

# **Europe's crop wild relatives** *in situ* data now in EURISCO





#### **Background**

Crop wild relatives (CWR) – wild plant species closely related to cultivated crops – are key genetic resources for crop improvement due to their rich and evolving diversity. As climate change intensifies, utilizing this diversity becomes more urgent. Global agreements such as the Convention on Biological Diversity (CBD), the FAO Global Plan of Action (GPA), and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) emphasize the importance of documenting and conserving CWR, especially *in situ*, i.e. in the natural habitats where they occur, and enabling their sustainable use. However, conservation efforts across Europe vary strongly, with scattered or missing data, making it difficult to find and access these resources.

An ECPGR project, funded by the German Federal Ministry of Agriculture, Food and Regional Identity, aimed to improve this situation by encouraging the establishment of national CWR inventories and integrating *in situ* data into the central European Search Catalogue for Plant Genetic Resources (EURISCO).

The project successfully extended the EURISCO catalogue to include CWR *in situ* data. Early efforts focused on defining clear criteria for identifying CWR populations eligible for inclusion – specifically, those under active conservation and potentially available to users. These criteria were published in the document *Principles for the Inclusion of CWR Data in EURISCO*, developed in consultation with the ITPGRFA Secretariat and endorsed by project partners and the EURISCO Advisory Committee. A standardized data exchange format was established, and CWR National Inventory Focal Points were appointed to manage national data flows into EURISCO.

Pilot countries were supported in organizing their internal data collection processes and successfully submitted initial datasets, using EURISCO-specific descriptors. The data were reviewed and uploaded to the system, enabling broader access. As of November 2025, 14 countries have contributed data covering 19,133 CWR populations. EURISCO now offers a centralized, searchable resource that links users to managing institutions or liaison contacts, facilitating access to the material.

This project marks a significant advancement in harmonizing CWR preservation and documentation efforts across Europe, supporting both conservation goals and crop improvement through better access to this valuable genetic diversity.

#### In situ CWR National Inventories created

The development of CWR National Inventories by National Focal Points follows a key process: starting with national checklists, defining priority taxa, and finally, collecting data on priority populations.

### **Principles for the** inclusion of CWR data in EURISCO

In situ CWR NIs are compiled by National Focal Points and document precisely located priority CWR populations. Those actively conserved for long-term persistence, and accessible in principle, are selected for EURISCO.



EURISCO should include only actively conserved populations that can be in principle made accessible to users.

More details

Including in situ populations in EURISCO means users can request access through designated channels, with terms varying by country.

More details



sustainable use of plant genetic resources.

# creating an in situ CWR **National Inventory**

interoperability and compatibility with EURISCO, while allowing flexibility for

### **Descriptors for** uploading in situ CWR data to EURISCO

Describes the data exchange format for uploading passport data from the National Inventories for in situ CWR to EURISCO.

View descriptors

### CWR in situ data available in **EURISCO** catalogue

By the end of the project:

- 17 pilot countries
- 17 National Inventories
- 19,133 CWR populations in EURISCO

