

ECPGR/AEGIS Forage work shop 2

9-11.4.2013, NordGen, Alnarp, Sweden

Compiled by Merja Veteläinen

Introduction

The ECPGR Working Group for Forages has dedicated itself to work according to the principles of AEGIS (A European Genebank Integrated System), which aim is to establish a European Collection of unique and important accessions in that are conserved in European crop germplasm collections.

In order to intensify the WG activities towards AEGIS goals the WG applied funds through the AEGIS Competitive Grant Scheme Second Call and was successful. Consequently, the workshop “Establishment of the European Forage Collection amongst the Central Forage database managers” was organized in Hungary in 2012. The work that was carried out during this work shop resulted in a first proposal for the establishment of the European Forage Collection (EFC) and the selection of AEGIS candidate accessions. It was agreed that it would be important to carry on the work and it was subsequently agreed with the ECPGR Secretariat to develop follow-up activities with the remaining funds from the first AEGIS work shop. The present report highlights the results and future work plans from the second work shop that was organized on 9-11th April 2013 at NordGen in Sweden (Appendix 1. The work shop program).

Planned activities according to the agreed agenda with the Secretariat for the second workshop included:

- 1) Confirmation of the EFC candidate accessions for acceptance as AEGIS accessions.
- 2) Inclusion of CxE data in model central forage databases in order to later facilitate EURISCO to work in the same direction.
- 3) Improvement of the database management routines of the less experienced DB managers (this was already started during the 1st WS in Hungary).

Preparatory work prior to the work shop

After the previous Forage AEGIS work shop in 2012 the forage database managers have been up-dating their respective databases. However, it has been difficult to receive feed-back and confirmations from the forage collection holders on the identified candidate accessions for the European Forage Collection. Therefore, it was decided to carry out preparatory work prior to the Alnarp work shop in order to encourage the forage germplasm holders to facilitate the work shop activities. The message and letter that were sent to the WG members before the work shop can be found in the Appendix 2.

In the Hungary work shop it was concluded that ‘Google tables’ is a practical tool to browse, organize and detect data errors. In addition, this Google tool provides a good way to share data with the collection holders. Therefore, it was decided that ‘Google tables’ would be used to create a central entry point for forage collection holders to check their respective data with forage database suggestions on primary collection holders (PRIMCOLL) and candidates for European Forage Collection (EFC, later called AEGIS candidates).

In order to implement the work, Ian D. Thomas requested the forage database managers to send their up-dated databases in Multi-Crop Passport Descriptor -format (MCPD) to him. He subsequently up-loaded all the individual databases in the Google tables. Consequently, the forage collection holders were contacted through members of the ECPGR Working Group for Forages and the collection holders were requested to:

1. Browse the data from the different perspectives since the tool provides e.g. possibility to browse the accessions on the geographical map, to group and to filter the data.

2. Extract the data of the accessions belonging to their respective institutes.
3. Edit the data records when needed, and confirm the AEGIS candidate accessions suggested by the database managers for EFC.
4. Send corrected and confirmed data back to the respective database managers to be checked and up-loaded again to the Google tables.

This procedure was requested in order to test whether this approach would encourage the collection holders to be more active in giving feed-back and necessary information to the database managers. Apart from the requests above, also accession offers from IPK and CGN genebanks to be included as European/AEGIS accessions were included in the work. This pre-work formed then the basis for the workshop activities and discussions. The results are presented in the following chapters of this report.

Information from the ECPGR and AEGIS Secretariat

Both the ECPGR and AEGIS Secretariat had kindly provided slides with up-to-date information on ECPGR Phase IX and recent developments and results of AEGIS. Merja Veteläinen presented this information to the participants in the introductory part of the work shop (Appendix 3).

The state of the individual central forage crop databases

All the participating database managers presented the state of their forage databases (Appendices 4-8). The following conclusions could be drawn:

- Not all forage collection holders could be contacted through the WG Forage members and thus responses could not be expected from all.
- One response from a WG member noted that her country is not member of AEGIS
- The number of responses was not as high as wanted. This may be caused partly by the relatively short response time given and that all WG members have not been successful in encouraging collection holders in their countries to respond. However, new efforts will be made after the work shop. From the experienced procedure some lessons have been learnt and more detailed instructions can be given in the next round. In addition, new contact details will be sought. The responding institutes so far are reported in the Table 1.
- One complication in order to proceed with the work was that there was missing information on data fields concerning the seed availability and the state of safety duplication (an accession can be approved in the European/AEGIS collection only if there are seed available for distribution and if it is safety-duplicated)¹. Therefore the reported number of AEGIS accessions is somewhat lower than expected.
- Confusions with the species nomenclature exist in the databases.

¹ This was the understanding for the definition of a European Accession in the work shop. Later during the report drafting, the AEGIS Secretariat informed the following: *We believe that the two arguments to make a distinction between the two are not (anymore) valid. The lack of seed for distribution should be only a momentarily situation that could occur even tomorrow while today the seeds are available. Therefore, we like to suggest that the decision to include or not to include a given accession based on the current availability of sufficient seeds to the respective Associate Member. The status of safety duplication of a given accession is of course important and all European Accessions should be safety duplicated. However, if an Associate Member is in the process of making concrete safety duplication plans for the next season we do not see that as a reason NOT to designate that accession as a European Accession. In addition, you should only call an accession an AEGIS or European Accession when it has been formally accepted by the National Coordinator concerned as a European Accession.*

Demonstration of the “Duplicate Finder” functionalities

The ECPGR Secretariat had requested the project group to test the “Duplicate Finder” – a tool prepared by the CGN – in order to see, if this tool can be used to easily identify accession groups with similar names (duplicates). The tool was browsed and its functionalities studied (The Duplicate Finder was down-loaded from <http://documents.plant.wur.nl/cgn/pgr/aegisdf/>). It was concluded that the tool might be useful and it was decided that the database managers will test the tool after the work shop. However, it was concluded that Google tables has functionalities that also are helpful for duplicate identification. So far, database managers have not reported their experiences with “Duplicate Finder” to the WG chair.

Clarification of the terms

The definition of the term “AEGIS candidate” (former EFC) was discussed and as the term should be clear in order to make the selection procedure of the final “AEGIS accessions” as straight forward as possible. It was agreed that in the future the forage accessions that fulfill the demand that there are safety duplicates preserved and seed available (according to the genebank standards) before the accession can qualify as an “AEGIS accession”. In addition, the collection holder has approved the responsibility to act as the primary holder of the accession.

The term “AEGIS candidate” means that the accession is MOS (most original accession) and that the gene bank has approved to act as the primary holder of this accession. However, if the requirements for safety duplication and seed availability are not fulfilled, the accession remains as AEGIS candidate until these requirements have been fulfilled and the information included in the respective central forage crop database.

Work with databases and information exchange

The attending forage database managers checked data, discussed open questions and data errors, sought confirmations for AEGIS candidates and AEGIS accessions during the working session of the work shop. In addition, statistics on the responses received from the forage collection holders were prepared. Also, contact details of non-respondent institutes holding forage accessions were solved. The overview of the institute confirmations on AEGIS candidates and accessions can be found in Table 1. In all, 8966 AEGIS accessions have been confirmed, as well as 14051 candidates. Formal approval as a European Accession will be made by the National Coordinator concerned.

Data models for CxE in central forage databases

It has been discussed within the Working Group for Forages that it would be useful to facilitate the utilization of forage germplasm collections that EURISCO would in the future include also characterization and evaluation data (CxE data). Therefore, one of the work shop goals was to enhance the inclusion of such data in the central forage databases as means to provide the data for EURISCO and EURISCO developments. Thus, in the work shop Evelin Willner presented a model from IPK gene bank in her presentation “Management of C&E Data in IPK Genebank with the GeneBankInformationSystem (GBIS)” (Appendix 9). In addition, Jonas Nordling from NordGen gave a practical presentation on how CxE data has been included in their information system. He also discussed the expected future developments in NordGen. It was

concluded that after the presentations the database managers who have a wish to include CxE data in their respective database should discuss the technical solutions with IPK and NordGen.

Table1. Institute confirmations on AEGIS candidates and AEGIS accessions

DATABASE INSTCODE	Dactylis		Festuca		Poa		Lolium		Annual Medicago		Perennial Medicago (cand./acc)		Minor Forage legumes		Trifolium subterraneum		Vigna		Phleum		Minor Forage grasses		Trifolium		
	Cand*	AEGIS*	Cand	AEGIS	Cand	AEGIS	Cand	AEGIS	Cand	AEGIS	Cand	AEGIS	Cand	AEGIS	Cand	AEGIS	Cand	AEGIS	Cand	AEGIS	Cand	AEGIS	Cand	AEGIS	
BEL004 (094)					2															5					
POL003		94		413	153						22									2077		79			
CZE082																				0		137			
CZE096																				0					
CZE122					95	46														50		0			
SWE054		148		353	377	213					18									729	472	624	243		
LVA009	1	26	5	83	16	5					2									37	3	18	3		
EST001		16		28	2	2					19									18	17	27	27		
IRL001							488																	137	
IRL029																									
NLD037					130	73														90	89	11	11		
GBR016					23	8	487	650																630	3
DEU271	1209	1209	1002	1002	407	345	1797	1797	13		66	66			85	85				816	799	396	301	30	30
CHE002					10																				
(HUN003)					154																				
FRA001	172		299		1						41	36													
DEU146					49	49					2											104	75		
ESP010									752						2352										
ESP003																									
ESP119																									
AUT060					5																				
AZE006					3																				
AZE015					2																				
BGR001					8	7																			
ITA363					35																				
LTU001					136	136																			

Post-work shop work plan

It was decided that additional activities will be carried out after the work shop. The following steps were agreed (table 2):

Table 2. Post-work shop work plan

Action	Completed (√)
1. Merja Veteläinen sends the summary table on Candidate and AEGIS accessions to database managers. They will check and complete missing numbers (Candidate and AEGIS accessions/INSTCODE)	√ (see Table 1)
2. Merja Veteläinen searches more contact details to forage collection holders and they will be sent to DB managers, as well as utilized in the next “confirmation round”.	√
3. DB managers carry out one more update/confirmation round. Prior to this: <ul style="list-style-type: none"> a) Up-dated tables are sent to Ian too up-load in Google tables (within 1 week from the work shop) b) Merja Veteläinen sends a new letter with instructions to collection holders c) Responses from the forage collection holders are requested within 4 weeks’ time. d) After DB managers received confirmations, they up-date the summary table on no of candidate and AEGIS accessions (within 4 weeks’ time) e) Formal approval as a European Accession will be made by the National Coordinator concerned. f) - Merja Veteläinen will contact the ECPGR Secretariat and ask advice on the suitable way to seek for final confirmations for AEGIS accessions to be included in the EURISCO. She will then inform the database managers on the procedure to be taken. 	√ - partly for the point a) √ - advice received for the point f): Candidate or AEGIS accessions should be presented to the respective National Coordinators for their approval. If the approval is given, the NCs should ask the respective National Focal Points to flag the approved accessions in EURISCO. <i>Note:</i> On 10 th of July 2013 ECPGR Secretariat informed about the draft for ‘Revised simplified procedure for the selection and flagging of accessions for the European Collection’. The proposed procedure means in practice that germplasm collection holders would make offers of AEGIS accessions to their National Coordinator for approval. He/she will request the NFP to flag the respective approved accessions in EURISCO
4. Ian D. Thomas to carry out an exercise to include CxE data in the <i>Lolium</i> Database based on the data from the LOL-ECC-trial 1997-1998.	no action taken yet

Acknowledgements

The project group is most grateful to NordGen and especially Dr. Anne Palmé for the excellent organization and facilities for the work shop. In addition, Dr. Ian D. Thomas is acknowledged for the enormous work with Google tables before and after the work shop. His input made the progress with EFC possible.



ECPGR/AEGIS Forage work shop 2, 9-11.4.2013, NordGen, Alnarp, Sweden

Participants, forage database managers and WG members:

- | | |
|------------------------|--|
| 1. Anna Palme | 6. Petter Marum |
| 2. Bartosz Tomaszewski | 7. Stephane Fourtier |
| 3. Evelin Willner | 8. Valentin Maya |
| 4. Ian. D. Thomas | 9. Jonas Nordling (NordGen) |
| 5. Merja Veteläinen | Not attending: Wilhelm Graiss, Lajos Horvath |

Program

Date	Time	Theme	
9 th April	13:00-14:00	Arrivals, lunch	NordGen
	14:00	Introduction	Merja Veteläinen
	14:30	State of the individual databases (progress since the work shop in Hungary)	Database managers
	16:00	Coffee break	NordGen
	16:30	Discussion	
	18:00	To hotel in Malmö	
	19:00	Dinner in Malmö	
10 th April	8.30	Departure from hotel to NordGen	
	9:00	Overview of the databases in Google tables (the state of confirmations for EFC)	Ian D. Thomas and database managers
	11:00	Coffee	
	11:15	Previous session continues	
	12.30	Lunch and Tour in the gene bank	NordGen
	14:00	Working session – checking answers from the curators -> decisions on the candidate	Database managers

		accessions	
	15:30	Coffee break	
	16:00	Data models for C&E in central forage databases	<ul style="list-style-type: none"> • Descriptor lists, IPK example: Evelin Willner • NordGen solution for C&E data: Jonas Nordling • Standardization and "meta data": Ian. D. Thomas
	18:00	To hotel in Malmö	
	19:00	Dinner in Malmö	
11 th April	8.30	Departure from hotel to NordGen	
	9:00	Wrap up, follow-up actions and conclusions	
	12:00-14:00	Lunch and departures	

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This is the text that was agreed with the ECPGR Secretariat (i.e. expectations from us)

Introduction

The workshop in Hungary resulted in a first set of European Forage Collection (EFC) and AEGIS candidate accessions. The workshop was funded through the AEGIS Competitive Grant Scheme Second Call as part of the selected project "Establishment of the European Forage Collection" and it was agreed with the ECPGR Secretariat to develop follow-up activities with the remaining funds from the AEGIS project.

