11th SCIENTIFIC CONFERENCE OF EFSA FOCAL POINT BULGARIA „SCIENCE – FROM POSSIBILITY TO ACTION”
07-08 November 2018, Sofia

STATUS OF THE NATIONAL COLLECTION OF PLANT GENETIC RESOURCES IN THE EUROPEAN ELECTRONIC CATALOG EURISCO

NIKOLAYA VELCHEVA
INSTITUTE OF PLANT GENETIC RESOURCES – SADOVO
E-mail: nikolaya_velcheva@abv.bg

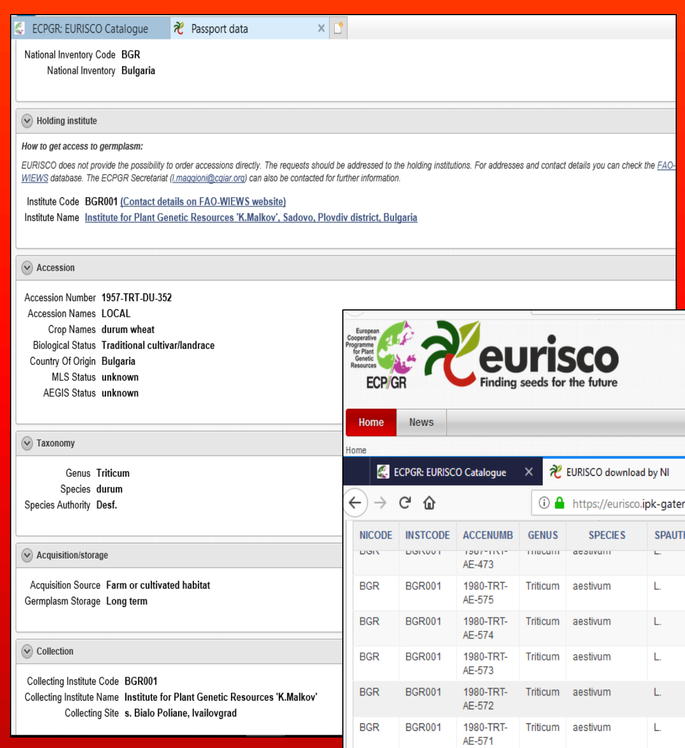
Conservation of Agrobiodiversity is a complex interdisciplinary process, which is the object of different National and International initiatives. The European countries unite their efforts in this direction by organizing the European Cooperative Programme for Plant Genetic Resources (ECPGR). One of the priorities of the programme is adapting uniform mechanisms for registration and description of the stored seed samples. EURISCO is an international database containing information about the ex situ PGR collections in Europe.

