

Making information accessible for the conservation and use of biodiversity

A novel initiative to facilitate access to information and use of agricultural and tree biodiversity

The challenge

The value of plant resources is dependent upon the information available. Accurate information promote use, especially if it is available in a standard format. However, much of the valuable information on agricultural and tree biodiversity is globally scattered and, at the same time, it is constantly evolving in farmers' fields and local forests because of current challenges.

Through the production of descriptors lists in collaboration with partners, Bioversity aims to stimulate the documentation on plants by providing standard guidelines for the description and exchange of information on them.

Descriptors contribute to increasing knowledge and facilitate research on crops that have received limited attention by the research community, but which are often favoured by poor people. The almost 130 descriptors and derived standards published over the years include 60 NUS species and 22 out of the 64 crops listed in Annex 1 of the ITPGRFA. Those developed in 2013 are included below.

Their production has given Bioversity a sound and leading role in standards development worldwide which is promoted by the FAO Global Plan of Action, the FAO Commission on Plant Genetic Resources and is supporting the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture.

In our revised Strategy, the growing emphasis on in situ/on farm and use of plant resources activities requires us to find appropriate solutions to develop effective methods and tools to facilitate utilization of those resources. Our proposal offers a new concept for descriptors, and a new tool which would facilitate collection of information contributing to a greater utilization of plant resources.

Some background

Bioversity has developed crop descriptors and derived standards since its inception (1976). They are considered the international standards that constitute the backbone for a number of important initiatives globally such as their adoption by GENESYS, the Generation Challenge Programme (ontologies), EURISCO, FAO-WIEWS, CGIAR centres, Crop Networks and National Programmes. Their production has given Bioversity a sound and leading role in standards development worldwide.

A new concept

The concept of descriptors has evolved over the years in response to changes in users' needs. Initially, DLs provided a minimum set of characteristics to describe particular crops. The concept of descriptors was revisited in 2010 with the development of Descriptors for farmers' Knowledge about people and plants. Now a new approach is being developed in order to produce an instrument that will facilitate its use linking ex situ and in situ efforts, which will include descriptors related to cultivation practices, processing, transformation which in turn, will increase the use of biodiversity.

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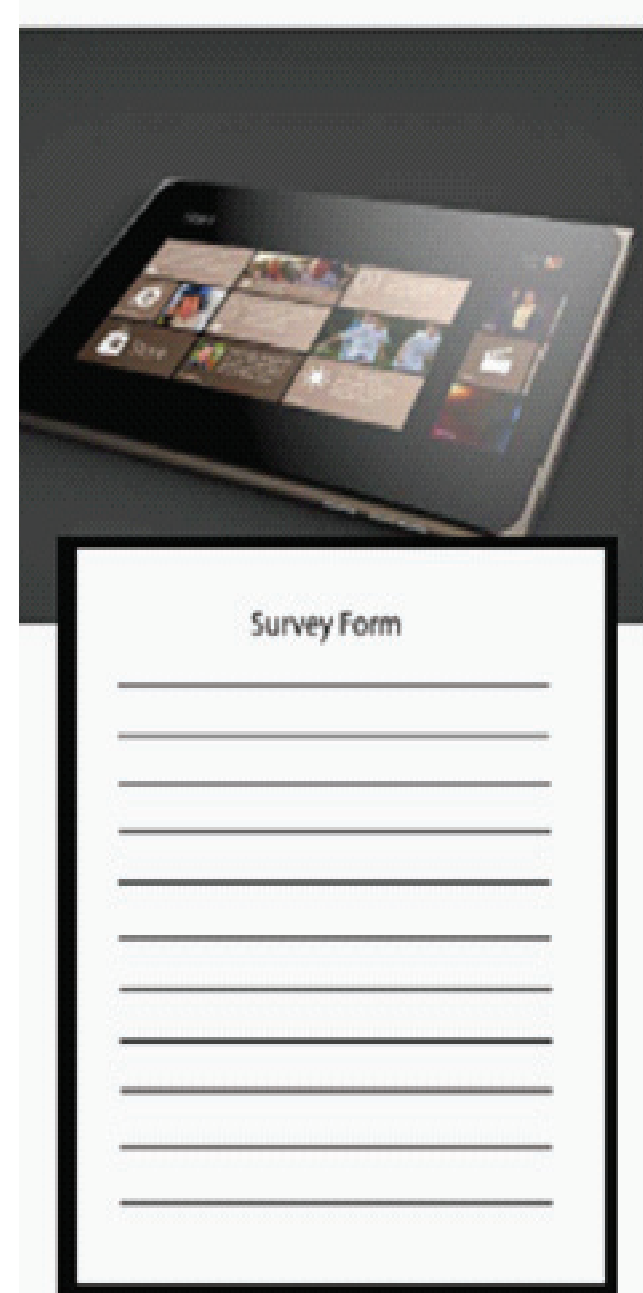
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Descriptors for Crops, Crop Wild Relatives, and Trees



Descriptors for Quinoa and wild relatives (E,F,S) and Descriptors for Tree tomato and wild relatives.

Core Descriptors for in situ conservation of CWR Coming soon, Descriptors for baobab.



Users fill in the survey form

Looking ahead

Bioversity should make additional efforts to maintain its leading role in international standards development in partnership with new players, in particular working with farmers to find solutions to current challenges, such as climate change, food security, land degradation and access to genetic resources while preserving biodiversity.

Moving forward on electronic descriptors

The Open Data Kit (ODK) is a free and open source application which helps people while collecting information in the field to manage their data and upload it in the internet using on mobile devices. The ODK offers the long awaited request to have our crop descriptors in electronic format so that XML forms can be automatically generated for data collection. In the ODK, descriptors are developed in Excel and then converted into XML format which is used by the application on the mobile device to collect data. It is now possible to move forward our work on electronic descriptors in XML format developed in APO office many years ago to new user-friendly and innovative ways using mobile devices.