More details

Country	Main results	No. of populations in EURISCO (as of November 2025)	Genera and taxa
Albania	A network of public and private data providers was organized. A National list of CWR was created, and 472 taxa were prioritized. A first set of priority populations were identified from three protected areas.	1,146	160 genera, 281 taxa
Bulgaria	A national in situ CWR database structure was prepared. A network of data providers has been identified, including the Ministry of Environment.	243	20 genera, 32 taxa
Cyprus	Priority list includes 177 CWR. In total, 5,206 populations were identified, representing all priority taxa. 391 populations included in EURISCO (all in protected areas) represent 73% of the priority taxa.	391	25 genera, 126 taxa
Czech Republic	Priority list of 98 taxa defined, based on threat status. National database structure revised to accommodate <i>in situ</i> data. Ongoing collaboration with the environmental sector. Guidelines for <i>in situ</i> conservation in progress.	*	
Georgia	National inventory was created. Activities focused on grapevine, wheat and legume CWR. Passport data were collected from 12 sites through six survey missions.	*	
Germany	Criteria and priority list defined. Genetic reserve conservation projects underway for wild celery, wild grapevine and mountain arnica.	66	2 genera, 4 taxa
Italy	Population monitoring focused on prioritized CWR of <i>Avena</i> , <i>Brassica</i> , <i>Cynara</i> , <i>Hordeum</i> , <i>Lactuca</i> , <i>Malus</i> , <i>Secale</i> , <i>Triticum</i> and <i>Vicia</i> . Collaborations were established with managers of protected areas in three regions (Abruzzo, Puglia, Trentino). A model agreement to provide access to CWR populations and guidelines for collecting material were established in Trentino.	97	18 genera, 28 taxa
Lithuania	A total of 1,080 populations representing 96 CWR species (65% of the priority list) were included in the dataset, with a median of seven populations per species. The number of CWR priority species (currently 147) is being revised. Three partners agreed to provide data, including the Lithuanian State Service of Protected Areas and two NGOs.	1,079	46 genera, 96 taxa
Netherlands	The Dutch CWR National Inventory was compiled using 26 descriptors. This includes 298 well-defined threatened populations, prioritized based on niche modelling and climate change scenarios. The other 1,614 are diffused populations that are common in the Netherlands. All accessions are available in principle through CGN.	1,912	89 genera, 219 taxa
North Macedonia	CWR National inventory structure was prepared, and priority taxa identified based on potential for crop improvement. Initial steps made to establish a network of data providers. First set of available population data provided to EURISCO.	188	10 genera, 21 taxa
Poland	National inventory data structure prepared and CWR taxa prioritized based on practical use. First set of available population data provided to EURISCO.	111	43 genera, 58 taxa
Portugal	A national task force prepared the CWR National Inventory. The work involved identifying priority CWR populations across mainland Portugal, Azores and Madeira based on economic interest, native status and potential for crop improvement. The inventory also includes European priority CWR populations that occur in Portugal, as well as populations currently managed in genetic reserves. Furthermore, priority populations of wild olive and wild grapes were identified for the entire Iberian Peninsula. Supporting work is underway, including an analysis of climate change scenarios, the organization of data providers, and the establishment of material access guidelines.	12,197	79 genera, 253 taxa
Romania	CWR priority taxa defined based on a list of criteria. CWR National database structure developed. Lists of priority CWR obtained for two protected areas and three potential genetic reserve areas identified. Initial population data set provided to EURISCO.	67	15 genera, 21 taxa
Slovakia	Defined list of priority taxa; national data structure for in situ CWR prepared; partnerships with nature conservation offices established.	364	16 genera, 33 taxa
Slovenia	Identified priority populations of hops, wild grapes and myrobalan plum. National programme on in situ CWR in progress.	*	
Spain	Priority list of 521 species defined. National network of collaborative private and public data providers identified. A database structure has been prepared. Proposal to establish 50 genetic reserves prepared. Initial data set of populations conserved in four genetic reserves provided to EURISCO. Provision of more data under discussion.	24	15 genera, 22 taxa
United Kingdom	223 CWR taxa prioritized based on several criteria. CWR National Inventory records within the top 15 National Nature Reserves selected for data provision to EURISCO. Natural England acting as liaison for access to material. A first set of 1,248 population data was uploaded to EURISCO.	1,248	27 genera, 37 taxa

<sup>\*</sup>The data is currently being provided and will be available in EURISCO shortly

#### **Looking ahead**

The successful integration of *in situ* CWR data into EURISCO provides a strong foundation for future development. Continued efforts will focus on expanding participation across more European countries, improving data quality and consistency, and supporting regular updates through sustained national-level engagement.

Further capacity building for National Inventory Focal Points will be essential to ensure the long-term functionality and relevance of the system. National Coordinators of countries contributing data to EURISCO are invited to nominate their *In situ* CWR National Inventory Focal Point, i.e. the national node that can provide *in situ* population data to EURISCO.

The advancements achieved through this project have been recognized in the most recent *State of the World's Plant Genetic Resources for Food and Agriculture* report and have been shared with the FAO's Global Information System (GLIS), contributing to global knowledge-sharing and coordination.

#### **Participating countries**

Albania, Bulgaria, Cyprus, Czech Republic, Georgia, Germany, Italy, Lithuania, North Macedonia, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, United Kingdom

# No. of CWR *in situ* populations included

19,133 *(as of November 2025)* 

#### Time frame

December 2021 - June 2025

#### **Funder**

Federal Ministry of Agriculture, Food and Regional Identity, Germany

### **Budget**

€317,316



www.ecpgr.org/cwr-in-eurisco





