



An update on the establishment of A European Genebank Integrated System

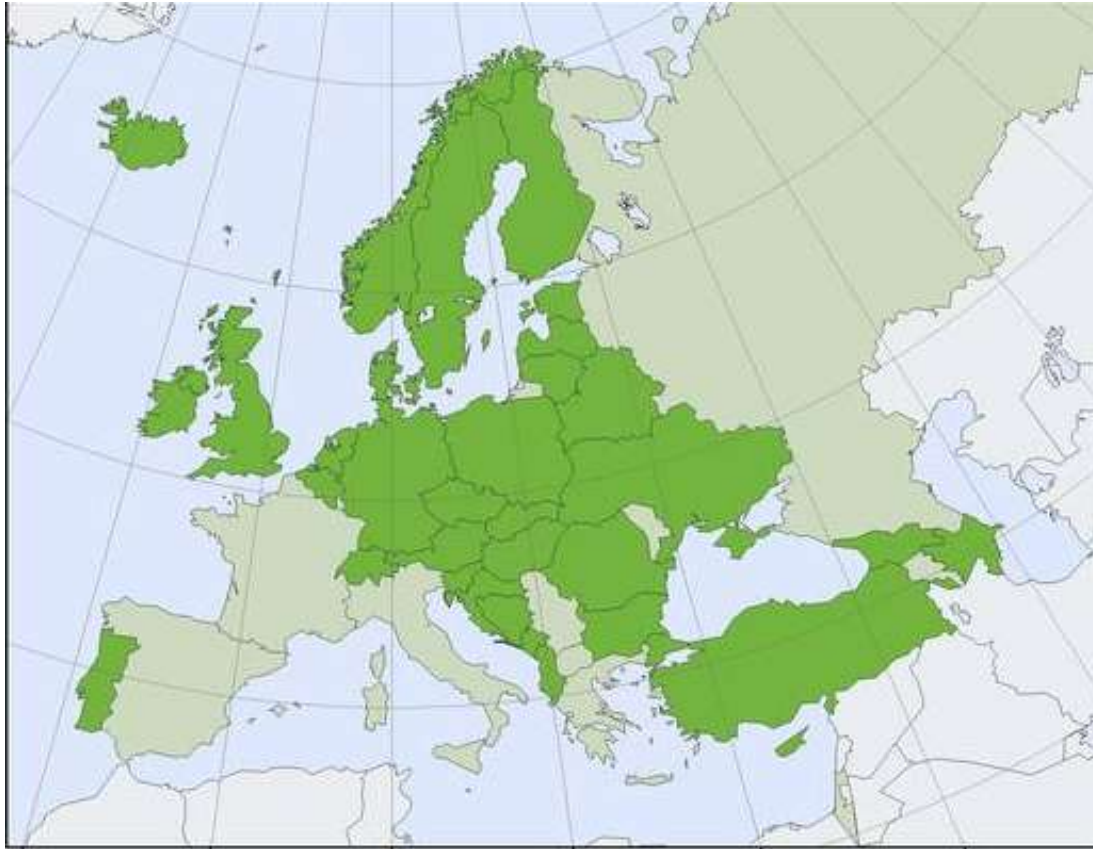


Lorenzo Maggioni & Jan Engels - ECPGR Secretariat

AEGIS objective

- To create **A** **E**uropean **G**enebank **I**ntegrated **S**ystem for plant genetic resources for food and agriculture, 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 status



1. **Albania** (06 May 2009) - [Associate Members](#)
2. **Austria** (05 December 2012)
3. **Azerbaijan** (16 July 2009) - [Associate Members](#)
4. **Belarus** (02 November 2011) - [Associate Members](#)
5. **Belgium** (01 June 2012) - [Associate Members](#)
6. **Bosnia and Herzegovina** (19 May 2010)
7. **Bulgaria** (02 December 2009) - [Associate Members](#)
8. **Croatia** (02 December 2009) - [Associate Members](#)
9. **Cyprus** (15 September 2012) - [Associate Members](#)
10. **Czech Republic** (23 July 2009) - [Associate Members](#)
11. **Denmark** (22 February 2010) - [Associate Members](#)
12. **Estonia** (22 May 2009) - [Associate Members](#)
13. **Finland** (02 December 2009) - [Associate Members](#)
14. **Georgia** (18 May 2009) - [Associate Members](#)
15. **Germany** (05 November 2009) - [Associate Members](#)
16. **Hungary** (22 November 2011) - [Associate Members](#)
17. **Iceland** (22 October 2010)
18. **Ireland** (22 July 2009)
19. **Latvia** (01 June 2012)
20. **Lithuania** (12 October 2010)
21. **Montenegro** (16 December 2010)
22. **Netherlands** (28 May 2009) - [Associate Members](#)
23. **Norway** (17 August 2009) - [Associate Members](#)
24. **Poland** (17 May 2010)
25. **Portugal** (20 November 2009)
26. **Romania** (14 April 2010) - [Associate Members](#)
27. **Slovakia** (17 June 2009) - [Associate Members](#)
28. **Slovenia** (21 September 2009) - [Associate Members](#)
29. **Sweden** (31 May 2011) - [Associate Members](#)
30. **Switzerland** (27 July 2009) - [Associate Members](#)
31. **Turkey** (14 November 2011) - [Associate Members](#)
32. **Ukraine** (30 April 2009)
33. **United Kingdom** (18 June 2010) - [Associate Members](#)

