

Interim technical 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.

Inventarization of the existing CWR collections in the Bulgarian genebank and priority taxa has 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 accessions from 26 plant genera / Allium, Anethum, Apium, Daucus, Lathyrus, Lotus, Lupinus, Medicago, Melilotus, Pisum, Trifolium, Vicia, Lamiaceae, Salvia, Sideritis, Aegilops, Avena, Bromus, Dactylis, Festuca, Hordeum, Lolium, Poa, Rosa, Secale, Valeriana/. All these species are from the National inventory of the genebank in IPGR-Sadovo and are collected from their wild habitats. Most of the species are preserved in 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./.

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

For purposes of classification, about 6 genera of the 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 inventory 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 database structure.

The structure of EURISCO database has been used and it is read to be uploaded in EURISCO. The future collections of CWR species will be added in the same database.

Our inventory provides baseline information on the CWR 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 are 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.

We made dissemination during the open day of the institute by presenting of the project tasks and outcomes to students, producers and colleagues.