



NATIONAL AGRICULTURAL
AND FOOD CENTRE

RESEARCH INSTITUTE OF
PLANT PRODUCTION

NI STATUS OF PGR IN SLOVAK REPUBLIC THROUGH GRISS

(**G**enetic **R**esources **I**nformation **S**ystem
of **S**lovakia)

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**EURISCO National Focal Point regional training
workshop, 12-14.9.2017, Gatersleben, Germany"**



4 chambers = 400 m³ with total capacity 50k acc.

Basic collection – long term seed storage -18°C, 50 years

Active collection - medium term seed storage, 0-4°C, 10 years

Save duplication - GeneBank Prague, Czech Republic



Conservation of PGR in Slovakia

- is made according to National Programme of Plant genetic Resources for Food and Agriculture
- established in year 1996
- is funded and supported by the Ministry of Agriculture
- mandate for co-ordination was given to RIPP
- NP is treated by law 215/2001



GRISS

Genetic Resources Information System of Slovakia

<http://griss.vurv.sk>

-Environment:

Microsoft .NET Framework 4.5 Technology with ASP.NET

-App Server + Web Server:

MS Windows Server 2012 R2 6.3 on VMvare vSphere 6.5/ Microsoft-IIS/8.0 Web Server

-DB Server:

MS SQL Server 2008 R2



GRISS

- is fully compatible with the descriptors of FAO/Bioversity
- It has been designed to the best possible user interface
- in GRISS can **search by** crop, taxonomy, origin, acquisition, status of sample and other requirements
- The collected **germplasm is freely available** for use in scientific research programmes
- information system is **freely accessible** at

<http://griss.vurv.sk>



GRISS

- is a **search catalogue** provides web-based access to information on plant genetic resources held in *ex situ* collections throughout Slovakia
- allows users to **search and obtain information** about number of crop species such as cereals, legumes, fodder crop, medicinal and aromatic plants, wild species, landraces and breeding lines
- allows access to information for gene bank managers, curators of collections, scientists, breeders, farmers, students and the general public's responses





GRISS

INFORMAČNÝ SYSTÉM GENETICKÝCH ZDROJOV RASTLÍN SLOVENSKA
GENETIC RESOURCES INFORMATION SYSTEM OF SLOVAKIA

Search sample

Search via

> [PASSPORTS](#)

> [DESCRIPTIONS](#)



INFORMAČNÝ SYSTÉM
GENETICKÝCH ZDROJOV
SLOVENSKA

National search portal ex situ seed samples generative propagated species of plant genetic resources stored in the active collection in the Gene Bank of the Slovak Republic and vegetatively propagated species in a field collection

[+ More...](#)

We support research activities in Slovakia
The project is co-financed from EU sources



Európska únia

Európsky fond regionálneho rozvoja



ASFEU

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- > [About](#)
- > [Gene bank](#)
- > [Delivering accession](#)
- > [Biodiversity monitoring](#)
- > [Contact](#)

VSTUP-KURÁTOR

- > [Sign in](#)
- > [Registration](#)

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Research Institute of Plant Production Piešťany.
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Site supports CMS ActiveWeb Lomtec.



Filtering through passports

Multicriteria Search

Search sample

EURISCO	Descriptor	FullName	Searched text	SearchedItems
	ACCENUMB	Accession number	<input type="text"/>	> Choose
	GENUS	Genus	<input type="text"/>	Triticum > Choose
	SPECIES	Species	<input type="text"/>	> Choose
	Accession name	Accession name	<input type="text"/>	> Choose
13.	ORIGCTY	Country of origin	<input type="text"/>	SVK > Choose
19.	SAMPSTAT	Biological status of accession	<input type="text"/>	300 > Choose
21.	COLLSRC	Collecting/acquisition source	<input type="text"/>	> Choose
	SEEDAVAL	Seed availability	<input type="text"/>	> Choose

GRISS

-in terms of **target user groups** and **associated functionality** is divided into two functional and interdependent parts:

- a) Front Office
- b) Back Office



a) Front Office

- **public part** of IS, designed primarily to end-users from the professional community, facilitates communication and dissemination of knowledge accumulated from the research of plant genetic resources in Slovakia

- in particular, it's the communication of basic information on samples of plant genetic resources stored in the NPPC RIPP in the Gene Bank. Registered users (applicants) allows samples of genetic resources to **order**

Web portal is available at <http://griss.vurv.sk>



b) **Back-office**

- **non public part** of IS accessible only to authorized users - curators of collections of plant genetic resources through a user name and password

- This section is intended primarily curators of genetic resources and gene bank management to a comprehensive management of all *ex situ* accessions of plant genetic resources stored in an active and base collection of NPPC RIPP in the Gene Bank SR.