THE BULGARIAN NATIONAL INVENTORY IS PUBLISHED IN THE EUROPEAN SEARCHING CATALOGUE FOR PLANT GENETIC RESOURCES

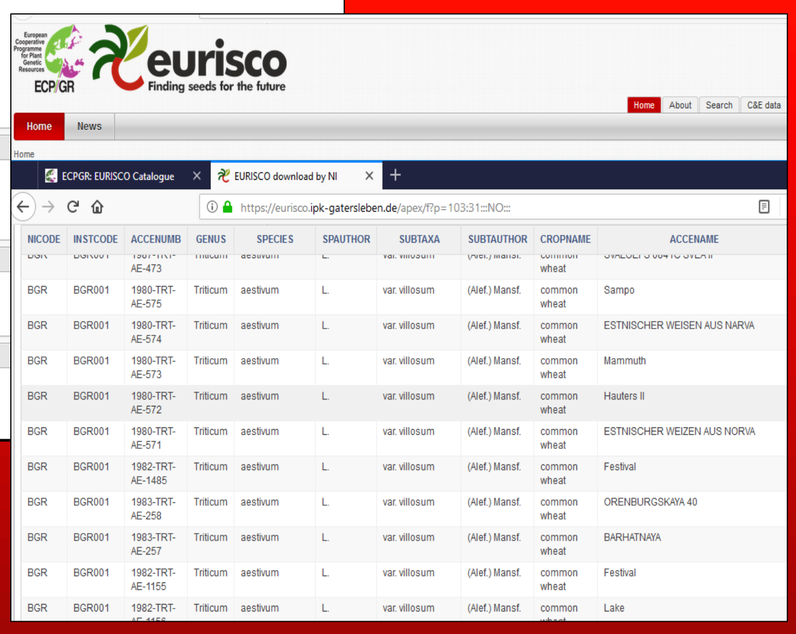
WEB INTERFACE

- **Multi-Crop Passport Descriptors (FAO/Bioversity)**
- **The seventh-largest National Inventory in Europe**
- **3,5 % of the whole European *ex situ* PGR collection**
- **27 % local accessions, with local Bulgarian origin**

PASSPORT DATA



- **Taxonomy description**
- **Accession**
- **Country of origin**
- **Biological status**
- **Collecting site**



According to EURISCO http://eurisco.ecpgr.org/ (November, 2018), the database of Bulgarian collection includes passport information about 69,336 accessions. The collection consists of genotypes characterized with diverse geographic origin.

Table 1. Holding institutes of the Bulgarian National Inventory

FAO INSTCODE	HOLDING INSTITUTION	ACCNUMB	BGR ORIGIN
BGR001	Institute for Plant Genetic Resources, Sadovo	64,916	15,990
BGR005	Institute of Rose and Essential-oil Plants, Kazanlak	563	4
BGR029	Dobrudja Agricultural Institute, General Toshevo	3,857	1,829
	TOTAL NUMBER	69,336	17,823

With respect to the taxonomic composition, the Bulgarian National Inventory consists of accessions belonging to 532 genera and 1,927 species.

According to the sample status, the germplasm divides into various categories:

wild
weedy
traditional cultivar/landrace
breeding/research material
breeders' line
synthetic population
hybrid
genetic stock
advanced cultivar
unknown

Table 2. Species with more than 1,000 accessions

SPECIES	CROP NAME	ACCNUMB	BGR ORIGIN
Triticum aestivum	Common wheat	12,886	2,784
Hordeum vulgare	Barley	6,205	287
Zea mays	Maize	4,770	1,892
Phaseolus vulgaris	Garden bean	3,135	1,345
Avena sativa	Oat	2,452	142
Triticum durum	Durum wheat	2,367	1,193
Pisum sativum	Pea	1,628	240
×Triticosecale	Triticale	1,459	533
Linum usitatissimum	Flax	1,442	77
Arachis hypogaea	Peanut	1,325	428
Capsicum annuum	Pepper	1,286	815
Secale cereale	Rye	1,258	808
Lycopersicon esculentum	Tomato	1,168	336
Cucumis sativus	Cucumber	1,011	75

CONCLUSIONS

ECPGR improves the collaboration, focusing on the conservation and sustainable use of plant genetic resources, which are an inexhaustible source of useful features for crop improvement.

ECPGR builds constructive cooperation between different partners (genebanks, research institutes, breeders, NGO, farmers, etc.).

EURISCO electronic portal eliminates the restrictions associated with distant locations of genebanks and as a result, improve coordination between organizations and researchers in the area of plant genetic resources and have an active impact on preservation of Plant Biodiversity.

EURISCO provides free access for potential users to conserved genotypes according to the principles of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA, 2009) and the implementation of the Nagoya Protocol (CBD, 2011) on equitable distribution of their benefits.

ACKNOWLEDGEMENT

The enrichment of the Bulgarian National Inventory is performed by implementation of the project „European Electronic Catalogue on Plant Genetic Resources EURISCO”, Bioversity International, ECPGR (2014-2020) and was supported by a training mobility of Dr. Nikolaya Velcheva (EURISCO National focal point Bulgaria) to IPK Gatersleben, Germany in 2015, funded by ERASMUS+ Project.