Experiences with the “National Collection” concept; strategies and actions for durable conservation of collections

Reports were given by members from Germany, Ireland, Italy and Switzerland. M. Lateur gave a presentation on lessons to be learnt from the experience of setting up a network of repository orchards.

The *Malus/Pyrus* Working Group and implementing AEGIS

**The establishment of the European Collection**

Jan Engels, AEGIS Coordinator, presented the general concept of the European Collection, which consists of dispersed accessions (“unique and/or important”) which have been identified in European genebanks where they are maintained as European Accessions. In order to provide a legal foundation to the Collection, a Memorandum of Understanding (MoU) is being concluded with countries that accept the responsibility for long-term conservation of the European Accessions and are prepared to make this material available to users. Furthermore, by signing the MoU the countries agree to conserve and manage the European Accessions in accordance with agreed quality standards that form part of an AEGIS Quality Management System (AQUAS).

The main players in selecting the European Accessions are the Crop Working Groups (WGs) with their technical expertise, together with the countries holding the germplasm and prepared to place the selected accessions in the European Collection. A simplified selection procedure for the European Accessions has been proposed and is being used by a number of WGs. The first step is for the WG to elaborate a list from the entire pool of accessions for a given crop maintained in European genebanks, using the data available in EURISCO and the respective Central Crop Database (CCDB), by applying the Selection Requirements that each of the European Accessions has to fulfil. In case two or more accessions are identified as candidate European Accessions and they turn out to be duplicates, the crop-specific selection criteria, to be defined by each WG, will be used to identify the Most Appropriate Accessions (MAAs) from that group of potential duplicates.

The list of selected accessions will be sent by the WG to the National Coordinator (NC) in each of the holding countries with the request to consider the selected accessions maintained in their country for inclusion in the European Collection. The NC, in close consultation with the respective holding institute(s), will then inform the WG whether or not the selected accessions can be included in the European Collection. The accessions selected and accepted for inclusion in the European Collection will subsequently have to be flagged in EURISCO as AEGIS Accessions by the EURISCO National Focal Point. If the accessions proposed by the WG are not accepted by the respective country, the WG will look for alternative accessions and seek acceptance for inclusion from the respective holding institute/country through the procedure described above.

**Discussion and action plan**

The Group discussed various issues related to the establishment of a European Collection: definition of primary criteria to start a global process that all members would be able to achieve concretely, using the list of priorities for selection of MAAs among sets of duplicated accessions, as established by the *Prunus* WG. It was generally felt that these would be appropriate, although a number of key elements were highlighted as presented below.

The first key criterion to take into account in the implementation of AEGIS by the WG is the “Country of historic origin” of the variety, which provides more accurate information on
the origin of material than the country from which the accession was obtained by the current holder. “Trueness to type” will then be used as the second priority criterion. This was considered useful although any assessment would need to take into account that the fruit genebanks would be expected to contain valuable material which had not been described in any way (e.g. landraces and seedlings) and could therefore not be “verified as true to type”. It was suggested that material should therefore be recognized as being either found “true to type” or “genetically unique”.

The Chair also highlighted that the inclusion of passport information was important but that the intention of the *Prunus* WG was to insist upon a restricted minimal set of passport data since some passport descriptors were less relevant to the clonally propagated perennial crops. It was generally felt that a first approach would be to consider that MAAs would probably be accessions of varieties which were held in their country of origin. High health status was also suggested as important although it was noted that this should focus on quarantine pests and diseases as it was inevitable that some material would probably hold levels of virus which would be expected to remain practically undetectable. The way to address clones, mutants and “sports” as particular germplasm types was also discussed. It was felt that these should be given lesser priority whilst more genetically diverse material was being considered; however a clear approach to these would be needed in the future.

The conclusion of the discussion was that the Working Group should start making progress toward the development of a European Collection as follows: as a first step, all WG members should consider accessions within their respective collections and identify a set of the most likely candidates to be considered for possible future inclusion in the European Collection. These candidates would be accessions of varieties which were likely to meet most of the criteria, which were clearly known to be of value and to originate in the holding country. These accessions could be used to allow the Group to test the procedure and to allow any further items that required consideration to be identified.

**Workplan**

- The DB Managers will send to each WG member a standardized form (MCPD format) to be filled in with the obvious accessions of national interest and completed with the requested information concerning priority passport data (by end May 2013).
- WG members will return the completed forms to the DB Managers by end July 2013.
- The DB Managers, together with the Chair and Vice-Chair, will analyse the data and propose a list of candidate European accessions to the WG by end September 2013.

**The development of crop-specific standards for Malus and Pyrus**

Jan Engels updated the meeting on the current situation of the generic technical genebank standards that form an integral part of the AEGIS Quality Management System (AQUAS). During the process of developing the generic technical standards for seed germplasm by a number of WGs it was decided to join the FAO Genebank Standards updating process. A number of ECPGR members commented on the draft orthodox seed genebank standards and the Secretariat participated in the Expert Consultation. An advanced draft was discussed by the FAO Commission on Genetic Resources for Food and Agriculture during its meeting in July 2011 and subsequently a revised draft orthodox seeds document was issued, including the evaluation standards suggested by the Commission. This version will be sent to the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture of the Commission and can be found on the FAO and AEGIS Web sites. Beside the addition of a section on evaluation standards, the Commission had requested the development of standards on field genebanks and on *in vitro* cryopreservation of non-orthodox seeds and vegetatively propagated crops. Both first draft documents were