

# Azerbaijan National Academy of Sciences GENETIC RESOURCES INSTITUTE

**Mirzaliyeva ILHAMA**

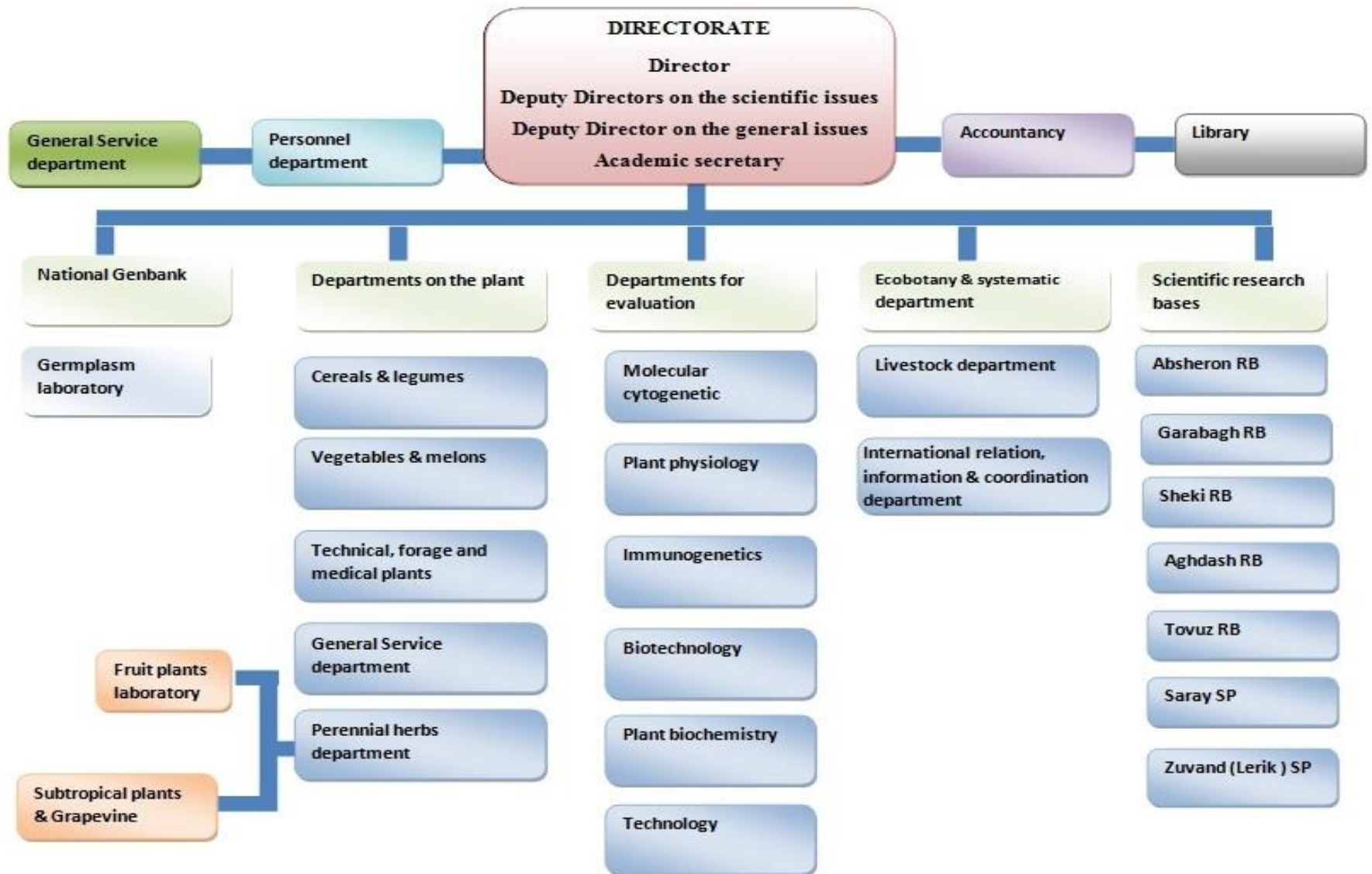
**Documentation officer  
of the National  
Genbank  
Azerbaijan, Baku**

01-Jun-15

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# Genetic Resources Institute structure



# Activities on PGR

- National Program on inventory (*ex situ*, *in situ* / on-farm)
- National law on PGR (was signed 2011)
- National Genbank
- National Network on PGR Documentation
- Coordination with republic Scientific Institutes related with PGR
- Scientific Technical Committee
- Well equipped Laboratories



# PGR coordination

Scientific  
Research Institute  
of Agriculture



Vegetable-growing  
Institute



Horticulture  
and Subtropical  
Crops Institute



Cotton-  
growing  
Institute



Genetic Resources Institute  
Central Database  
of National Genbank



SR Institute of  
Viticulture and  
Wine-Making

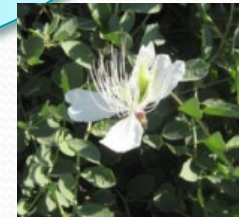
Institute of  
Botany



Botanical  
Garden

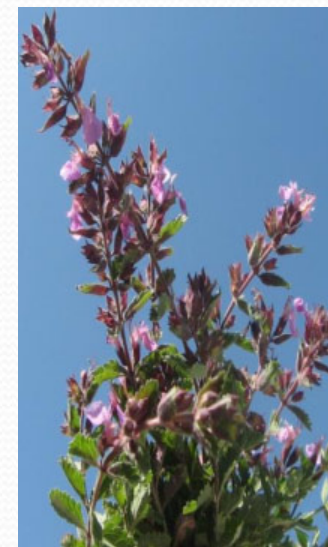


Forage Institute  
pastures, meadows



- **Contact persons - network members in each institutes**
- **Contact persons and WGs are connecting parts in coordinating of GRI activities**
- **The Scientific–Technical Committee included into management system on conservation and effective use of Cultivated plants Genetic Resources created on the basis of decision of the Cabinet Ministers of AR has great importance in fulfilment of the Institute coordinating activities**

For the formation of “Scientific Technical Committee, included into the management system on conservation and effective use of crop plant genetic resources” and creation within it “specialized expert councils” and “working groups (on cereals-leguminous, fruits and subtropical plants, vegetable & melon, industrial plants, forages, aromatic & medicinal plants) on priority activities ” have been used the ECPGR practices, the methodical supports of its authorities and also consultations with national coordinators of countries.



