

Report of a Network Coordinating Group on Forages

Ad hoc Meeting

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INTRODUCTION

Merja Veteläinen, Coordinator of the Network Coordinating Group (NCG) on Forages welcomed the participants to the ad hoc meeting, held in connection with the XXVIIIth Meeting of the Fodder Crops and Amenity Grasses Section of EUCARPIA in La Rochelle, France. The meeting was organized as a self-funded ad hoc meeting due to insufficient budget for the Forages Working Group (WG) to arrange all planned activities during the ongoing ECPGR Phase. However, it was felt that it was important to update the WG workplan in relation to the allocated funds for the WG activities during Phase VIII of ECPGR. Also recent developments in AEGIS prompted the need for the NCG meeting to be held at the beginning of Phase VIII.

The participants attending the meeting were: Evelin Willner, Petter Marum, Beat Boller and Merja Veteläinen. Chris Kik was also supposed to attend, but last minute obstacles prevented his participation. During the conference the NCG communicated also with Jean-Paul Sampoux and Stéphane Fourtier, respectively the former and new Database Manager for the Perennial *Medicago* Database. An Ghesquiere, also a member of the Forages WG, took part in the meeting as observer.

FORAGES WG WORKPLAN AND BUDGET

The Forages WG workplan and budget 2009-2013 were discussed. Merja Veteläinen informed that the WG had received a budget of € 27 700 to be used for one WG meeting, which is insufficient in relation to the workplan presented by the WG and especially concerning the necessary work with Forage Central Crop Databases (CCDBs), leading to the establishment of a European Forage Collection (EFC), as part of AEGIS.

Discussions on individual workplan items are summarized below.

Documentation and information, Forage CCDBs and assignment of AEGIS accessions

The Working Group on Forages manages altogether 23 different databases of which 9 (*Poa*, *Trifolium pratense*, *Trifolium repens*, *Medicago sativa*, annual *Medicago*, *Lolium*, *Phleum*, *Festuca* and *Dactylis*) are considered priority databases. Generally, the main goal during the ongoing ECPGR Phase is to define the primary holder of each forage accession in these databases as a fundamental step in the implementation of AEGIS goals. The progress has until now been quite modest. The reasons for this were discussed. It was concluded that there were many organizational reasons that have slowed down the progress: the existence of two parallel European PGR documentation systems (CCDBs and EURISCO), and the fact that the work carried out by the CCDB managers is not always acknowledged and supported by the hosting institutes. The change of CCDB managers is also a crucial point for the continuity of each single database development. In light of these obstacles, it was decided that the NCG should discuss how to develop the existing Forage CCDBs and their organization. In this context the following recommendation from the ECPGR Steering Committee was also taken into consideration: "*Fragmentation of the forages catalogues into too many DBs (23) was considered inefficient and the SC therefore encouraged the Network to consider merging some of the DBs.*".

Two alternative options for the reorganization of the DBs were discussed: (1) to merge all forage databases into one and (2) to merge databases by taxa/DB manager. For alternative 2, the following suggestion was made:

No	Database
1	Minor Forages (former minor grasses and minor legumes): <i>Agropyron</i> , <i>Agrostis</i> , <i>Arrhenatherum</i> , <i>Bromus</i> , <i>Phalaris</i> and <i>Trisetum</i> + possible others
2	<i>Dactylis</i> and <i>Festuca</i>
3	<i>Lathyrus</i>
4	<i>Lolium</i>
5	<i>Medicago</i>
6	<i>Phleum</i>
7	<i>Poa</i>
8	<i>Trifolium</i>
9	<i>Vicia</i>
10	<i>Vigna</i>

Note: the *Lupinus* DB is under the responsibility of the Grain Legume Working Group – this should also be clarified for the *Vigna* DB.

It was decided that the detailed workplan concerning the Forage CCDBs and the process leading to the definition of AEGIS accessions will be updated when confirmation will have been received from the present Database Managers on the new organization and management of Forage Databases. The aim is to agree on this matter by the end of November 2009. Communication will be done by email. When the Chair will send the request to confirm the responsibility to manage a certain database, the DB manager will also be asked to obtain confirmation from his/her respective institute that it will support the related responsibility.

It was also decided that possibilities to organize educational meetings for new Database Managers by the experienced Database Managers will be worked out. Evelin Willner mentioned that a German Academic Exchange Service (DAAD) programme may allow invitation of the Polish Database Manager for such a meeting to Germany. It was also decided to inquire to the ECPGR Secretariat regarding available resources or information about relevant opportunities for this kind of activities.

Characterization and evaluation

The Forages WG workplan does not include any specific activities on characterization and evaluation (C&E), but the WG has decided to encourage genotyping initiatives with the aim of identifying similar accessions and understanding the diversity of European forage crops. However, there are good possibilities to make progress with inclusion of already existing C&E data in the Forage CCDBs. It was decided that possibilities to utilize NordGen's "dynamic data analyzer" for inclusion of C&E data into the *Poa* database will be elucidated during the ongoing ECPGR Phase and especially during the next WG meeting.

After the meeting, the Group was informed by the ECPGR Secretariat about the initiative of the ECPGR Documentation and Information Network to include C&E data into EURISCO. This initiative will therefore also need to be monitored.

