in the South Eastern Europe* is held virtually on 30 November 2020 - [Meeting programme](#) (678,6 KB)

76 ECPGR *Brassica* Working Group Members

[✉ Email Distribution List](#)

Chair: Ferdinando Branca [✉ fbranca@unict.it](mailto:fbranca@unict.it)

[Full list](#)

Genebank Curator (18)

Crop specialist (34)

Information/Documentation (8)

Plant breeder (15)

Policy and law (9)

Other expertise (3)

Contact Persons (8)

▼ LIST OF COUNTRIES

1. Ex situ conservation

AEGIS objective

Conserving in a **collaborative way** and at **agreed quality standards**, the **genetically unique** and important accessions for Europe of **all crops** and making them **available** for breeding and research **through SMTAs**

AEGIS benefits

Users

- Transparent/well defined set of accessions available from all of Europe under clear and uniform terms of access (SMTA)
- Compliance with CBD/Nagoya Protocol
- Unique material
- Well conserved
- Well documented

AEGIS benefits

Genebank curators

- Clear and participatory framework establishing and revising standards for conservation
- Capacity building support triggered by peer/mentorship review system
- Stable commitment from country/region to conserve European Collection for the long-term

AEGIS benefits

Policy makers

- Compliance with International Treaty / Nagoya Protocol
- Mechanism to prioritize resources
- Strengthened position of European region (example of efficiency/ commitment)

AEGIS membership



35 Member countries

68 Associate Member Agreements

AEGIS membership

Total Associate Member Agreements: 68

Albania (2)

Austria (2)

Azerbaijan (2)

Belarus (9)

Belgium (1)

Bosnia and Herzegovina (2)

Bulgaria (1)

Croatia (2)

Cyprus (1)

Czech Republic (9)

Denmark (1)

Estonia (2)

Finland (1)

Georgia (1)

Germany (3)

Hungary (1)

Iceland (1)

Italy (3)

Latvia (3)

Lithuania (2)

Netherlands (1)

Norway (1)

Poland (1)

Portugal (2)

Romania (1)

Slovakia (1)

Slovenia (5)

Sweden (2)

Switzerland (1)

Turkey (1)

United Kingdom (3)



AEGIS membership

Associate Members

Croatia

The MoU was signed on 02 December 2009 by Ministry of Agriculture, Fishery and Rural Development, Croatia

Institute for Seed and Seedlings, Croatian Centre for Agriculture Food and Rural Affairs

Institute Code: HRV053

Contact: Stanislav Volenik ✉ stanislav.volenik@hcphs.hr

Website: <http://www.hcphs.hr/default.aspx?id=273>

Date of signature of Associate Membership: 02 December 2009

[MORE DETAILS](#)

University of Zagreb, Faculty of Agriculture

Institute Code: HRV041

Contact: Tatjana Krička ✉ tkricka@agr.hr

Website: <http://www.agr.unizg.hr/en>

Date of signature of Associate Membership: 16 January 2014

[MORE DETAILS](#)

The European Collection

Total number of European Accessions: **57 599** (November 2020)

Country	No of accessions
Albania	8
Bosnia and Herzegovina	22
Bulgaria	341
Croatia	90
Czechia	1659
Estonia	129
Germany	26725
Italy	8815
Latvia	27
Lithuania	45
Montenegro	31
Netherlands	5842
Nordic Countries	4779
Poland	443
Romania	733
Slovakia	640
Switzerland	5611
United Kingdom	1659
Total	57 599

EUBRASWILD accessions in AEGIS

Brassica cretica	1
Brassica incana	2
Diplotaxis sp.	7
Eruca sativa	67
Isatis sp.	22
Hirschfeldia incana	1
Sinapis alba	23
Sinapis arvensis	1

