

# ECPGR Forage WG

## *ECPGR objectives of Phase IX*

# AEGIS progress: forages

Gene bank country/region	Total in EURISCO (Important forage genera)	AEGIS accessions 1/11 2015	AEGIS accessions 7/3 2017	Change
Germany	13 844	2 203	2 207	+ 4
Nordic countries	4 428	1 303	1 303	0
Czech Rep.	3 925	236	291	+ 55
Estonia	161	0	53	+ 53
Netherlands	1 032	851	851	0
UK	17 115	2 431	0*	- 2431
<b>SUM</b>		7 024	4 705	



# Questionnaire: Why are not more accessions flagged as AEGIS?

- Sent out January 2017 to
  - all ECPGR Forage Working Group members
  - the National Coordinators
- Single question “In your opinion, why are not more accessions from your collection flagged for inclusion in the European forage collection (AEGIS)?”
- Nine different factors suggested (possibility to give other reasons)
- We received 15 answers representing 19 countries



## Question: In your opinion, why are not more accessions from your collection flagged for inclusion in the European forage collection (AEGIS)?

Factor	This factor has an impact (Number of "yes")	How important is this factor? Average (1= most important)	How important is this factor? No. of 1
Lack of funding for regeneration	11	1,9	9
Lack of funding for germination testing	7	3,4	4
Not implemented a system for duplicate storage	4	3,5	3
Uncertainty about funding during the coming years (cannot assure long-term conservation)	6	2,1	5
The institute leaders do not want to prioritize the process to select AEGIS accessions (other tasks are considered more important)	6	2,1	4
The strict rule for unflagging accessions make me hesitate to flag accessions	6	2,6	2
The instructions about how to select and flag AEGIS accessions are unclear	1	4,2	1
The process for flagging AEGIS accessions is complicate	4	2,9	2
There are too many criteria to define an AEGIS candidate	5	2,7	1

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**A major constraint for the progress of AEGIS is lack of funding for basic gene bank tasks**

# EURISCO

- The forage WG has provided C&E data that has been used as test cases in EURISCO. Use-cases as well as feedback were provided in order to improve the EURISCO web interface.
  - The first C&E data for forages has now been uploaded into EURISCO and data on *Agrostis*, *Lolium*, *Phleum*, *Poa* and *Trifolium* are now available online via the EURISCO homepage.
- Identification of errors and duplicates in forage accessions in EURISCO (genus, species, crop name, variety names, latitude and longitude)
- Comparison between the forage ECCDBs and EURISCO
  - about 45% of the accessions listed in the ECCDBs are missing from EURISCO (candidates for further efforts on including all relevant accessions into EURISCO)



Filter by species and traits × +

https://eurisco.ipk-gatersleben.de/apex/f?p=103:47:::NO::

European Cooperative Programme for Plant Genetic Resources ECP/GR eurisco Finding seeds for the future

Filter by species and traits Filter by genus Filter by experiment Filter by trait

Home > C&E data > Search by species and trait

Filter C&E data by species and traits

Genus \* Phleum

Species \* Phleum bertolonii DC. Phleum pratense L.

Traits \* Disease susceptibility rust (2) (disease susceptibility in[...]) Diseases susceptibility (1) (disease susceptibility in[...]) Diseases susceptibility (2) (disease susceptibility in[...]) Heading Date (heading date in days after[...]) Leaf Width (1=very narrow;2=very narrow[...]) LeafColour (1=light green;2=grey-green[...]) LeafLength (1=very short;2=very short[...])

# Recommendations

(from the Forage Barley workshop, Malmö 2017)

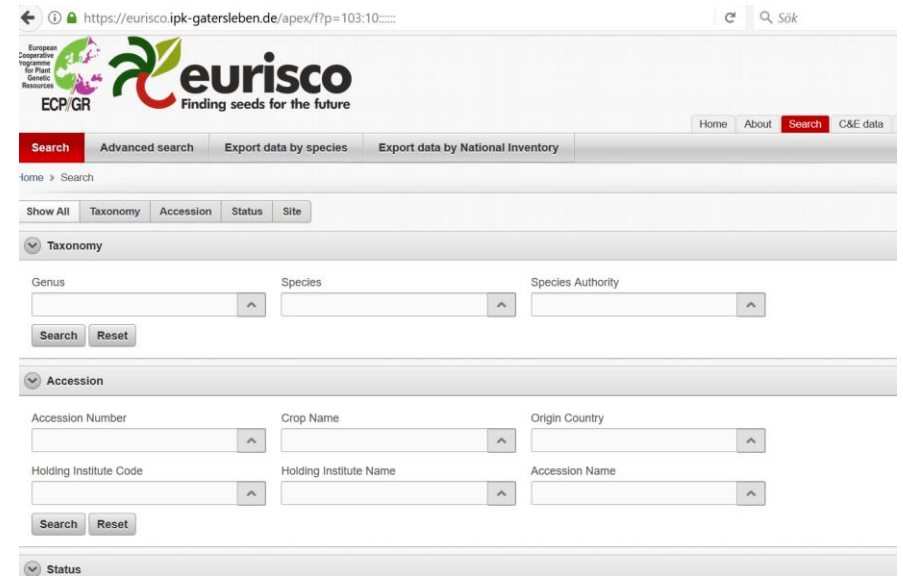
- Introduce the term “AEGIS candidate”
- ECPGR should work towards strengthening the basis for funding for gene banks in Europe
  - Exploring options for AEGIS to gain ERIC (European Research Infrastructure Consortium) status
- Introduce a gene bank mentorship system to stimulate collection holders to flag AEGIS accessions.
- Actions should be initiated to encourage upload of C&E data into EURISCO on a larger scale.



# Recommendations

(from the Forage Barley workshop, Malmö 2017)

- Development of a EURISCO feature for downloading of C&E data at experiment level
- Evaluate the possibility to include C&E data from accessions that are currently not documented in EURISCO
- Establishment of a quality check system in EURISCO, for example regarding taxonomy and geographic coordinates



The screenshot shows the EURISCO website search interface. The URL is <https://eurisco.ipk-gatersleben.de/apex/f?p=103:10:::>. The page features the EURISCO logo and the tagline "Finding seeds for the future". The navigation menu includes "Home", "About", "Search", and "C&E data". The search interface is divided into several sections:

- Search**: A red button for the main search function.
- Advanced search**: A link for more complex search options.
- Export data by species**: A link for exporting data by species.
- Export data by National Inventory**: A link for exporting data by national inventory.

The search criteria are organized into two main sections:

- Taxonomy**: Includes fields for Genus, Species, and Species Authority, each with a dropdown arrow. Below these fields are "Search" and "Reset" buttons.
- Accession**: Includes fields for Accession Number, Crop Name, Origin Country, Holding Institute Code, Holding Institute Name, and Accession Name, each with a dropdown arrow. Below these fields are "Search" and "Reset" buttons.

At the bottom, there is a section for **Status**, which is currently collapsed.





# Recommendations: enhance use of GR

(partly from the Forage Barley workshop, Malmö 2017)

- improve the visibility of the genetic resources in the European gene banks, for example via Crop Portals and communication targeted to breeders
- involve the users in the selection/collection of relevant genetic resources to be stored in the gene banks
- PPP pre-breeding projects





**Thank you!**

