

**ECPGR Activity Grant Scheme**  
**Proposal Form**  
Second Call

**Activity Proposal**

Activity	
Full title	Integration of barley characterization and evaluation data into EURISCO, and development of specifications for a barley crop portal, with a focus to improve the AEGIS collection
Acronym (or short title)	Barley C&E Data
Duration of Activity (in months)	15
Starting date	2016-09-01

**Applying Working Group(s)**

Working Group	Indicate name and surname of Working Group Chair
1. Barley	Ahmed Jahoor
2.	
3.	
4.	

**Activity Coordinator**

Activity Coordinator	
Name and Surname	Jan Svensson
Nationality	Swedish
Current position	Senior Scientist
Institute	Nordic Genetic Resource Center
Country	Sweden
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## Activity Partners

Please note that each partner needs to be a member of a Working Group's Pool of Experts to be eligible. A maximum of 12 funded partners can be listed. For self-funded partners please use the separate box below.

Partner ID No.	Name and Surname	Institute	Country
1	Stephan Weise (Doc and Info WG)	IPK (EURISCO)	Germany
2	Küllli Annamaa	Estonian Crop Research Institute	Estonia
3	Helmut Knüpffer	IPK	Germany
4	Ernesto Igartua Arregui	CSIS/EEAD	Spain
5	Adrian Turner	Germplasm Resources Unit	UK
6	Wolfgang Kainz	Austrian Agency for Health and Food Safety	Austria
7	Marja Jalli	Natural Resources Institute	Finland
8	Ahmed Jahoor	Nordic Seed	Denmark
9	Jan Svensson	NordGen	Sweden
10	Alessandro Tondelli	CREA	Italy
11	Giuseppe Vendramin	CNR, Bari	Italy
12	Marcin Zaczyński	IHAR	Poland

### *Self-funded partners*

Partner No.	Name and Surname	Institute	Country
1	Kjell-Åke Lundblad	NordGen	Sweden
2			
3			
4			
5			
6			

Describe the Activity (max. 500 words):

### Background

The ECPGR HordEva activity in 2015 defined barley AEGIS accessions for Bulgaria, France, Germany, Latvia, Lithuania, Nordic Countries, Poland, Romania, Slovakia and Switzerland. In addition, the participants conducted an inventory of characterization and evaluation (C&E) data available for the AEGIS accessions.

The European Barley database (EBDB) was created at IPK, Germany, in 1983 and contains ~156.000 accessions from ECPGR countries in addition to contributions from genebanks in Australia, Japan, Syria (ICARDA) and the International Barley core collection. The EBDB contains basic characterization data for 80.000 accessions (seasonality, row number and kernel cover) and 3.029 accessions contain evaluation data from an EU GENRES project. The last update of the EBDB was in 2001 and currently the evaluation data are not accessible.

### Aims

The aims are to (i) expand the Barley AEGIS collection and (ii) to upload and provide access to C&E data on European Barley Genetic Resources.

### Tasks and justification

- 1) Expand the barley AEGIS collection with accessions from Estonia, United Kingdom, Austria and Italy. *This task fulfils objective: 1.2. AEGIS collections established.* Coordinator: Jan Svensson
- 2) Transfer of barley C&E data to EURISCO. *This task fulfils objective: 2.2 C&E data in EURISCO included, with high quality and wide coverage.*
  - 2a) Transfer C&E data from the old EBDB to EURISCO. Coordinator: Helmut Knüpffer.
  - 2b) Collect C&E data from members of the previous barley activity (HordEva) and task 1 for upload to EURISCO. Coordinator: Jan Svensson
- 3) Creation of a "barley view" on EURISCO and development of specifications for a barley crop portal. *This task fulfils the overarching objective: 2. Quantity and quality of data in EURISCO....* Functionality of EURISCO meets users' expectations. Coordinator: Stephan Weise.

### Approach

**Task 1.** Activity members will define AEGIS candidates and inventory available C&E data for the AEGIS candidates. The task will use the guiding principles "Revised simplified procedure for the selection and flagging of accessions for the European Collection" and routines developed in the HordEva activity 2015. AEGIS accessions will be flagged in EURISCO.

**Task 2.** Transfer of barley C&E data to EURISCO. Existing C&E data will be transferred to EURISCO using the procedures and guidelines developed for uploading of C&E data.

**2a.** Cross-referencing of data in EBDB versus EURISCO shows an overlap of 20.000 accessions. C&E data for these accessions will be transferred to EURISCO.

**2b.** C&E data from the HordEva activity and task 1 will be compiled for upload to EURISCO.

**Task 3.** Creation of a “Barley View” on EURISCO, and development of specifications for a Crop portal for Barley presenting data on barley accessions in EURISCO.

**3a.** Development of a “Barley View” on EURISCO allowing EURISCO users to search within the barley subset of EURISCO data, including C&E data.

**3b.** Development of specifications for a crop portal for barley, based on the outcome of topic 4 of the user workshop (see below under Workplan)

## ECPGR Objective(s)

*Objectives must be feasible and achievable within the project timeline. Please list here the corresponding number(s) of the ECPGR Outcome(s) and/or Output(s) and/or Activities to which your proposed Activity will contribute. The logframe describing ECPGR objectives is available from the website.*

List ECPGR outcomes, outputs, activities to which this Activity contributes:
1. AEGIS is operational...Accessions in AEGIS are characterized and evaluated
1.2.1. Identification of eligible accessions to be proposed for registration as AEGIS accessions
1.2.2. Verification of the proposed AEGIS accessions
2. Quantity and quality of data in EURISCO...Functionality of EURISCO meets users' expectations
2.2.1 Development of a mechanism to upload C&E data
2.4.2 Database functions adapted or added

## Expected products

List concrete products and results that are obtained by the Activity

Expected products/results
TASK 1. Expanded barley AEGIS collection
TASK 2: Development of procedures to upload C&E data for barley. Accessibility of C&E data on European Barley Genetic Resources
TASK 3: A common access point for barley genetic resources via the "Barley View" on EURISCO and development of specifications for a crop portal

## Workplan for the proposed period of the Activity

Brief description of meetings and/or main actions of the Activity.

Type of Action (indicate if "meeting" or "other action")	Description
1 Start-up of activity (Responsible; Jan Svensson)	Initiate the work on task 1 and 2, and plan for the workshop.
2 Workshop for all participants in Malmö, Sweden. (Responsible: Jan Svensson)	A workshop with the aim: 1. To present the progress on tasks 1 and 2. 2. Present and decide on the new AEGIS candidates 3. Present and discuss the procedure for C&E data upload to EURISCO (including hands-on training). 4. Discuss the content and functionality of a barley crop portal  <i>The forage WG has a similar aim with their application "AEGIS progress and improved access to European Forage PGR" and parts of the workshop will be joint if both are funded.</i>
3 Follow-up activity (Responsible: task coordinators)	Continue and finalize the work in tasks 1 and 2.
4 Report (all participants)	Final report to document the work completed in the action.

## Additional remarks

Indicate any additional remark(s) that is/are important for the evaluation/implementation of the proposed Activity

Remarks:

1. If both the Forages and the Barley project application will be funded, there will be synergies due to common aims and methodologies developed
2. The present project will contribute to the EURISCO development due to the planned inclusion of C&E data

The proposal was presented to the WG Documentation and Information via its chair Theo van Hintum and this WG approves and supports this initiative.

**Please send the completed form together with the budget table to the Chair of the submitting Working Group for submission of the Activity proposal.**