# Institutes and their collection

	<b>Institutes</b>	<b>Plants</b>	<b>Number of accession in NDB</b>
1.	<b>Genetic Resources Institute</b>	<b>All plants</b>	<b>11898</b>
2.	<b>SR Institute of Agriculture</b>	<b>Cereals, grain legumes, forage legumes</b>	<b>2017</b>
3.	<b>SR Institute of Vegetable-Growing</b>	<b>Vegetable-melon crops, green vegetables, spicy crops and potato</b>	<b>257</b>
4.	<b>SR Institute of Horticulture and Subtropical crops</b>	<b>Pomegranate and stone fruits, nuts, subtropical fruits, citrus and berry crops and their wild relatives</b>	<b>1011</b>
5.	<b>SR Institute of Viticulture and Wine-Making</b>	<b>Cultivated and wild grapevine</b>	<b>525</b>
6.	<b>SR Institute of Fodder, Meadows and Pastures</b>	<b>Grasses and forage legumes</b>	<b>186</b>
7.	<b>SR Institute of Cotton Growing</b>	<b>Cultural and wild types of cotton</b>	<b>588</b>
8.	<b>Research Institute of Botany and National Botany Garden</b>	<b>Woody-bush and grassy plants, medicinal &amp; untraditional plants Herbaria</b>	<b>128</b>
10.	<b>Azerbaijan State Agricultural Academy</b>	<b>Vegetable-melon crops, green vegetables</b>	<b>126</b>

## NI databases

- ❖ **Excel spreadsheet – EURISCO**
- ❖ **Database on MS FoxPro**
  - MS FoxPro version has data on botanical, ecological, geographical, seed stock information
- ❖ **Database on MySQL**







# Database view on MS FoxPro

AzGR database - All crops and all institutes

Database Edit Selection Display\_selection Fields Help

Active selection: ALLCOLLECTION (11898)

Tables Views Queries Selections Reports Tools

Data for selection ALLCOLLECTION.SEL 0 - 6004

Accession	Collection site & sample	Stock	Pedigree	User selected fields	Notes & Taxon Change	Pictures
AzGR	6004	Cicer arietinum				

Origin country AZE

Site code S 1091 Site number

Coll date 2003/08/09 Mission code

Country AZE Collector

Province Location Lenik

Latitude 038 45 58 N Decimal 38 75613

Longitude 048 35 11 E Decimal 48 58630

Altitude 450 Soil depth

Rainfall Soil texture Soil PH

Slope Soil salinity Characteristic species

Aspect Site irrigated/dry

Area sampl Plants sampl 0 Parentstock

AGRI Azerbaijan Genetic Resources Institute

Accession (Azg\Accession) Record: 6004/11898 Record Unlocked



AzGR database - All crops and all institutes

Database Edit Selection Display\_selection Fields Help

Active selection: ALLCOLLECTION (11898)

Tables Views Queries Selections Reports Tools

Data for selection ALLCOLLECTION.SEL 0 - 10263

Accession	Collection site & sample	Stock	Pedigree	User selected fields	Notes & Taxon Change	Pictures
AzGR	10263	Phaseolus vulgaris				

Origin country AZE

Active collection (seeds)

Weight	120.00
Seeds	-
Year	2011
Location ID	5-09-09-02
Viability (%)	92
Test date	2012

Vegetatively propagated

Year	
Planting site	
Location ID	

In-vitro

Year	//
In-vitro location	
Location ID	

Stock notes

Safety duplication site

Type of germplasm storage 12

Weight of 100 seeds (g) -

Weight of 1000 seeds (g) 326.00

AGRI Azerbaijan Genetic Resources Institute

Accession (Azg\Accession) Record: 10263/11898 Record Unlocked

# Database view on MS FoxPro

AzGR database - All crops and all institutes

Database Edit Selection Display\_selection Fields Help

Active selection: ALLCOLLECTION.118981

Data for selection ALLCOLLECTION.SEL 0 - 11898

Tables

Type of report:

Accession 11902 *Rosa canina* Origin country AZE

Conservation

Conserved by AZE015

Receipt date 2015/ /

Donor AZE004

Country AZE

Sample characteristics

Sample type

Status

Seasonality

Habitat

Herbarium specimen

Conservation status A

In National Genebank

Field collecting

Collector's number

Coil date 2014/ /

Site code K07

Country AZE

Province Khizi

Site

Altitude

Rainfall

Latitude

Longitude

Identifying name/number	What	Where used	Pref
It iburnusu	LOC	AZE015	Y

Label for bottle

Accession [Azgr/Accession] Record: 11898/11898 Record Unlocked



AzGR database - All crops and all institutes

Database Edit Selection Display\_selection Fields Help

Report Designer - storage247.lbx - Page 570

Label: Bottle in storage (2 columns, 7 rows) for selection

Report title Label: Bottle in storage (2 col)

AZGR	FIELDS	FIELD1	FIELD4				
10913	10913	AG-2767	Cicer arsa				
10914	10914	AG-2768	Cicer arsa				
10915	10915	AG-2769	Cicer arsa				
10916	10916	AG-2770	Lena cul				
10917	10917	AG-2771	Lena cul				
10918	10918	AG-2772	Lena cul				
10919	10919	AG-2773	Lena cul				
10920	10920	AG-2774	Lena cul				
10921	10921	AG-2775	Lena cul				
10922	10922	AG-2776	Lena cul				
10923	10923	AG-2777	Lena cul				
10924	10924	AG-2778	Lena cul				
10925	10925	AG-2779	Lena cul				
10926	10926	AG-2780	Lena cul				
10927	10927	AG-2781	Lena cul				
10928	10928	AG-2782	Lena cul				
10929	10929	AG-2783	Lena cul				
10930	10930	AG-2784	Lena cul				
10931	10931	AG-2785	Lena cul				
10932	10932	AG-2786	Lena cul				
10933	10933	AG-2787	Lena cul				
10934	10934	AG-2788	Lena cul				

Records 8148

AzGR	11847		AzGR	11848	
	<i>Bilyvali</i>			Zaif	
	<i>Cerasus monogyna</i>	15-03-08-01		<i>Cydonia oblonga</i>	
	Azerbaijan			Azerbaijan	15-03-08-02
AzGR	11849		AzGR	11850	
	<i>Sax ilahabali</i>			<i>Khazar</i>	
	<i>Cirsium lactans</i>	15-03-08-03		<i>Ferula caprina</i>	15-03-08-04
	Azerbaijan			Azerbaijan	
AzGR	11851		AzGR	11852	
	<i>Qashiq</i>			<i>Dereh</i>	
	<i>Allium rostratum</i>	15-03-08-05		<i>Asterias maxima</i>	15-03-09-01
	Azerbaijan			Azerbaijan	
AzGR	11853		AzGR	11854	
	<i>Adi goryali</i>			<i>Hirkan</i>	
	<i>Fraxinus exoniensis</i>	15-03-09-02		<i>Buxus byronae</i>	15-03-09-03
	Azerbaijan			Azerbaijan	
AzGR	11855		AzGR	11856	
	<i>Boya dazi</i>			<i>Lactuca</i>	
	<i>Hypericum androsaemon</i>	15-03-09-04		<i>Sedum licheniscens</i>	15-03-09-05
	Azerbaijan			Azerbaijan	
AzGR	11857		AzGR	11858	
	<i>Bulu pavalil</i>			<i>Chamaecyparis</i>	
	<i>Dianthus serotinus</i>	15-04-01-01		<i>Trifolium pratense</i>	15-04-01-02
	Azerbaijan			Azerbaijan	

01-Jun-15

# Database view on MySQL

The screenshot shows the phpMyAdmin interface for a MySQL database named 'pgr database'. The left sidebar displays a tree view of databases, with 'pgr database' selected and expanded to show 14 tables. The main area displays a table structure view for the selected database, listing 14 tables with their respective actions, row counts, types, collations, sizes, and overheads. Below the table list, there are options to 'Check All' and 'With selected:'. At the bottom, there is a 'Create table' button and a form to specify the table name and the number of columns.