What was agreed as a next step is the confirmation of MOS/PRIMCOLL determination from all European Genebanks/Curators, which have accessions of EFC in their collection. This could be done in a centralized way. The proposed second workshop will deal with the feed-back received, check the answers from the curators and make final decisions on the candidate AEGIS accessions. In addition, preliminary plans to try to go ahead with CxE data inclusion in the central forage databases will be implemented in order to facilitate EURISCO developments in this area.

Activities

Planned activities for the second workshop include:

- 1) Confirmation of the EFC candidate accessions for acceptance as AEGIS accessions.
- 2) Inclusion of CxE data in model central forage databases to later facilitate EURISCO work to the same direction.
- 3) Improvement of the database management routines of the less experienced DB managers (this was already started during the 1st WS in Hungary).

Dear Members of the ECPGR Working Group for Forages,

Already 2,5 years have passed since our last meeting in Poel, Germany 2010. In that meeting we were strongly dedicated time to progress with A European Genebank Integrated System (AEGIS) and with the establishment of the European Forage Collection. After that our forage database managers have been working towards those goals that were set at the Poel meeting. One work shop has been held (see for the report at http://www.ecpgr.cgiar.org/news_area/establishment_of_the_european_forage_collection_to_age_with_aegis.html) and the next will be held on **April 9-11 in Alnarp, Sweden.**

Now, in order to facilitate the work of the coming workshop we need your help to distribute the attached letter (can be found also below) to the forage germplasm holders (gene banks and other institutes) in your country. This letter explain a procedure that the germplasm holders are requested to carry out before the work shop.

As you can see the time table is quite tight and I appeal you send this letter to forage collection holder/-s in your country (if you are not yourself the responsible person for the forage collection in your country).

The letter should be sent **immediately and preferably this week.**

I thank you greatly for your help and if they are any questions, please, do not hesitate to contact me.

The outcomes of the coming work shop will be sent to you in due time.

Yours sincerely,

On behalf of the organizers of the ECPGR/AEGIS Workshop "Establishment of the European Forage Collection"

Merja Veteläinen, Chair of the WG Forages

merja.vetelainen@boreal.fi

Text of the attched letter

Dear Forage Germplasm collection holder,

As you surely are aware the aim of AEGIS (A European Genebank Integrated System) is to establish a European Collection of unique and important accessions in European crop germplasm collections. The Working Group for Forages is responsible to lead the selection process for forage crops and has been working for several years to define the European Collection for Forages (EFC).

The crucial point in defining the EFC is that the forage germplasm holders **confirm** the proposals for "**Holder of primary collection**" (PRIMCOLL) that the CCDB Managers have suggested (see below) according to the principles of AEGIS. In order to speed up this selection process, the database managers provide now the data of all Forage crop databases in a centralized way for you to **check the data and confirm of the candidate accessions to the EFC.**

Therefore we are asking you:

1) to confirm that the proposed identification of PRIMCOLL is formally correct, based on the criteria established by the WG;

2) to confirm that your institution agrees to maintain and make the PRIMCOLL available to users as part of the EFC within the AEGIS framework.

The list of confirmed candidate accessions will then be sent to the National Coordinators of the respective holding countries, who should reconfirm whether these can be included in the European Collection and consequently flag them in EURISCO as 'AEGIS Accessions'. It is therefore also essential that your confirmed PRIMCOLLs are included in EURISCO before the last step of flagging can be implemented. If this is not yet the case, you should contact your National Inventory Focal Point: ([http://www.ecpgr.cgiar.org/index.php?id=2501&tx_wfqbe_pi1\[uid\]=14](http://www.ecpgr.cgiar.org/index.php?id=2501&tx_wfqbe_pi1[uid]=14))

(More information on the selection criteria to the European Collection can be found at http://aegis.cgiar.org/european_collection/selection_criteria.html)

Now, we would ask you to check the data correctness of forage accessions belonging to your collection. In addition, we ask you to confirm whether you agree with the suggestions on the candidates for EFC made by the database managers and available from the links below latest at 5th April 2013. See more detailed instructions below. The dead-line date is set so that the AEGIS workshop of forage database managers on 9-11th April in Sweden can be strongly facilitated and supported by your input in data validation. One of the aims of this workshop is to progress with the confirmation of the EFC candidate accessions for acceptance as AEGIS accessions.

Below you will find instructions on how to proceed (Please, read the instructions before you start):

1] Open the database you want to use in the following links (Note that there are several sheets to be browsed. The information on candidates to EFC can be found on the sheet: Eur.For.Col or EFC).

ECCDB Dactylis Full

https://www.google.com/fusiontables/DataSource?docid=14k3aRANVFuDN7_PfjNLDICvYXgVO5SxKe1p0NR8

ECCDB Festuca Full

https://www.google.com/fusiontables/DataSource?docid=1Lcsf7_nAjbViL14dnp1PR4Eu9mY8EMmoC1n1kZY

ECCDB Lolium Full https://www.google.com/fusiontables/DataSource?docid=1oGph7eHw8w2JnwBa117f_fXB5U-11D1SQykAYI

ECCDB MedicagoAnnual Full https://www.google.com/fusiontables/DataSource?docid=1-xguPXeQ_4HDms5L8aR68gmPRSfKx6u8JBBUyfl

ECCDB MedicagoPerennial Full <https://www.google.com/fusiontables/DataSource?docid=1E8vtMK5gk7V8l8Wk1Nhdf-iRfM31o52XaNkO3kM>

ECCDB MinorGrasses Full

<https://www.google.com/fusiontables/DataSource?docid=1l3cvmRJMqjiQQ7o2XrbNS7cy1FCEVEO2xaHkbVo>

ECCDB MinorLegumes Full

<https://www.google.com/fusiontables/DataSource?docid=1zT78lpBg2tjkHFD80fgzi9D3rf3c6N0kjrdy40>

ECCDB Phleum Full

<https://www.google.com/fusiontables/DataSource?docid=1E2WY2xkLgiXjr1J8It8ySpHr0yFIVIPDoey-XtU>

ECCDB Poa Full

<https://www.google.com/fusiontables/DataSource?docid=1ZeSijEPVGmDLEc4ZjpdxfTaVIUKwwWfpGlo23k>

ECCDB Trifolium Full

https://www.google.com/fusiontables/DataSource?docid=1AUsmbePHUHW_eKyNfnSxGAWeZw5sxuEwwiSNYJA

ECCDB Trifolium subterraneum Full

<https://www.google.com/fusiontables/DataSource?docid=1F89MftRmPSKuUqEpnInpAMkW2mOIFTP1Z0wuH9Q>

ECCDB Vigna Full

https://www.google.com/fusiontables/DataSource?docid=1VXtz8chVSVfge9yt_voEDEhilmoi9IFewEMf_yE

Now you should then be able to search and browse databases but NOT make any changes to the data. Instructions on how to edit the data is described in point 3. (Please note that eventually you will be able to do a Google search for the database by name but it takes a little while for Google's search engines to pick the tables up).

2] Extract records for correction:

- a) Select tab "All".
- b) Select Filter and then INSTCODE. A list of distinct values should then appear. Tick the box for the INSTCODE you want to extract.
- c) Select File and Download. A download menu will appear. Choose to download filtered rows as type CSV. This will create a file on your computer called for instance 'ECCDB Lolium Full-filtered.CSV'

3] The downloaded file is a standard. CSV format which can be opened in Excel, LibreOffice, Google Docs etc.

- a) Edit extracted records and confirm the candidate accessions for EFC in the column ORIGINALITY-GB that you add in the table. The **confirmation should be marked with value "1"**. Finally, **send the corrected file back to the appropriate database manager** to be checked and re-uploaded. E-mail addresses of the forage database managers can be found at http://www.ecpgr.cgiar.org/germplasm_databases/central_crop_databases/ECCDB_List.html?network=8 . Please pay particular attention to ORIGINALITY-GB and PRIMCOLL-GB. PLEASE NOTE that it is important that the order of the fields in the Table is NOT altered. Note also that in some of the tables DONORNUMBER has not been correctly uploaded, but this should not be a major problem and will be corrected at a later stage.

If you have any questions on the data, please, contact the corresponding forage database manager. If you have questions about the up-loading of the data, please, contact Ian D. Thomas at idt@aber.ac.uk.

Your help is invaluable in determining accessions to the European Forage Collection and we appeal that you will do the checking of the data of your respective forage accessions as soon as possible but not later than 5th April.

On behalf of the ECPGR Working Group for Forages,

Merja Veteläinen, Chair of the WG



AEGIS Forage workshop

9th – 11th April 2013

NordGen

Alnarp, Sweden

AEGIS goal

- is to create **A European Genebank Integrated System** for plant genetic resources for food and agriculture, aimed at **conserving the genetically unique and important accessions** for Europe and **making them available for breeding and research**. Such material will be **safely conserved** under conditions that ensure genetic integrity and viability in the long term.



ECPGR towards Phase IX

ECPGR towards Phase IX

- Phase IX of ECPGR will be launched (2014-2019) with an approved budget of 2,5 M Euro – additional funds will need to be raised to allow implementing new mode of operation
- Secretariat will be hosted by the Global Crop Diversity Trust in Bonn, Germany, as of 1 January 2014
- EURISCO will be hosted by IPK, Gatersleben, Germany
- New objectives
- New operational structure
- New rules of procedure and terms of reference of ECPGR bodies

Objectives of ECPGR to be finalized in a logframe

1. AEGIS is operational and accessions are characterized and evaluated
2. Functionality of EURISCO (data quality & quantity + in situ data)
3. In situ and on-farm conservation and concepts are agreed
4. Commitment and regular resources from donors are increased
5. Relations with users of germplasm are strengthened
6. Secretariat support is adequate to sustain operations of ECPGR

New Operational structure

- Networks are eliminated
- 15-20 Working Groups (actual number and scope under discussion)
- WGs, composed of pools of experts proposed by NCs, carry out activities mandated by the SC or proposed by the WG and approved by the SC
- Proposals for activities evaluated and approved every 6 months by ExCo
- Each activity normally will not exceed Euro 15,000 and the participation of 12 members, selected on the basis of “expressions of interest”

Ongoing preparation for Phase IX

- Two Task Forces on “Crop Wild relatives” and on “On-farm conservation” are being set up to work on respective ECPGR concepts to be approved by the Steering Committee
- A task Force to discuss the engagement of germplasm users in ECPGR activities is being set up
- A strategy to enhance relationship with the EU has been approved

Upcoming ECPGR meetings

11-12 April 2013: Vegetables DB managers ad hoc meeting -
Valencia, Spain

7-8 May 2013: 5th Grain Legumes Working Group - Novi Sad,
Serbia

26-28 June 2013: 2nd Umbellifer Crops Working Group - St
Petersburg, Russian Federation

September (tbc): Ad hoc meeting of the *Avena* Working
Group – Limassol, Cyprus

8 October 2013: 2nd Leafy Vegetables Working Group -
Ljubljana, Slovenia

To be confirmed: Documentation and Information Network
(relationship ECCDBs- EURISCO)

AEGIS website:

ABOUT AEGIS

LINKS



A European Genebank Integrated System

Search

About AEGIS

Membership

Structure

European Collection

AQUAS

AEGIS ROAD MAP



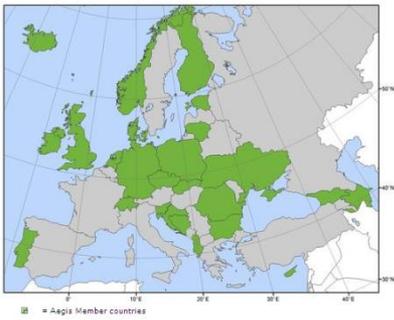
A **European Genebank Integrated System**, or AEGIS for short, aims to establish a European Collection, which would be a virtual European Genebank, to be maintained in accordance with agreed quality standards, and to be freely available in accordance with the terms and conditions set out in the International Treaty on Plant Genetic Resources for Food and Agriculture...

