

EURISCO Newsletter, No. 12

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The EURISCO Newsletter is a series of electronic bulletins that provide feedback to National Focal Points (NFPs) and serve as a dissemination vehicle for NFPs and other partners to put forward their contributions regarding plant genetic resources issues/themes. The EURISCO Newsletter is the successor of the previous EURISCO e-bulletin. In order to ensure that the EURISCO Catalogue is sustainable and meets the NFPs' and other users' needs, everyone is invited to contribute to this newsletter. Thematic papers, ideas, comments, suggestions and questions are all welcome.

Coverage of EURISCO

As another year draws to a close, it is time to review the latest EURISCO developments.

During 2022, the number of accessions documented in EURISCO grew by 10,087, reaching 2,081,968 on 1 December 2022. These accessions are maintained in 405 institutions and include 6,730 genera and 45,172 species. The number of AEGIS accessions increased by 10,729 to a total of 70,413. Phenotypic data records increased by 33,297, reaching a total of 2,716,599. Phenotypic data are sourced from 21 countries and are available for 90,974 accessions. Further data is welcome at any time and can be provided to EURISCO by involving the National Inventory Focal Points.

Infrastructure for data providers

After the upload/update process for passport data was renewed last year, the corresponding process for phenotypic data has also been completely revised this year. This was necessary because the technology used so far can no longer be used in the foreseeable future due to changes in licensing conditions and restrictions in manufacturer support. The aim of the revision was to implement a purely web-based solution analogous to the new update mechanism for passport data. Third-party software and special firewall permissions are

now no longer required. The new infrastructure has been available to EURISCO data providers since the summer.

New public web interface

An important focus of activities was EURISCO's new public web interface. Both technologies and user behaviour are constantly evolving. Therefore, even established information systems have to be revised regularly. Thus, the central EURISCO web application was also completely revised. Extensive work on this was already started in 2021 and continued this year. In addition to necessary updates of the technology used, special attention was paid to the implementation of a responsive design. In this context, functionalities of the previous application were assessed to identify those used particularly heavily or little, in order to adopt or adapt them accordingly in the new application. Furthermore, new functionalities were introduced based on user feedback, in particular a combined search via passport data and phenotypic data. Additional functionalities were implemented, such as faceted search, map-based selection of accessions and search indices for scientific names and common crop names. After the completion of extensive performance tests, the interface was made publicly available in spring 2022.

