

# Workshop recommendations

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Listed below are recommendations from the ECPGR Forage and Barley workshop, 14-16 March, 2017, Malmö, Sweden. The workshop was a joint activity of the ECPGR projects "Forage Data Access" and "Barley C&E Data".

## AEGIS

The lack of stable long-term funding for gene bank operations is a major problem. A survey among forage collection holders suggests that lack of funding for regeneration is the most important reason why not more forage accessions have been flagged for the European Collection. We suggest the following actions to stimulate progress for AEGIS:

1. Introduce the term "AEGIS candidate", which would be different from a standard AEGIS accession. AEGIS candidate would signify accessions that are unique and should become AEGIS accessions but need regeneration or other action. It could be introduced as a new state (no. 2) within the current AEGIS MCPD descriptor (no. 35). The aim would be to make the need for action and additional funding more visible.
2. ECPGR should work towards strengthening the basis for funding for gene banks in Europe. Different approaches should be explored, for example cooperation with funding agencies, lobbying for increased funding on the European level and strengthening the status of ECPGR and AEGIS. The latter could be achieved by
  - o Exploring options for AEGIS to gain ERIC (European Research Infrastructure Consortium) status to improve long-term funding opportunities and a more integrated system for sharing of responsibilities for regeneration.
3. A system with mentorship could stimulate collection holders to flag accessions. In such a system gene banks with experience of flagging AEGIS accessions could mentor those that have not done so. ECPGR could for example offer travel support within the grant system.
4. The Executive Committee should encourage the National Focal Points (NFP) to work together with the collection holders and flag accessions for AEGIS.

## Characterization and Evaluation data in EURISCO

The first data sets have been uploaded into EURISCO and the system for upload, display and download of C&E data is functioning (though modifications to meet user needs and wishes will be performed later). We recommend:

5. Actions should be initiated to encourage upload of C&E data on a larger scale. The workshop suggests that efforts should be made to involve the National Focal Points. These are people that have the technical expertise to transform the data into the correct format (which can appear daunting for non-experts).
6. Development of a EURISCO feature for downloading of C&E data at experiment level would allow users to perform their own analysis. Ideally, the download options would also append passport data of the accessions included in the experiment.
7. Evaluate the possibility to include C&E data from accessions that are currently not documented in EURISCO, if included in an experiment together with EURISCO accessions.
8. A study on the feasibility of assigning digital object identifiers (DOIs) to uploaded C&E experiments. The presence of a DOI makes datasets of C&E experiments "citable" for users and it would allow uploaders and EURISCO to track the use of the data by citation count.

## Quality of data in EURISCO

The quality, not only the quantity, of data in EURISCO is very important. Errors and inconsistencies in the data hinder users to efficiently search for information.

9. We support the establishment of a quality check system in EURISCO, for example regarding taxonomy and geographic coordinates.
10. We support actions to encourage collection holders to adopt common naming practices and clean their data of errors.
11. Lower quality data, such as poorly documented field observations, can be included but should have a "warning" explaining the limitations.

## Visibility of European genetic resources, C&E data, EURISCO and ECPGR

The workshop considers that the awareness of breeders and other users about genetic resources available at European gene banks and about the associated C&E data is too low. Actions should be taken to broaden/spread this knowledge:

12. Crop portals could be a way to not only inform about specific crops but also channel users into relevant parts of EURISCO and the ECPGR homepages. The workshop participants agreed that a European Crop Portal should:
  - a. Aim at increasing the knowledge about the crop, the genetic resources available in Europe, C&E data and at the same time increase the visibility of EURISCO and ECPGR.
  - b. Be hosted under the umbrella of ECPGR.
  - c. Be "owned" by the relevant Working Group (not individual persons).
  - d. Channel users into a relevant view ("subpage") of EURISCO devoted to the specific crop.
  - e. The forage WG will set up a simple Forage Crop Portal during 2017 and this can serve as an example of how such a portal can look and function.
  - f. The barley WG will postpone development of a barley portal until discussions have been held with the wheat and *Avena* WGs on the possible development of a joint cereal portal and about potential overlap with other similar initiatives.
13. Actions directly targeted towards breeders and pre-breeders should be initiated to inform about the new C&E module in EURISCO and the type of data available. This should include presentations of EURISCO on conferences.
14. The inclusion of EURISCO as data provider for GBIF (the Global Biodiversity Information Facility) should be updated and extended for C&E data. Each holding institution should appear as separate data owner.
15. Explore additional data-publishing pathways from the data publishing genebank to the NFPs and EURISCO utilizing the GBIF data-publishing infrastructure, including support and training from the national GBIF Node helpdesks that are established in GBIF member countries.

## Workshop participant list

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