[More about AEGIS](#)

AEGIS objective:

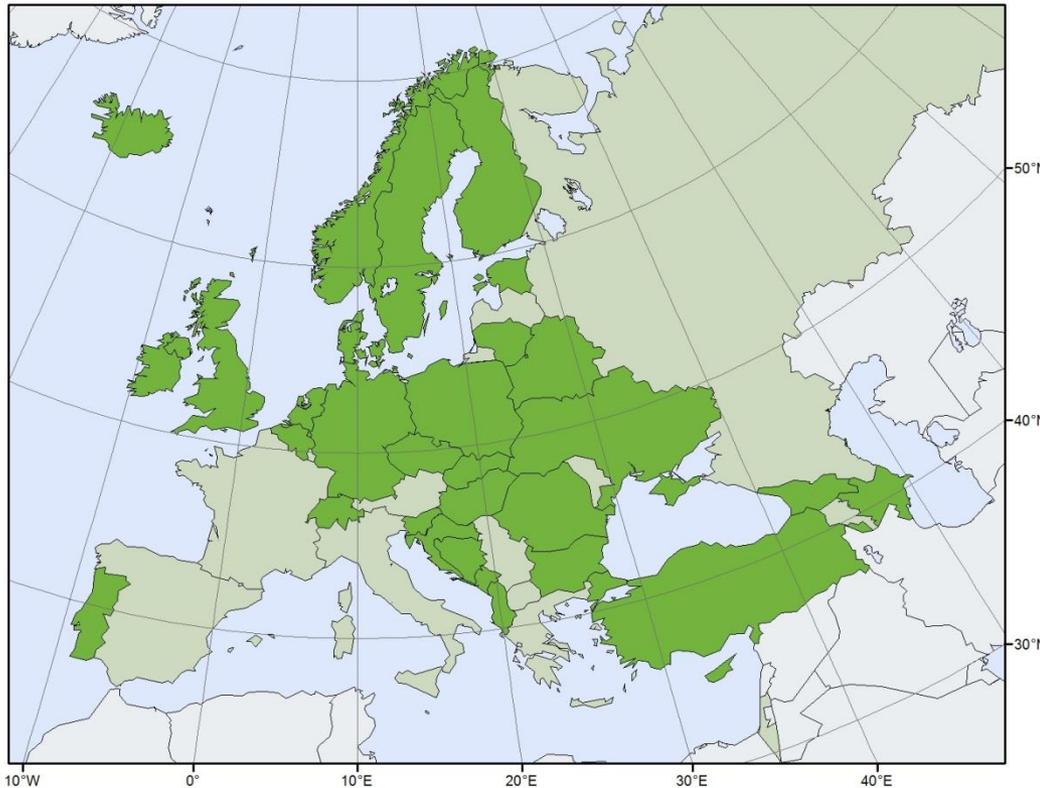
To create an integrated system for plant genetic resources for food and agriculture in Europe, aimed at conserving genetically unique accessions that are important for Europe and making them readily available and easily accessible for breeding and research. *Ex situ* conservation of those accessions, called European Accessions together forming the European Collection, will be carried out in accordance with common agreed quality standards, independently of where the accessions are physically located, and will be made available in accordance with the terms and conditions of the Treaty.

AEGIS membership status



2010 (25 countries)

2013 (33)



1. **Albania** (06 May 2009) - [Associate Members](#)
2. **Austria** (05 December 2012)
3. **Azerbaijan** (16 July 2009) - [Associate Members](#)
4. **Belarus** (02 November 2011) - [Associate Members](#)
5. **Belgium** (01 June 2012) - [Associate Members](#)
6. **Bosnia and Herzegovina** (19 May 2010)
7. **Bulgaria** (02 December 2009) - [Associate Members](#)
8. **Croatia** (02 December 2009) - [Associate Members](#)
9. **Cyprus** (15 September 2012) - [Associate Members](#)
10. **Czech Republic** (23 July 2009) - [Associate Members](#)
11. **Denmark** (22 February 2010) - [Associate Members](#)
12. **Estonia** (22 May 2009) - [Associate Members](#)
13. **Finland** (02 December 2009) - [Associate Members](#)
14. **Georgia** (18 May 2009) - [Associate Members](#)
15. **Germany** (05 November 2009) - [Associate Members](#)
16. **Hungary** (22 November 2011) - [Associate Members](#)
17. **Iceland** (22 October 2010)
18. **Ireland** (22 July 2009)
19. **Latvia** (01 June 2012)
20. **Lithuania** (12 October 2010)
21. **Montenegro** (16 December 2010)
22. **Netherlands** (28 May 2009) - [Associate Members](#)
23. **Norway** (17 August 2009) - [Associate Members](#)
24. **Poland** (17 May 2010)
25. **Portugal** (20 November 2009)
26. **Romania** (14 April 2010) - [Associate Members](#)
27. **Slovakia** (17 June 2009) - [Associate Members](#)
28. **Slovenia** (21 September 2009) - [Associate Members](#)
29. **Sweden** (31 May 2011) - [Associate Members](#)
30. **Switzerland** (27 July 2009) - [Associate Members](#)
31. **Turkey** (14 November 2011) - [Associate Members](#)
32. **Ukraine** (30 April 2009)
33. **United Kingdom** (18 June 2010) - [Associate Members](#)

51 Associate Membership Agreements

European Collection (1)

ECP/GR

- Selection of European Accessions: an evolutionary process
- Simplified selection procedures agreed (coordinated by WGs)
- 8 WGs have agreed selection procedures

Germany (IPK) offered about **20 000** and the Netherlands (CGN) **5864** unique accessions to AEGIS. Acceptance by WGs in progress.

The above offers include the following forage accessions **for your consideration on the suitability of their inclusion** in the European Collection:

- IPK, Germany: **5807**
- CGN, The Netherlands: **852**

End March 2013 a total of **6007** accessions were flagged as European Accessions on EURISCO, including **143** Allium accessions and **5864** accessions maintained by CGN

European Collection (2)

ECP/GR

- Currently **120** *Vitis* accessions proposed for acceptance by NCs and/or flagging
- The Czech Republic and Russia offered **394** and **115** *Linum usitatissimum* candidate accessions respectively.
- **4** WGs have first lists of approx. **4000** selected candidate accessions

Outcomes of the first AEGIS project workshop:

- The procedure for the selection of candidate European Accessions was agreed.
- A tentative list of 10 485 candidate European Accessions of 10 forage species/groups was created;
- Database Managers to seek confirmations from the respective genebanks/collection holders.
- The selection of candidate accessions is a continuing process and the expected number of accessions to EFC can be 5-10 times the present number of candidates.

AEGIS Quality System (AQUAS - 1)

- Template for operational genebank manual
- **3** (+ 1) AMAs prepared genebank manual
- Combined effort with FAO to develop generic operational genebank standards; active ECPGR participation in the process
- Draft generic standards on seed, field and *in vitro*/cryopreservation genebanks approved by ITWG. They are tabled at the forthcoming Commission meeting for approval.

The ECPGR WGs have used above draft standards as a reference for adoption as part of the AEGIS Quality System.

An *AEGIS Safety-duplication Policy* for the accessions to be included in the European Collection has been approved by SC

AEGIS Quality System (AQUAS - 2)

- **7** WGs developed generic standards; still to be 'harmonized' with FAO standards
- **6** WGs have or are developing crop-specific standards for one or more routine operations (using FAO standards as reference)

Forage WG: Preferred and acceptable quality standards for regeneration have been agreed at the Working Group level.

Miscellaneous achievements

- Competitive Grant Scheme: 2 calls; 8 projects granted; 6 projects concluded; 2 concluded by end 2012; very interesting results, all contributing to AEGIS process
- 2 project proposals (EUROGENEBANK and Plant Gene Access) developed and submitted to FP7; major coordination task; excellent collaboration with more than 30 partners each; no good 'fit' with FP7 requirements; no funding obtained
- AEGIS Web site revised (<http://aegis.cgiar.org/home/html>); about 300 visits per month

AEGIS conclusions and outlook

ECP/GR

- Membership still growing; project development helped; sometimes lengthy procedures for countries to sign
- European Collection on a good development curve; selection procedures of unique accessions agreed; constraints with lack of (good) data; countries are offering their 'unique' accessions; important role of WGs; process is slow
- Collaboration with FAO on genebank standards was positive; good progress being made
- Very positive experience with AEGIS Grant Scheme; allows more flexibility and use of opportunities; the mechanism could be used more widely!
- Time-consuming experience with FP7 projects affected the progress of AEGIS

Goals of the Forage workshop

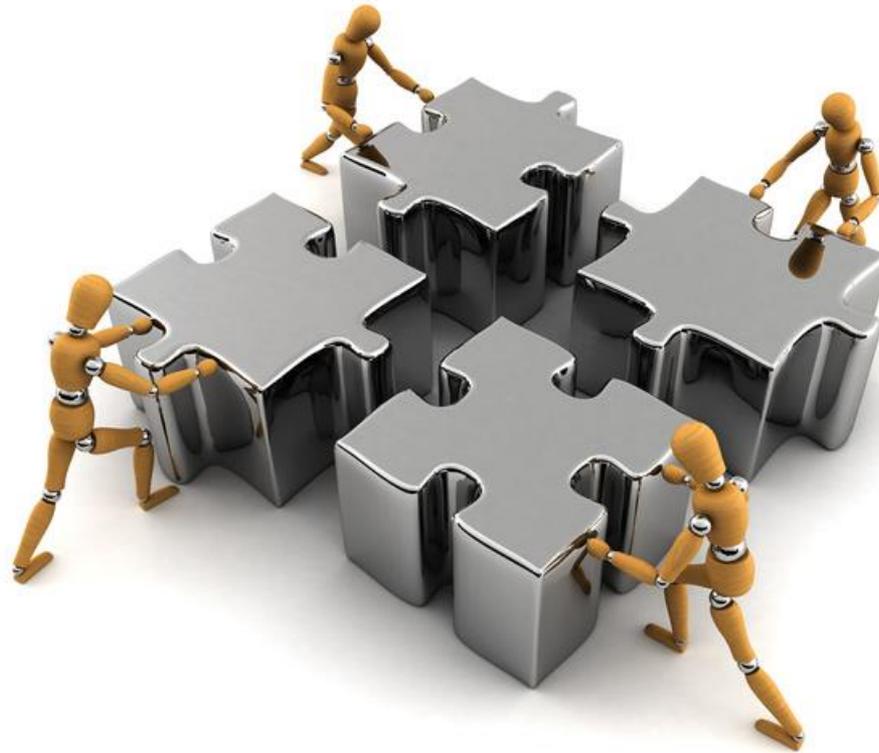
1. Confirmation of the EFC candidate accessions for acceptance as AEGIS accessions.
2. Inclusion of CxE data in model central forage databases to later facilitate EURISCO work to the same direction.
3. Improvement of the database management routines of the less experienced DB managers (this was already started during the 1st WS in Hungary).



Define primary holder of accessions

Step	Action	Responsible	Interaction with
1	Add MOS data to accession data in genebank (ORIGINALITY descriptor)	Genebank curators	
2	Per genus, deliver national datasets containing MOS info to CCDBs	WG member	Genebank curators, CCDB managers
3	Incorporate MOS info in CCDBs and assign preliminary value for primary holder (PRIMCOLL)	CCDB manager	
4	Identify cases needing clarification (multiple samples sharing highest level of Originality), propose solution	CCDB manager	Genebank curators, ev. WG members
5	Obtain approval of assumption of responsibility as primary holder for list of predefined accessions	CCDB manager	Genebank curators, ev. WG members
6	Assign values (Yes/No) to EFC descriptor field where situation is clear	CCDB manager	

Let's work!



European *Festuca* and *Dactylis* Databases

Bartosz Tomaszewski, Włodzimierz Majtkowski
Plant Breeding & Acclimatization Institute
– *National Research Institute,*
National Centre for Plant Genetic Resources, Botanical
Garden,
Bydgoszcz, POLAND,



Alnarp / Sweden 2013



The changes in databases since the last report

Databases	No. of records		
	last update	added	current status
<i>Festuca</i>	13164	1753	14917
<i>Dactylis</i>	12341	760	13101
Total	25505	2513	28018

Genus *Dactylis* database status by data donor

INSTCODE	Advanced cultivar, Breeder's line	Traditional cultivar, Landrace	Wild, Weedy	Unknown, Other	Total
AUT060	12		5	1	18
BGR001	44	241	150	92	527
CHE001			11		11
CZE082	128	2			130
DEU271	310		1314	254	1878
ESP009			337		337
ESP119	1		22		23
FRA051	77		379		456
GBR004			65		65
GBR016	300	23	757	79	1159
HUN003	7	2	158	107	274
LTU001	80		164		244
LVA007	28				28
LVA009	4		10		14
MKD001			16		16
NLD037	1		31		32
POL003	145		6151		6296
PRT084	7		137		144
ROM003	32		17		49
ROM007	3	25	19		47
SVK012	91		245		336
SVN019	1		27		28
SWE002	40	21	279	1	341
SWE054	49	12	401	6	468
TUR001			180		180
SUM	1348	326	10870	539	13101
%	10,3	2,5	83,1	4,1	100

Genus *Festuca* database status by data donor

INSTCODE	Advanced cultivar, Breeder's line	Traditional cultivar, Landrace	Wild, Weedy	Unknown, Other	Total
AUT060	34		14	2	50
BEL014			28	1	29
BEL087				81	81
BGR001	47	2	131	112	292
CHE001			37		37
CZE082	316	1	2		319
CZE079	3				3
DEU271	537	3	794	572	1906
ESP119			22		22
FRA051	164		170		334
GBR004			75	3	78
GBR016	199	68	989	286	1542
HUN003	29	1	358	322	710
LTU001	105		215	65	385
LVA007	323				323
LVA009	41	1	16		58
MKD001	1	1	59	1	62
NLD037	31		1		32
POL003	275		4767	178	5220
ROM003	93		321		414
ROM007	2	38	35	13	88
SVK012	162		1017	14	1193
SVN019	3				3
SWE002	119	27	553	16	715
SWE054	148	32	785	28	993
TUR001			28		28
SUM	2632	174	10417	1694	14917
%	17,6	1,2	69,8	11,4	100