WEB portal is available at <http://kurator.vurv.sk>



Back-office

-is used by all institutes cooperating within the National Programme.

Internally is composed from some parts:

- passport data
- receiving samples into a gene bank
- C & E data
- storage data
- monitoring and regeneration
- reports
- herbarium
- distribution of samples to users



DATA MANAGMENT

STORAGE

REQUEST Code LISTS Managment



Správa vzoriek

Protokoly

Príjem vzorky

Skladové položky

Herbár

Monitoring

Regenerácia

Žiadosti

Správa číselníkov GB



Zmeniť heslo

Vzorky

Import vzoriek

Pozorovania/Pokusy

Zberové expedície

Skladové položky na regeneráciu

SUBMENU

MAIN MENU

DATA IMPORT

TRIALS

COLLECTIONS

Zoznam vzoriek

SEARCH ADV. SEARCH

ADD NEW

+ Nová vzorka

Hľadaj + zobrazíť rozšírený filter

Mail kurátorovi

data filtering

Export

+ Nový záznam										
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z										
Zrušiť výber <input type="checkbox"/> Zobraziť v Exceli <input type="checkbox"/>										
ACCENUMB	ACCENAME	Kód pl.	Plodina	FAO kód	Stav pasportu	A	Z	Zobraz žiad.	Stav odovzd.	Akcie
SVK001 A73 00020	SVNPIR01-261	A73	skorocel	SVK001	Passport neskontrolovaný	19,500	0	zobrazovať	neodovzdaná	
SVK001 AE6 00001	CZEJIZ2009-40	AE6	veronika lekarska	SVK001	Passport neskontrolovaný	1,500	0	zobrazovať	neodovzdaná	
SVK001 C01 05290	Triticum aestivum	C01	Pšenica ozimná	SVK001	Passport neskontrolovaný	274,000	0	zobrazovať	neodovzdaná	
SVK001 C01 05291	Triticum macha	C01	Pšenica ozimná	SVK001	Passport neskontrolovaný	259,000	0	zobrazovať	neodovzdaná	
SVK001 C01 05292	Triticum macha	C01	Pšenica ozimná	SVK001	Passport neskontrolovaný	252,000	0	zobrazovať	neodovzdaná	
SVK001 C01 05297	Triticum timopheevii	C01	Pšenica ozimná	SVK001	Passport neskontrolovaný	190,000	0	zobrazovať	neodovzdaná	
SVK001 C01 05298	Triticum urartu	C01	Pšenica ozimná	SVK001	Passport neskontrolovaný	152,000	0	zobrazovať	neodovzdaná	
SVK001 C01 05299	DIM 77	C01	Pšenica ozimná	SVK001	Passport neskontrolovaný	252,000	0	zobrazovať	neodovzdaná	
SVK001 C01 05300	DCS 11	C01	Pšenica ozimná	SVK001	Passport neskontrolovaný	236,000	0	zobrazovať	neodovzdaná	

Vzorka: Klea

Základné nastavenia pasportu vzorky

Interný komentár:

IMPORT

Poznámka:

Pasportné informácie o vzorke

Skrátený názov	Descriptor	Kód descriptora	Poradie záznamu (Portál)	EuriscoCode	Hodnota	
ORIGCTY	Štát pôvodu	17	12	13.	Slovenská Republika	?
SAMPSTAT	Biologický typ genetického zdroja	28	13	19.	500 - Vyšľachtený kultiva	?
ACQDATE	Dátum zaradenia do kolekcie	30		12.	01.01.1998	?
GROWSEASON	Výtrvalosť	32	27		1 - Annual plant	?
SEEDA/AIL	Dostupnosť/Objednateľnosť vzorky	33	58		L - Limited, depended fro	?
PLOIDYLEV	Typ ploidie	34	25		6 - 6n-hexaploid	?
DONORCODE	Kód inštitúcie darcu	35	15	22.	SELEKT, VŠÚ, a.s. Bučany Vybrat ... Refresh	?
DONORNAME	Meno inštitúcie darcu	36	16	22.1		?
DONORNUMB	Číslo položky u darcu	37	17	23.	BU-34-10	?
OTHERNUMB	Ďalšie identifikačné číslo	38	18	24.		?
MAINFORM	Spôsob udržovania	39			S - semená	?

