ESTABLISHMENT OF AN EUROPEAN PLANT GENETIC RESOURCES INFORMATION INFRA-STRUCTURE



4 September 2002 Update on the EPGRIS project and the development of EURISCO

Introduction

Information regarding the EPGRIS project has been made publicly available from a web site at http://www.ecpgr.cgiar.org/EPGRIS/Index.htm. Updates were also published in the Newsletter for Europe (n^o 20 and 22) and presentations were made at the occasion of several ECP/GR Working Group meetings. A discussion paper on « National Inventories, EURISCO and Central Crop Databases (CCDBs): communicating vessels » was distributed to all CCDB managers and National Inventory focal persons in January 2002. After the mid-term coordination meeting, held in Oeiras, Portugal on 14-15 June 2002, it is useful to provide a further update, especially to the CCDB managers, about the progress made, in particular on the development of the EURISCO search catalogue.

The envisaged relationship between National Inventories, EURISCO and the CCDBs is explained in the above-mentioned document, which is still a valid reference. However, in practice, a number of questions were recently raised by the ECP/GR Working Groups, in particular regarding the rate of progress of EURISCO and the recommended activity of the Working Groups. This paper aims at answering some of the questions raised in the ECP/GR circles, such as the following:

- Should the advanced CCDBs continue to collect missing passport data or should they wait for EURISCO?
- Should the new CCDBs start gathering passport data in the traditional way (either directly contacting germplasm curators or via the Working Group members) or should they wait for EURISCO to become operational?
- Will EURISCO and the CCDBs remain compatible or will they use different standards?
- Will EURISCO replace or duplicate the role of the CCDBs?

State of progress of EURISCO

In the EPGRIS mid-term coordination meeting, the data and standards used for EURISCO were defined. This is an important step forward that immediately allows for harmonization between EURISCO and the CCDBs. EPGRIS will use the new FAO/IPGRI Multi-crop descriptors list (MCPD v2) without changes. The list can be accessed at: http://www.ipgri.cgiar.org/publications/pubfile.asp?ID_PUB=124.

Six additional fields were also adopted. These are necessary for: i) identification of the data set (NICODE), ii) linking, where applicable, to additional data (ACCEURL) and iii) solving problems related to missing or obsolete FAO institution codes (DESCR fields) (see footnote¹).

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¹⁾ NICODE (National Inventory Code)

This is the code identifying the National Inventory (NI) and is necessary to identify the data set received by a given country; it consists in the ISO3166-1 code of the country preparing the NI (exceptions are possible if agreed with EURISCO such as NGB for the Nordic Countries)

Under the coordination of National Inventory focal persons, National Inventories are being developed in all 41 countries participating in the EPGRIS initiative. Nearly thirty-five countries currently have their National Inventory ready offline. Seventeen National Inventories (Austria, Bulgaria, Czech Republic, Estonia, France, Germany, Lithuania, The Netherlands, the five Nordic Countries, Poland, Russian Federation. Slovenia and Spain) are alreadv available on-line at: http://www.ecpgr.cgiar.org/epgris/Partners/NatInvent.htm. A first test to upload National Inventory data into EURISCO has been made by IPGRI. The requirements for data uploading from the National Inventories into EURISCO have been defined and are being indicated to the National Inventory focal persons during the sub-regional meetings in the summer of 2002.

Next steps in the development of EURISCO

During 2002 and 2003, EURISCO will be ready to receive National Inventory data from all the European countries. This uploading process will be coordinated by IPGRI and its automation will be fine tuned before the end of the project.

At the same time, EPGRIS is combining all available CCDBs into one database, and subsequently will extract country data subsets. These will be sent to the National Inventory focal persons, to be used as cross reference by the focal persons or as initial National Inventory, if no other set is available.

Before the end of 2003, the first version of EURISCO is expected to be launched on-line and to contain a combination of data available from the existing National Inventories and from the existing CCDBs. At this point, EURISCO will start to be a useful source of data for the CCDBs. The official launching of EURISCO is expected to occur during the final EPGRIS meeting, due to be jointly held with an ECP/GR Documentation Network meeting, convening all the National Inventory focal persons and European Central Crop database managers, tentatively in the second week of September 2003 in Prague, Czech Republic.

The CCDBs and EURISCO. The suggested way forward

Before the first version of EURISCO is officially launched, existing CCDBs are not expected to remain inactive. EURISCO is expected to gradually develop and become the most complete and reliable source of passport data in Europe, however, this process may require a few years. In the meantime, the EPGRIS project partners wish to suggest the following action:

1) CCDBs to harmonize their structure with EURISCO. This is very important in order to enable the CCDBs to build on passport data taken from EURISCO. This means adopting the new FAO/IPGRI

2) ACCEURL (Accession URL)

This is the accession URL, providing a link to additional information about the accession maintained in the national collections. It is desirable for linking to additional data about the accession).

