# EURISCO Newsletter, No. 13 December 2023

*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 at the end of every year, it is time to take a look at the latest EURISCO developments.

In 2023, the number of accessions documented in EURISCO increased by 10,278, reaching 2,092,353 on 20 December 2023. These accessions are managed in 413 institutions and include 6,730 genera and 45,128 species. The number of AEGIS accessions increased only minimally last year to a total of 70,428, while the number of phenotypic records rose by 13,181 to a total of 2,729,780. In total, phenotypic data is available for 91,449 accessions from 21 countries. Further data is always welcome and can be made available to EURISCO with the involvement of the National Inventory Focal Points.

## Infrastructure for data providers

The backend infrastructures for uploading and integrating *ex situ* passport data and phenotypic data were continuously maintained and further developed. The switch to purely web-based solutions without the use of third-party software, as already described in the last newsletter, has proved successful.

## Public web interface

The public web application has also been continuously developed. Particular emphasis was placed on the necessary restructuring of the taxonomic search (text indices, processes for synonym mapping, etc.). In addition, new features such as the search for DOIs were also implemented.

## Extension for *in situ* CWR data

As part of the project "Extension of EURISCO for Crop Wild Relatives (CWR) *in situ* data and preparation of pilot countries' data sets", the EURISCO infrastructure has been extended in recent months for the management of *in situ* CWR data.

The data standard for the provision of data and a template for data exchange were already compiled at the end of last year. Following on from this, the database structure has been expanded accordingly for the management of this data and modules for uploading, checking and integrating this data have been developed. A new intranet interface is used to upload *in situ* CWR data, which is based on the previous interface for *ex situ* data in terms of its design and functionalities (Figure 1).

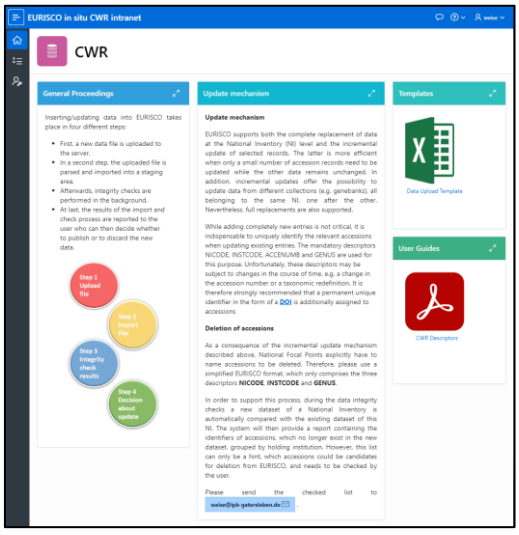


**Figure 1: Intranet interface for *in situ* CWR data.**

In addition to uploading data, it also allows the results of the integrity checks to be reviewed and the final release of new data for EURISCO.

The necessary background functionalities for upload, data integrity checks and data integration were implemented as PL/SQL packages.

Four of the pilot countries involved in the project have already provided data on *in situ* CWR populations for integration into EURISCO. Data on 20 populations have been imported for Bulgaria, 66 for Germany, 1,912 for the Netherlands and 27 for Spain. The web interface has been expanded to include simple filter options (Figure 2). Dedicated search functionalities for *in situ* CWR data will be available in the beginning of 2024.