Table	Action	Rows	Type	Collation	Size	Overhead
accession	Browse Structure Search Insert Empty Drop	-10,784	InnoDB	latin1_swedish_ci	1.5 MiB	-
accpicture	Browse Structure Search Insert Empty Drop	-11,800	InnoDB	latin1_swedish_ci	320 KiB	-
breeder	Browse Structure Search Insert Empty Drop	-10,451	InnoDB	latin1_swedish_ci	320 KiB	-
collector	Browse Structure Search Insert Empty Drop	-11,347	InnoDB	latin1_swedish_ci	368 KiB	-
colsite	Browse Structure Search Insert Empty Drop	-1,417	InnoDB	latin1_swedish_ci	176 KiB	-
cooperator	Browse Structure Search Insert Empty Drop	-16	InnoDB	latin1_swedish_ci	16 KiB	-
country	Browse Structure Search Insert Empty Drop	-81	InnoDB	latin1_swedish_ci	16 KiB	-
croppname	Browse Structure Search Insert Empty Drop	-1,158	InnoDB	latin1_swedish_ci	96 KiB	-
id_numb	Browse Structure Search Insert Empty Drop	-11,131	InnoDB	latin1_swedish_ci	1.5 MiB	-
notes	Browse Structure Search Insert Empty Drop	-11,570	InnoDB	latin1_swedish_ci	384 KiB	-
pedigree	Browse Structure Search Insert Empty Drop	-10,307	InnoDB	latin1_swedish_ci	416 KiB	-
stock	Browse Structure Search Insert Empty Drop	-10,921	InnoDB	latin1_swedish_ci	1.5 MiB	-
taxon	Browse Structure Search Insert Empty Drop	-1,336	InnoDB	latin1_swedish_ci	256 KiB	-
taxonchange	Browse Structure Search Insert Empty Drop	-10,901	InnoDB	latin1_swedish_ci	336 KiB	-
14 tables	Sum	103,220	InnoDB	latin1_general_ci	7.2 MiB	0 B

Check All    With selected:

Print view    Data Dictionary

Name:     Number of columns:

# Database view on MySQL

localhost / 127.0.0.1 / pgr x Service unavailable x

localhost/phpmyadmin/#PMAURL-16.tbl\_select.php?db=pgr+database&table=accession&server=1&target=&token=62a1229e73e6112a3a03461a290b1e77

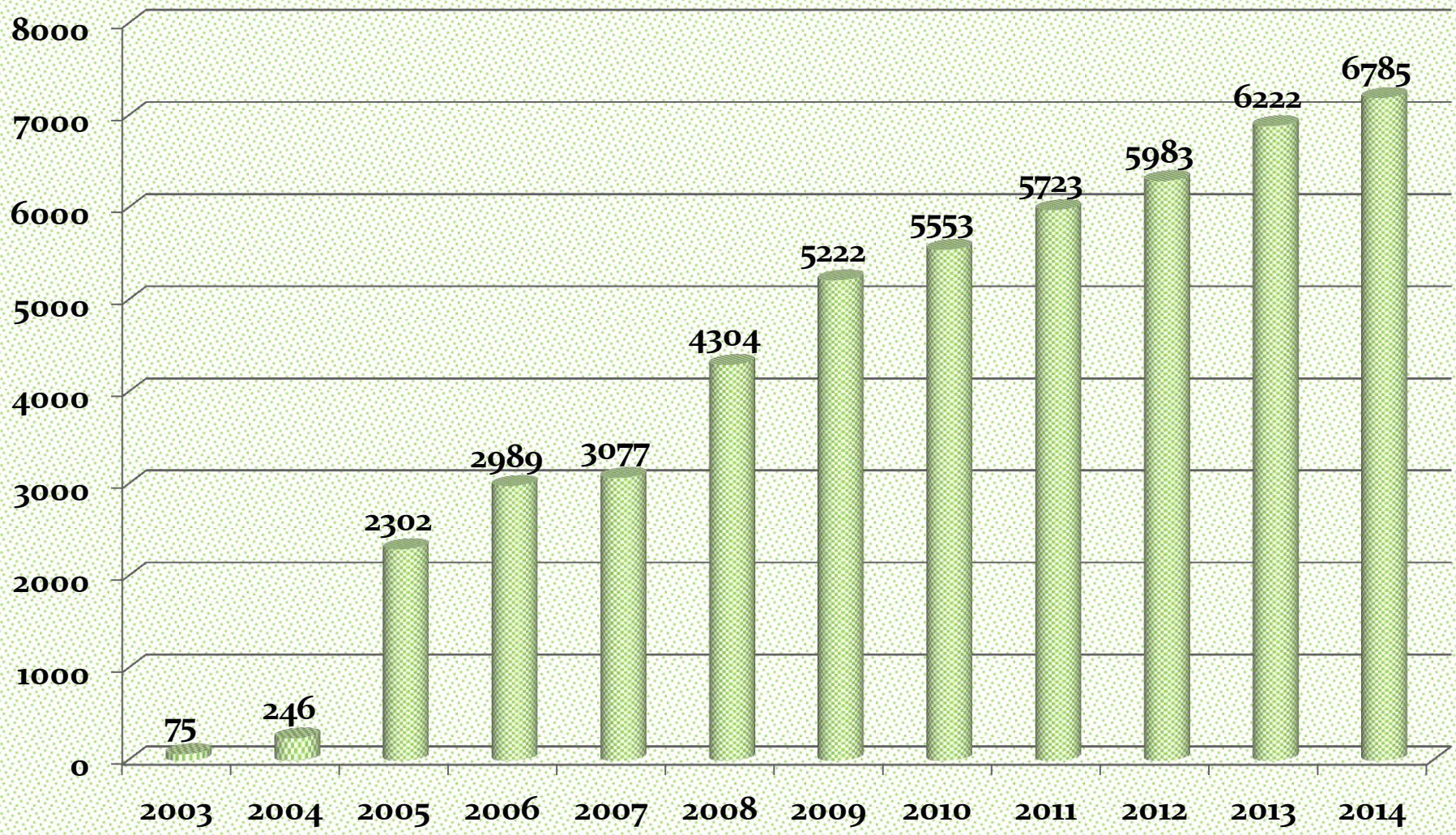
phpMyAdmin 127.0.0.1 s pgr database » accession Main file for accessions in the system