(example: www.cgn.wageningen-ur.nl/pgr/collections/passdeta.asp?accenumb=CGN04848)

3) COLLDESCR (Decode of Collecting Institute Code)

4) DONORDESCR(Decode of Donor Institute Code)

5) BREDDESCR(Decode of Breeding Institute Code)

6) DUPLDESCR (Decode of Duplication Site Code) If fields containing institution codes (i.e. COLLCODE, BREDCODE, DONORCODE and DUPLSITE, but not INSTCODE) cannot be filled since the codes are not in the FAO Institutes codes database, these codes used can be (briefly) decoded in the above additional fields. The decode should contain the identifying parts of the contact, or, if not available, the available information such as acronym.

Example for DONORDESCR: 'Tuinartikelen Jan van Zomeren, Arnhem, The Netherlands'

If the INSTCODE part of OTHERNUMB doesn't have a FAO code, this part is considered unknown.

example: a number 'GA1221', used by an institution called FRGA which doesn't appear in the FAO list would become ':GA1221'.

Multi-crop passport descriptors list (MCPD v2) and the additional EURISCO descriptors (see footnote 1). This harmonization will facilitate exchange of information and comparison of data sets. CGN is, on behalf of EPGRIS, in the process of undertaking this harmonization for all available databases prior to loading them in a central database. All CCDBs have been requested to send their latest version for this purpose. If any CCDB manager would like to receive the harmonized version of their database, they can obviously request it from CGN.

2) Existing and new CCDBs should not refrain from gathering data in the traditional way before EURISCO becomes operational and until it has collected enough data to objectively become the preferred source of passport data.

3) Once EURISCO becomes operational (expected in September 2003), CCDB managers to consider retrieving data from EURISCO. Indeed, EURISCO is eventually expected to replace the process of collecting passport data for the CCDBs. The validity of data in EURISCO will be guaranteed by the respective country National Inventory focal persons. While initially EURISCO will reflect the limited and inhomogeneous development of National Inventories in Europe, the gradual improvement of national information systems will result in increasing completeness of EURISCO, which will be as up-to-date as every single National Inventory.

At any point in time, however, the scenarios indicated below can be expected. CCDB managers should evaluate the specific situation and decide whenever it is convenient to make use of the data from EURISCO for their databases:

- EURISCO contains less data than a given CCDB this may be the case especially in the earlier phases of EURISCO, since not all National Inventories may include all the collections recorded in the CCDBs;
- EURISCO contains more data than a given CCDB this is expected to occur from the start for new or emerging CCDBs and increasingly in the future, when National Inventories will be more developed and will become the preferred source of updated and validated passport data;
- EURISCO and CCDBs contain different data sets for the same accession this situation may occur whenever collection curators have not distributed the same data sets to the CCDBs and to the National Inventory.

Although initially it may not be convenient, especially for well developed databases, to retrieve data from EURISCO, the situation is expected to rapidly improve within 2-3 years.

The role of the CCDBs and their managers

Once EURISCO becomes the preferred and most reliable source of passport data, the CCDBs and their managers should eventually be able to fully assume the function that has recurrently been attributed to them². Rather than continue to compile passport data, database managers should then be able to dedicate resources and time, for example, to the following activities:

- Helping to improve the quality of the data, pointing out errors and insufficient standards;
- Tracing duplicates, gaps, Most Original Samples;
- Gathering data beyond the Multi-crop series (characterization and evaluation data);
- Analyzing information that can be obtained by applying GIS tools;
- Providing data in the format that is most convenient to specific users (*e.g.* summaries of evaluation results);
- Promoting coordination of activities, such as helping in defining European collections, core collections, safety-duplication and collecting needs, etc.

The role of the CCDBs and the interaction with EURISCO will probably be the central theme of the final EPGRIS meeting, that will be combined with an ECP/GR Documentation Network meeting. We hope this meeting, tentatively in the second week of September 2003 in Prague, Czech Republic, will bring together all National Inventory focal persons and all CCDB managers in Europe, and will thus provide an excellent platform for discussion of these issues.

² Lipman, E., M.W.M. Jongen, Th.J.L. van Hintum, T. Gass and L. Maggioni (compilers). 1997. Central Crop Databases: Tools for Plant Genetic Resources Management. International Plant Genetic Resources Institute, Rome, Italy/CGN, Wageningen, The Netherlands.