

Working Group on the Information System

Introduction to Working Group on the Information System

Christian Vernière for Working Group Leader, Roland Cottin

The French system was not described in detail as Roland Cottin could not attend. Their database (EGID) was demonstrated in Australia and its web address is: <http://www.corse.inra.fr/sra/egide.htm>. He offered to list assessments for any collection and has gotten responses from some countries but not all. He now has 6000 assessments worldwide listed in the database system. He will send all the people on the GCGN attendance list questionnaire so they can provide him with data if they have not responded previously.

The GRIN Information System

Dr. Robert Kruger, USDA Citrus Germplasm Repository, Riverside, California, USA

A description and cost of maintaining the USDA collection was presented at the 1996 Congress of the International Society of Citriculture (Proc. Int. Soc. Citriculture 1996; Vol 2: 1235-1240). The combined USDA - University of California, Riverside collection has 865 assessments and can be viewed on the USDA GRIN computerized germplasm database.

The citrus database is incorporated in the overall USDA germplasm system called 'GRIN.' GRIN (Germplasm Resources Information Network) has a web interface. Anyone can view the public information at <http://www.ars.grin.gov>. There are three data areas for each assessment. The first data area provides passport type data. The cooperator area indicates people who give and receive germplasm from the system. The descriptive area is under a specific crop germplasm committee such as one for citrus. This section gives a description of a particular germplasm. The Citrus Germplasm Committee realizes there are some limitations to the current descriptors used in the system.

A number of activities are involved in maintaining GRIN. A number of local databases are maintained. These, like the citrus databases, also contain some information that is physically in the national system. Germplasm information goes from paper to the local database, to the national database, which then can be viewed by the public. Information can be updated from various sources via the internet. People can request germplasm on-line and the request will be sent to the proper authorities. There are about 10 people who maintain the server, update the server, and update the software. You can search by descriptors, which would be a list of descriptions for the crop, and the system will indicate the corresponding germplasm. With substantial resources a very user-friendly and inclusive database system, that can search by various characteristics, can be maintained.

Demonstration of the Spanish Germplasm Data System

Luis Navarro, INIA, Valencia, Spain

This database system of citrus germplasm in the Spanish system, can be searched by group, name, and reference. You can view the source plant information, vegetative characteristics, an image of an example of that assessment, and zoom in on a particular part of the image.

This is a very inclusive database system and queries are very user friendly to run in either Spanish or English versions in the same program. You are able to enter a wide range of parameters, any of which can bring you to the same conclusion. It would be very useful to have on a web-site and plans are underway to do so.

It might be useful to have a general citrus species and relatives database system on a web-site,

then have a list of experts and their contact and expertise information for each kind of citrus in the database system. Also, if the expert has a web-site or an e-mail, put a direct link to that web-site or e-mail directly on the list. The database could include the field of genome descriptors for each citrus type also. This would not be the same kind of database as those described for the USA, Spain, or France.

Discussions and Identification of Potential Cooperative Activities

At the first meeting the discussion was about having one global germplasm database. The various systems are too advanced, meet different needs, and cannot be expected to merge. The database versions should be available; however, the French and United States versions are available to web access. The Spanish version will be soon. The important thing is that everyone accept one of the databases and enter their data into that system for global use.

The Spanish are moving towards putting their database on a web-site for public use. We should post general information and links on a Global Citrus Germplasm Network web-site to the USDA, French, and Spanish web-sites allowing informed access to all users.

The abstracts of all papers that relate to citrus germplasm and were presented as posters at the 9th Congress of the International Society of Citriculture are provided in Appendix 9.