Crop-specific conservation standards

CROP-SPECIFIC GENE BANK STANDARDS FOR ORTHODOX SEEDS

Agreed by the Wheat Working Group

January 2016

FAO Genebank standards for orthodox seeds	Crop-specific genebank standards for orthodox seeds – Wheat gene pools (<i>Triticum</i> , <i>Aegilops</i> , <i>Secale</i> , <i>XTriticosecale</i>) <i>No comment in this column means agreement with FAO standard</i>	Remarks (reasons for deviating from FAO standards)
4.2 Standards for drying and storage		
4.2.1 All seed samples should be dried to equilibrium in a controlled environment of 5-20°C and 10-25 percent of relative humidity, depending upon species.		
4.2.2 After drying, all seed samples need to be sealed in a suitable airtight container for long term storage; in some instances where collections that need frequent access to seeds or likely to be depleted well before the predicted time for loss in viability, it is then possible to store seeds in non-airtight containers.		
4.2.3 Most-original-samples and safety duplicate samples should be stored under long-term conditions (base collections) at a temperature of -18 ± 3°C and relative humidity of 15 ± 3 percent.	Most-original-samples and safety duplicate samples should be stored under long-term conditions (base collections) at a temperature of -18 ± 3°C and relative humidity of 15 ± 3 percent. <i>However, when samples are stored in airtight containers, relative humidity in the storage room is of no relevance.</i>	
4.2.4 For medium-term conditions (active collection) samples should be stored under refrigeration at 5-10°C and relative humidity of 15 ± 3 percent.	For medium-term conditions (active collection) samples should be stored under refrigeration at 5-10°C and relative humidity of 15 ± 3 percent, <i>whenever possible.</i>	Medium-term conservation at 15 ± 3 percent RH can be very expensive and technically difficult to attain in case of large cold rooms.
4.3 Standards for seed viability monitoring		
4.3.1 The initial seed viability test should be conducted after cleaning and drying the accession or at the latest within 12 months after receipt of the sample at the genebank.	The initial seed viability test should be conducted after cleaning and drying the accession or at the latest within 12 months after receipt of the sample at the genebank. <i>This period can be exceeded in case it is necessary to break seed dormancy.</i>	CWR usually have dormancy. It can exceed 12 months.

2. Documentation



<http://eurisco.ecpgr.org>




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[Export data by National Inventory](#)
[Home](#) > [Search](#) > [National inventory report taxonomy](#)

National inventory report

1-5

National Inventory	No Of Accessions
Germany	7
Italy	2
Netherlands	2
Spain	28
United Kingdom	11

1-5

[Download](#)

0.01 s

Matches

Total number of selected accessions:

50

Search term:

Brassica incana

Total number of accessions (including misspellings and synonyms):

59 accessions were found. 7 different taxa were detected.

Synonym names were derived from GRIN taxonomy and Mansfeld taxonomy.

Select	Taxon	No Of Accessions
<input checked="" type="checkbox"/>	Brassica incana Ten.	38
<input checked="" type="checkbox"/>	Brassica incana	12
<input type="checkbox"/>	Brassica incana Ten. L	5
<input type="checkbox"/>	Brassica sylvestris (L.) Mill.	1
<input type="checkbox"/>	Brassica sylvestris	1

1 - 5 of 7 >

Search [Advanced search](#) [Export data by species](#) [Export data by National Inventory](#)

[Home](#) > [Search](#) > [National inventory report taxonomy](#)

National inventory report

1-5

National Inventory	No Of Accessions
Greece	43
Israel	2
Italy	1
Spain	42
United Kingdom	10

1-5

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0.01 s

Matches

Total number of selected accessions:

98

Search term:

Brassica cretica

Total number of accessions (including misspellings and synonyms):

115 accessions were found. 5 different taxa were detected.

Synonym names were derived from GRIN taxonomy and Mansfeld taxonomy.