Number of accessions per *Festuca* species

No.	<i>Festuca</i> species	No. of accessions
1	<i>pratensis</i>	7969
2	<i>rubra</i>	2826
3	<i>arundinacea</i>	2667
4	<i>ovina</i>	359
5	<i>gigantea</i>	218
6	<i>rupicola</i>	117
7	<i>pseudovina</i>	76
8	<i>sp.</i>	69
9	<i>nigrescens</i>	68
10	<i>valesiaca</i>	46
11	<i>duriuscula</i>	26
12	<i>longifolia</i>	26
13	<i>tenuifolia</i>	26
14	<i>trichophylla</i>	25
15	<i>heterophylla</i>	19
16	<i>trachyphylla</i>	19
17	<i>capillata</i>	18
18	<i>cinerea</i>	15
19	<i>elatior</i>	14
20	<i>brevipila</i>	13
21	<i>glauca</i>	13
22	<i>drymeja</i>	12
23	<i>pallens</i>	11
24	<i>vaginata</i>	10

Number of accessions per *Dactylis* species

No.	<i>Dactylis</i> species	No. of accessions
1	<i>glomerata</i> L.	13030
2	<i>glomerata</i> L. ssp. <i>aschersoniana</i>	25
3	<i>glomerata</i> L. ssp. <i>glomerata</i>	12
4	<i>marina</i> Borrill	31
5	<i>smithii</i> Link	1
6	<i>sp.</i>	2

Definition most original sample (MOS) for *Dactylis*

Originality (EURISCO code)	bred	collected	unknown	Total
(1) MOS	98	959	63	1120
(2) with MOS	16	5	262	283
(3) one away	162	1520	67	1749
(4) more away	29	70	1552	1651
(5) unknown	26	5426	2846	8298
total	331	7980	4790	13101

Definition most original sample (MOS) for Polish accessions of *Dactylis*

Originality (EURISCO code)	bred	collected	unknown	Total
(1) MOS		106		106
(2) with MOS				
(3) one away				
(4) more away			724	724
(5) unknown		4985	484	5469
total		5091	1208	6299

Definition most original sample (MOS) for *Festuca*

Originality (EURISCO code)	bred	collected	unknown	Total
(1) MOS	55	5528	91	5674
(2) with MOS	51	19	81	151
(3) one away	341	1516	125	1982
(4) more away	492	229	2533	3254
(5) unknown	448	451	2957	3856
total	1387	7743	5787	14917

Definition most original sample (MOS) for Polish accessions of *Festuca*

Originality (EURISCO code)	bred	collected	unknown	Total
(1) MOS		4179		4179
(2) with MOS				
(3) one away	24	240		264
(4) more away	172	193	172	537
(5) unknown	61	93	86	240
total	257	4705	258	5220

RECAPITULATION

- The European *Festuca* Databases contain more than 100 species, however only 5 species (*F. pratensis*, *F. arundinacea*, *F. rubra*, *F. ovina* and *F. gigantea*) account more than 95% of all records.
- The European *Dactylis* Databases consist of only 2 species (*D. glomerata* and *D. marina*) with *D. glomerata* accounting for 99,5%.

State of the European *Poa* Database: Progress in Identification of “Originality”, “Primary Holder” and EFC candidate (ECCDB-POA)

Evelin WILLNER

IPK Gene Bank

Satellite Collections North

The ECCDB-Poa

content and application

The aim of ECCDB

- Cataloguing the Poa PGR in European GB collections
- Providing information on available Poa germplasm
- Identifying duplicates
- Identifying gaps in European Poa collections and
- Identifying Originality (MOS) and Primary holder (PRIMCOLL)

Overview of the contributors to the ECCDB *Poa*

Country	ECCDB 2012	ECCDB 2013	EURISCO 2013
POL003	2862	2862	1759
DEU271, DEU146	1233	1233	1187
SWE054	580	579	550
SVK001	297	297	19
CZE082	266	266	272
LTU001	261	261	116
GBR016, GBR004	239	255	263
HUN003	203	203	201
BGR001	111	111	112
NLD037	78	133	134
ROM003, 007, 023	56	56	49
EST001	55	55	55
ITA363	37	37	-
ESP003, ESP119	37	37	37
AUT001	19	19	19
FRA243	17	17	2
SVN019	16	16	7
LVA010	16	16	16
UKR084	14	14	14
TUR001	13	13	-
CHE002	10	10	-
IRL029	10	10	10
AZE006, AZE015	5	5	5
BEL094	2	2	30

(24 countries/ 30 Institutions)

total

6437

6507

4857

Evelin Willner: AEGIS workshop, Poa sp.-EDB-MOS, Hungary 31.01.2012

Overview of the contributors to the ECCDB *Poa*

<u>Country</u>	<u>ECCDB 2012</u>	<u>ECCDB 2013</u>	<u>EURISCO 2013</u>
POL003	2862	2862	← 1759
DEU271, DEU146	1233	1233	← 1187
SWE054	580	579	← 550
SVK001	297	297	← 19
CZE082	266	266	272
LTU001	261	261	← 116
GBR016, GBR004	239	→ 255	263
HUN003	203	203	201
BGR001	111	111	112
NLD037	78	→ 133	134
EST001	55	55	55
LVA010	16	16	16
BEL094	2	2	30
...			
...			
total	6437	<u>6507</u>	4857

Overview of the ECCDB by country, originality and primary holder

Institution code	No. of accessions	Originality	PRIMCOLL	
			DBM	GB
• POL003	2862	2668	2571	(*)
• DEU271, DEU146	1233	1230	1212	385
• SWE054	579	579	579	212
• SVK001	297	297	286	276
• CZE082	266	265	263	183
• LTU001	261	150	151	145
• GBR016, GBR004	255	203	54	23
• HUN003	203	203	167	154
• BGR001	111	111	98	98
• NLD037	133	133	133	133
• ROM003, 007, 023	56	54	55	*
• EST001	55	55	55	55
• ITA363	37	37	36	36
• ESP003, ESP119	37	36	36	*
• AUT001	19	19	19	19
• FRA243	17	17	17	(*)
• SVN019	16	16	16	16
• LVA010	16	16	16	16
• UKR084	14	14	14	*
• TUR001	13	13	13	13
• CHE002	10	10	10	10
• IRL029	10	10	10	*
• AZE006, AZE015	5	5	5	*
• BEL094	2	2	2	2
total	6507 (100)	6143 (95)	5823 (89)	1776 (27)
		4488 MOS		

* confirmation by curator is missing

Overview of the ECCDB by country and EFC candidates

Institution code	No. of accessions	EFC yes (1)	EFC no (0)
• POL003	2862	115 (-28)	117
• DEU271, DEU146	1233	456	181
• SWE054	579	377 + (189)	11
• SVK001	297	4	93
• CZE082	266	92	88
• LTU001	261	136	8
• GBR016, GBR004	255	8 + (15)	0
• HUN003	203	15	47
• BGR001	111	8	25
• NLD037	133	132	1
• ROM003, 007, 023	56	0	0
• EST001	55	2 + (53)	0
• ITA363	37	20 + (15)	0
• ESP003, ESP119	37	0	0
• AUT001	19	(4)	14
• FRA243	17	5	12
• SVN019	16	(9)	16
• LVA010	16	5 + (11)	16
• UKR084	14	(12)	2
• TUR001	13	(6)	0
• CHE002	10	10	10
• IRL029	10	10	0
• AZE006, AZE015	5	(5)	0
• BEL094	2	(2)	0
total	6507 (100)	1382 (22)	599 (9)

Definition most original sample (MOS)

Originality (EURISCO code)	bred	collected	Unknown	Total
(1) MOS	181	3328	979	4488
(2) with MOS	21	7	3	31
(3) one away	285	219	171	675
(4) more away	594	128	248	970
(5) Unknown	20	24	97	141
Total	1101	3706	1498	6305
Empty fields				(+202)

Candidates for European Forage Collections

updated <i>Poa</i> sp.	2012		2013	
<i>Poa</i> sp. - accessions	6437	(100%)	6507	(100%)
ORIGINALITY	6217	(97%)	6143	(95%)
PRIMCOLL	5687	(88%)	5823	(89%)
Confirmation Curator	2647	(41%)	1776	(27%)
Suggestion by DBmanager	4482	(70%)	5823	(89%)
Candidates for EFC: yes	1529	(24%)	1382	(22%)
no	1178	(18%)	599	(9%)

Screening for duplicates: for example: Trampas

INSTCODE	ACCENUMB	ACCENAME	DONORCODE	DUPLSITE	SEEDAVAIL	EFC	PRIMCOLL	ORIGINALITY
NLD037	CGN21027	Trampas	NLD083	DEU271	1	1 → 0	NLD037	3
CZE082	14G2800029	Trampas	DNK006		1	0	SWE054	3
BGR001	1985-POA-PR-6	TRAMPAS	CZE122			0	SWE054	4
INRA L	792	TRAMPAS				0	SWE054	2
DEU271	GR 4578	Trampas	DEU273	NOR051	1	0	SWE054	4
DEU271	GR 9784	Trampas	DEU001	NOR051	1	0	SWE054	4
SVK001	G2800019	Trampas			0	0	SWE054	4
GBR016	ABY-Bp 812	Trampas	DNK006		1	0	SWE054	3
SWE054	NGB1715	TRAMPAS (PLÆNE)	DNK066	NOR051	1	1	SWE054	1

Screening for duplicates: for example: Alicja

INSTCODE	ACCENUMB	ACCENAME	DONORCODE	DUPLSITE	SEEDAVAIL	EFC	PRIMCOLL	ORIGINALITY
SVK001	G2800089	Alicja			0	0	POL022	4
POL003	141793	ALICJA					POL003	4
CZE082	14G2800001	Alicja	POL076		1	0	POL003?	3
DEU271	GR 4286	Alicja	DEU273	NOR051	1		DEU271?	4
POL003	142239	ALICJA					POL003	4
POL003	143375	ALICJA					POL003	4
POL003	143510	ALICJA				0	POL003	3
POL003	155231	Alicja	POL076			1?	POL003	1

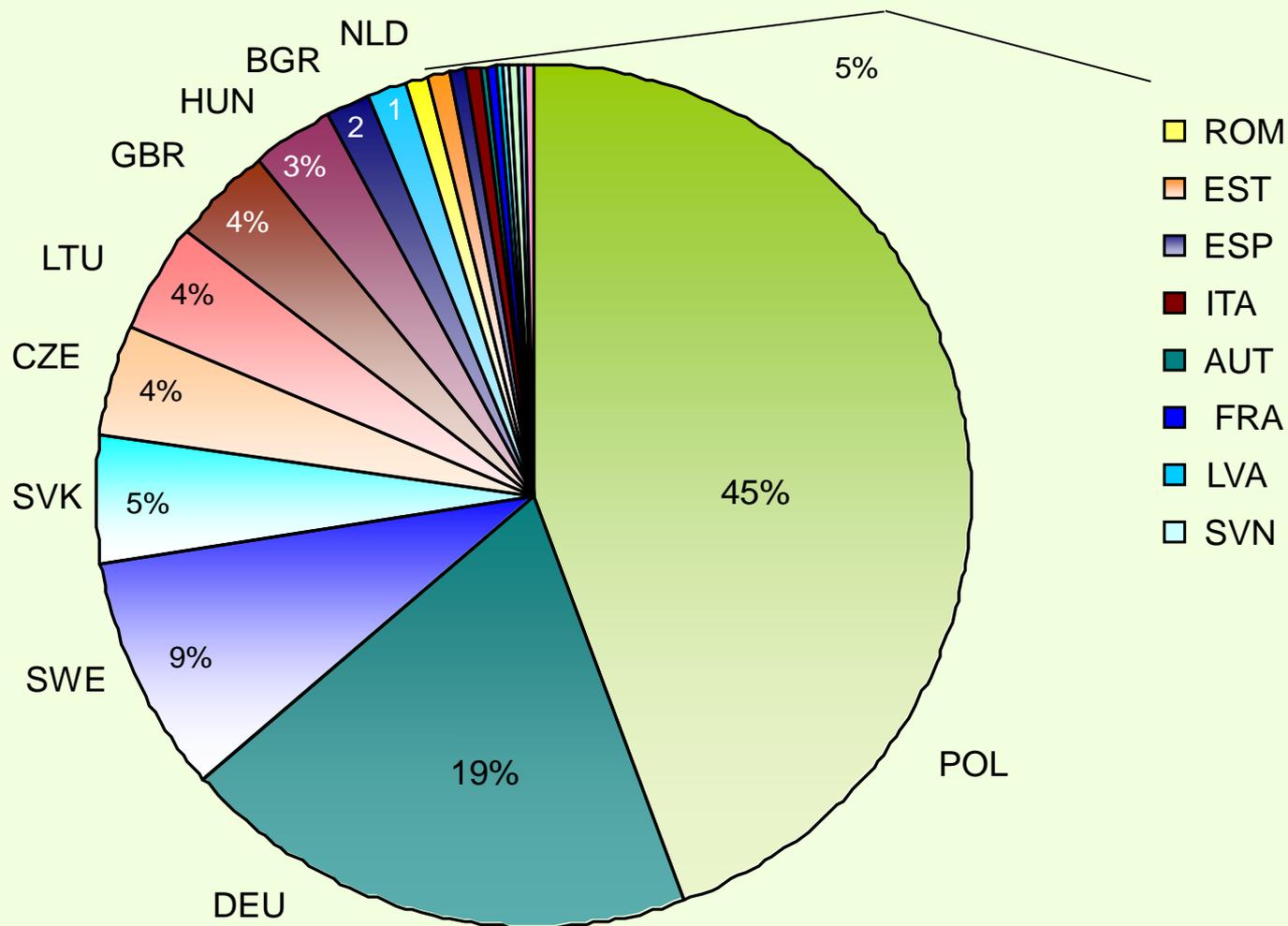
Conclusions

- 10 curators sent updates, handling with new data is easier, because same data structure (thanks to Ian!)
- More correct data, but not more EFC candidates (missing of several criteria, first of them no safety duplicate, seed not available)
- Comparison between collections is possible (to find duplicates → to determine EFC candidate)