Options

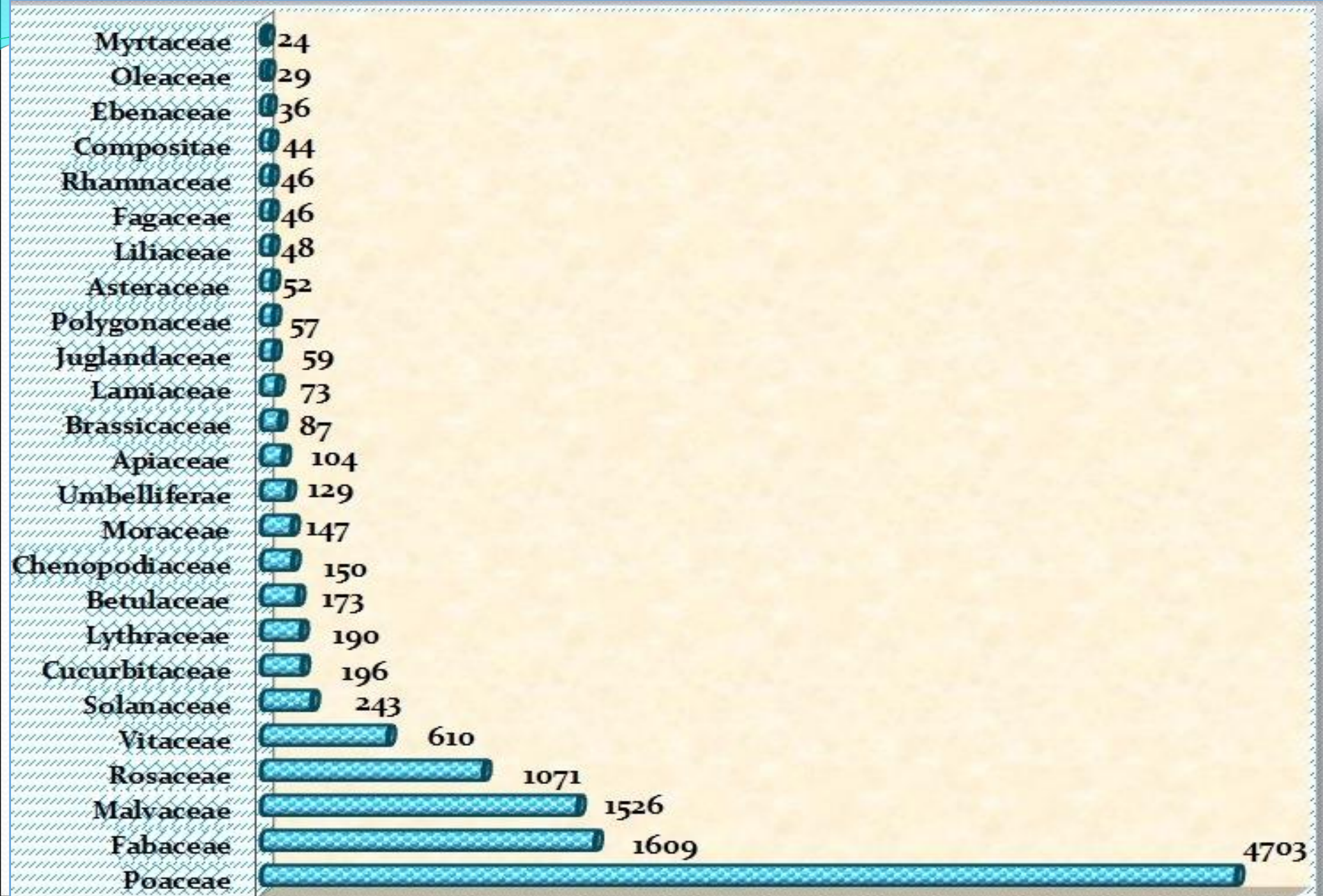
	nc	crop	taxno	s_w	pop_type	status	ori	site_code	coll_no	collectiond	donor_cty	ins_cons	donor	rec_date	herb_spec	con_stat	newnc	habitat	are_samp	no_plants	i_d	t_u	a_code	nc2	genbank	
			7212	Wheat	32279	CV	PO	AZE	S 1509			AZE015		2005		A	0		0	0	T	0	17211	0		
			7200	Wheat	32279	CV	PO	AZE	S 1509	1996	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17199	0		
			7199	Wheat	32279	CV	PO	AZE	S 1509	1996	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17198	0		
			7198	Wheat	32279	CV	PO	AZE	S 1509	1997	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17197	0		
			7197	Wheat	32279	CV	PO	AZE	S 1509	1997	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17196	0		
			7196	Wheat	32279	CV	PO	AZE	S 1509	1997	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17195	0		
			7195	Wheat	32279	CV	PO	AZE	S 1509	1998	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17194	0		
			7194	Wheat	32279	CV	PO	AZE	S 1509	1998	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17193	0		
			7193	Wheat	32279	CV	PO	AZE	S 1509	1998	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17192	0		
			7201	Wheat	32279	CV	PO	AZE	S 1509	1996	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17200	0		
			7202	Wheat	32279	CV	PO	AZE	S 1509	1996	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17201	0		
			7203	Wheat	32279	CV	PO	AZE	S 1509	1996	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17202	0		
			7211	Wheat	32279	CV	PO	AZE	S 1509			AZE015		2005		A	0		0	0	T	0	17210	0		
			7210	Wheat	32279	CV	PO	AZE	S 1509			AZE015		2005		A	0		0	0	T	0	17209	0		
			7209	Wheat	32279	CV	PO	AZE	S 1509			AZE015		2005		A	0		0	0	T	0	17208	0		
			7208	Wheat	32279	CV	PO	AZE	S 1509	1997		AZE015		2005		A	0	AC	0	0	T	0	17207	0		
			7207	Wheat	32279	CV	PO	AZE	S 1509	1997		AZE015		2005		A	0		0	0	T	0	17206	0		
			7206	Wheat	32279	CV	PO	AZE	S 1509	1997		AZE015		2005		A	0		0	0	T	0	17205	0		
			7205	Wheat	32279	CV	PO	AZE	S 1509	1997		AZE015		2005		A	0		0	0	T	0	17204	0		
			7204	Wheat	32279	CV	PO	AZE	S 1509	1996		AZE015		2005		A	0		0	0	T	0	17203	0		
			7192	Wheat	32279	CV	PO	AZE	S 1509	1998	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17191	0		
			7191	Wheat	32279	CV	PO	AZE	S 1509	1998	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17190	0		
			7190	Wheat	32279	CV	PO	AZE	S 1509	1998	AZE	AZE015	AZE003	2005		A	0	AC	0	0	T	0	17189	0		
			7178	Wheat	32279	CV	PO	AZE	S 1509	1997	AZE	AZE015	AZE003	2005		A	0	AC	0	0	I	T	0	17177	0	
			7177	Wheat	32279	S	CV	PO	AZE	S 1509	1997	AZE	AZE015	AZE003	2005		A	0	AC	0	0	I	T	0	17176	0
			7176	Wheat	32292	S	CV	PO	AZE	S 1509	1998	AZE	AZE015	AZE003	2005		A	0	AC	0	0	I	T	0	17175	0

Recent tables: cdcol, csv\_db, information\_schema, mydatabase, mysql, performance\_schema, pgr database, New, accession, accpicture, breeder, collector, colsite, cooperato, country, cropname, id\_num, notes, pedigree, stock, taxon, taxonchange, phpmyadmin, test, test1, webauth

