

Appendix 2

**Progress Report of The Mediterranean Citrus Network - MECINET and Some Suggestions for the Future**

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The Mediterranean Citrus Network, MECINET, was established at a "FAO - Expert Meeting to Promote Inter-country Cooperation on Citrus Production Improvement in the Mediterranean Region" held in Adana (Turkey) 8-11 December 1993. Fourteen countries (Albania, Algeria, Cyprus, Egypt, France, Israel, Italy, Lebanon, Morocco, Portugal, Spain, Syria, Tunisia and Turkey) agreed to develop a joint effort to co-ordinate activities under the aegis of FAO related to citrus production improvement in the Mediterranean region.

The Global Citrus Germplasm Network, GCGN, was established in December 1997 during an international technical meeting organized by MECINET in Acireale, Italy, Prof. A. Nicotra was designated as General Coordinator.

The main goal of the Global Citrus Germplasm Network, GCGN, is the conservation and utilization of genetic resources of citrus and related genera through the establishment of an inter-country global research and information programme and an articulated plan of action. Four working groups were established for Germplasm characterization, conservation strategies, and utilization of germplasm and for the establishment of a global computerized citrus germplasm information system, to be integrated with the FAO World information and Early Warning System, VIEWS. Integration of the computerized data system into the FAO VIEWS system will guarantee access to information to all users, for citrus as for other crop plants.

The second General meeting of MECINET was held in Adana 1-4 September 1999. The meeting was convened and hosted by the University of Çukurova, in cooperation with the Seeds and Plant Genetic Resources Service of FAO.

Representatives from the following countries attended the meeting: Albania, Cyprus, France, Georgia, Greece, Iran, Israel, Italy, Jordan, Morocco, Tunisia, and Turkey. Georgia, Iran, and Jordan have joined as new members of the network.

The meeting placed particular emphasis on activities for the conservation and use of citrus diversity in the Mediterranean basin and the establishment of an appropriate computerized information system for the network. The FAO Officer provided the meeting with details on activities undertaken in Latin America, the Caribbean, and in the Asia Pacific region concerning inter-country cooperation on conservation of citrus genetic diversity.

The meeting recognized that new activities should be defined in light of the current needs identified in country status reports and in line with the objectives of the Global Citrus Germplasm Network, established in Acireale, Italy, in 1996. It emerged during the meeting that insufficient activities had been developed for the identification of citrus genetic diversity, particularly at field level, and that all members' countries should assume more responsibilities on inter-country cooperation. The importance to develop an information system on citrus genetic resources was underlined. Special attention was drawn to the need to strengthen research activities towards the increase of fruit quality and the improvement of varieties. In this context the use of biotechnologies was highly debated and special attention to the need of developing research in

genomics was emphasized as a tool to improve citrus quality and production.

#### Recommendations and Conclusions Taken in 2nd MECINET General Meeting

The network should clearly define priority activities in the field of citrus genetic resources conservation and utilization, and the initiatives to be undertaken to identify self-financing mechanisms for the network and/or eventual donors for project funding.

A logo for MECINET was selected and approved during the General Meeting Session on the basis of a written voting done during the plenary. It will be used for any communication and/or publication produced by the network.

The General Meeting considered it necessary to revise the structure of the network as established when it was created. Three Working Groups were identified as follows:

*Working group on genetic evaluation and utilization of citrus and its relatives.* Development of a MECINET information system will consist of the following activities:

1) Preparation of an inventory in MECINET countries of the existing citrus diversity that will include:

a) Passport data, variety identification according to the international system, location, sanitary status category (virus free, virus tested, standard), variety availability (protected by I Pros, restricted, freely available).

b) Improving the common knowledge database on citrus cultivars and relatives [already initiated in Global Citrus Genetic Resources Network (GCGN) frame] by gathering information among the MECINET countries.

c) Use of common software to allow exchange of data related to citrus genetic diversity among different members of MECINET and with FAO databases.

