

**TOOLS FOR BIODIVERSITY MANAGEMENT**

**Applications of bioinformatics in managing herbaria & seed banks**

**LIST OF LECTURERS WILL INCLUDE**

**S. L. JURY**  
School of Plant Sciences, The University of Reading (UK)

**C. THANOS**  
Dept. of Botany, Faculty of Biology, University of Athens (GREECE)

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Flora and Phytotaxonomy Research Department, HRC, ARC (EGYPT)

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**I. ABDEL GALIL HUSSEIN**  
Desert Research Center (EGYPT)

**F. PANDO**  
Real Jardin Botanico-CSIC, (SPAIN)

**SCIENTIFIC COORDINATION**

**Antonios Makris**

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Botany dpt., Fac. Of Sciences, Mansoura University, Egypt

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The course will take place under the auspices of Prof. A. Amid Hamza, the president of Mansoura University.



**April 22 - May 2, 2001  
Mansoura, Egypt**

**MEDITERRANEAN AGRONOMIC INSTITUTE OF CHANIA**



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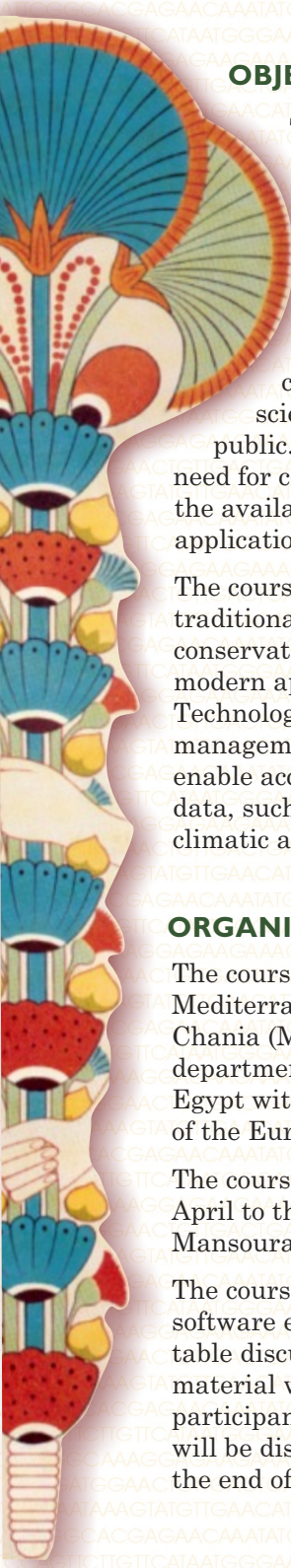
**MANSOURA UNIVERSITY**



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## OBJECTIVES

The sustainable use and management of Biodiversity requires a combination of efforts for the conservation of genetic resources, collection of information about the existing Biodiversity and the means through which this information can reach decision makers, scientists and thereby educate the public. The short course addresses the need for conservation of biodiversity and the available tools, emphasizing on new applications of Information Technology.

The course will focus on the integration of traditional methods and tools of ex-situ conservation (e.g. seedbanks) with modern applications of Information Technologies to facilitate efficient management of large collections and enable access to other important types of data, such as ecological, geospatial, climatic and molecular data.

## ORGANISATION

The course is organized by the Mediterranean Agronomic Institute of Chania (MAICH) and the Botany department of Mansoura University, Egypt with the support of the commission of the European Union (EU-DGD).

The course will be held from the 22nd April to the 2nd of May 2001 in Mansoura, Egypt.

The course consists of theoretical sessions, software exhibition, field trips and round table discussions. Copies of the lecture material will be distributed to the participants. Certificates of attendance will be distributed to all participants at the end of the course.

## ADMISSION REQUIREMENTS

The course is designed for young scientists who are actively involved in the fields of biodiversity and conservation.

Proven competence in English is required.

The maximum course enrollment will be 25 participants.

Candidates will be evaluated from an admission committee by MAICH and the Botany department of Mansoura University.

## SCHOLARSHIPS

Especially qualified applicants may receive scholarships covering travel expenses, tuition, accommodation, board and field trip expenses.

## REGISTRATION

Application forms must be received by the 9th of March 2001 in the following address:

**Mediterranean Agronomic Institute of Chania (MAICH)**

Alsylion Agrokipion, P.O. Box 85, GR-73100 Chania, Crete, Greece,

Tel: +30 821 81151, Fax: +30 821 81154,

E-mail: [aroma@maich.gr](mailto:aroma@maich.gr)

Information about the short course and application material can be downloaded from <http://www.maich.gr/natural/shortcourses/bioinformatics>

The application should be accompanied by:

A detailed curriculum vitae, indicating the applicants academic record and professional qualifications and experience;

Official transcripts and/or certificates from all universities, colleges institutes and seminars attended;

Certificate or other documentation which indicates the applicant's competence in English;

A medical certificate indicating that the applicant is in good health;

2 passport sized photos;

A personal statement explaining reasons of interest in the course.

All participants should submit a photocopy of their passport (the pages which include the personal data). A detailed Curriculum vitae, indicating the applicants academic record and profession qualifications and experience.

## COURSE PROGRAM

Seed biology (overview)

Physiology of seed germination and longevity

Seed ecology

Seed banks-Infrastructure and function

Seed collection, handling, processing and storage

Organisation of herbaria

Collection, processing and handling plant specimens

Management of herbaria

Export regulations

Mapping systems

Bioinformatics for biodiversity

Taxonomic databases working group

Digitizing herbaria and seed bank data

Development of databases

Linkage and Interoperability of databases

Modeling species distributions

Modeling biodiversity systems

Bottlenecks and prospects in the use of bioinformatics

Field trip to Desert Research Centre, North Sinai Desert Station (El-Sheikh Zuwayid) close to the town of El-Arish

Field trip to ARC, Agricultural Museum, Dokky, Giza, Egypt