Cross-cutting activities

Merja Veteläinen briefly reported to the NCG the previous meeting of the AEGRO project ("An Integrated European *In Situ* Management Work Plan: Implementing Genetic Reserves and On Farm Concepts") held in Germany. Since *in situ* conservation of forages is a relevant matter to be considered for the Forage WG, she suggested that the AEGRO project leader,

Lothar Frese, could be invited to the next Forage WG meeting to inform on the project developments and how they can be utilized in the ECPGR Networks. It was decided that this could be done if funds for the purpose could be raised.

On-farm conservation of forages was also discussed. It was pointed out that it is an important task for the WG to encourage individual countries to carry out both on-farm/*in situ* conservation as an integral part of the conservation and utilization of forage crop genetic resources. The first important step to enhance this activity could be a preliminary inventory of already existing European sites. Also a model for *in situ*/on-farm database inventory should be developed. It was decided that Beat Boller would provide information about the development of a Swiss solution for an *in situ*/on-farm database inventory as a basis for discussion during the next WG meeting.

After the meeting, a new call for proposals was launched by the European Commission under the Seventh Framework Programme. The possible development of relevant project proposals related to the establishment of European wild relatives and landrace inventories will therefore need to be monitored by the Group.

Next meeting

The timing and venue for the next WG meeting was discussed. The important aspect in the discussion was to find a solution that would allow both WG members and Database Managers to attend the meeting. The request from the ECPGR Secretariat to hold WG meetings during the latter part of the ongoing Phase was also considered.

Concerning the timing of the WG meeting, it was felt that it would be important to arrange the meeting at the latest in 2010 in order to discuss and implement the workplan and especially the restructuring of the databases with the entire WG as soon as possible. Thus, it was decided that the meeting would take place in May 2010.

Two alternative meeting venues were discussed, namely Finland and Germany. It was decided that the WG Chair and Vice-Chair would calculate the costs for meeting arrangements in their respective countries and sites (Jokioinen and Malchov) and that the less expensive site would be selected. This should be done by the end of August 2009.

FUNDS TO BE APPLIED FOR THROUGH AEGIS GRANT SCHEME

Merja Veteläinen informed the NCG about the upcoming call for proposals for competitive AEGIS grants. She explained that the grant scheme will support initiatives contributing to the establishment and operation of AEGIS. This possibility to apply for funds was discussed and it was concluded that the present WG goals to assign unique European forage accessions and share the conservation task between germplasm collections is well in line with AEGIS goals. Since the present WG budget is scarce and does not allow funding of any specific activities, it was decided that the WG would develop a proposal to the grant scheme. The preliminary plan is to apply for funds for the education of Database Managers in order to increase their ability to effectively carry out the whole process leading to the assignment of Most Original Accessions (MOS), Primary collection holder (PRIMCOLL) and European Forage Collection (EFC). Note: Deadline for applications is expected to be 18 October 2009.

SEVENTH FRAMEWORK PROGRAMME (FP7) CAPACITIES WORK PROGRAMME 2010: RESEARCH INFRASTRUCTURES

Merja Veteläinen informed the NCG on the FP7 Capacities Work Programme 2010: Research Infrastructures. The ECPGR Secretariat has prepared a draft project outline and asked for comments. The project outline was discussed and comments from the NCG were formulated as follows.

The Forages NCG will not comment on the structure of the proposal, but suggest the following activities/themes to be included:

WP2: AQUAS-related outputs

There is a need to review and update the different guidelines (collecting, regeneration, etc. of forage crops) developed by the Forages WG and to compile them into one single publication to be used by the forage crop germplasm holders. It is suggested to include the production of this document as one activity of this work package (WP). We would estimate that one single person could be hired for this task within the Network for a short time period.

WP3: Model crops

We suggest that one of the forage crops (e.g. perennial ryegrass or red clover) be included as model crop in this WP. Our justifications are based on the fact that these crops are generally cross-pollinating and thus more problematic to characterize and evaluate than self-pollinating crops. Thus there is an urgent need to establish a common method. On the other hand, there is already well-established cooperation between plant breeders and germplasm curators in this field (as in the example presented by Evelin Willner at the EUCARPIA Conference in the case of *Lolium perenne*). In addition, there are also old data available for forage crops that could be utilized in this context. Another issue is to establish a method on how to present DNA population data in the databases. For C&E data we wish to point out the utility of NordGen's tool "dynamic data analyzer" that could be tested in this WP.

We wish that the ECPGR Secretariat consider the above-presented suggestions of the Forage Network Coordinating Group and also keep in mind the ongoing exercise to establish the European Forage Collection (= identify MAAs) (WP2).

The Forage Network Coordinating Group will be available as the partner for WP2 and thus participate in the WP formulation.

It was decided that M. Veteläinen would send the comments immediately to the ECPGR Secretariat.

CONCLUSION

The Group approved all the decisions taken during the meeting and M. Veteläinen/ECPGR Secretariat will request the endorsement from the entire WG. A dialogue on merging of databases will be carried out by email with present and future DB managers. An application process for the AEGIS grant scheme will also be initiated by email once the call has been published.

The meeting was closed and Merja Veteläinen thanked all the participants for their active participation in the meeting and for dedicating their time to the Forage WG during the EUCARPIA Conference.