# Entering dynamic of seeds to National Genbank



# Families with large amount of accessions



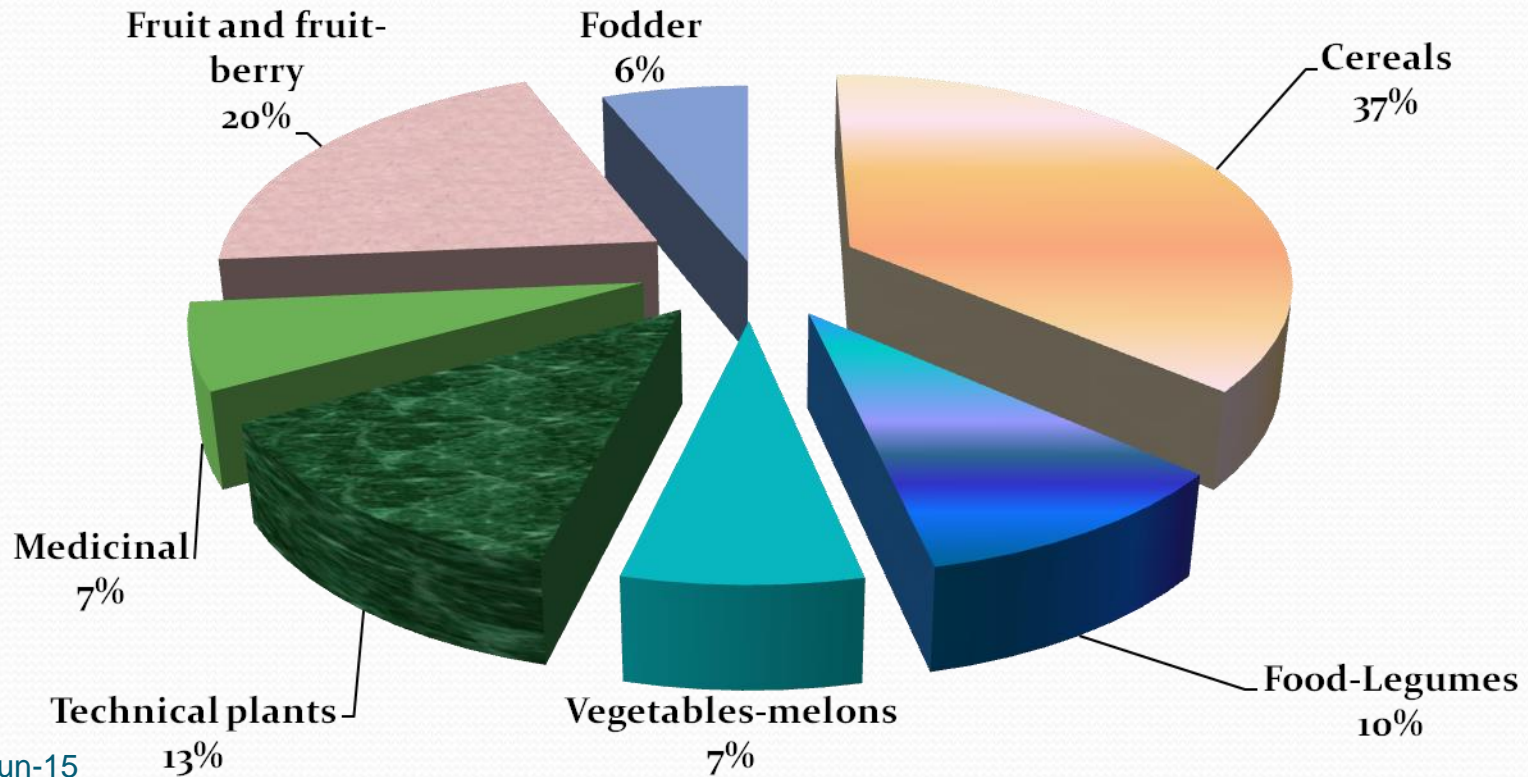
# Azerbaijan National Genbank

- Genbank has begun its activities since 2004 as a sub group of GRI
- In 2011 after the acceptance the law “Conservation and effective utilization of genetic resources of cultural plants” by the Azerbaijan Parliament , Genbank has received the status of national especially protected object with the following research departments:
  - ✓ Seed collection and regeneration departments,
  - ✓ Evaluation departments,
  - ✓ Protection and conservation departments
- All accessions get new numbers with prefix **AzGR** (Azerbaijan Genetic Resource) is in front of sequential number