Select all

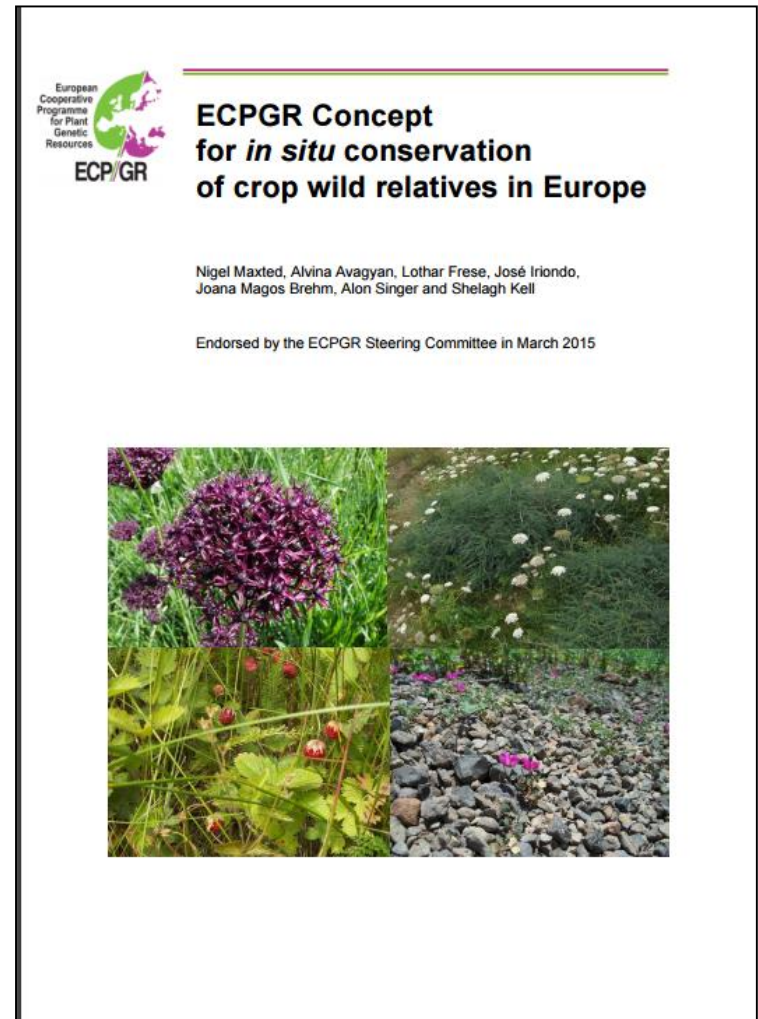
Deselect all

Select	Taxon	No Of Accessions
<input checked="" type="checkbox"/>	Brassica cretica Lam. subsp. nivea (Boiss. & Sprun.) Onno	8
<input checked="" type="checkbox"/>	Brassica cretica Lam.	73
<input checked="" type="checkbox"/>	Brassica cretica	8
<input checked="" type="checkbox"/>	Brassica cretica Lam. subsp. laconica Gustafs. & Snogeup	9
<input type="checkbox"/>	Brassica cretica Lam. L	17

1 - 5 of 5

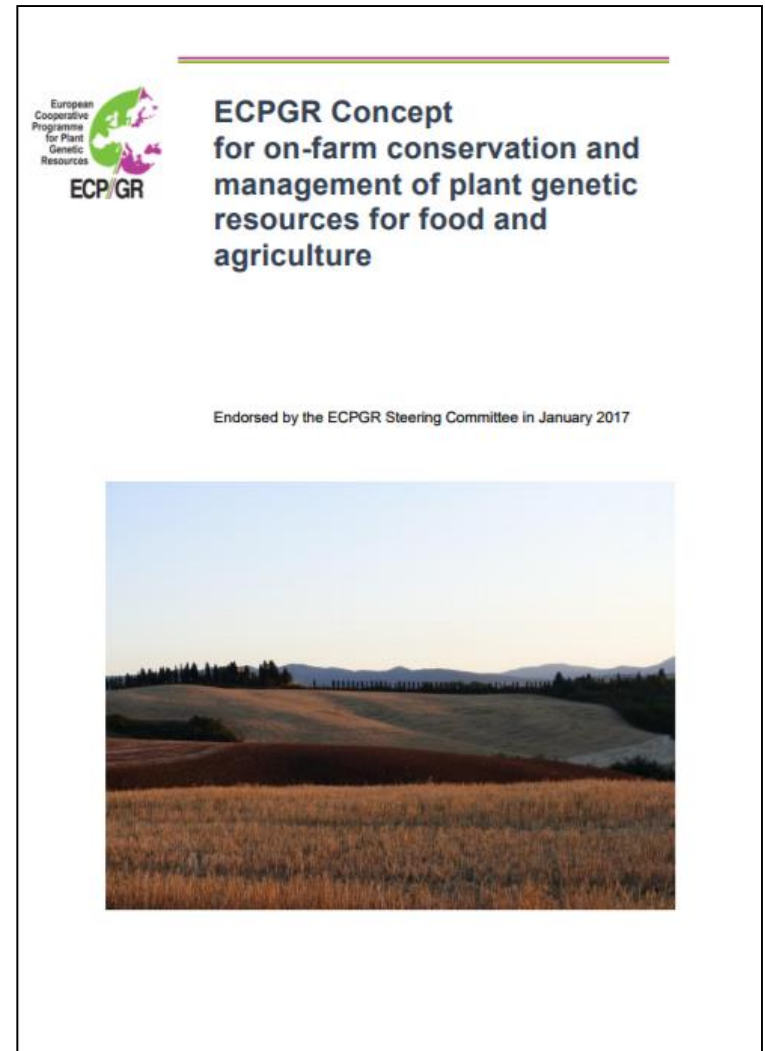
3. Conservation of crop wild relatives

- National and regional conservation strategy planning
(checklists -> priorities -> inventories -> action plans)
- Designation and management of **Most Appropriate Wild Populations** (genetic diversity and traits of interest) **in genetic reserves**



