DEVELOPMENT OF NATIONAL PROGRAMMES ON PLANT GENETIC RESOURCES IN SOUTHEASTERN EUROPE IPGRI

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Title:

Project information resources and tools (project's web site, descriptors, DIVA GIS)

Summary:

In this brief communication the project website will be presented and discussed with the participants. The resources available will be emphasized and participants encouraged in providing comments for the improvement of the website.

WEBSITE

The website is organized into three separate sections: the first is a general description of the project and the following two describe in details the grapevine and the broadleaves components. Each sub-website has separate sections for: Partnerships, Conservation Activities, Country Reports, Fellowships, Meetings, Resources, Contacts.

DIVA GIS

From the website a free GIS software (DIVA GIS) is available for downloading.

Plant genetic resources management is a complex process that goes from identifying a gene pool to conserving and using its genetic resources. Many activities in this process generate and require geographically referenced data that can be more easily analyzed with geographic information system (GIS) technology. GIS can combine genetic diversity data with information such as population density, climate, topography and soil, thus being a useful tool to monitor genetic diversity, select potential sites for collecting, design reserves or develop conservation strategies.

In collaboration with national and international organizations, IPGRI is developing innovative methodologies and tools lo support the use of GIS. This initiative includes the design, development, promotion and distribution of low-cost and easy-to-use tools such as DIVA - a recently released software to manage and analyse germplasm spatial data.

DIVA was developed cooperatively with the International Potato Center (CIP) and with support of the System-wide Genetic Resources Programme (SGRP), a collaborative effort of the centers of the CGIAR. DIVA allows user to find and verify the coordinates of an accession or draw data on climate associated with that accession, identify diversity hot spots or find materials with desired characteristics in a given geographical area. Users of the software find it easy to apply and have given suggestions to improve it.

DIVA is available free of charge at <u>http://gis.cip.cgiar.org/gis/tools/diva.htm</u>; and <u>http://diva-gis.org/</u> copies of the user manual and a tutorial can be downloaded from the same site. Geo-referenced data about countries in the region, including climate, land use, population density and administrative boundaries can be downloaded from the website.

EURISCO

Another resources accessible from the project website is the EURISCO web catalogue. <u>http://eurisco.ecpgr.org/index.php</u>

The EURISCO web catalogue automatically receives data from the National Inventories. It effectively provides access to all *ex situ* PGR information in Europe and thus facilitates locating and accessing PGR. EURISCO is hosted at and maintained by IPGRI on behalf of the Secretariat of the *European Cooperative Programme for Crop Genetic Resources Networks* (ECP/GR).

The central infrastructure of EURISCO has been developed with open source software. This strategic choice is intended to allow EURISCO National Focal Points to benefit from the development of EURISCO for their national implementation. The uploading mechanism concept is designed to allow an easy data checking of the information provided in national inventories both on essential descriptors and on a line-per-line checking. The checking and validation procedures assist the national partners in their efforts to improve the accuracy of their information with their data providers at national levels.

DESCRIPTORS

Grapevine descriptor represents an important tool for a standardized characterization system and it is promoted by **IPGRI** throughout the world. It provides an international format and a universally understood 'language' for plant genetic resources data. The adoption of this scheme for data encoding, or at least the production of a transformation method to convert other schemes to the **IPGRI** format, will produce a rapid, reliable and efficient means for information exchange, storage, retrieval and communication, and will assist with the utilization of germplasm.

IPGRI encourages the collection of data for all five type of descriptors: **Passport**, **Management**, **Environment and site**, **Characterization** and **Evaluation** whereby data from the first four categories should be available for any accession.

Descriptors should be used when they are useful to the curator for the management and maintenance of the collection and/or to the users of the plant genetic resources.

It is recommended, therefore, that information should be produced by closely following the descriptor list with regard to: ordering and numbering descriptors, using the descriptors specified, and using the descriptor states recommended.

The List of Multi-crop Passport Descriptors (**MCPD**) is a reference tool developed jointly by IPGRI and FAO to provide international standards to facilitate germplasm passport information exchange across crops. These descriptors aim to be compatible with IPGRI crop descriptor lists and with the descriptors used for the FAO World Information and Early Warning System (WIEWS) on plant genetic resources (PGR).

Please kindly note that the Grapevine descriptors are currently under revision.

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