# PROPOSAL TO THE ECP/GR STEERING COMMITTEE FOR THE ESTABLISHMENT OF A CUCURBIT WORKING GROUP

## Cucurbit genetic resources in Europe

More than 25.000 accessions of cucurbits are currently stored in European genebanks. Approximately half of these accessions belong to the genus *Cucumis*, almost 7.000 accessions are of the *Cucurbita* genus and a little more than 4.000 of *Citrullus* genus. Most of the collections (23.000 accessions) are made up of the main cultivated species (*Citrullus lanatus, Cucumis melo, C. sativus, Cucurbita maxima, C. pepo, C. ficifolia, C. argyrosperma* and *C. moschata*). Most of them are held in only 10 Institutions, located in Bulgaria, Czech Republic, Germany, Hungary, The Netherlands, Poland, Russian Federation and Spain.

In spite of this important effort on genetic resources activities on cucurbits there has been no coordinated activities in Europe to collect, conserve, document and make available to users the genetic resources of these crops.

# **Background**

In the *ad hoc* Meeting of the Network Coordinating Group on Vegetables held in Vila Real (Portugal) in May 2000, the establishment of three new informal working groups was approved, one of them on cucurbit crops. The first activity was the preparation of a small meeting, in collaboration with the recently approved EU-funded project RESGEN CT99-108 on *Cucumis melo*.

# Ad hoc Meeting of the Group

Within this context, invited partners attended an *ad hoc* meeting in Adana, Turkey organized within the framework of the ECP/GR Vegetables Network and backto-back with a meeting of the EU funded project RESGEN CT99-108 on *Cucumis melo*.

The meeting involved four partners of the EU-funded *Cucumis melo* project (RESGEN-CT99-108) from Portugal, Spain and Turkey, together with representatives from Spain, the Netherlands and Turkey not involved in the project. An additional four experts from countries in Eastern Europe, specifically Bulgaria, Czech Republic, Hungary, and the Russian Federation also participated (See Annex I).

This informal meeting was held directly following the second annual *Cucumis melo* project meeting 17-19 January 2002. Most of the institutions holding the largest Cucurbitaceae collections in Europe were represented at the meeting, enabling interaction of the project partners with the additional representatives. The purpose of this interaction was to initiate the organization of Cucurbit genetic resources in Europe based upon this EU-project collaboration. Focus areas identified included muskmelon, cucumber, watermelon, squash and pumpkins, as well as other minor cucurbits such as *Lagenaria*, *Benincasa*, *Momordica*, etc.

The group discussed all the aspects of genetic resources conservation for these genera, highlighting specific areas requiring immediate actions. The importance of pursuing a number of collaborative objectives was also agreed upon. The most relevant were the following:

The establishment of an European Central Cucurbit database (ECCUDB). It is being currently developed by the Center for the Conservation and Improvement of the Agrodiversity at the Polytechnic University of Valencia, Spain. Initially this will be limited to passport data stored in the IPGRI/FAO Multi-crop Passport Descriptor format. At this moment passport data of more than 8 000 accessions are included.

- Revision of the current level of safety duplication and long-term storage facilities for genetic resources of Cucurbits. The participants felt that the establishment of the European database would provide a better basis for the coordination of this important task. A plan of action was already agreed during the Meeting.
- Improve and harmonize the seed regeneration and characterization protocols for Cucurbits in Europe. Planning to do this task was also developed during the Meeting.

During the Vegetables Network and *ad hoc* Leafy Vegetables Meeting held in Skierniewice, Poland in May 2003, other countries attending this Meeting expressed their interest in participating in the activities of the Cucurbit Group. These countries were Armenia, Israel, Poland and Ukraine. Italy was contacted after this meeting, expressing also its interest. The actions and proposals of the Informal Cucurbits Working Group were presented during this meeting. These actions were the following:

**Documentation:** Proceed with the development of the Cucurbit Central Database at the Polytechnic University of Valencia (UPV, Spain).

**Characterization** Establishment of Minimum descriptor list for melon, cucumber, watermelon, pumpkin and minor cucurbits. Responsibility is shared between the members.

**Safety-duplication** The level of safety-duplication, long-term conservation facilities and availability to host black boxes was stated by each Institution during the first meeting. Partners will be encouraged to make plans for safety-duplication.

## **Proposal**

To formalize this networking initiative, strengthen European collaboration and to ensure more stable financial support, as focal person on Cucurbits, I submit a request for the establishment of a Working Group on Cucurbitaceae to the next meeting of the Steering Committee of ECP/GR, to be held in 2003 for your consideration and approval.

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#### Annex I

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