<http://aegis.cgiar.org/>

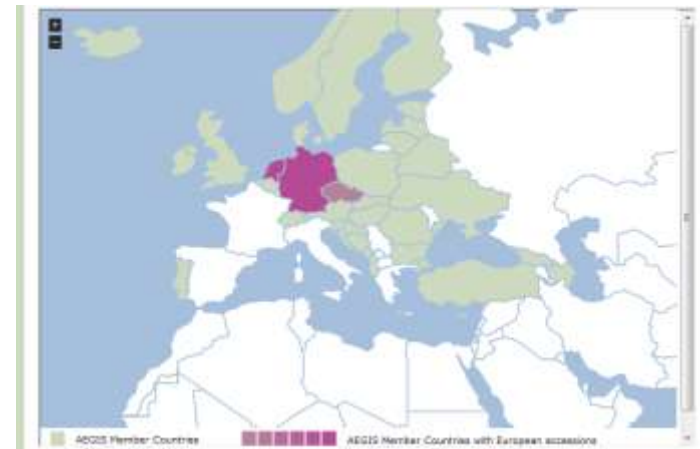
51 Associate Membership Agreements

The European Collection

- The European Collection will consist of **dispersed accessions**, i.e. a virtual European genebank
- 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 today

- Selection of European Accessions: an evolutionary process
- **8** WGs have agreed on selection procedures. **4** WGs have first lists of approx. **4000** selected candidate accessions
- Germany (IPK) offered about **20 000**, the Netherlands (CGN) **5864**, Czech Rep. **394**



The European collection today

European Accessions

<http://aegis.cgiar.org/>

Total European Accessions: **11524**

Genus	European Accessions	Countries
Abelmoschus	9	Germany (9)
Abutilon	6	Germany (6)
Achnatherum	1	Germany (1)
Adonis	1	Germany (1)
Agastache	2	Germany (2)
Agrimonia	1	Germany (1)
Agropyron	2	Germany (2)
Agrostis	11	Netherlands (11)
Alcea	8	Germany (8)
Alliaria	6	Germany (6)
Allium	388	Czech Republic (82), Germany (155), Netherlands (151)
Althaea	3	Germany (3)
Ammi	7	Germany (7)
-	-	-

Selection procedure for the European Accessions -1

Up to now we have promoted two complementary approaches as part of a “simplified selection procedure”:

1. Selection of Most Appropriate Accessions by WGs based on their own selection criteria
2. Offers by countries based on country of origin and uniqueness

Selection procedure for the European Accessions - 2

It has become increasingly clear that the proposed steps were heavily leaning on two wrong assumptions:

- 1) Availability of sufficient data available in EURISCO and the Central Crop Databases
- 2) The various parties involved would be able to quickly respond and agree on proposed candidate accessions

Selection procedure - A new proposal

- Bring to completion ongoing exercises, whenever WGs are close to reach good results (case of Umbellifer WG?!)
- Additionally, a new proposal from the Secretariat:
 - 1) Countries to play the central role.
 - 2) Working Groups to assume a supervisory and monitoring role

Further Simplified Selection Procedure - 1

- 1) Associate Member** institutes/genebanks recommend to National Coordinators a list of accessions they maintain, for inclusion into the European Collection.
- 2) National Coordinator** considers the recommendations and makes the final decision, ensuring that the established conservation and availability conditions will be met.

Further Simplified Selection Procedure - 2

- 3) Accessions are flagged in **EURISCO** as part of the European Collection
- 4) The **Working Groups** maintain the technical oversight over the comprehensiveness of the European Crop Collection, the existence of possible gaps, monitor the management of the Crop Collection, including adherence to the AEGIS quality system (AQUAS) and prepare annual workplans for regeneration and other activities that should be coordinated at the European or sub-regional level.

Selection criteria

- Respect the Selection Requirements agreed by SC
- Consider as a priority those accessions that have originated in the country and apply other considerations that would indicate the uniqueness of the accessions.
- In case of evident duplications that would be noted at any subsequent stage, it is suggested that the two holding genebanks agree on the final status of the duplicates, including the possibility of declaring one accession as the original and the other as a safety duplicate.

pause



AEGIS Quality System (AQUAS)

- Quality assurance based on the principles:
 - Say what you do
 - Do what you say
 - Let an independent body check that you do what you say
 - Correct and improve what you say you do

AQUAS principles

- Consensus
- Agreed minimum standards
- Capacity building
- As little bureaucratic as possible
- Monitoring system (not policing, but guiding and advisory approach)

AEGIS Quality System (AQUAS)

- 1) Template for operational genebank manual
(approved by the AEGIS Advisory Committee
and available from AEGIS web site)**
 - All Associate member institutes are encouraged and expected to compile it and upload it on AEGIS Web site
 - 4 genebank manuals are online plus 1 draft received

AEGIS Quality System (AQUAS)

2) Generic operational genebank standards

- a) Combined effort with FAO to develop generic operational genebank standards; active ECPGR participation in the process
- b) Generic standards on seed, field and *in vitro*/cryopreservation genebanks approved by FAO Commission in April 2013

AEGIS Quality System (AQUAS)

- 3) **Agreed minimum crop-specific technical standards** (complementing generic standards)
 - 6 WGs have agreed on crop-specific standards for one or more routine operations (using FAO standards as reference)
- 4) **An AEGIS Safety-duplication Policy** has been approved by SC
- 5) **An AEGIS Distribution policy** is in preparation
- 6) **Record keeping, monitoring and reporting**
 - Under development

Proposed action points for WG workplan

1. Agree on next steps of selection of accessions for the European Collection
2. Agree on crop-specific standards that were drafted in the first meeting and verify their compatibility with FAO genebank standards.

The end

