

FRUIT NETWORK

4.3. Fruit Network

Working Groups: *Malus/Pyrus*, *Prunus* and *Vitis*.

The **Fruit Network Coordinating Group** consisted of six members: Marc Lateur, Belgium (Network Coordinator); Daniela Giovannini, Italy; Stein Harald Hjeltnes, Norway; Erika Maul, Germany; Jesús Ortiz, Spain and Matthew Ordidge, United Kingdom.

Malus/Pyrus WG

The *Fourth Meeting of the ECPGR Malus/Pyrus Working Group* took place from 6 to 9 March 2012 in Weggis, Switzerland, following two *ad hoc meetings on fruit synonyms* (5 March) and *on descriptors* (6 March). Twenty-two country representatives participated.

The ad hoc meeting on descriptors agreed draft lists of characterization and evaluation descriptors for apple and pear, including the methodology and protocols to be followed. The descriptors were then prioritized by the WG.

A list of 12 validated SSR markers for apple, cherry and pear, including the methodology to apply these markers, had been previously agreed during an ECPGR ad hoc meeting. The availability of information was discussed by the Working Group. References to publications detailing markers and protocols were added to the ECPGR Web site and a Task Force was set up to summarize the information across *Malus*, *Pyrus* and *Prunus*, for publication of a manual on the ECPGR Web site.

Procedures for the updating of the *Malus* and *Pyrus* Central Crop Databases (CCDBs) were agreed. The development of the *Pyrus* Database is closely linked to that of the *Prunus* Database (see below). The Working Group also discussed the perspectives of development of the *Malus* and *Pyrus* CCDBs in relation to EURISCO. The WG considered the roles of CCDBs in resolving crop-specific issues and providing access to essential technical knowledge of great importance, in particular for the development of the European Collection. The meeting recommended better coordination of activities and clarification of responsibilities to ensure harmonization of data in the CCDBs and EURISCO, and enhancement of the links between the Documentation and Information Network and the CCDB Managers.

A *Pomological reference list* under development was presented and the meeting agreed that it would be useful to enrich it and to integrate it into the *Malus* and *Pyrus* CCDBs to facilitate the referencing of cultivar names.

The ad hoc meeting on synonyms obtained the following outcomes: for pear, update of the synonym list, definition and adoption of a methodology successfully implemented on 3471 accessions of the *Pyrus* Database; for apple, presentation of a "name-checking tool" developed alongside the Brogdale Collection Database and to be used in the development of the ECPGR *Malus* Database. Detailed procedures to be followed for the implementation of these tools for the identification of synonyms in both the *Malus* and *Pyrus* DBs were agreed.

The meeting was the first opportunity of the WG to discuss AEGIS and the establishment of the European Collection. Selection criteria were discussed and it was agreed that candidate accessions should originate in the holding country, and be either true to type or genetically unique. In a first step, all WG members will be requested to identify within their respective collections a set of the most likely candidates. Regarding technical standards, the meeting agreed to use the final FAO *Field Genebank Standards* as a basis for deciding whether the development of crop-specific standards would be required.

Marc Lateur was reconfirmed as Chair of the WG and Dorota Ewa Kruczynska was nominated as Vice-Chair in replacement of Bronislovas Gelvonauskis.

Prunus WG

Following the departure in August 2011 of the **European *Prunus* Database (EPDB)** Manager, Emilie Balsemin, the recruitment process for her replacement is still under way at the French National Institute for Agronomical Research (INRA). She however brought forward the planned improvement of the EPDB in collaboration with INRA-Bordeaux and with support from the EC project GenBerry and ECPGR funds. A new portal Web site gives access to five new *Prunus* crop databases (almond, apricot, cherry, peach and plum). An advanced search tool was developed for passport and

characterization and evaluation data as well as for molecular data; photo upload and search tools were also developed. The database model was developed in consultation with the Walloon Agricultural Research Centre (CRA-W) of Gembloux (Belgium) with a view to deploying the same structure for the ECPGR *Pyrus* Database.

The module for direct update of the EPDB by contributors is not yet operational so the updates are to be carried out by the EPDB Manager. New data were provided to INRA by Italy, Latvia and UK.

