

A few points for action by the WG were proposed, as follows:

1. Agree on the process of identifying *Beta* accessions for the European Collection;
2. Compile first lists of possible AEGIS accessions;
3. Decide whether crop-specific standards are needed beyond the current FAO draft list of technical standards for seed crops/species and, if so, plan for their elaboration.

Criteria for the definition of *Beta* accessions for the European Collection

Ayfer Tan introduced the subject, indicating that all available data sources should be used to identify the existing *Beta* accessions in European genebanks. EURISCO records 8224 accessions from 28 European genebanks, while the IDBB records 10 485 accessions held in 28 genebanks worldwide. In order to select appropriate accessions for inclusion in the AEGIS European collection, she proposed merging of the lists from EURISCO and the IDBB, and starting the sorting of accessions held in countries that have signed the AEGIS Memorandum of Understanding (MoU). The second step would be to check completeness of a minimum amount of data (at least "Species" and "Accession name" or "Collecting number" or "Donor number" or "Other number" or "Country of origin"). Accessions without species name, unclear species and hybrids should not be considered. The lists could then be divided into sub-sections and candidate accessions could first be selected from the smaller subsections. Obvious duplicates could be identified, and Most Appropriate Accessions (MAAs) among duplicates could be selected on the basis of criteria such as:

- Quality of passport data
- Quality of management standards of holding institutes
- Minimum number of regeneration cycles
- Health status (checked for seed-borne/quarantine diseases)
- Existence of characterization and evaluation data
- Whether the accession is maintained in the country where it was collected or originated
- Accession history
- Storage facilities
- Minimum germination % standards used by holder (International Seed Testing Association, ISTA; AQUAS)
- Monitoring germination % by holder (Revised Genebank Standards for the Conservation of Orthodox Seeds, RGBSO; AQUAS).

Other crop-specific criteria that could be used to select those accessions that have been properly regenerated could be the following:

- Number of seeds or approximate size of the original sample;
- Number of plants used in the regeneration plots;
- Pollination method (controlled);
- Number of plants collected in the regeneration plots (minimum 10?).

However, the information for these criteria may not have been recorded or may not be easily available. The general problem is that lack of data or wrong data make it very difficult to select material.

Discussion

The Group considered that the analysis of the databases in the proposed way and with so many criteria would be difficult to achieve without funding support. The alternative

suggested was to start focusing on those accessions that were selected in the past for GenRes projects and now for the AKER project. These accessions are rich in data and have already been selected through some criteria. Moreover, full sets of characterization data are not required to select accessions that need to be preserved as a priority. For example, accessions belonging to the taxa included in the IUCN Red List (*B. nana*, *B. patula* and *B. webbiana*) would all need to be conserved in the European Collection. The taxa related to the proposed *in situ* conservation sites were also suggested as appropriate. This type of choice would also establish a link between *in situ* and *ex situ* conservation, thereby bringing their complementarity into effect.

Regarding the possibility of sorting out accessions on the basis of their taxonomy, it was pointed out that the taxonomy currently used by the N.I. Vavilov Research Institute for Plant Industry (VIR, St Petersburg) does not match other taxonomies such as GRIN; a parallel between the two should be established.

Recommendation

- The first group of accessions to be proposed for inclusion in the European Collection should be selected from the *Beta* Core Collection and the AKER collection. Accessions of threatened species should also be included.

Workplan

- Under the guidance of the IDBB Managers, a list of candidate accessions to be included in the European Collection will be compiled **by end 2012**, using the *Beta* Core Collection, AKER collection and accessions of threatened species. All concerned country representatives and/or curators will support the IDBB Managers' activity. The WG Chair will then submit the agreed list to all the concerned National Coordinators, suggesting inclusion of the respective accessions into AEGIS.
- Lothar Frese, with the assistance of Maria Cristina Duarte, will compare the VIR and GRIN taxonomies for *Beta* and provide a list of matching relationships for all relevant taxa **by end 2013**.

Discussion on generic genebank standards and on the need to agree on crop-specific standards

(introduced by A. Tan)

Following a request of the FAO Commission to update existing standards for orthodox and non-orthodox seeds, and for clonally propagated plants, the FAO drafted the "Revised Genebank Standards for the Conservation of Orthodox Seeds". This document (www.fao.org/docrep/meeting/022/MB179E.pdf) was discussed by the FAO Commission during its meeting in July 2011; it will be finalized and discussed again at the Sixth Session of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture in November 2012. In this document, standards are defined for acquisition, drying and storage, seed viability monitoring, regeneration, characterization, documentation, distribution, safety-duplication and security/personnel.

Ayfer Tan suggested that the FAO Genebank Standards could be adopted as they are, and that the genebanks should attempt to follow them. The WG on *Beta* had already developed a crop-specific "Seed increase protocol" and collected the available regeneration guidelines in the form of country protocols, all available on the *Beta* WG's Web site (http://www.ecpgr.cgiar.org/networks/sugar_starch_fibre_crops/beta/other_wg_documents.html).