

Workplan for the second part of Phase VIII (2011-2013)

Proposed points of the workplan were presented for preliminary discussion in order to be finalized before the end of the meeting (see below).

Discussion

S.H. Hjeltnes: Considering the proposal, how can the quality standards be applied to trees maintained on-farm, such as the private collections that participate in national conservation networks?

Accessions that would be part of AEGIS need to respect the standards.

For on-farm conservation and allowing evolution to continue, guidelines should be developed. The Group however could not identify at the moment any volunteers to work on these aspects. This initiative, as well as the possibility to organize an ad hoc meeting with key stakeholders and representative of the *In situ* and On-farm Conservation Network can be considered for the next Phase of ECPGR.

WORKING GROUP PARALLEL SESSIONS

The Working Groups split in three separate groups discussing specific items. The results of the discussions are reported below.

***Prunus*-specific standards for genebank management**

Chaired by E. Balsemin.

Participants: Kristiina Antonius, Eva-Maria Gantar, Inger Hjalmarsson, Stein Harald Hjeltnes, Rajmonda Sevo, Rafael Socias i Company, Sandor Szügyi, Selim Tokmak.

The group started the discussion on the basis of the minimum standards for *Prunus* conservation that were proposed by the AEGIS *Prunus* sub-group in 2008.

The following suggestions/precisions were given in order to complement the proposal made in 2008:

- Minimum passport data required for the selection of MAAs for AEGIS
 - **Mandatory:** ACCENUMB, ACCENAME, INSTCODE, NICODE, GENUS, SPECIES, ORIGCTY (but not to be confused with the country of the donor! If not known, it should be left blank)
 - **Recommended:** ACQDATE, DONORCODE, DONORDESCR, DONORNUMB, OTHERNUMB, BREDCODE, BREDESCR
 - **Other recommended:**
 - IDENTIF (using a standardized method)
 - VIRUSTATUS and VIRUSDATE ◊ descriptors to be revised
 - SAMPSTAT
 - STORAGE (but need to revise EURISCO descriptor, e.g.: it is not possible to indicate that an accession is stored both in the “field” AND in “greenhouse”)

- Minimum passport data for a given accession that is received/acquired
 - **Recommended to the donor or the collector:** ACCENAME, GENUS, SPECIES, DONORCODE or DONORDESCR, DONORNUMB, ORIGCTY, and other passport data known to the donor/collector

- **Mandatory for the genebank** (for an accession that is registered in the genebank documentation system): ACCENUMB, INSTCODE, DONORCODE or DONORDESCR (if accession is received from a donor institute), and GENUS (if not previously mentioned by the donor/collector)
 - **Recommended to the genebank:** ORIGCTY (but not to be confused with the country of the donor! If not known, it should be left blank)
- When an accession is despatched, it should be accompanied by a label with minimum passport data, as follows:
 - **Mandatory:** NICODE (only for transfers from National Inventory to EURISCO), INSTCODE, ACCENUMB and GENUS, because all are EURISCO mandatory descriptors
 - **Recommended:** ACCENAME, SPECIES, ORIGCTY (if known)
 - A set of minimum *Prunus* characterization data should be agreed by the WG (also useful for selection of MAAs for AEGIS), including both phenotypic and perhaps genotypic data and possibly pictures of the fruit. This list is still to be discussed (see below, “Phenotypic and molecular characterization” session).
 - Regarding the possible addition of other *Prunus*-specific standards as new elements to complete the whole process, it was considered that elements of management of a *Prunus* genebank such as managing human resources, ensuring physical security and ensuring security of equipment are not *Prunus*-specific. On the other hand, data management and traceability requires the following standards:
 - Ensure traceability of information for each individual, from the initial grafting to death
 - Register data into dedicated files or databases.

It is also important to use a standard methodology to verify accession identity. This methodology will need to be developed by the Working Group.

Additional elements of the *Prunus*-specific standards need to be included, keeping in mind that, beside grafting, other propagation techniques are used:

- Propagation/re-propagation: use virus-tested compatible rootstocks (only if grafting is necessary)
- Distribution: maintain a record of the transaction.

Additional elements of the *Prunus*-specific standards may need to be included, keeping in mind other conservation methods:

- Seed collections: only for conservation of rootstocks’ seeds, but these are not part of a genebank activity (not to be included in the *Prunus* AQUAS)
- *In vitro* culture collections: standards would need to be developed by *in vitro* experts
- Cryopreserved collections: the techniques are not well developed for *Prunus*. It is too early to include any standard in the *Prunus* AQUAS
- Add greenhouse/screenhouse collection standards.

Regarding the draft version (v.8) of the template for the preparation of a genebank operational manual provided by the ECPGR Secretariat, it was recommended to add a section on conservation in greenhouse/screenhouse. It was also suggested to use as a basis the existing operation manual prepared by the Corvallis USDA genebank, which includes screenhouse operations.

Workplan

13. A proposed list of minimum passport descriptors (mandatory and recommended) for all *Prunus* species will be prepared by E. Balsemin and circulated to the Group in order to obtain a final approval **by November 2010**.
14. A document summarizing all the proposed *Prunus*-specific standards will be prepared by E. Balsemin and circulated to the Group in order to obtain a final approval **by June 2011**.

Safety-duplication arrangements, *in vitro* and *in vivo*

Chaired by Daniela Benediková.

Participants: Mihai Botu, Edite Kaufmane, Miroslav Cizmovic, Metka Hudina and Torben Toldam-Andersen.

Safety-duplication is considered very important. Many countries organize it in the field and greenhouse (*in vivo*) and only few countries organize it *in vitro* (Italy and Estonia at the experimental stage). *In vitro* safety-duplication is considered expensive and problematic for the slow regeneration of the entire plant. The protocols are also very crop- and variety-specific. The *in vivo* safety-duplication is preferred, with 2-3 trees per accession in 2 places. The need was also discussed to prepare protocols for *in vitro* conservation.

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15. D. Benediková and M. Botu to prepare the safety-duplication methodology **by December 2010** and circulate it to the Group for approval.

Phenotypic and molecular characterization

Chaired by M. Lateur.

Participants: Felicidad Fernandez (Rapporteur), Daniela Giovannini, David Szlalatnay, Henryk Flachowsky, Hedi Kalmäe, Larissa Gustavsson, Petra Engel and Pakeza Drkenda.

As an introduction to the specific work of characterization and evaluation of genetic resource collections, M. Lateur presented some "general methodological aspects" of the work.

Firstly we need to differentiate the "characterization" work that is of most specific importance for the identification of the material and the "evaluation" that is of tremendous importance for the further potential use of the material. "Characterization" deals with the most stable and the less environmentally influenced traits and therefore the characterization work can be carried out during a limited period of time with at least three representative years of collecting the data. Concerning the evaluation work, the methods used, the orchard management conditions and specific methodologies need to be properly defined; duration or number of years needed for a proper evaluation work depends on e.g. priorities defined by the curators, available budgets, available competent staff, orchard management systems, representative years; it is a dynamic process that needs to be properly planned in order to obtain logical series of data that will be able to be finally analysed. For the evaluation an average of five to six representative years would be optimal with a strict minimum of three good representative years.

As curators, our task is to implement a good "**Primary evaluation**" work that can be defined as a first screening using standardized protocols, but with very simple experimental design because we often have to manage a tremendous number of accessions that allows to