2) The creation and maintenance of a MECINET web-site to distribute scientific information to users (electronic copies of the Newsletter will be published on this WWW server).

3) Build an electronic forum, based on a citrus mailing list and instant messenger service for exchanging information related to MECINET activities quickly and at lower cost.

4) Evaluation of:

a) Citrus biodiversity present in national collections in MECINET countries .

b) Citrus biodiversity identified in the field.

c) CTV presence in the inventoried materials.

The evaluation of citrus genetic diversity will include cultivars, rootstocks, and citrus relatives in MECINET countries.

Identification of the existing citrus diversity and preparation of an inventory in MECINET countries. The inventory will include information of the existing citrus national collections and the citrus diversity identified in the farmers fields. Place of location of materials will be noted and the risk of genetic erosion will be assessed. The phytosanitary status of the material will also be described and the contact person/institution for each material will be reported.

Mr. R. Cottin was designated to guide this activity in close collaboration with the leader of the working group. Ms. D'Onghia from IAMB-VIA, Italy, was designated to guide this working group in consultation with the General Coordinator of MECINET in order to promote activities and harmonize the expected outputs in respect with the above mentioned topics.

*Working group on planting material improvement.* Based on the Italian national project "List of Citrus recommended varieties" lead by Prof. Nicotra, the CB decided to launch a field evaluation of rootstocks and scions in the different climatic and soil conditions of MECINET countries. This activity will also include an appraisal of the behavior of new citrus varieties in the Mediterranean Basin.

Ms. A. Georgiou from ARI, Cyprus, was designated to guide this working group.

*Working group on research on citrus fruit quality improvement.* Cooperative research activities to improve fruit size, appearance, sugars, and acid content.

Dr. Y. Erner from Volcani Center, Israel was designated to coordinate the research activities of this working group.

#### Responsibilities of Working Group Leaders and Country Representatives

In addition of the terms of references already defined in the first meeting of MECINET, the working group leaders will take the initiative to promote meetings and develop the work plan of activities with the interested institutions. They will also assign responsibilities to the participants in close consultation with the General Coordinator of MECINET. Working group leaders and country representatives will provide MECINET with the name of additional institutions within their countries that would be interested in each of the activities defined and will take initiatives to explore governmental financial support to MECINET.

The following country representatives attended the meeting: Mr. B. Nelaj, Albania; Mr. Kerbona, Algeria; Ms. A. Georgiou, Cyprus; Mr. Shetta, Egypt; Mr. R. Cottin, France; Mr. M. Khurtsilava, Georgia; Mr. E. Protopapadakis, Greece; Mr. A. Luni, Iran; Mr. Y. Erner, Israel; Ms. A. M. D'Onghia, Italy; Ms. Al-Hallaq, Jordan; Mr. H. Zouhry, Morocco; Mr. L. Ben Mahmoud, Tunisia; Mr. Ö. Tuzcu, Turkey. The representatives from the following countries are yet to be confirmed: Lebanon, Portugal, Spain, and Syria.

Italy, Turkey, Israel, Georgia, Morocco, France, Greece and Cyprus officially confirmed their country representatives. The General Coordinator of MECINET will request respective national authorities (Ministry of Agriculture or equivalent authority) to officially confirm country representatives within three months for the countries indicated.

*Training.* The General Meeting took a decision to invite institutions to offer specialized short, medium, and long term training to scientists and technicians of MECINET countries on specific subjects. Country representatives are expected to explore, in their countries, possibilities for providing education and training (for students, post-doctorates, exchange of scientists, field specialist officers, etc)

*Appointment of the General Coordinator of MECINET.* Prof. Ö. Tuzcu from the University of Cukurova, Turkey, was appointed as General Coordinator of MECINET for the term 1999-2003.

The General Coordinator will be responsible for the publication of the newsletter with the support of the Faculty of Agriculture of the University of Çukurova,

*Venue of General Meeting of MECINET.* The General Meeting accepted the proposal for the third general meeting to be hosted in Cyprus and welcomed Jordan as an alternative. The CB decided to have the general meeting every three years.

