

ECPGR context and update

Lorenzo Maggioni
ECPGR Secretary



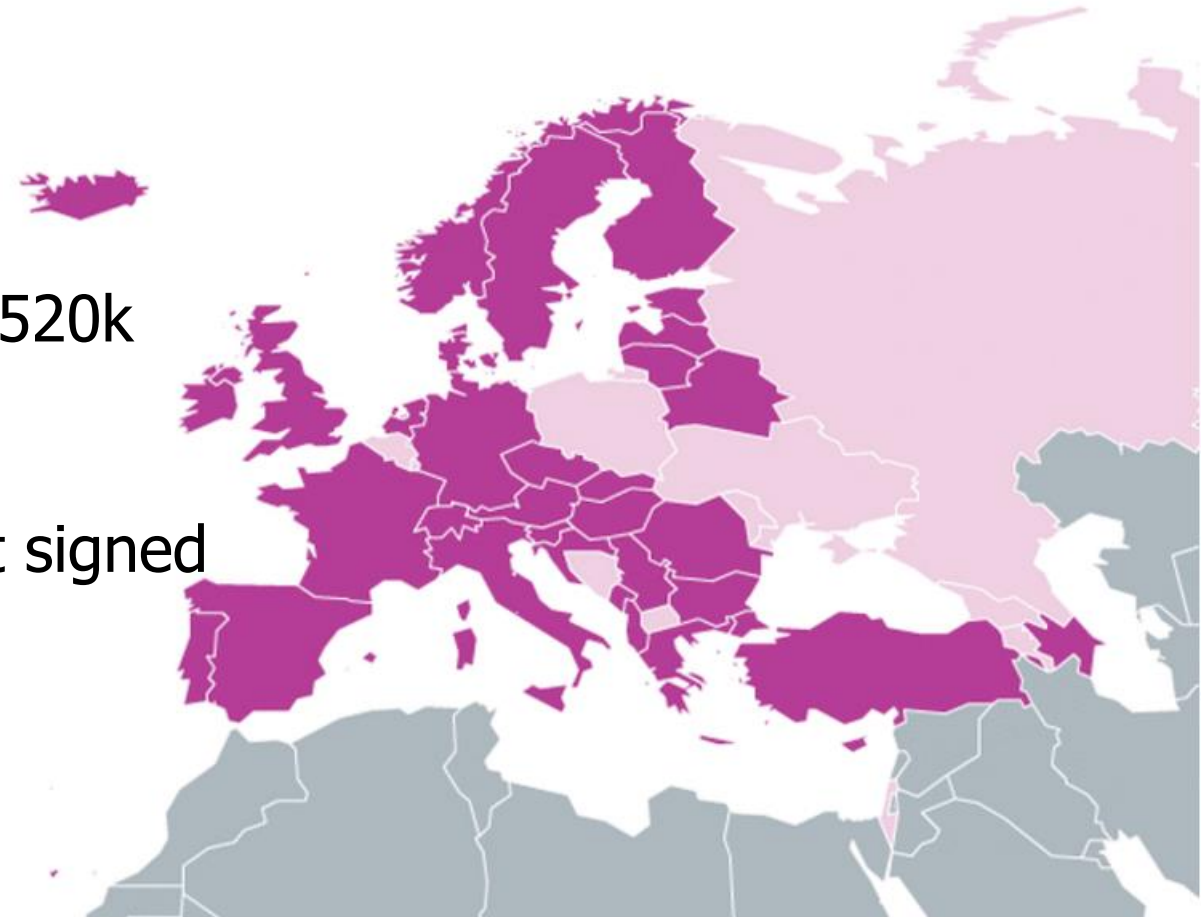
What is ECPGR

ECPGR is a collaborative Programme among most European countries, aiming at ensuring the long-term conservation and facilitating the utilization of plant genetic resources in Europe.

www.ecpgr.cgiar.org/

Phase IX (2014-2018)