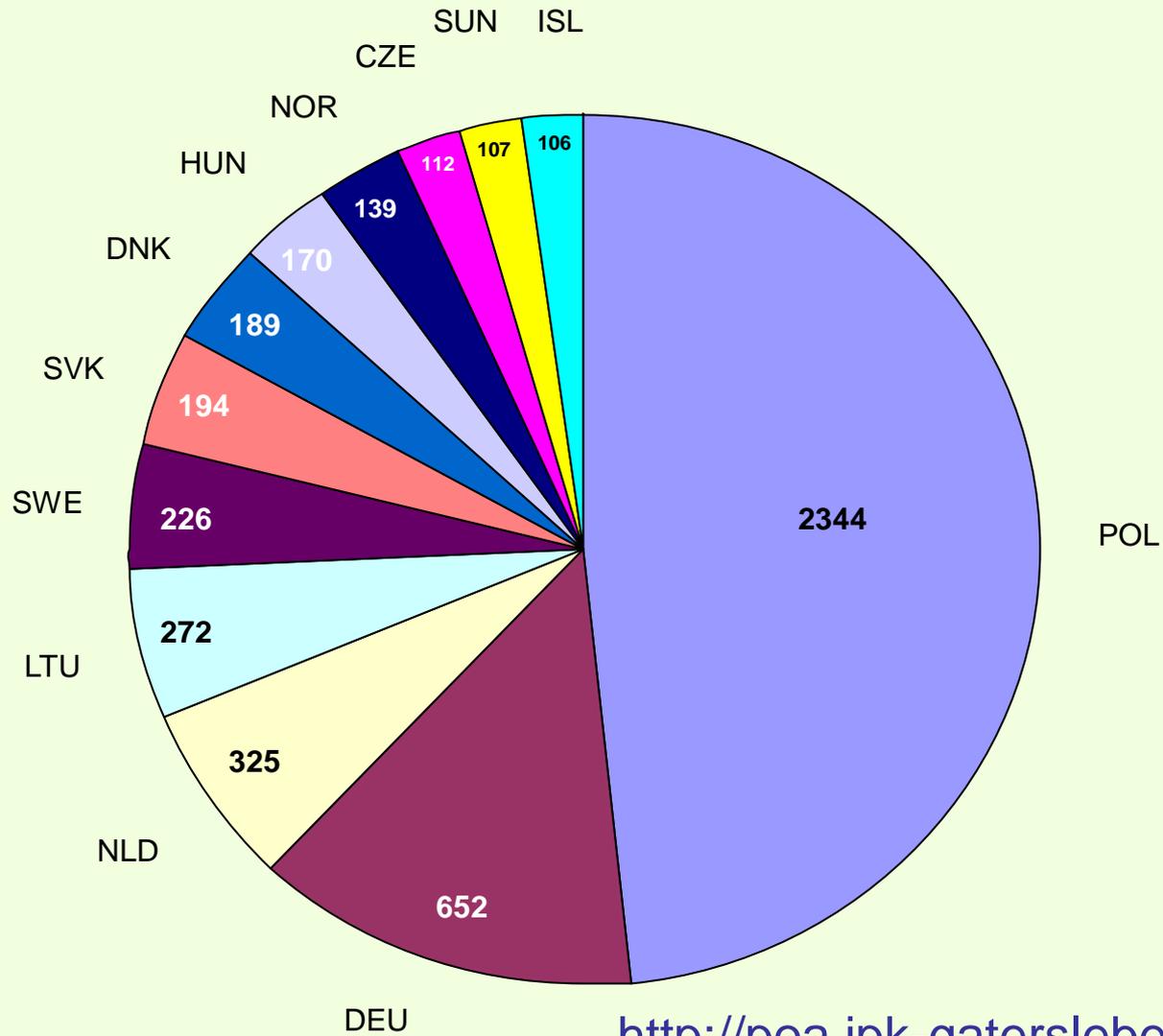
IPK Genebank Malchow

- Leibniz-Institute for Plant Genetics and Crop Plant Research Gatersleben
Genebank, Satellite Collections North
Inselstrasse 9
D-23999 Malchow/Poel
- Tel.: +49 (0)38425-20316
- Fax: +49 (0)38425-429808
- E-Mail: willner@ipk-gatersleben.de
- Internet: http://gbis.ipk-gatersleben.de/gbis_i/
- <http://poa.ipk-gatersleben.de/apps/epdb/>

ECCDB-Poa , grouped by donor country (In total 6437 accessions)



ECCDB-Poa , grouped by country of origin



<http://poa.ipk-gatersleben.de/apps/epdb/>

Screening for duplicates among accessions with (variety) names

Accession names		no. of accessions
• <i>accessions without name</i>		3,673
• accessions with name		1,404
• name unique		882
• name present twice	96 →	192
• name present three times	54 →	162
• name present four times	24 →	96
• name present five times	7 →	35
• name present six times	1 →	6
• name present seven times	2 →	14
• name present eight times	1 →	8
• name present nine times	1 →	9
• total redundant variety names/accs.	186	522

(2007: collection total 5,077 accessions:
→ unnecessary multiplication by 336 accessions