*Other matters.* The General Meeting considered positively the proposal for a special session of the Global Citrus Genetic Resources Network (GCGN) to be organized in the context of the International Society of Citriculture Congress to be held in Orlando, Florida, USA, in December 2000.

#### Regional Project Set-up Efforts

The MECINET and Mediterranean Network on Citrus Certification (MNCC), a sub-network of the Plant and Quarantine network promoted by the Centre International de Hautes Etudes Agronomiques Méditerranéennes (CIHEAM)

Mediterranean Agronomic Institute of Bari (IAMB), organized the 1st technical joint meeting which was held in Algiers, 3-7 October, 2000. The representatives of the participant countries from MECINET and MNCC considered:

1) the social and economic importance of citriculture in the Mediterranean agricultural production.

2) the necessity of maintaining citrus populations and their free exchange for any possible use among the Mediterranean countries.

3) the need of harmonizing the existing regulations.

4) the future role of citrus in the Mediterranean as a free trade area.

Since it is compulsory to carry out operations to safeguard and maintain free exchange of citrus germplasm, it was decided to prepare a common regional project proposal on the "Improvements of the citrus sector in the Mediterranean." The goal is to set up common conservation strategies and establish procedures for the free exchange of healthy citrus plant genetic resources."

At the meeting, participants were 24 members of the two networks, coming from 9 countries, representatives of FAO, CIHEAM, GTZ, the Italian Embassy in Algiers, and Algerian authorities. During the meeting the following concluding remarks were approved:

1) technical guidelines of the proposed programme.

2) project proposal submission by MNCC and MECINET members to their governments for official approval (deadline February 2001).

3) Iran, Georgia, and Jordan also will be invited to join the project.

4) project coordination will be under the umbrella of CIHEAM and FAO.

5) project proposal will be presented to different donors for co-financement with participating governments.

6) a training programme on the main techniques will be initiated starting within the next technical meeting of MECINET in Cairo, towards the end of 2001.

The project will aim also to promote:

1) the establishment of certification programmes for germplasm of commercial importance.

2) the harmonization of protocols for germplasm characterization, pathogens detection, sanitation, and conservation.

3) the introduction of new technologies that are easy to apply and are reliable.

4) the gaining of knowledge and the upgrading of technical skills.

Further details about the proposal will be provided by Dr. A. M. D'Onghia, General Coordinator of MNCC.

Summary and Some Suggestions for Future Common Actions for MECINET Regional Cooperation on Citrus

1) There are considerable benefits to organizing a common meeting of MECINET and MNCC in Algeria to set up new approaches for improving efficiency of the collaboration for the programs in a wider Mediterranean.

2) For the working group on genetic evaluation and utilization of citrus and its relatives, very valuable work was done for the compilation and review of existing citrus collections in the Mediterranean. The detail will be given by the working group coordinator.

3) Working group on planting material improvement under coordination of Mrs. Georgiou has realized after several attempts to set up a regional project on citrus rootstocks and new varieties evaluation. The contacts and search to find collaboration and financial supports are in continuation.

4) Working group on research on citrus fruit quality improvement has not yet passed to an active position. We are in expectation that its coordinator will have some activity propositions in this field in the near future.

In conclusion, firstly, it is advisable as the first step for FAO and CHIAM to set up a close collaboration for MECINET and MNCC activities, especially on the project proposal on "Improvements of the citrus sector in the Mediterranean by the setting up of common conservation strategies for the free exchange of healthy citrus plant genetic resources," as a model for a wider Mediterranean regional project.

Secondly, all member countries should ascertain their contribution areas according to their national opportunities and priorities for implementing the above-mentioned topics.

Thirdly, we need more close collaboration to strengthen the establishment of the project under the coordination of Mrs. A. Georgiou.

Finally, I invite again the working group on research on citrus fruit quality improvement to develop activities for the realization of the decision taken during the 2nd MECINET meeting.