- Annual budget ca. € 520k from 38 countries
- Letters of Agreement signed by 33 countries



ECPGR objectives (Phase IX)

Long-term Goal:

National, Sub-regional and Regional Programmes in Europe rationally and effectively conserve *ex situ* and *in situ* PGRFA and increase their utilization

Structure

Executive Committee

Steering Committee

Coordinating Secretariat

Crop Working Groups

Thematic Working Groups

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

- Leafy Vegetables
- *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

New Operational Structure

- Networks are eliminated
- 21 Working Groups (18 crop and 3 thematic WGs)
- WGs, composed of pools of experts proposed by NCs, carry out activities mandated by the SC or proposed by the WG (through the Chair) and approved by the SC → Grant Scheme
- Revised Terms of Reference of Chairs

Composition of WGs

Nominations to become WG members must be made by
National Coordinators

Size of WGs: between **43** and **92** members (average **72**
members) (total: 1514)

MAP WG: 80 members

Genebank curators: 22

Policy and law: 13

Info/Doc specialist: 18

Plant breeders: 14

Crop specialists: 34

Other: 3

Grant Scheme

- Activities with a budget up to € 15 000 per year
- Recommended limit of 12 participants per activity
- Participation based on “Expression of interest”
- Selection made by Chair from the established pool of experts

Terms of Reference of Crop Working Groups

- **Contribute to management of the European Collection:**
 - Identify gaps or redundancies
 - Monitor implementation of conservation standards
 - Setting priorities for C&E
 - Setting priorities for rejuvenation
 - Sharing responsibilities on above-mentioned tasks
- **Undertake Activities in line with ECPGR objectives**

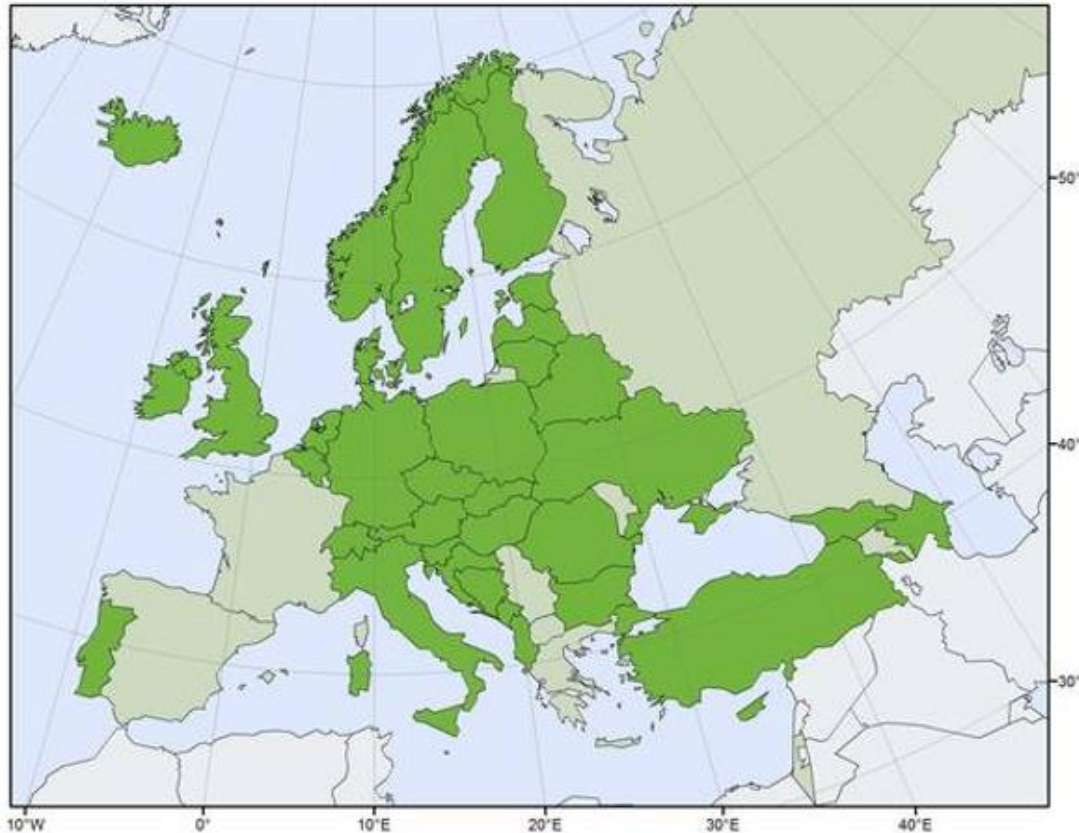
Objectives of ECPGR – outcomes of Phase IX

