

CEREALS NETWORK

4.1. Cereals Network

Working Groups: *Avena*, Barley and Wheat.

The **Cereals Network Coordinating Group (NCG)** consisted of seven members: Helmut Knüpfner, Germany (Network Coordinator); François Balfourier, France, replacing Gert Kleijer, Switzerland as of May 2012; Iva Faberová, Czech Republic; Christoph Germeier, Germany; Marja Jalli, Finland; Andreas Katsiotis, Greece; and Marcin Zaczynski, Poland.

The **Third Meeting of the ECPGR Wheat Working Group** was held in Piešťany, Slovakia, 15-17 May 2012, involving 23 WG members and 7 observers. An inventory of precise genetic stock collections in Europe and their conservation status was prepared for the meeting. An ad hoc group on precise genetic stocks was then created, led by Mike Ambrose (UK), with the task of working on the definition of cereal genetic stocks, developing criteria to select valuable material for their long-term conservation, completing the inventory of materials, and developing specific descriptors or data fields that indicate the cereal genetic stocks' special characteristics.

The list of descriptors used for the ECPGR Wheat Database (EWDB) was revised and the members committed themselves to updating the database on an annual basis. The EWDB Manager, Iva Faberová (Czech Republic) informed members that she would progressively transfer responsibilities to her colleague Ludmila Papoušková.

Regarding the relationship between EURISCO and Central Crop Databases, the WG was looking forward to the development of EURISCO as a reliable unique database that could and should serve all the current needs of the Working Groups. This would require the inclusion of standardized crop-specific characterization descriptors in EURISCO. The WG was looking forward to developments driven by the Documentation and Information Network and decisions of the Steering Committee.

The Wheat Working Group members agreed to provide data to be uploaded on the WG pages of the ECPGR Web site, covering studies on genebank material and other activities of interest carried out in their respective institutes (http://www.ecpgr.cgiar.org/networks/cereals/wheat/inventory_activities.html).

Criteria for the development of the European Collection and the related genebank standards were agreed (see below, AEGIS section).

The WG also discussed the status of other ECPGR cereal databases and took note that the *Secale* Database, maintained by the Plant Breeding and Acclimatization Institute (IHAR), Poland, was increasingly providing access to characterization and evaluation (C&E) data. The agreement was made that the Triticale Database, maintained by Agroscope, Switzerland, should include data for the same descriptors as the Wheat Database.

Gert Kleijer and Iva Faberová resigned from their current roles. François Balfourier, France and Külli Annamaa, Estonia were elected as new Chair and Vice-Chair, respectively.

After the meeting, the WG agreed on the definition and use of two new descriptors that were included in the EWDB: "Year of entry into common knowledge" and "Zeleny sedimentation test".

Summary of AEGIS development status

Offers by countries

The following accessions were submitted to the attention of the Working Groups for their opinion on the suitability of their inclusion in the European Collection:

- IPK, Germany: *Avena* (137), barley (1595), maize (106) and wheat (1386)
- CGN, The Netherlands: *Avena* (75), barley (642), maize (195) and wheat (646).

Avena WG

The WG agreed that all wild species could be AEGIS accessions, as well as all the material that had been selected for the EU project '*Avena* genetic resources for quality in human consumption' (AVEQ). The identification of a detailed list of AEGIS accessions was agreed to be the topic of an ad hoc meeting (expected in 2013). At this same meeting, an already established Task Force will be expected to report about draft protocols on regeneration of wild accessions.

Barley WG

An agreement remained pending on protocols for the species-specific maintenance of wild *Hordeum* species and cultivated barley, which were expected to be drafted by a Task Group.

Wheat WG

- European Collection: *Triticum* accessions held in the country of origin by Belarus (19) and Estonia (8) were recommended by the WG and expected to be flagged as European Accessions by the respective National Focal Points. Additional lists of *Triticum* and *Aegilops* accessions conserved in their country of origin were expected to be proposed by the DB Manager. WG members were invited to prepare by the end of 2012 additional lists of “genetically unique” material conserved in their genebanks. Criteria for the selection of accessions were the country of origin (same as holding country), safety duplication (either completed or in the process of being completed) and completeness of minimum documentation (mandatory descriptors were defined).
- AEGIS Quality System (AQUAS): The WG agreed that they did not need to elaborate crop-specific standards in addition to those proposed by FAO. A document summarizing the necessary genebank management knowledge for breaking dormancy, viability testing and multiplication of *Aegilops* and other wild cereals was prepared by A. Börner, Germany and H. Sela, Israel and posted on the WG Web site.

Other cereals

Criteria and the procedure for the selection of European **Rye** Accessions had been agreed, starting with landraces, wild *Secale* accessions and cultivars, whereas genetic stocks and breeders' lines will follow thereafter. The search for duplicates will be focused on cultivars released after 1950. A proposed list of European Rye Accessions is expected in 2013 as a product of the AEGIS Grant Scheme-funded project.

The development of the first list of possible **Triticale** European Accessions was postponed until the Triticale DB has been updated. The approach proposed for wheat can then be adopted also for Triticale.

Outlook for 2013

A small project aiming at making progress with the inventory of precise cereal genetic stocks is planned to be undertaken by an ad hoc group.

An ad hoc meeting of the *Avena* WG to discuss the selection of candidate European Accessions and to discuss relevant details of the AEGIS Quality System for cereal crops is planned to be held in Cyprus during 2013.