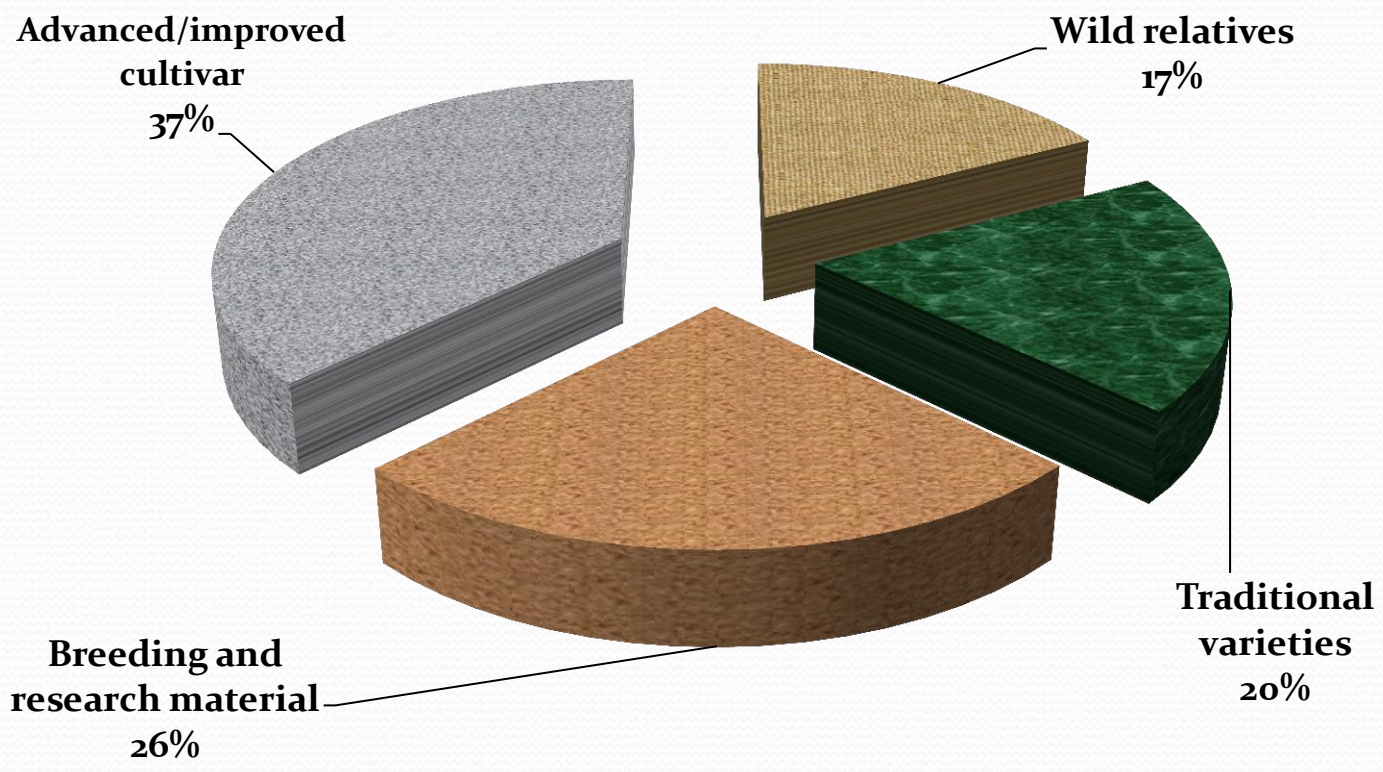




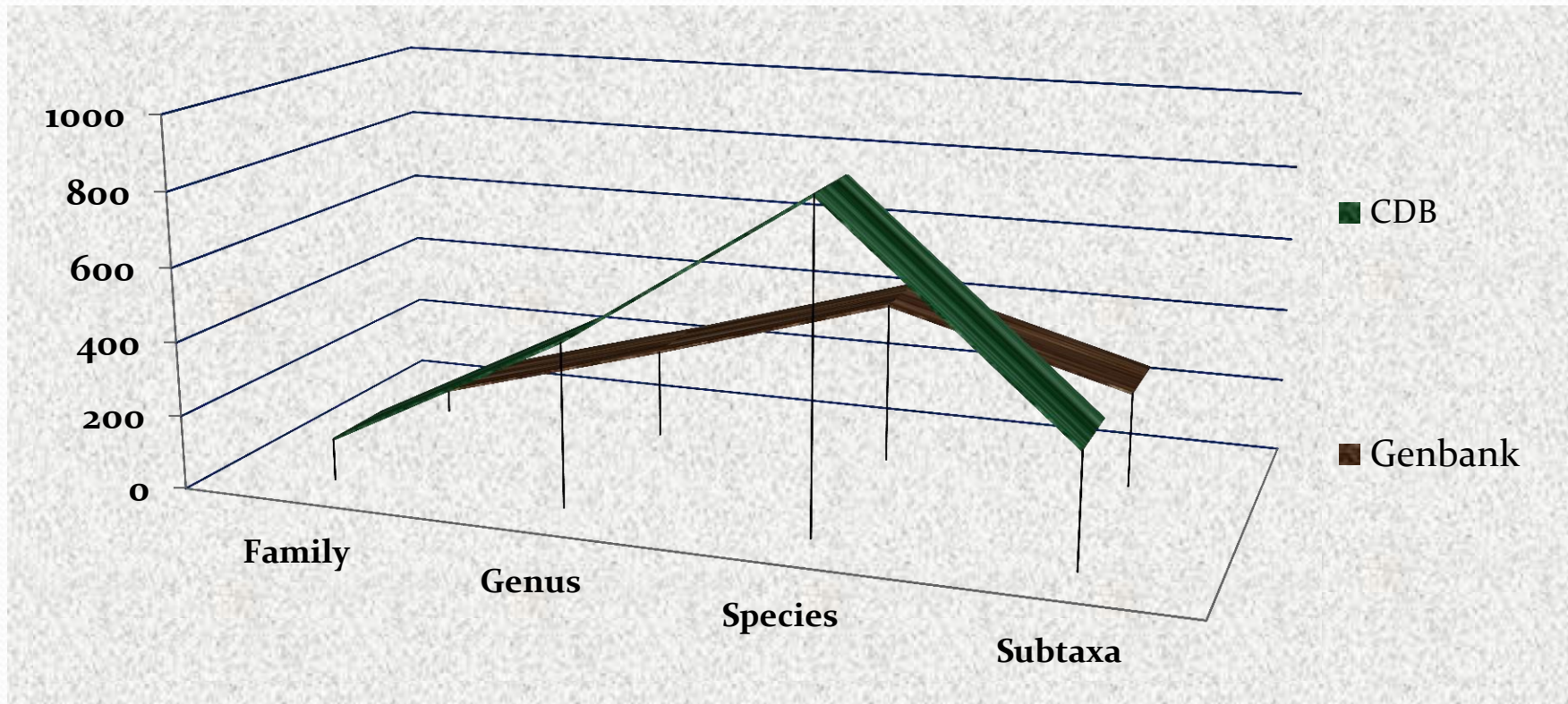
Crops groups	Number of accessions in CDB
Cereals	4338
Food-Legumes	1204
Vegetables-melons	859
Technical plants	1570
Medicinal	782
Fruit and fruit-berry	2411
Fodder	734
<b>Total</b>	<b>11898</b>



Status	Number
Wild relatives	2056
Traditional varieties	2365
Breeding and research material	3025
Advanced/improved cultivar	4452
<b>Total</b>	<b>11898</b>



# Taxonomy features at CDB and Genbank



	Family	Genus	Species	Subtaxa
CDB	113	443	869	304
Genbank	63	244	437	257

# Wheat characterization data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Accession number	Id	Inst_cons	Genus	Species	Subtaxa	Height of plant	Number of productive tillers	Spike length	Number of spikelets	Weight of spike	Number of kernels per spike	Spike density	1000 kernel weight
2	AzGR-10429	AG-1931	AZE015	Triticum	aestivum	var. graecum	100.3	4.4			1.9	51	1.5	36.4
3	AzGR-10430	AG-1932	AZE015	Triticum	aestivum	var. graecum	91.0	3.7			2.9	79.5	1.9	39.2
4	AzGR-10431	AG-1933	AZE015	Triticum	aestivum	var. graecum	99.9	4.1			2.3	60.0	1.6	36.8
5	AzGR-10432	AG-1934	AZE015	Triticum	aestivum	var. graecum	100.4	4.2			2.2	50.2	1.8	44.0
6	AzGR-10433	AG-1935	AZE015	Triticum	aestivum	var. graecum	101.5	4.4			1.8	52.4	1.8	44.4
7	AzGR-10434	AG-1936	AZE015	Triticum	aestivum	var. graecum	92.1	4.4			2.4	62.0	1.6	37.6
8	AzGR-10435	AG-1937	AZE015	Triticum	aestivum	var. graecum	131.4	4.5			2.5	62.80	1.6	39.6
9	AzGR-10436	AG-1938	AZE015	Triticum	aestivum	var. milturum	96.7	3.5			2.6	59.6	1.4	42.8
10	AzGR-10437	AG-1939	AZE015	Triticum	aestivum	var. milturum	109.1	3.9			3.6	52.2	1.5	38.8
11	AzGR-10438	AG-1940	AZE015	Triticum	aestivum	var. milturum	84.6	3.9			2.1	62.6	1.5	33.2
169	AzGR-6108	azeBB-240	AZE015	Triticum	durum	var. hordeiforme	124	3	7.7	15.8	2.4	49		
170	AzGR-6111	azeBB-255	AZE015	Triticum	durum	var. hordeiforme	66	3.2	6.6	17	2.4	55		
171	AzGR-6112	azeBB-295	AZE015	Triticum	durum	var. hordeiforme	90.6	3.5	7.4	19.6	1.7	44		
172	AzGR-6113	azeBB-296	AZE015	Triticum	durum	var. hordeiforme	81	4.0	6.0	15.3	2.6	47		
173	AzGR-6114	azeBB-297	AZE015	Triticum	durum	var. hordeiforme	79.5	4.0	7.9	18.3	1.6	45		
174	AzGR-6115	azeBB-1-149	AZE015	Triticum	durum	var. hordeiforme	64	3.4	5.5	11.8	1.8	47		
175	AzGR-6116	azeBB-1-123	AZE015	Triticum	durum	var. hordeiforme	106.8	3.1	5.6	16	2.7	49		
176	AzGR-6117	azeBB-1-148	AZE015	Triticum	durum	var. hordeiforme	95.7	3.6	4.5	16	1.9	48		
177	AzGR-6118	azeBB-1-165	AZE015	Triticum	durum	var. hordeiforme	102	4.1	5.4	15.6	2.3	48		
178	AzGR-6119	azeBB-1-166	AZE015	Triticum	durum	var. hordeiforme	105	2.8	6.7	17	2.7	51		
179	AzGR-6120	azeBB-1-181	AZE015	Triticum	durum	var. hordeiforme	91.1	4.3	7.4	16.7	2.5	43		
180	AzGR-6121	azeBB-216	AZE015	Triticum	durum	var. boeufii	64.8	3.8	7.7	17.7	2.2	42		
181	AzGR-6122	azeBB-228	AZE015	Triticum	durum	var. boeufii	102	2.2	6.0	17.5	2.2	53		