1. **AEGIS** is operational and accessions are characterized and evaluated
2. Functionality of **EURISCO** ensured (data quality & quantity + in situ data)
3. **In situ and on-farm conservation and management** of priority crop wild relative (CWR) and landrace (LR) populations are implemented throughout Europe
4. Relations with **users** of germplasm are strengthened
5. Commitment and regular resources from donors are increased
6. Secretariat support is adequate to sustain operations of ECPGR

Outcome 1- AEGIS is operational

- To create **A European Genebank Integrated System for PGRFA**, aimed at **conserving the genetically unique and important accessions for Europe and making them available** for breeding and research. Such material will be safely conserved under conditions that **ensure genetic integrity and viability in the long term**

AEGIS membership



34 Member countries
61 Associate Members' Agreements

1. **Albania** (05 May 2009) - [Associate Members](#)
2. **Austria** (04 December 2012) - [Associate Members](#)
3. **Azerbaijan** (15 July 2009) - [Associate Members](#)
4. **Belarus** (01 November 2011) - [Associate Members](#)
5. **Belgium** (31 May 2012) - [Associate Members](#)
6. **Bosnia and Herzegovina** (18 May 2010)
7. **Bulgaria** (01 December 2009) - [Associate Members](#)
8. **Croatia** (01 December 2009) - [Associate Members](#)
9. **Cyprus** (15 September 2009) - [Associate Members](#)
10. **Czech Republic** (22 July 2009) - [Associate Members](#)
11. **Denmark** (21 February 2010) - [Associate Members](#)
12. **Estonia** (21 May 2009) - [Associate Members](#)
13. **Finland** (01 December 2009) - [Associate Members](#)
14. **Georgia** (17 May 2009) - [Associate Members](#)
15. **Germany** (04 November 2009) - [Associate Members](#)
16. **Hungary** (21 November 2011) - [Associate Members](#)
17. **Iceland** (21 October 2010) - [Associate Members](#)
18. **Ireland** (21 July 2009)
19. **Italy** (02 March 2014) - [Associate Members](#)
20. **Latvia** (31 May 2012) - [Associate Members](#)
21. **Lithuania** (11 October 2010)
22. **Montenegro** (15 December 2010)
23. **Netherlands** (27 May 2009) - [Associate Members](#)
24. **Norway** (16 August 2009) - [Associate Members](#)
25. **Poland** (16 May 2010) - [Associate Members](#)
26. **Portugal** (19 November 2009) - [Associate Members](#)
27. **Romania** (13 April 2010) - [Associate Members](#)
28. **Slovakia** (16 June 2009) - [Associate Members](#)
29. **Slovenia** (20 September 2009) - [Associate Members](#)
30. **Sweden** (30 May 2011) - [Associate Members](#)
31. **Switzerland** (26 July 2009) - [Associate Members](#)
32. **Turkey** (13 November 2011) - [Associate Members](#)
33. **Ukraine** (29 April 2009)
34. **United Kingdom** (17 June 2010) - [Associate Members](#)

The European Collection

Through signing the MOU countries accept responsibility for European Accessions:

- Long-term conservation according to quality standards
- Availability through Standard Material Transfer Agreement (SMTA)
- Safety-duplication