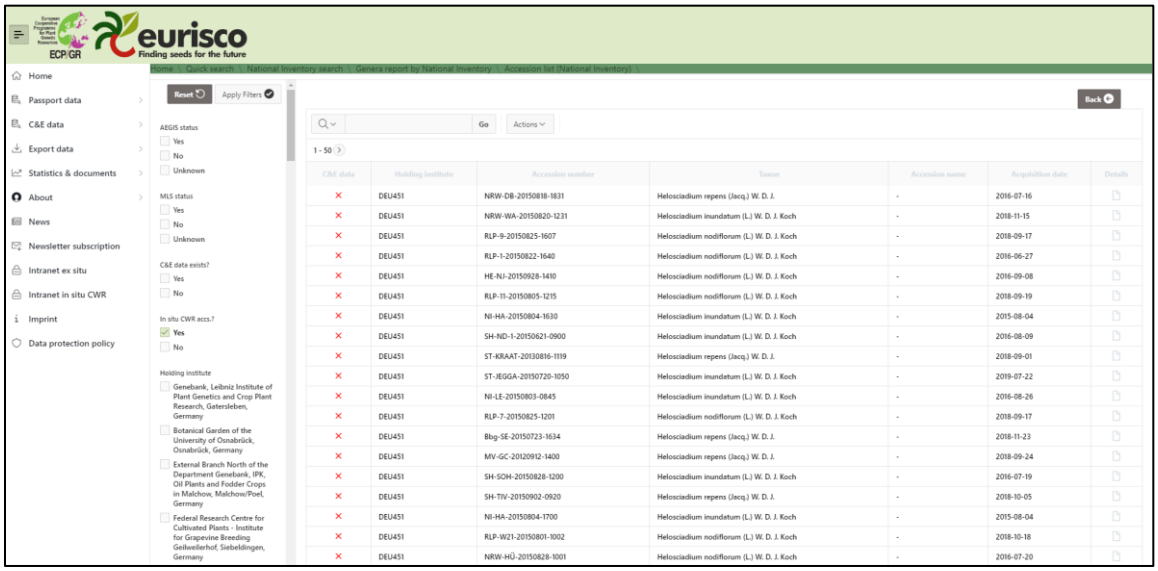


**Figure 2: Search result in EURISCO, filtered by *in situ* CWR populations.**

## EURISCO training workshop

This year's EURISCO training workshop for National Inventory Focal Points took place from 12-14 September 2023 in Plovdiv, Bulgaria. It was the first in-person training since the COVID pandemic and brought together 16 Focal Points who were briefed on the latest developments. The main emphasis of the training was put on the submission of passport and phenotypic data to EURISCO. The major focus in this context was on the preparation and uploading of data, in particular the quality and completeness of the data, but also on the data templates to be used and the uploading procedure. Practical exercises on uploading and testing data sets of the individual participants were carried out. In addition, the use of Digital Object Identifiers (DOIs) as unique and stable identifiers for plant genetic resources and their support by EURISCO was discussed.

The report of the training workshop is available from the ECPGR website.

## EURISCO-related activities

The EURISCO coordination was also involved in various projects. In particular, special attention was paid to the HORIZON 2020 project AGENT, in which EURISCO plays a central role in managing new data from European wheat and barley collections. AGENT serves as a sandbox to test ways of expanding EURISCO. A particular focus, for example, is on improving the FAIRness of the data. In addition, solutions for linking traditional genebank data with genotyping data are being evaluated.

From the beginning of this year, the EURISCO coordination has been involved in the HORIZON Europe project PRO-GRACE. The aim of this project is to develop a concept and proof-of-concept measures for the

establishment of a large European Research Infrastructure for plant genetic resources. In this context, the EURISCO coordination focusses on information standards and the interaction of different information systems.

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

## Dissemination

An article about EURISCO was published in the 2023 edition of the renowned database issue of *Nucleic Acids Research* (Kotni et al., 2023). This special issue is published once a year with articles on the most important databases in the field of life sciences.

In addition, together with colleagues from the Global Crop Diversity Trust and the James Hutton Institute, among others, a book chapter on database solutions for genebanks and germplasm collections was written, in which EURISCO was also discussed (Shaw et al., 2023).

The conservation of the rapeseed gene pool in European genebanks was analysed on the basis of data from EURISCO and other sources. In addition to a gap analysis of accessions of the various species, this also included the use of a niche modelling approach to investigate how the natural distribution ranges of these species are expected to change by the end of the century, assuming different climate change scenarios (Weise et al., 2023).

The activity report for 2023 and the work plan for 2024 are in progress and will be published early next year.

**For more information, please contact:**

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