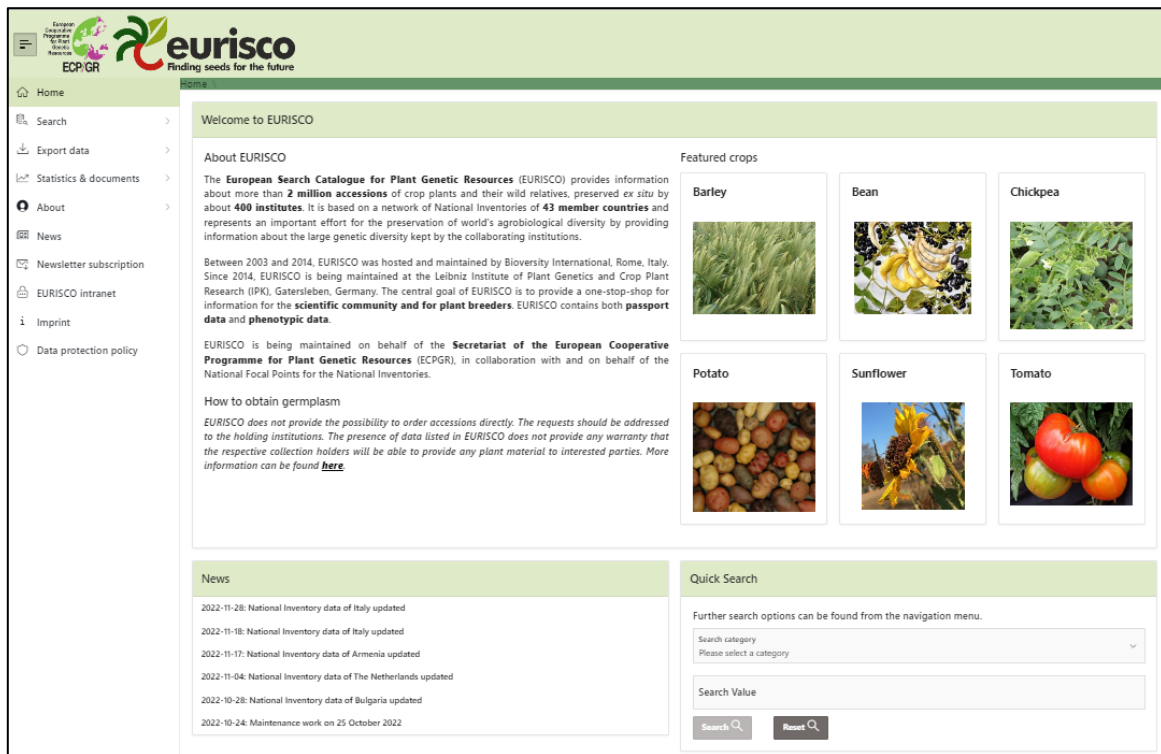


Figure 1: Screenshot from the new public web interface.

Extension for *in situ* CWR data

Within the project 'Extension of EURISCO for Crop Wild Relatives (CWR) *in situ* data and preparation of pilot countries' data sets', funded by the German Federal Ministry of Food and Agriculture and coordinated by the ECPGR Secretariat, the adaptation of EURISCO for *in situ* CWR data started in October 2022. By the middle of next year, it is planned to finalise the EURISCO data standard for *in situ* CWR data, to make the necessary extensions to the infrastructure and upload mechanism, and to add search and visualisation capabilities to EURISCO's public web interface.

EURISCO-related activities

The EURISCO coordination is involved in ECPGR's European Evaluation Network (EVA). Under this initiative, an intranet extension of EURISCO was developed to temporarily host the evaluation data being collected by the network in a protected environment. This feature is necessary, since EVA data is covered by a 3-years embargo, which is an incentive for private breeders to get involved in the partnership. After expiration of the embargo, this data will be entered into the public

EURISCO environment. After the first prototype was already presented in 2021, work on it continued this year and was brought to a conclusion at the end of September 2022. Data exchange templates were finalised, import procedures were completed and the web interface was extended according to the wishes of the users. The completed infrastructure is now available to existing and future EVA consortia.

Particular attention was also paid to the HORIZON 2020 project AGENT, in which EURISCO plays a central role in the management of new data deriving from European wheat and barley collections. In this regard, AGENT also serves as a sandbox to test possibilities for extending EURISCO. For example, a special focus is on improving the FAIRness of data. Furthermore, solutions are being evaluated to link the classical genebank data with genotyping data.

The EURISCO coordination will be involved in the HORIZON-INFRA project 'Promoting a Plant Genetic Resource Community for Europe' (PRO-GRACE) from next year. This project aims to develop a concept and proof-of-concept

actions for the establishment of a large European Research Infrastructure for plant genetic resources. In this context, the EURISCO coordination will focus on information standards.

We will continue to actively participate in preparing further project proposals to acquire additional funding for developing certain aspects of EURISCO.

Dissemination

A publication on EURISCO has been accepted for the 2023 database issue of *Nucleic Acids Research* (DOI: [10.1093/nar/gkac852](https://doi.org/10.1093/nar/gkac852); advance article). This special issue is published once a year with articles on the most important databases in the field of life sciences. The contribution will enhance the worldwide visibility of EURISCO.

The activity report for 2022 and the work plan for 2023 are in progress and will be published early next year.

For more information, please contact:

Stephan Weise, EURISCO coordinator
c/o Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany
phone: +49 39482 5-744, email: eurisco@ecpgr.org