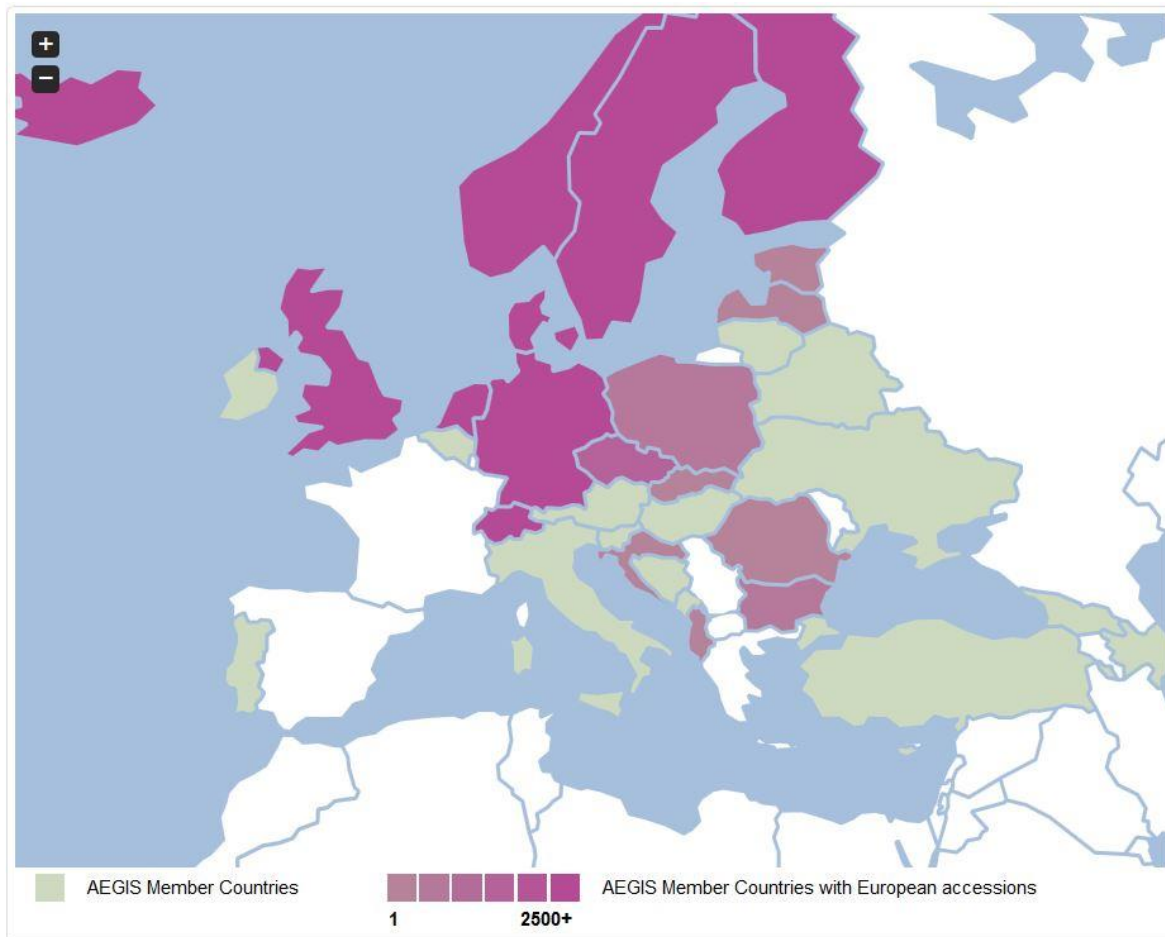
Working Groups are responsible for:

- Oversight over the Selection of European Accessions
- Establishment of crop-specific quality standards
- Preparation of crop conservation/management strategies