Perennial Medicago AEGIS-DATABASE

Alnarp-2013

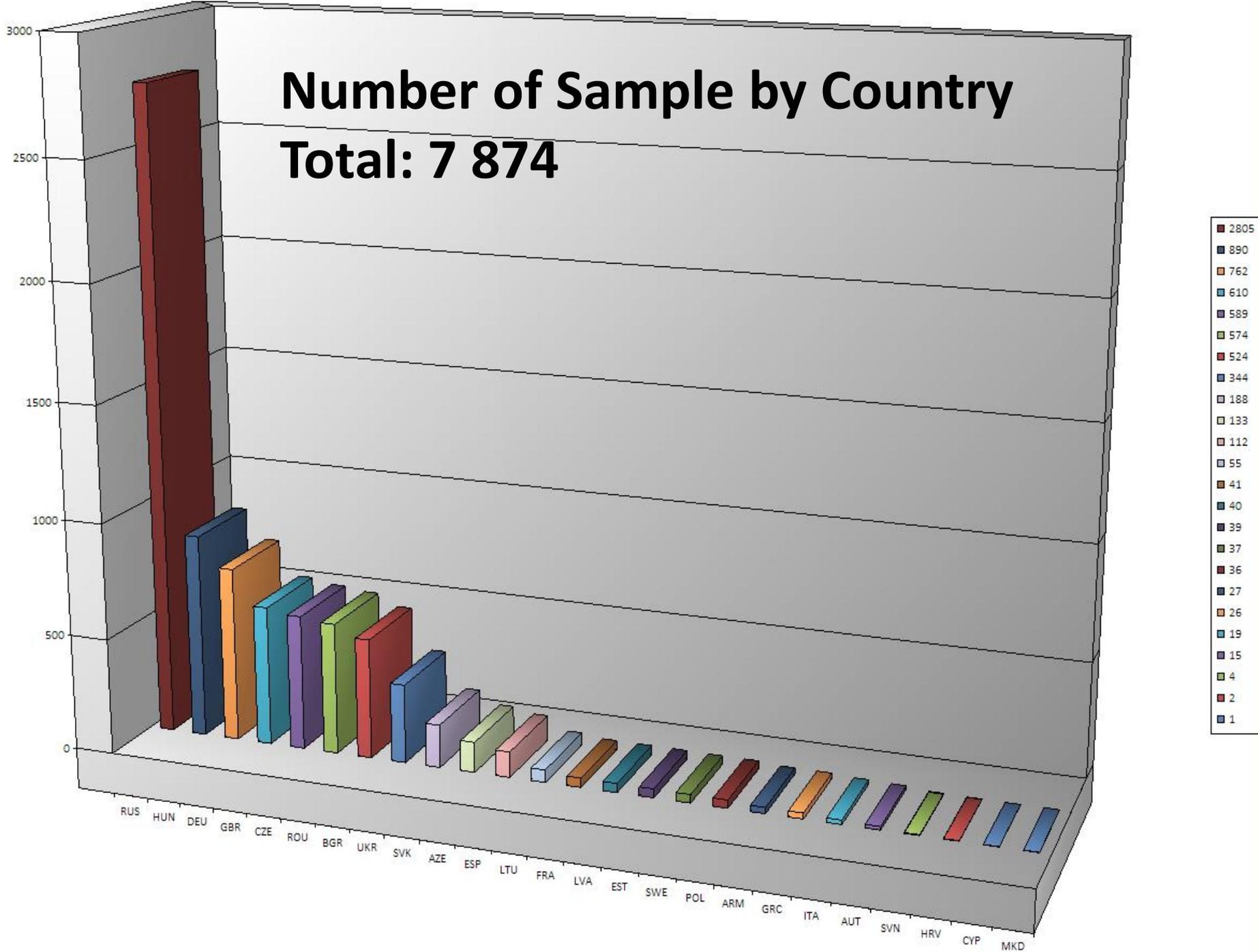
CRG INRA DE LUSIGNAN



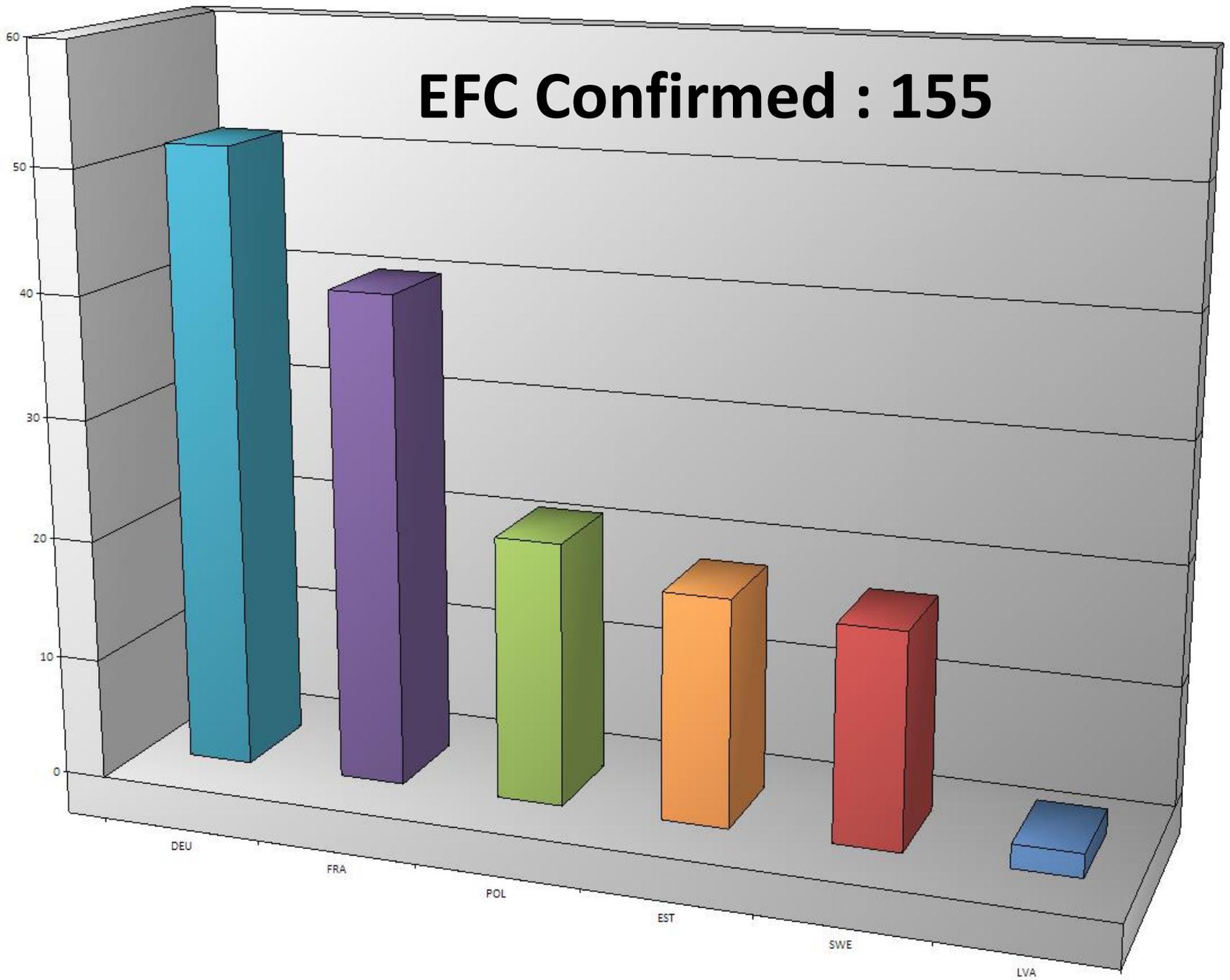
INRA
SCIENCE & IMPACT

Number of Sample by Country

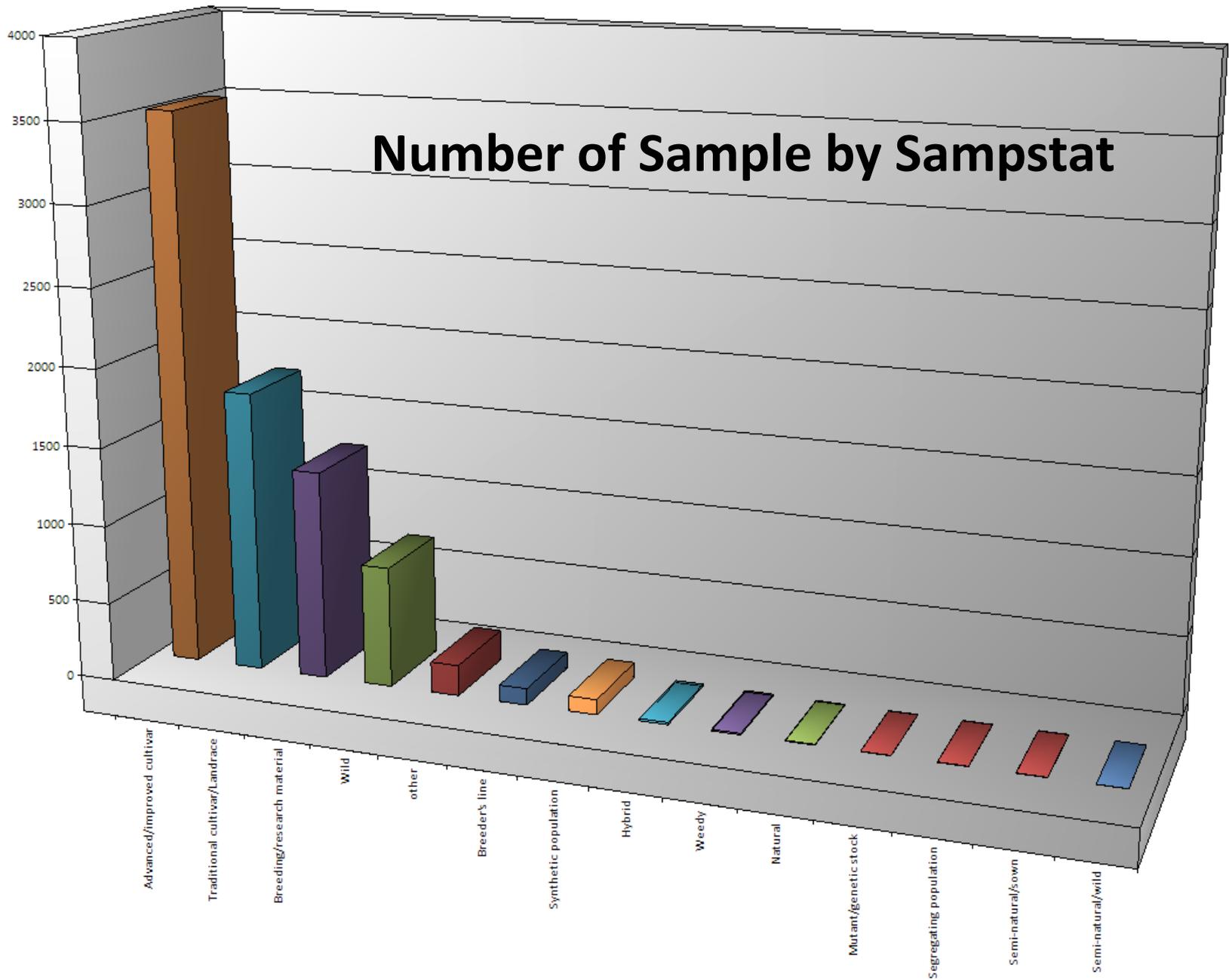
Total: 7 874

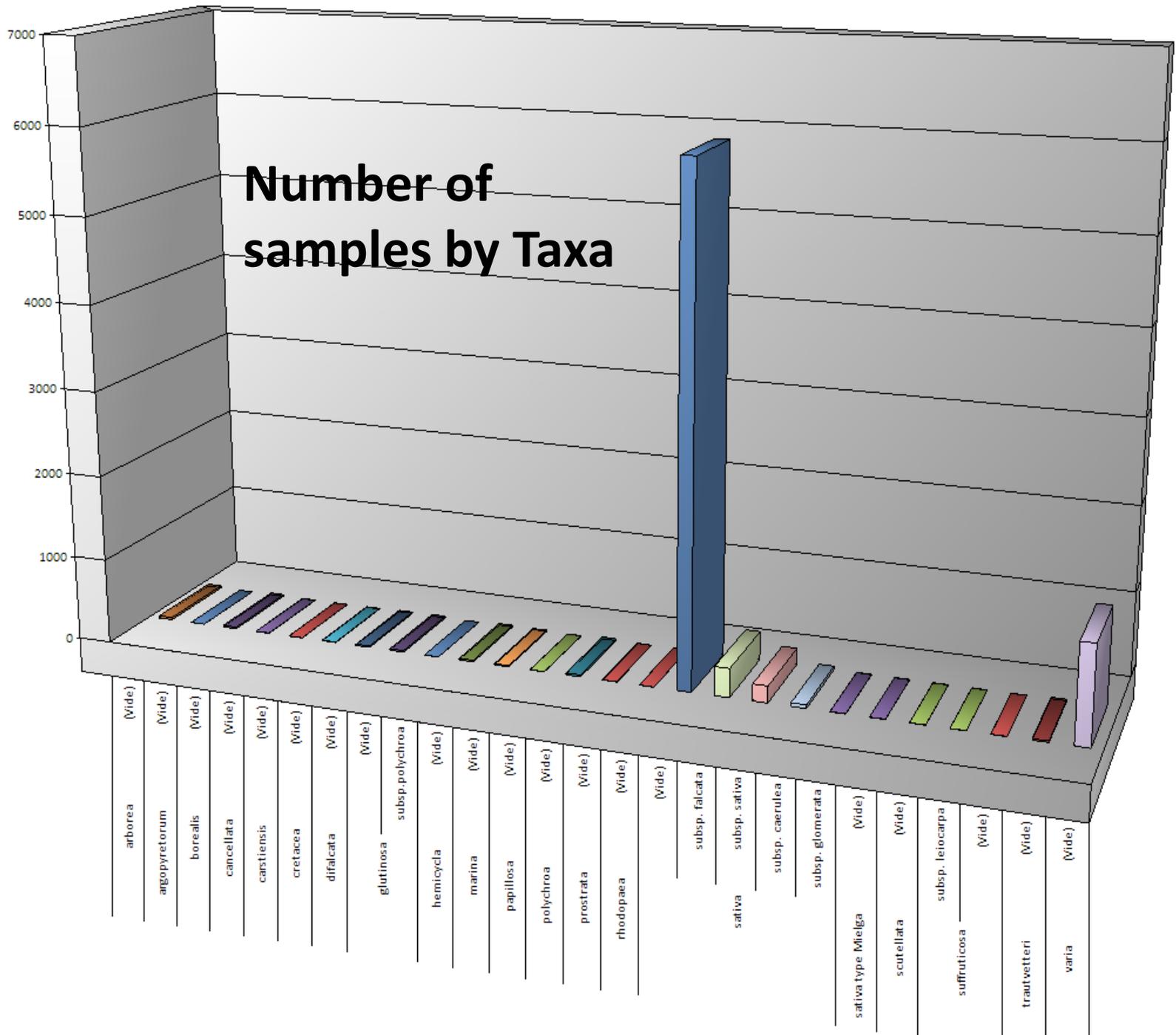


EFC Confirmed : 155



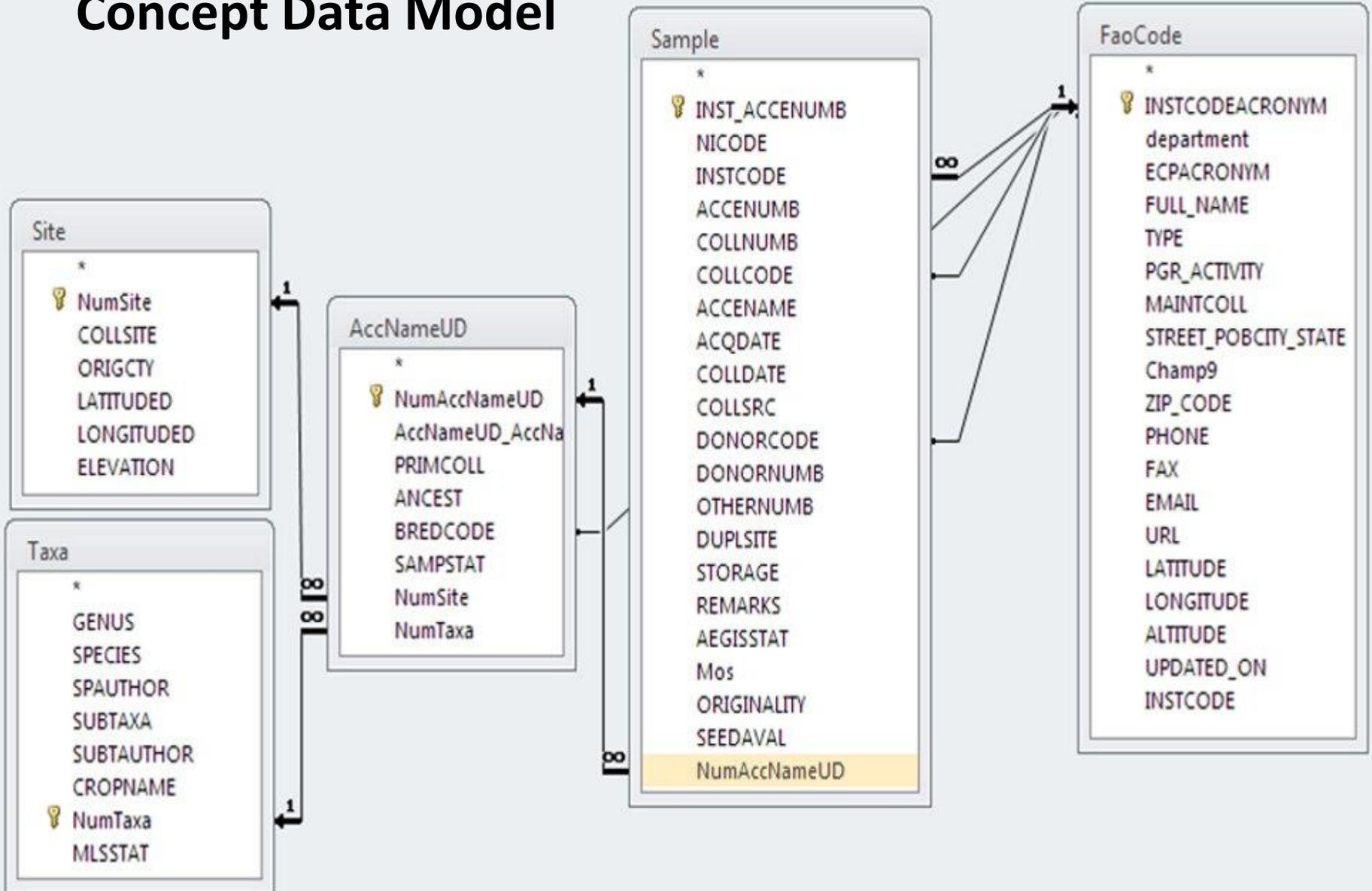
Number of Sample by Sampstat





- 5944
- 1159
- 341
- 198
- 42
- 27
- 22
- 19
- 18
- 17
- 16
- 14
- 7
- 4
- 3
- 2
- 1

