

FINAL REPORT for L22ROM223

Inclusion of wild relatives of cultivated plants in EURISCO

IPGR-Sadovo

According to the agreement the activities, that has to be reported in the interim report are as follows:

1. Identify priority taxa and populations.

The Inventory was made based on the existing CWR collections in the Bulgarian genebank and priority taxa have been determined. Prioritization was done according to the practical use and protected status of each CWR genera.

The starting point of the CWR list of taxa was a Project, funded by the Ministry of the Environment in 2014.

Our inventory includes 81 CWR populations from 26 plant genera /*Allium*, *Anethum*, *Apium*, *Daucus*, *Lathyrus*, *Lotus*, *Lupinus*, *Medicago*, *Melilotus*, *Pisum*, *Trifolium*, *Vicia*, *Lamium*, *Salvia*, *Sideritis*, *Aegilops*, *Avena*, *Bromus*, *Dactylis*, *Festuca*, *Hordeum*, *Lolium*, *Poa*, *Rosa*, *Secale*, *Valeriana*/. All these accessions are included in the National inventory of the genebank in IPGR-Sadovo and were originally collected from their wild habitats. Most of the populations are preserved as seed collection. Some of them, totally 4 /*Mentha* sp. and *Rosa* sp./ are in living collection and 2 are in in-vitro storage /*Sideritis* sp./.

The inventory includes information about: taxonomic data (such as taxa accepted names and authority), cultivated status, in situ conservation status, ex situ conservation status.

For purposes of classification, about 6 genera of the priority taxa are primarily considered as wild relatives of aromatic and medicinal crops or as wild taxa that are harvested and used for aromatic and medicinal purposes. There are 7 taxa primarily considered as food plants. The rest of the genera from the list are forages and fodder and other uses.

The development of the inventory of priority CWRs is an important first step for development of national strategy for the conservation of CWR. National checklists/ inventories allow us to characterize a country's richness concerning these resources, also regarding the conservation and access to the material.

A considerable part of Bulgarian flora is potentially useful either indirectly as a gene source for plant breeding and improvement (CWR) or directly in traditional and popular uses. The importance of conserving these resources is twofold: they may provide useful genes for the improvement of varieties in the future, and they will also serve to maintain the knowledge and sustainable supply of wild useful plants ensuring the diversity of uses as much as possible. Once this list is completed, it becomes a powerful tool for nature conservation management helping us in setting priorities and subsequently establishing conservation programmes.

2. Prepare the national in situ CWR populations database structure.

The structure of EURISCO database has been used. Data is transformed in EURISCO *in situ* CWR data standard data format.

The future collections of CWR species will be added in the same database.

Our inventory provides baseline information on the CWR *in situ* populations? in Bulgaria. As it is intended to be a useful tool for conservation managers and other researchers, the inventory will be made available online as a next step.

3. Organize the network of data providers.

The network data providers are scientific institutes that have deposited their seeds in the National genebank – Institute of Roses and Essential oil plants and Forage Research Institute. These two scientific organizations work with wild species.

Contacts with the responsible authorities from the Ministry of Environment in Bulgaria for providing information about species – CWR with protected status has been established.

4. Authorized CWR Focal Point from Bulgaria and first data transfer.

CWR Focal Point from Bulgaria Dr Nikolaya Velcheva has been authorized.

The first transfer of data has been uploaded, using the EURISCO *in situ* CWR data standard (FAO/Bioversity, 2022):

https://www.ecpgr.cgiar.org/fileadmin/bioversity/publications/pdfs/EURISCO_in_situ_CWR_descriptors.pdf

On 19.12.2023, passport data describing the first 20 populations from the priority taxa: *Glycirriza*, *Silene*, *Trifolium*, *Heracleum*, *Calamagrostis*, *Dactylis*, *Bromus*, *Mentha*, *Stachys*, *Lepidium*, *Clinopodium*, *Achillea*, *Daucus*, *Lotus*, *Mentha* from Bulgaria were uploaded to the EURISCO web page using the Intranet *in situ* CWR.

5. Dissemination of results.

We made dissemination during the open day of the Institute on 22 May 2023 by presenting of the project tasks and outcomes to students, producers and colleagues.

We made dissemination of results during the international conference V. BALKAN AGRICULTURAL CONGRESS, September 20-23, 2023, Edirne, Turkey by presenting of the project tasks and outcomes to foreign scientists from all over the world.