The European Collection

26 512 accessions included in the European Collection

Country	No of accessions
Albania	8
Bulgaria	261
Croatia	90
Czechia	1285
Estonia	89
Germany	7904
Latvia	21
Netherlands	5853
Nordic Countries	3708
Poland	303
Romania	194
Slovakia	299
Switzerland	4838
United Kingdom	1659
Total	26512



Perceived Benefits of AEGIS

- Improved **security of germplasm** through long-term commitment and systematic safety-duplication
- Facilitated access to and **availability** of germplasm
- Improved **quality standards** of conserved material
- **Cost efficient** conservation activities
- **Reduced unwanted duplication** of germplasm material
- Improved **sharing of knowledge** and information

MAPS in AEGIS vs. EURISCO

Taxon	AEGIS	EURISCO
<i>Achillea</i> sp.	5	663
<i>Artemisia</i> sp.	4	450
<i>Carum carvi</i>	60	561
<i>Gentiana lutea</i>	0	61
<i>Hypericum perforatum</i>	2	591
<i>Melissa officinalis</i>	2	178
<i>Mentha</i> sp.	0	1078
<i>Origanum vulgare</i>	8	507
<i>Salvia officinalis</i>	0	391
<i>Thymus</i> sp.	2	557
TOTAL	83	5037

New AEGIS initiatives

1. Pilot study led by CGN: Creation of a **peer review system** amongst *ex situ* genebanks in Europe (based on voluntary participation)

Expected result: **Exchange of knowledge; Basis for fund raising**

2. Multiplication and Safety-duplication to Svalbard of AEGIS accessions, funded by the Crop Trust (to be confirmed)

Expected result: **First example of ability of AEGIS to prioritize use of donor funds**

Outcome 2- Quantity and quality of data in EURISCO

Online catalogue, with information on the European *ex situ* collections: passport and C&E data

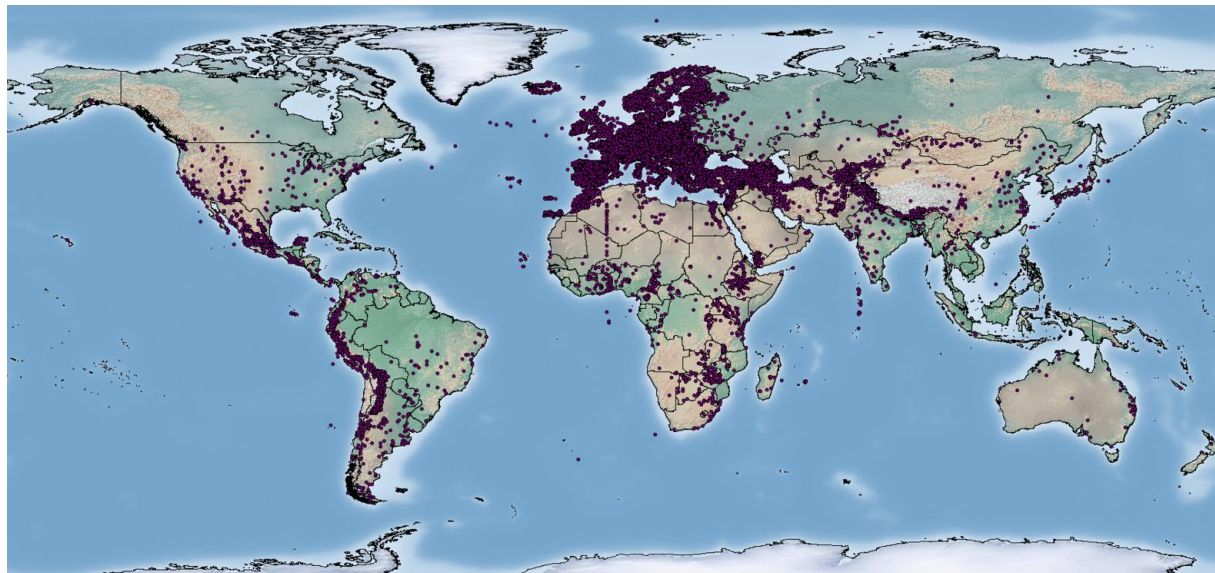


<http://eurisco.ecpgr.org>



Online catalogue of accessions in European genebanks: EURISCO

- Data gathered from 43 national inventories
- 1.94 M accession data from 378 institutions throughout Europe
- Larger data provider to Genesys and the Global Information System
- Register for MLS (414k) and AEGIS (26.5k) European accessions