4. On farm conservation and management

- European Inventory of on-farm genetic diversity
- Developing indicators for monitoring diversity and threat
- Promoting good practices for on-farm management
- Concept of European agro-diversity sites
- Addressing issues of ownership, access, availability, marketing, etc.



5. Relations with users

Establishment of the European PGRFA Evaluation Network (EVA)

WHEREAS the world is facing increasing challenges to food security through the loss of diversity and the underutilization of the diversity that exists;

WHEREAS the natural range of growing conditions in Europe calls for and permits more comprehensive evaluation of PGRFA across different environments;

WHEREAS it is of strategic importance for Europe to better utilize Plant Genetic Resources for Food and Agriculture to facilitate adaptation of European agriculture to climate change and to contribute towards the achievement of Sustainable Development Goals;

WHEREAS it is important not only to increase the use of genetic diversity in plant breeding, but also to increase the diversity of stakeholders in plant breeding, including private and public sectors, small and medium enterprises and participatory plant breeding actions;

WHEREAS there is an opportunity to build on existing networks for conservation and use of PGRFA and to develop a European PGRFA Evaluation Network which is open for participation by both private and public sectors in order to facilitate the exchange of data on evaluation in a standardized format;

Now therefore, the Steering Committee of the ECPGR hereby establishes the European PGRFA Evaluation Network in the form of Private/ Public Partnerships within the framework of the European Cooperative Programme for Plant Genetic Resources (ECPGR), in accordance with the following provisions.

01 Definitions

For the purposes of this Proposal –

- i) “AEGIS” means the European Genebank Integrated System;¹
- ii) “ECPGR” means the European Cooperative Programme for Plant Genetic Resources;
- iii) “EURISCO” means the European Search Catalogue for Plant Genetic Resources;²

¹ AEGIS entered into force in 2009 within the framework of ECPGR in order to improve coordination with respect to the conservation of PGRFA in Europe and to facilitate the exchange of PGRFA and related information among the countries and genebanks of Europe, and is now functioning to conserve genetically unique and important accessions for Europe and to make them available for breeding and research

² EURISCO is a European cooperative mechanism, which provides information on nearly 2 million accessions of crop plants and their wild relatives, preserved *ex situ* by almost 400 institutes, based on a network of National Inventories of 43 member countries: EURISCO forms part of the Global Information System on Plant Genetic Resources for Food and Agriculture provided for under the International Treaty of Plant Genetic Resources for Food and Agriculture, and is now being extended to characterization and evaluation data.

- European Evaluation Network (EVA) approved by the ECPGR Steering Committee in Thessaloniki, May 2018

ECPGR Mode of Operation of Phase X

- Two budget lines of similar amounts
(Euro 300k for 5 years)

1. Meetings
2. Other activities (Grant Scheme)

Instructions:

<http://www.ecpgr.cgiar.org/about/management-structure/>

Budget line "Meetings"

- Each WG can apply for funds to organize a meeting **towards implementing ECPGR objectives**
- Applications can be submitted **at any time** to the ExCo through the Secretaria
- **Only WG members** can be funded by ECPGR
- **The country quota system applies.** One quota allows attending one meeting

Budget line "Other activities" = Grant Scheme

- Activities to implement the ECPGR objectives funded through the **Grant Scheme based on selection of proposals** by the ExCo.
- Meetings approved under this budget line are **not subject to country quota**
- No limitations in the number of participants
- Budget limitations (Euro 20 000)

Horizon 2020 - SFS 28 2018

GenRes Bridge

- Joint effort of plant, forest and animal networks



- ECPGR-related activities (among others):
 - **European Genetic Resources Strategy** + Plant specific strategy
 - Genetic Resources Journal
<https://www.genresj.org/>





Thank you for your attention