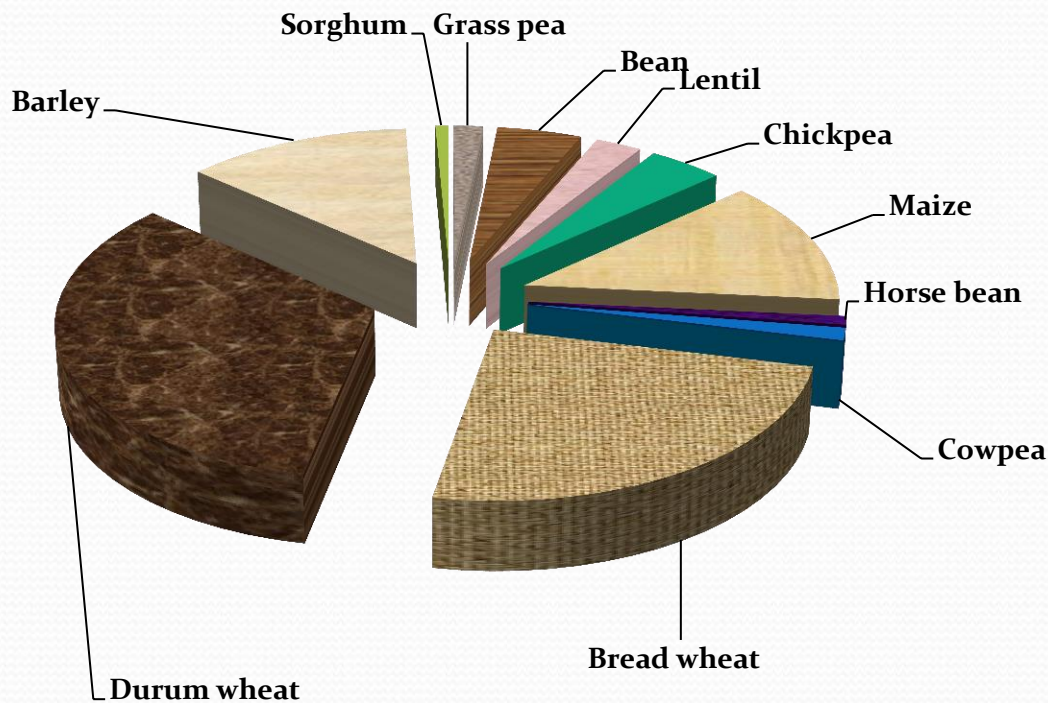
# ✓ Chickpea characterization data

Cicer arietinum - chickpea accessions basic indications																		
Accession number	Colnumber number	Origin	Cold tolerance	Days to 50% flowering [days]	Flowers colour [code]	Days to maturity [days]	Leaf size [code]	Seed type (code)	Seed colour (code)	Seed surface [SCO]	Planting season [code]	Leaflet size (medial pair of leaflets) [code]	Plant hairiness [score]	Plant pigmentation [score]	Number of flower	Year of evaluation	Days to pod emerge	drought tolerance
AzGR-2607	CIAR-1	Lenkoran		173	W	215	E 1	1	BE=1	5	W	3	5	3	1	2009		
AzGR-2584	CIAR-2	Lenkoran		173	W	215	E 1	2	LB=5	3	W	3	5	3	1	2009		
AzGR-2596	CIAR-3	Lenkoran		173	W	215	E 1	1	LB=5	5	W	3	5	3	1	2009		
AzGR-2588	CIAR-5	Lenkoran		173	W	215	E 1	2	LB=5	3	W	3	5	3	1	2009		
AzGR-2586	CIAR-9	Jalilabad		174	W	215	E 1	2	BE=1	3	W	3	5	3	1	2009		
AzGR-2589	CIAR-11	Jalilabad		174	W	215	E 1	2	LB=5	3	W	3	5	3	1	2009		
AzGR-2600	CIAR-12	Jalilabad		174	W	215	E 1	3	LB=5	5	W	3	5	3	1	2009		
AzGR-2599	CIAR-17	Jalilabad		176	W	217	E 1	3	LB=5	3	W	3	5	3	1	2009		
AzGR-6015	CIAR-45	Jalilabad		175	W	216	E 1	2	LB=5	3	W	3	5	3	1	2009		
AzGR-6016	CIAR-55	Jalilabad		172	W	214	E 1	2	LB=5	3	W	3	5	3	1	2009		
AzGR-6006	CIAR-35	Aghstafa		174	W	215	E 1	2	BE=1	3	W	3	5	3	1	2009		
AzGR-6007	CIAR-36	Aghstafa		174	W	215	E 1	3	LB=5	3	W	3	5	3	1	2009		
AzGR-6008	CIAR-42	Aghstafa		174	W	215	E 1	2	BE=1	3	W	3	5	3	1	2009		
AzGR-7642	CIAR-57	Absheron		164	W	207	E 1	2	BE=1	3	W	3	5	3	1	2009		
AzGR-2615	CIAR-36	Nakhchivan	1	175	W	213	E 1	medium	LB=5	3	W		5	3		2010	181	115,9
AzGR-6013	aze/Ciar-39	Ordubad	1	181	W	213	E 1	medium	B=6	5	W		5	3		2010	186	
AzGR-6014	aze/Ciar-41	Ordubad	1	171	P	213	E 1	desi	BL	3	W		5	3		2010	180	98,68
AzGR-6009	aze/Ciar-37	Gusar	2	176	W	213	E 1	medium	BE=1	3	W		5	3		2010	180	74,7
AzGR-6010	aze/Ciar-38	Gusar	2	180	W	213	E 1	medium	BE=1	3	W		5	3		2010	185	135,1
AzGR-6011	aze/Ciar-43	Gusar, vill.Hil	1	176	W	213	E 1	medium	B=6	5	W		5	3		2010	181	77,13
AzGR-6012	aze/Ciar-44	Gusar,vill.Imamg	2	176	W	213	E 1	medium	LB=5	3	W		5	3		2010	183	71,2
AzGR-8039	CIAR-538	Guba-Xudat	2	177	W	213	E 1	medium	B=6	3	W		5	3		2010	182	
AzGR-7821	CIAR-504	Davachy-Nugady	1	178	W	213	E 1	medium	BE=1	3	W		5	3		2010	181	99,7
AzGR-7650	CIAR-356	Ganja	1	176	W	213	E 1	medium	LB=5	3	W		5	3		2010	181	78,7