EURISCO development planned for 2017

- User survey to get feedback and implementation of improved search functionalities
- Adoption of MCPD v.2.1 including additional descriptors
- An improved user interface to increase the searching performance via taxonomic names (project funds offered by Germany)
- Uploading of C&E datasets via Grant Scheme Activities
- Instructions for National Focal points regarding C&E datasets

Outcome 3- In situ conservation and management

- 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**

ECPGR Concept for *in situ* conservation of crop wild relatives in Europe

Nigel Maxted, Alvina Avagyan, Lothar Frese, José Iriondo,
Joana Magos Brehm, Alon Singer and Shelagh Kell

Endorsed by the ECPGR Steering Committee in March 2015



Outcome 3- On farm conservation and management

CONCEPT (IN PRINT) ENDORSED BY STEERING COMMITTEE IN JANUARY 2017:

- 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.

Outcome 4- Relations with users

Voluntary contribution by Germany for:

- A workshop on *Private Public Partnerships for the use of PGRFA*, June 2017
- A part-time research assistant for 6 months at the ECPGR Secretariat
- Development of dedicated ECPGR webpages providing examples of public private partnerships on use of PGRFA

Expected outcomes:

- Increased ECPGR knowledge and opportunities on Private Public Partnerships for the use of Plant Genetic Resources for Food and Agriculture
- A list of recommendations, prioritization and a feasibility analysis for an "Evaluation Programme on PGRFA in Europe"

ECPGR Activity Grant Scheme

Working Group activities (meetings and other actions) are carried out on the basis of a competitive scheme.