A final draft descriptor list for peach was nearly finished.

Vitis WG

The Second Meeting of the ECPGR Vitis Working Group was held from 18 to 20 September 2012 at Siebeldingen, Germany. Eighteen country representatives participated.

Collaboration was strengthened with COST Action FA1003 on *East West collaboration for grapevine diversity exploration and mobilization of adaptive traits for breeding*, with an invitation to all *Vitis* WG members to join the Action and establish agreements with other COST partners who will be available to fingerprint a number of grapevine accessions free of charge. The initiative of the Action to promote a simplified protocol for the phytosanitary treatment of *Vitis* germplasm imported from outside the EU for genetic resource conservation purposes was endorsed.

The *European Catalogue of Nationally Registered Varieties* was acknowledged as currently the most reliable and up-to-date for the definition of synonyms of registered varieties in Europe.

The WG recommended using at least the nine SSRs agreed by the WG for the determination of the identity of an accession and the 48 descriptors of the recently concluded EC GrapeGen06 project for trueness-to-type testing.

The meeting was the first opportunity for the WG to discuss AEGIS and the establishment of the European Collection. A procedure for the selection of AEGIS accessions was agreed, focusing on minor and neglected cultivars of European countries. A preliminary list of autochthonous varieties to be proposed for inclusion in the European Collection was drawn up, including nearly 2500 accessions from 18 countries. The WG agreed with the draft *AEGIS Safety-duplication Policy* and endorsed the draft *FAO Generic Standards for Non-orthodox Seeds and Clonally Propagated Plants*, with the addition of a few *Vitis*-specific standards.

A mechanism was set up to help the WG to mobilize small funds to cover critical situations that would put the survival of important germplasm at risk.

Jesús Ortiz stepped down from his position of Chair and David Maghradze was elected to replace him, with Edi Maletić continuing as Vice-Chair.

The **European *Vitis* Database** (www.eu-vitis.de) will continue to be hosted and maintained by the Julius Kühn-Institut-Federal Research Centre for Cultivated Plants (JKI), Institute for Grapevine Breeding Geilweilerhof, Siebeldingen, Germany, as an in-kind contribution to ECPGR.

The 48 descriptors of the Organisation Internationale de la Vigne et du Vin (OIV) that are used for the European *Vitis* Database were translated into Russian and Turkish. They are now available in seven languages via the European *Vitis* Database.

A comprehensive list of national variety catalogues was posted on the ECPGR Web site.

Summary of AEGIS development status

***Malus/Pyrus* WG**

- European Collection: In a first step, all WG members will be requested to identify within their respective collections a set of the most likely candidates of national interest, using a form to be provided by DB Managers. The exercise will start in 2013.
- AQUAS: The WG agreed to use the final version of the *FAO Field Genebank Standards* as a basis for deciding whether any crop-specific standards are needed.

***Prunus* WG**

- European Collection: Following the identification in 2011 of 1116 unique cherry genotypes and 367 duplicate groups, the finalization of proposed lists of candidate European Accessions was put on hold, pending the nomination of a new EPDB Manager.
- AQUAS: The *Minimum Prunus-specific standards for genebank management* were revised in collaboration with the AEGIS Coordinator. It was agreed to harmonize them with FAO standards.

***Vitis* WG**

- European Collection: A procedure for selecting European Accessions has been agreed and a tentative list of almost 2500 autochthonous accessions identified. The selection of candidate accessions by WG members is in progress. Twenty-one *Vitis* accessions conserved by IPK, Germany, have been designated as part of AEGIS.
- AQUAS: The draft *AEGIS Safety-duplication Policy* and the *FAO Standards for Non-orthodox Seeds and Clonally Propagated Plants* were agreed with a few additions.

Outlook for 2013

- Fruit Database development and maintenance: a log book will be implemented for the European *Vitis* Database.
- The *Malus* and *Pyrus* Databases will be updated with accession lists supplied by the WG members and using the EPDB database structure.
- Ad hoc meeting of the *Prunus* WG (AEGIS activities).