# ✓ Chickpea characterization data

Cicer arietinum - chickpea accessions basic indications																			
Accession number	Colnumber number	Origin	Cold tolerance	Days to 50% flowering [days]	Flowers colour [code]	Days to maturity [days]	Leaf size [code]	Seed type (code)	Seed colour (code)	Seed surface [SCO]	Planting season [code]	Leaflet size (medial pair of leaflets) [code]	Plant hairiness [score]	Plant pigmentation [score]	Number of flower	Year of evaluation	Days to pod emerge	drought tolerance	
3	AzGR-2607	CIAR-1	Lenkoran	173	W	215	E 1	1	BE=1	5	W	3	5	3	1	2009			
4	AzGR-2584	CIAR-2	Lenkoran	173	W	215	E 1	2	LB=5	3	W	3	5	3	1	2009			
5	AzGR-2596	CIAR-3	Lenkoran	173	W	215	E 1	1	LB=5	5	W	3	5	3	1	2009			
6	AzGR-2588	CIAR-5	Lenkoran	173	W	215	E 1	2	LB=5	3	W	3	5	3	1	2009			
7	AzGR-2586	CIAR-9	Jahlabad	174	W	215	E 1	2	BE=1	3	W	3	5	3	1	2009			
8	AzGR-2589	CIAR-11	Jahlabad	174	W	215	E 1	2	LB=5	3	W	3	5	3	1	2009			
9	AzGR-2600	CIAR-12	Jahlabad	174	W	215	E 1	3	LB=5	5	W	3	5	3	1	2009			
10	AzGR-2599	CIAR-17	Jahlabad	176	W	217	E 1	3	LB=5	3	W	3	5	3	1	2009			
11	AzGR-6015	CIAR-45	Jahlabad	175	W	216	E 1	2	LB=5	3	W	3	5	3	1	2009			
12	AzGR-6016	CIAR-55	Jahlabad	172	W	214	E 1	2	LB=5	3	W	3	5	3	1	2009			
27	AzGR-6006	CIAR-35	Aghstafa	174	W	215	E 1	2	BE=1	3	W	3	5	3	1	2009			
28	AzGR-6007	CIAR-36	Aghstafa	174	W	215	E 1	3	LB=5	3	W	3	5	3	1	2009			
29	AzGR-6008	CIAR-42	Aghstafa	174	W	215	E 1	2	BE=1	3	W	3	5	3	1	2009			
30	AzGR-7642	CIAR-57	Absheron	164	W	207	E 1	2	BE=1	3	W	3	5	3	1	2009			
31	AzGR-2615	CIAR-36	Nakhchivan	1	175	W	213	E 1	medium	LB=5	3	W	5	3		2010	181	115,9	
32	AzGR-6013	aze/CIAR-39	Ordubad	1	181	W	213	E 1	medium	B=6	5	W	5	3		2010	186		
33	AzGR-6014	aze/CIAR-41	Ordubad	1	171	P	213	E 1	desi	BL	3	W	5	3		2010	180	98,68	
34	AzGR-6009	aze/CIAR-37	Gusar	2	176	W	213	E 1	medium	BE=1	3	W	5	3		2010	180	74,7	
35	AzGR-6010	aze/CIAR-38	Gusar	2	180	W	213	E 1	medium	BE=1	3	W	5	3		2010	185	135,1	
36	AzGR-6011	aze/CIAR-43	Gusar, vill.Hil	1	176	W	213	E 1	medium	B=6	5	W	5	3		2010	181	77,13	
37	AzGR-6012	aze/CIAR-44	Gusar, vill.Imamg	2	176	W	213	E 1	medium	LB=5	3	W	5	3		2010	183	71,2	
38	AzGR-8039	CIAR-538	Guba-Xudat	2	177	W	213	E 1	medium	B=6	3	W	5	3		2010	182		
39	AzGR-7821	CIAR-504	Davachy-Nugady	1	178	W	213	E 1	medium	BE=1	3	W	5	3		2010	181	99,7	
40	AzGR-7650	CIAR-356	Ganja	1	176	W	213	E 1	medium	LB=5	3	W	5	3		2010	181	78,7	

# Sending accessions to Svalbard Global Seed Vault



N	Accessions	Number of accessions	Safety Duplicate organizations
1.	Grass pea <i>Lathyrus sativus</i> L.	25	ICARDA
2.	<i>Phaseolus vulgaris</i> L. Common bean	73	CIAT
3.	<i>Lens culinaris</i> Medic. Lentil	40	ICARDA
4.	<i>Cicer arietinum</i> L. Chickpea	65	ICRISAT
5.	Maize <i>Zea mays</i> L.	200	CIMMYT
6.	<i>Vicia faba</i> L. Horse bean	14	ICARDA
7.	Cowpea <i>Vigna unguiculata</i> (L.)Walp.	20	IITA
8.	Bread wheat <i>Triticum aestivum</i> L.	369	ICARDA
9.	Durum wheat <i>Triticum durum</i> Desf.	510	ICARDA
10.	Barley <i>Hordeum vulgare</i> L.	194	ICARDA
11.	Sorghum <i>Sorghum bicolor</i> (L.)Moench	11	ICRISAT
<b>Total</b>		<b>1521</b>	

# Seed collection and regeneration departments



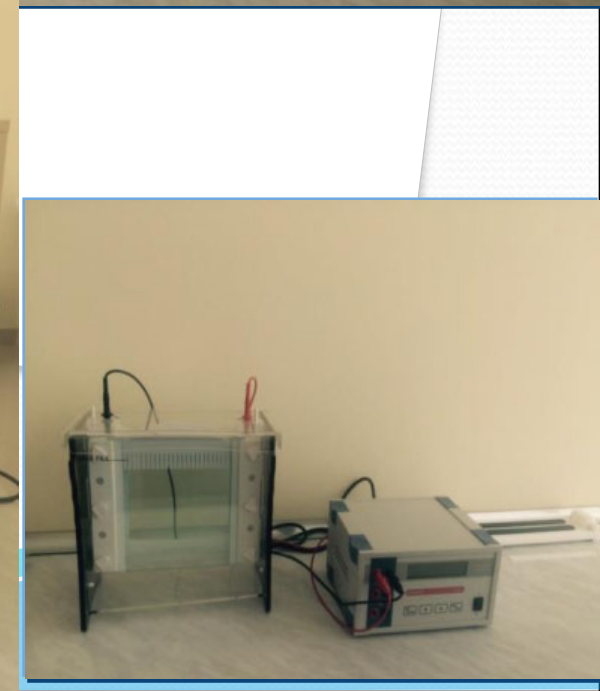


# Protection and conservation departments



# Genotyping laboratory

Genotyping of National Genbank materials using molecular markers are being conducted at this laboratory



# Sequencing laboratory

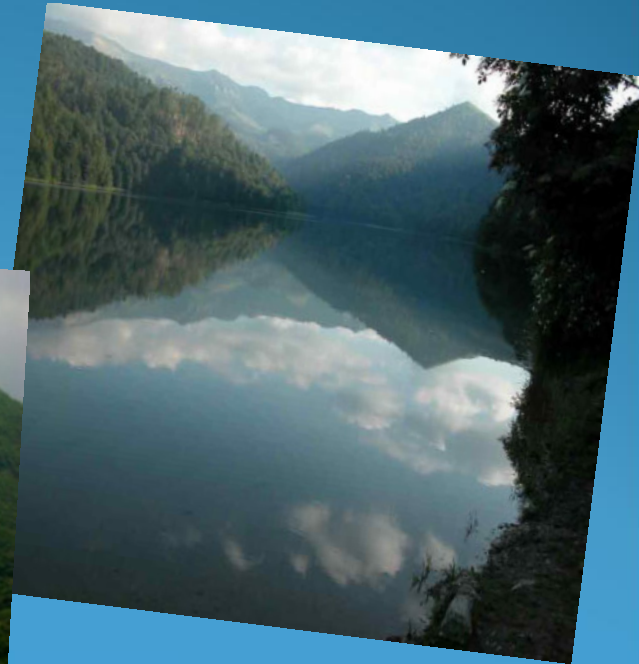
- Genotyping by sequencing
- Whole transcriptome sequencing
- Genome sequencing
- Viral typing



## Our near future plans on PGR documentation

- Creation of characterization and evaluation database
- To create web-based information system on Azerbaijan PGR and put to institute's website
- We are preparing the new proposal on creation of characterization, evaluation and genomics Database of National Genbank for submitting to STCU

# AZERBAIJAN land of fire



# THANK YOU

