Proposed for the “Establishment of the European Forage Collection”

by ECPGR Working Group for Forages

1. Problem statement

The European genetic resources for forage grasses and legumes include a wide range of species which have different reproductive systems. A very big part of the conserved material in the gene banks is of type ‘wild’ or ‘semi-wild’. Consequently, the conservation of forages is demanding and requires considerable resources when regenerating the material. At present there are app. 60 000 accessions of forages in European gene banks. Therefore, it is important that the scarce resources are directed for conservation of unique and genetically diverse material. This proposal aims to establish a European Forage Collection (EFC) according to the principles of AEGIS. The working group for forages (WG) has already developed the method to create this collection through identifying the most original samples of forages (MOS), that the ECPGR forages working group consider to be the most appropriate accession (MAA), and assigning the holders of primary collection (PRIMCOLL). The challenge is to streamline the process leading to EFC. This will be done by education of forage database managers and proceeding education package.

2. Justification and rationale

The kernel of the AEGIS is the genetically unique and important accessions for Europe (MAAs). The process for their registration and task sharing in conservation demand well functioning procedures and routines. Our aim is to speed up and improve selection of MOS (equivalent to MAAs) and PRIMCOLL and assign forage accessions for the EFC (part of entire European Collection, EC). Thus, our project is perquisite for AEGIS operation for forages. Our goal is to
1) Refine the process to identify MOS (MAAs) and PRIMCOLL. For example new data sharing facilities will be explored (like “Google Fusion”). Consequently, education material will be prepared for the education and on place guidance to carry out the process leading to establishment of EFC.

2) Organize an activity workshop where all forage database managers will be educated to carry out the process to establish EFC by experienced db managers. The educational component of the project is the key to guarantee the establishment of EFC.

5. Materials and methods

The earlier method developed by the WG Forage to identify MOS and PRIMCOLL will be analysed in terms of the critical steps. Possibilities to overcome the potential obstacles will be explored and discussed amongst the experienced forage database managers. Based on the findings an education package for on place guidance of new database managers will be prepared.

All selected MOS (MAAs) will comply with the general selection requirements agreed by the ECPGR Steering Committee:

- Material under the management and control of member countries and in the public domain;
- Genetically unique within AEGIS, to the best of available knowledge;
- Plant genetic resources for food and agriculture as well as medicinal and ornamental species;
- European origin or introduced germplasm that is of actual or potential importance to Europe.

6. Expected outputs

The expected output of this project is a set of MAAs that will be the EFC to be included in the European Collection. The exact number cannot be anticipated at the moment, but we expect a
instructors at the workshop. The forage database managers will carry out MOS and PRIMCOLL identification during and after the workshop. All participants will be responsible for the reporting of the results to the Forage Working Group Chair, who will act as the project leader.

11. Budget

Total project costs and applied grant

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<tr>
<th></th>
<th>Project</th>
<th>In Kind</th>
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<tbody>
<tr>
<td>IPK</td>
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<tr>
<td>Staff time</td>
<td>1000</td>
<td>5000</td>
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<td>Travel</td>
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<td>IBERS</td>
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<td>Staff time</td>
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<td>Travel</td>
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<td>NordGen</td>
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<td>Staff time</td>
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<tr>
<td>Travel</td>
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<tr>
<td>All forage database managers</td>
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<tr>
<td>Staff time</td>
<td>22 000 (11 x 2000)</td>
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<tr>
<td>Travel</td>
<td>14 000 (14 x 1000)</td>
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<tr>
<td>Meetings (workshop costs e.g. meals, materials)</td>
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<td>TOTAL</td>
<td>18 000</td>
<td>37 000</td>
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<td>Applied from the grant scheme</td>
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12. Contributions offered by applicant

IPK, IBERS and NordGen will contribute a considerable time for the project in kind through work for process refinement, database manager instruction and activity session preparations, as well as reposting. In addition, we will apply saved funds of the Working Group for Forages during the Phase VIII (available app. 10 000 €) for staff costs and expenses that cannot be funded with AEGIS grant.

13. Bibliography