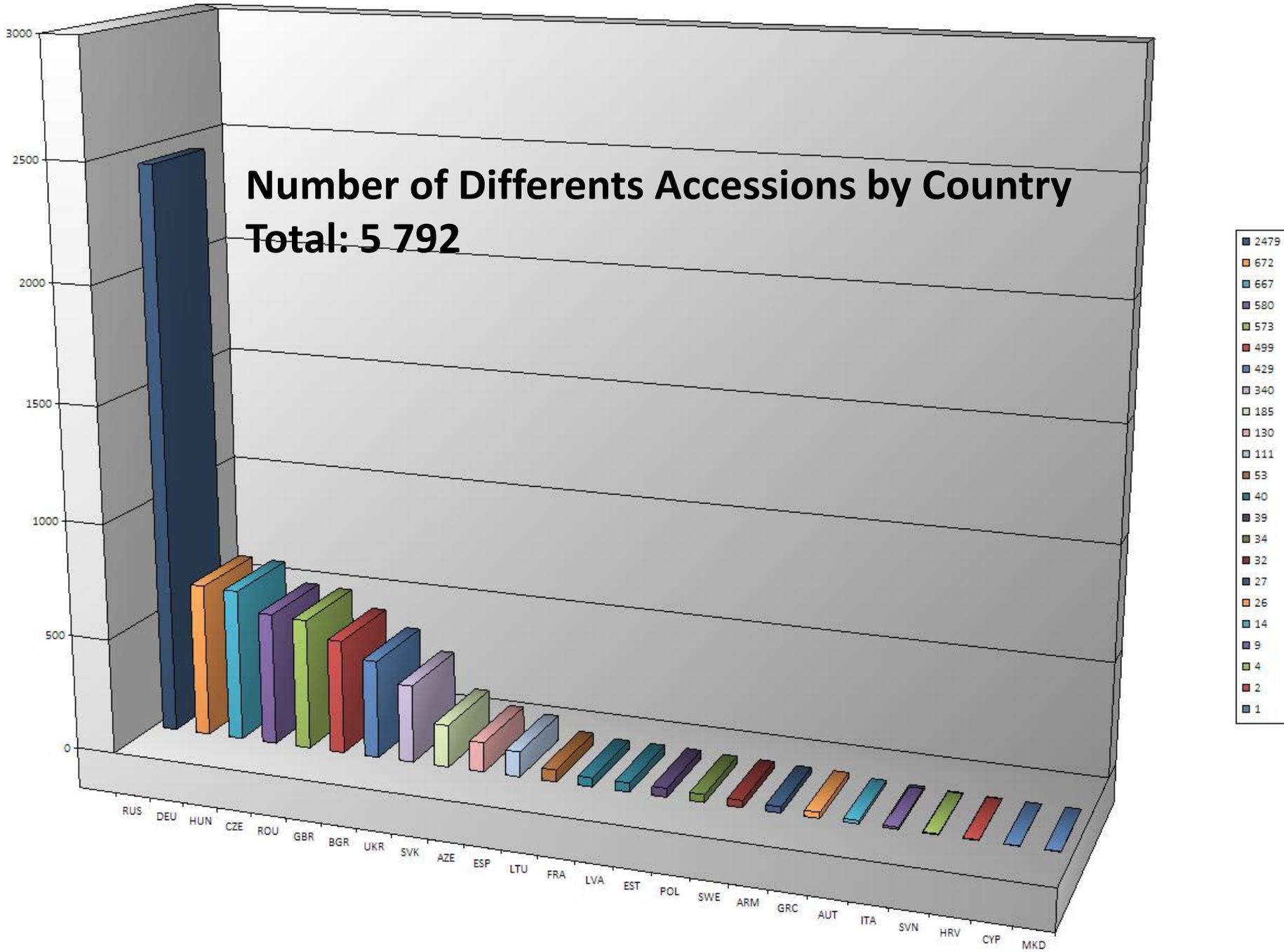
Concept Data Model



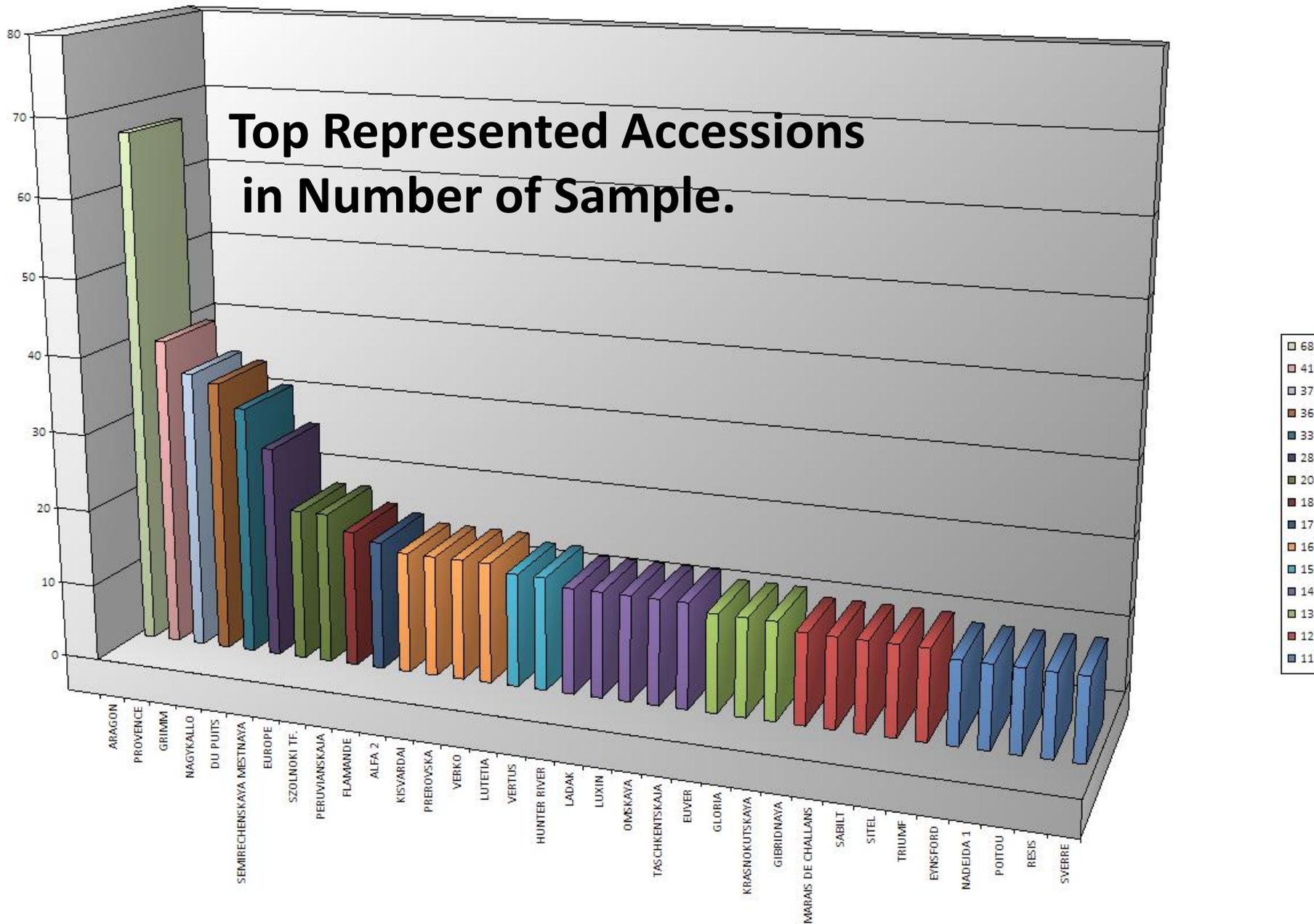
Theme Table for Unicity by primary Key

Number of Different Accessions by Country

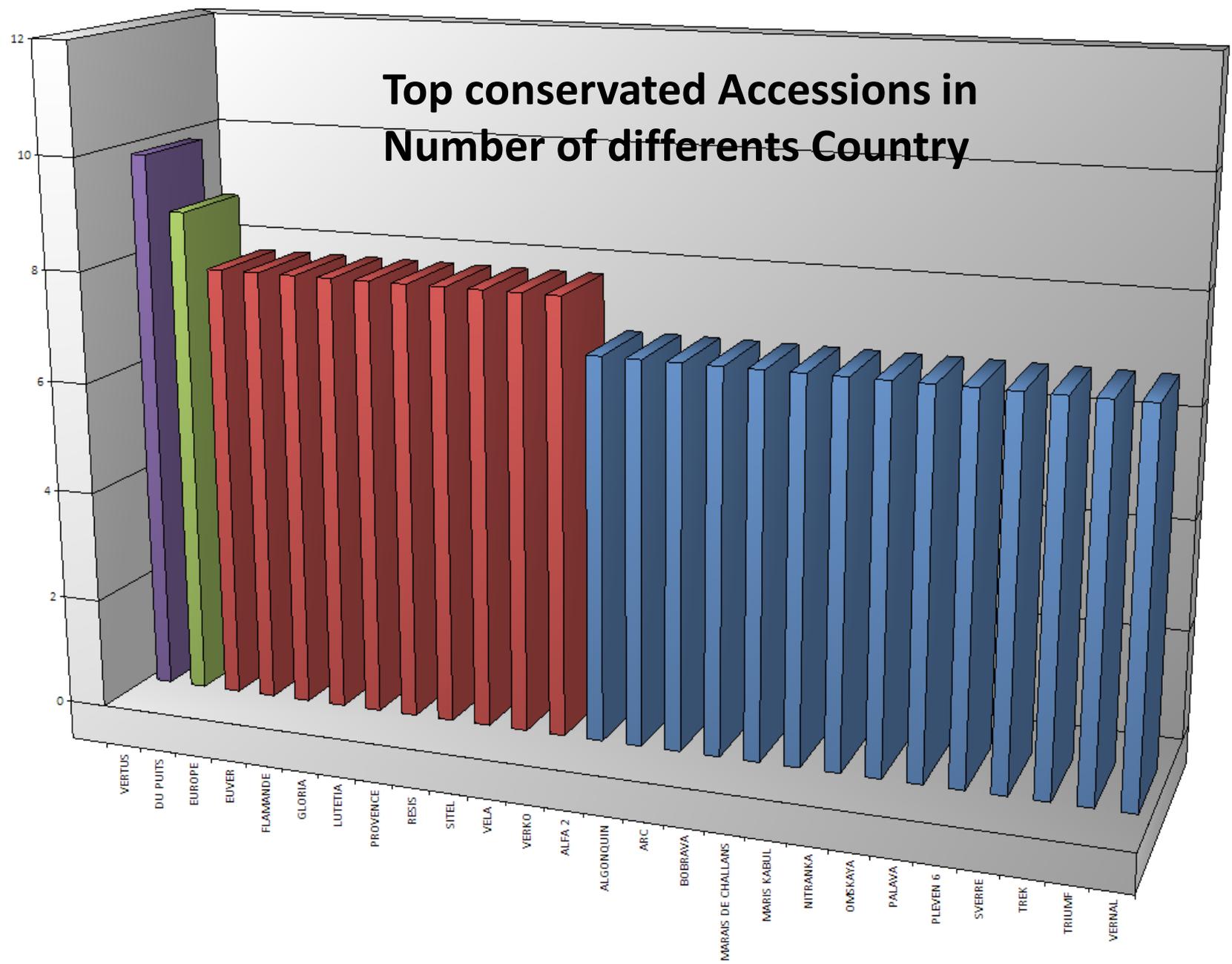
Total: 5 792



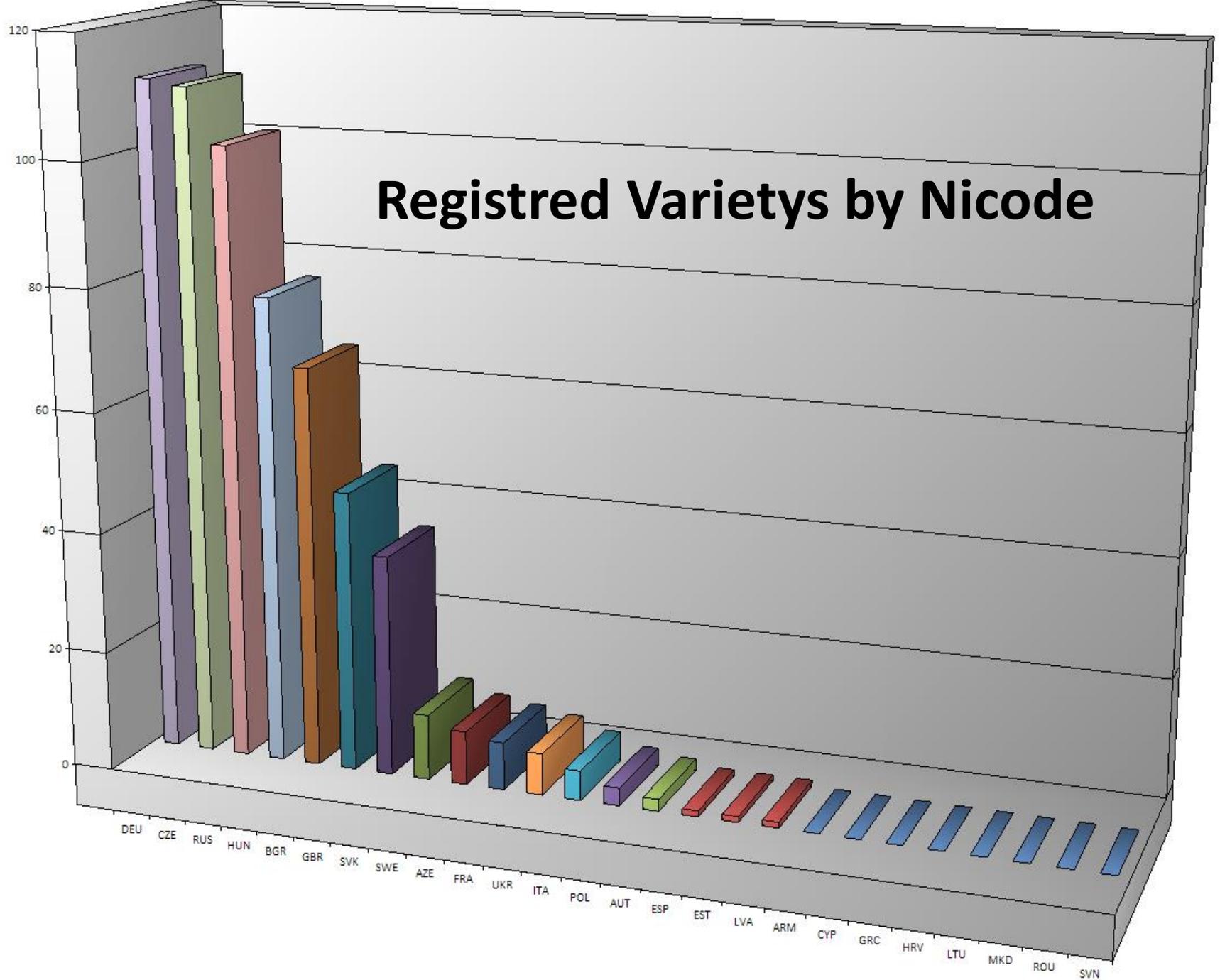
Top Represented Accessions in Number of Sample.