Survey of passport data for PGR in Slovak collections

Collection	Total passports
Cereals	11203
Leguminous plants	3594
Grasses	2013
Grape	1718
Corn	1682
Fruit trees	1596
Fodder crops	1168
Industrial and energy. crops	806
Potato	747
Oilseeds	701
Vegetables	604
Arom. and medicinal plants	436
Pseudoobilniny	263
Beet	155
Flowers	66
Ornamental trees, roses	17
TOTAL	26.679





Správa vzoriek

Protokoly

Prijem vzorky

Skladové položky

Herbár

Monitoring

Regenerácia

Žiadosti

Správa číselníkov GB

Vzorky

Import vzoriek

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Zberové expedície

Skladové položky na regeneráciu

Vzorka: Klea

Základné údaje

Zberová expedícia

Pasport

Charakteristika vzorky

Stav popisných údajov

Stav popisu:

--- nezadaná hodnota ---

Hodnoty znakov pre vzorku

Znak	Stupeň prejavu	Poznámka	Poznámka - anglicky
Rastlina-tvar trsu	5-polovzpriamený (41,00)		
Rastlina-výška	1-zakrpatená (0,00 - 35,0)		
Steblo-dĺžka horného internódia	3-krátka (20,00 - 24,00)		
Steblo-hrúbka	4- (3,10 - 3,50)		
Steblo-vyplnenosť (dreň)	1-chýba (duté) (-)		
Steblo-osrienenie kŕčku najvyššieho internódia	--- nezadaná hodnota ---		
Steblo-farba horného internódia	--- nezadaná hodnota ---		
Vlajkový list-postavenie	3-vzpriamený (15,00 - 45)		

Skladová položka: 4703 - C01-02734 Klea

Základné vlastnosti

Vzorka: C01-02734/Klea Plodina: Pšenica ozimná
Typ skladu: A Skladové číslo (od-do): 4703
ID vzorky: 4740
Dátum naskladnenia: 13.05.1999
Uskladnené množstvo: 90,48 g
Dátum umiestnenia SD: Prístupnosť vzorky: A
HTS: 49,60
Status: Aktívna Vyradená Zlikvidovaná

Zostatok: 90,48 g

Amount

Umiestnenie

Komora: A1
Typ kontajnera: Stredný
Regál: 5
Polica: F
Miesto: C/1
Pohár: 25
Počet pohárov: 1

Localisation Data in
Storage

Regenerácia

 Potrebná regenerácia (pre aktiváciu zaškrtnite)

Vyskladnenia vzorky

Výdaj

[Zobraziť v Exceli](#)

Žiadateľ	ks	g	Účel výdaja	Dátum vyskladnenia	Poznámka	Akcie
	150,000	150,000	V	30.5.1905 0:00:00	GB-monitoring; VURV; 921 68 Piestany; Bratislavská 122; Slovak Republic	✎
	100,400	100,400	Monitoring	5.6.2014 0:00:00	GB-monitoring; VURV; 921 68 Piestany; Bratislavská 122; Slovak Republic	✎

Collection	Active Collection (0 - +4 ⁰ C)	Base Collection (-18 ⁰ C)
Arom. and medicinal plants	371	43
Beet	152	56
Cereals	10801	1517
Flowers	28	62
Grasses	203	89
Vegetables	324	143
Leguminous plants	3360	963
Oilseeds	600	266
Fodder crops	960	83
Industrial and energy. crops	473	240
Corn	841	416
Pseodocereals	250	16
TOTAL	18.366	3.894
TOTAL A+B coll.	22.260	



Summary NI - Slovakia

Passport data	26.679	accessions
Active collection	18.366	accessions
Base collection	3.894	accessions
Save duplication	3.884	accessions
C & E data	8.333	accessions
Species	181	

**status with duplications*

EURISCO	17.043
-AEGIS status	299
-MLS status	12.520



Hardship:

all known and described bugs in other systems 😊

Priorities for the future:

2016-2017 - alpha version online WEB, data purity and data quality of migrated data

2018 - **full online access**
- full integration C & E data into the system

2020 - migration to government cloud to an open source platform

A very urgent task for us is to clean up the system !!!



The expected impact of the IS GRISS is an

- overall increase in the quality of documentation of PGR in the Slovak Republic,
- simplify the ordering plant material provided from a gene bank for home and foreign users,
- system also facilitate getting information about PGR for the government, NGOs and public
- increased compatibility with others documentation systems, international data exchange, mainly EURISCO ...





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Thank you for your attention