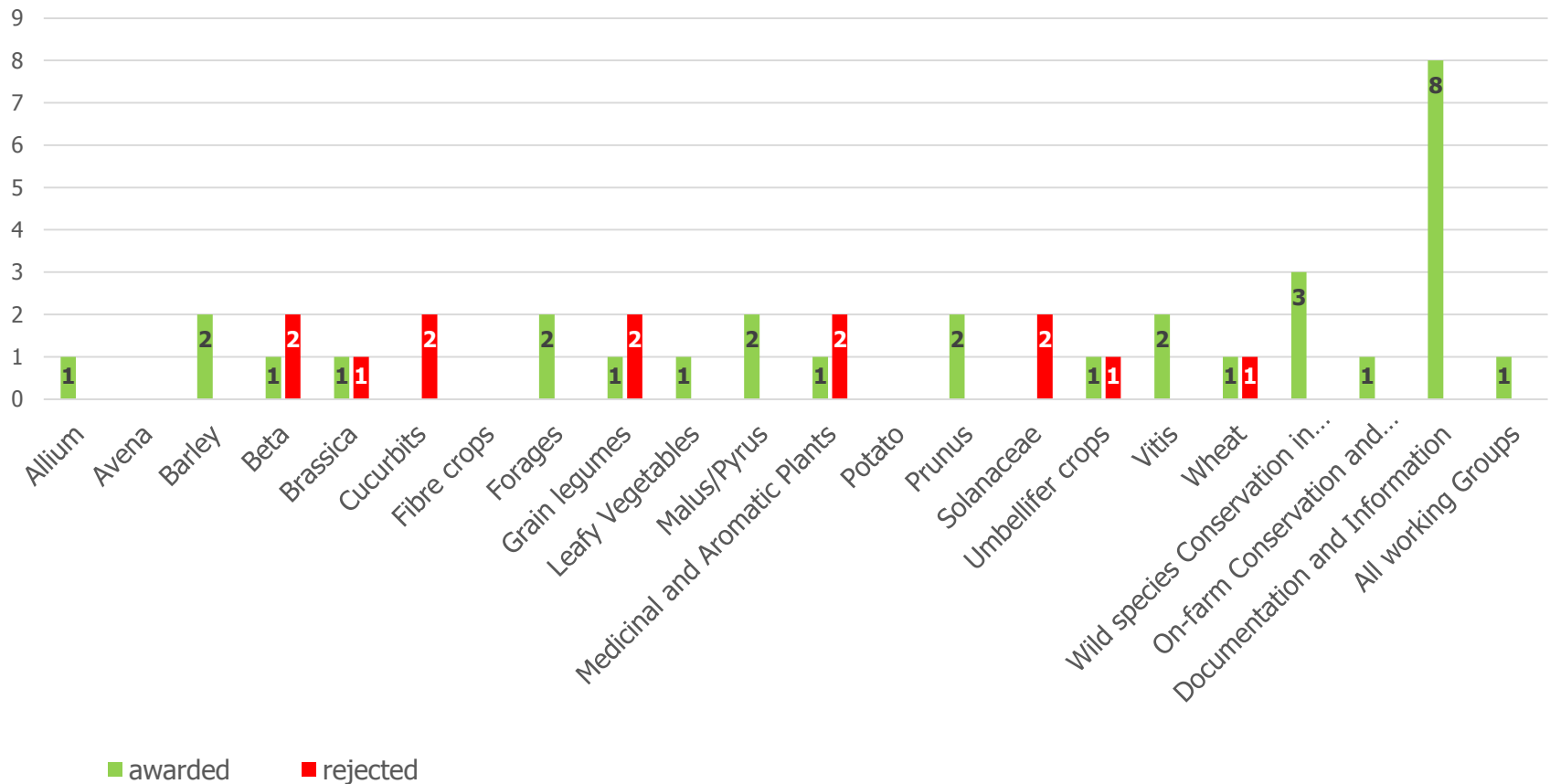
Participation in these activities of technical experts from all the member countries are guaranteed by a country quota.

Depending on funding availability, the Secretariat will regularly open calls for ECPGR-funded actions.

Activity Grant Scheme

- 26 Activities funded through 4 Calls (ca. €430 000)

Working Groups involved in the Activity Grant Scheme



MAP EUROCOLLECTION

Activity approved by ExCo in June 2016

Step 1: Organize a meeting in Braga, Portugal

Step 2: Allocate budget € 3750 to activities directed to the establishment of the European Collection

ECPGR offering assistance to the European Commission (EC) and the European Parliament

Following up from the preliminary conclusions and recommendations of the “Preparatory Action on EU plant and animal genetic resources”, a letter from the European genetic resources networks was sent to the European Commission.

The letter encourages the EC to capitalize on the expertise of the existing GR networks and offers a close collaboration with the EC for the development of a “EU Agrobiodiversity Strategy”.



Draft H2020 Work Programme 2018-20 includes support to genetic resources communities

Targets for the future of ECPGR

- Expanded characterization of PGRFA as part of the AEGIS process
- Increased availability of data through EURISCO
- Expanded scope of MLS = increased access as part of AEGIS
- Promoted use through the On-farm concept
- Improved partnerships between genebanks and users

Targets for the future of AEGIS

- Increased number of MoUs
- Increased number of AMs
- Increased number of accessions

- Use of AQUAS
- Exchange of services
- Increased use of accessions

Upcoming events – ECPGR

- Workshop on Private Public Partnerships, June 2017, Bonn, Germany
- Fifth Call for proposals: to be launched in June with deadline in September 2017
- Meeting of all Chairs: 16-18 October 2017 in Ljubljana, Slovenia
 - Discussion of ECPGR objectives and Mode of operation for Phase X
- End-of-Phase Steering Committee meeting: May 2018

**Thank you
for your
attention!**