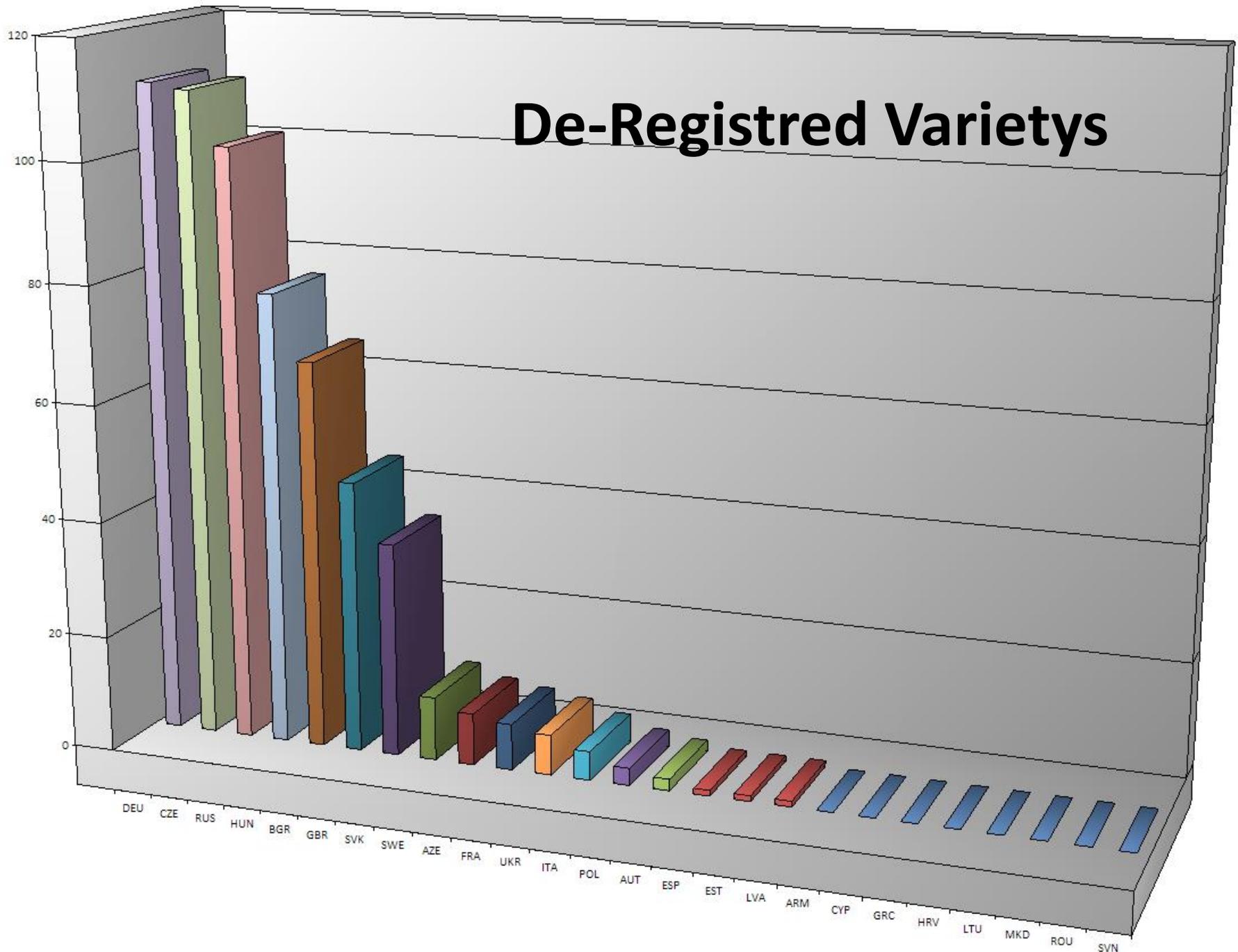
Top conserved Accessions in Number of different Country



Registered Varietys by Nicode



De-Registered Varietys



Prospectives

- Determine Taxa and synonym Annual vs Perennial Medicago
- Integration of other taxons from Annual Medicago Database
- Add Other EFC validation.
- Develop an autonatisation tool to integrate csv file in Access PM database easily.

ECPGR/AEGIS Forage work shop 2



Valentín Maya

(Trifolium subterraneum and Annual Medicagos database manager)



la orden

centro de investigación
la orden - valdesequera

9-11 April 2013, NordGen, Alnarp, Sweden

1. *Trifolium subterraneum* Database

-Since the last work shop, only Spain has increased his *Trifolium subterraneum* collection with 6 accessions

-85 accesions were ofered by IPK but they were already included.

1. *Trifolium subterraneum* Database

NICODE	N° REG	With Originality	Without Originality
AZE	2	2	0
BGR	52	49	3
DEU	406	400	6
ESP	2655	2358	297
GBR	40	3	37
FRA	39	39	0
GRC	3	3	0
ITA	1827	1827	0
RUS	15	15	0
SVK	1	1	0
TUR	12	12	0
TOTAL 2013	5052 (100%)	4709 (93,21%)	343 (6,79%)
<i>TOTAL 2012</i>	<i>5046 (100%)</i>	<i>4703 (93,2%)</i>	<i>343 (6,80%)</i>



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1. *Trifolium subterraneum* Database

Originality	Accesions
1. MOS	3678 (78,11%)
2. with MOS	25 (0,53%)
3. one away	36 (0,76%)
4. more away	327 (6,94%)
5. Unknown	643 (13,66%)
Total 2013	4709
<i>Total 2012</i>	<i>4703</i>

**There are no significant changes
in the database.**

2. Annual Medicagos Database

The database has been corrected. 110 ecotypes were removed to be included in the perennial medicago database.

Since the last work shop, only Spain and Germany have increased their *Annual Medicago* collections with 31 and 13 accessions respectively.

2. Annual Medicagos Database

NICODE	N° REG	With Originality	Without Originality
BGR	270	90	180
DEU	384	384	0
ESP	817	775	42
GBR	266	89	233
FRA	876	876	0
ITA	1779	1568	211
RUS	357	357	0
SVK	18	18	0
TOTAL 2013	4767 (100%)	4157 (87,20%)	610 (12,79%)
TOTAL 2012	4830 (100%)	4164 (86,22%)	666 (13,72%)

2. Annual Medicagos Database

Originality	Accessions
1. MOS	1298 (31,22%)
2. with MOS	0
3. one away	27 (0,65%)
4. more away	27 (0,65%)
5. Unknown	2805 (67,48%)
Total 2013	4157
Total 2012	4164

**The data are very similar
to the last report.**

Thanks you
and Good luck



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Minor Forage Grasses

Progress since the work shop in Hungary

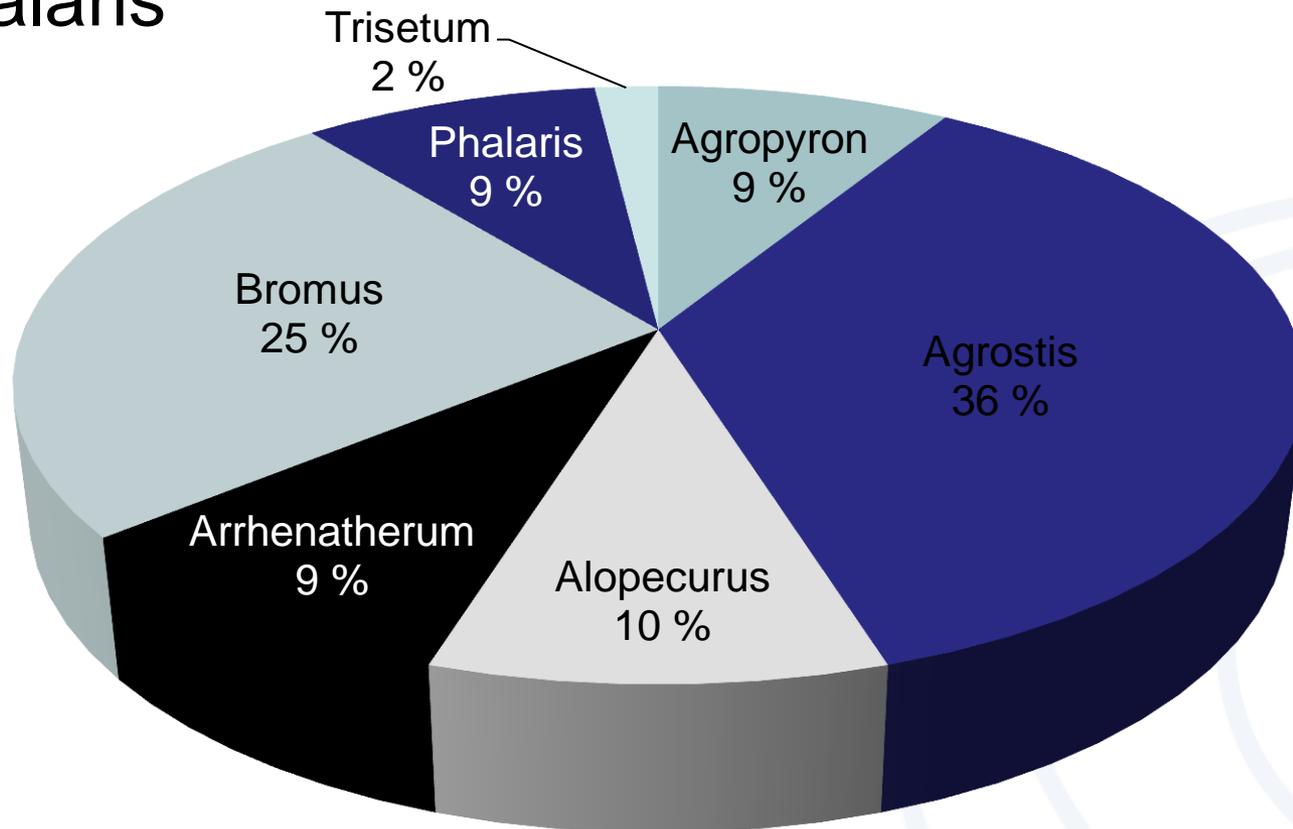
Anna Palmé

ECPGR/AEGIS Forage work shop
April 9-11, 2013, NordGen, Alnarp



Minor Forage Grasses DB

- Established 2010: EURISCO + Agrostis + Phalaris





Status February 2013

(compared to after Tapiozele workshop)

- No accessions: 4631 (4641)
- PRIMCOLL: 703 acc. (706)
- PRIMCOLL-GB: 987 acc.(869)
- ORIGINALITY: 1052 acc. (1 069)
- EFC-AEGIS: 703 (706)



Updates since the last workshop

Updates following the last workshop

- according to the file that Gert worked on at the last workshop, for example
 - information on EFC_AEGIS, PRIMCOLL, PRIMCOLL_GB, ORIGINALITY
 - added 15 accessions (German and one Austrian)
- Updates of the German accessions, for example
 - Deleted 19 old German accessions and Bromus duplicates
 - Added German accessions of Agropyron, Bromus, Phalaris and Trisetum



Updates since the last workshop

Updated according tables from IPK September 2012

- DUPSITE and STORAGE
- PRIMCOLL-GB
- SEEDAVAIL
- Added 4 accessions

Updates according to tables from CGN January 2013

- DUPSITE and STORAGE
- PRIMCOLL-GB



Response to Merja's letter to the collection holders (March 20, 2013)

- LVA009 (Agnese Gailite, Latvian Gene Bank)
 - 18 accessions (5 accessions in current version)
- EST001 (Küllli Annamaa, Jõgeva Plant Breeding Institute, Estonia)
 - 4 accessions. More accessions should be added (should be 19 accessions of *Agrostis*, 2 *Phalaris*, 2 *Bromus* and 3 *Alopecurus* in the data base)
- POL003 (Bartosz Tomaszewski, Bartosz. Ogród Botaniczny KCRZG IHAR-PIB)
 - 217 accessions
- CZE082, CZE122 (Magdalena Ševčíková, OSEVA PRO Ltd., Grassland Research Station, Zubri, Czech Republic)
 - 325 accessions



Phleum DB

Progress since the work shop in Hungary

Anna Palmé

ECPGR/AEGIS Forage work shop
April 9-11, 2013, NordGen, Alnarp



Status February 2013

(compared to after Tapiozele workshop)

- No accessions: 5 844 (5 597)
- PRIMCOLL: 2 326 (1859)
- PRIMCOLL-GB: 1 583 (1 452)
- ORIGINALITY: 2 228 (2 025)
- EFC-AEGIS: 1 452 (1455)



Updates since the last workshop

Two versions of the data base (Petters and Gerts)

- Transfer missing accessions
- Transfer information on originality, primcoll and seed availability

General editing

- Added accessions (3 Austrian)
- Identified doublets
- Latitude and longitude format
- Added crop name



Updates since the last workshop

Updated according tables from IPK September 2012

- PRIMCOLL-GB
- SEEDAVAIL

Updates according to tables from CGN January 2013

- PRIMCOLL-GB
- STORAGE



Response to Merja's letter to the collection holders (March 20, 2013)

- BEL094 (An Ghesquiere, Instituut voor Landbouw, Belgium)
 - 4 accessions
- LVA009 (Agnese Gailite, Latvian Gene Bank)
 - 40 accessions (only 9 accessions in current version)
- EST001 (Küllli Annamaa, Jõgeva Plant Breeding Institute, Estonia)
 - 24 accessions
- CZE122, CZE082, CZE096 (Martin Losak, OSEVA PRO Ltd., Grassland Research Station Roznov, Zubri, Czech Republic)
 - 149 accessions
- POL003 (Bartosz Tomaszewski, Bartosz. Ogród Botaniczny KCRZG IHAR-PIB)
 - 2 576 accessions

THANK YOU!

