

Working for the future: Conservation in the Botanic Garden of the University of Valencia (Spain)

AGUILELLA, A. & A. M. IBARS.

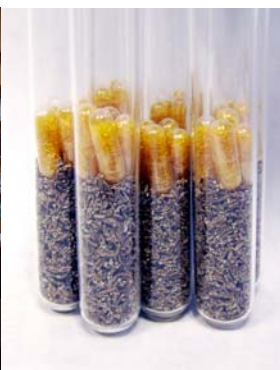
Jardí Botànic de la Universitat de València. Quart 80, 46008, Valencia, Spain
Antoni.Aguilella@uv.es

History

Along 202 years the Botanic Garden of the University of Valencia has suffered several changes, from natural disasters to periods of great splendour

The botanic garden was conceived at first as a small garden in which the practical of the faculty of medical sciences could be carried out, and later on those of the faculty of sciences. After several enlargements and improvements of the facilities, the Botanic Garden of Valencia was turned into a garden well integrated in the social life of the city.

In the late years of the 20th century, the University focuses its efforts on the development of the Botanic Garden as a historic institution with great perspectives of scientific research and dissemination of the botanical knowledge. With this aim a new research institution was build and equipped.



Library

The library is specialized in the topics of plant biology, gardening, agriculture and ethnobotany. It includes a splendid sample of ancient books of Botany.

The library has received additional private donations, of reprints, books, and journals, which have enriched its collections. The library includes computerized equipment and the electronic search of bibliographic databases.

Herbarium

The herbarium includes mostly iberolevantine samples, but also an important collection of plants from the whole Iberian Peninsula, north of Africa, Mediterranean islands and south of Europe. The herbarium (about 300.000 specimens) has been already computerized and will be soon accessible on-line.

Research

At this moment the Botanic Garden of Valencia is embarked in a process of complete and effective integration in the world network of botanic gardens, promoting the research on conservation biology and biodiversity, approaching topics on seed biology, biosystematics, molecular biology, plant anatomy, phytosociology, geobotany and bioclimatology.

In this line, our efforts are mainly focussed on the *in situ* and *ex situ* conservation of rare, threatened and endemic plants of the Valencian Community.

Germplasm bank

Is one of the essential services of the Garden. Its purpose is the conservation of seeds and spores, mainly of the Valencian Flora. It is equipped with NL, cooling chambers maintained at -25° and 4°C , as well as with an up-to-date lab for the processing of seeds.

Taxonomy

The research at the laboratory is centred in some of the most important genera of the Iberian Peninsula; several researchers of the Botanical Garden are involved in the fundamental project of the Iberian Flora.

Plant anatomy

The studies carried out in the laboratory provide a complementary tool to increase our knowledge on the structures and the changes induced by alterations in the environment (meteorological agents or different abiotic stress conditions, such as nutrient deficiency, salinity, chemical contaminants, etc.).

Molecular systematics

In the laboratory is available all the infrastructure and equipment required by this modern field of research. In addition to small instruments (freezers, table-top centrifuges, water baths, agarose electrophoresis equipment, etc.) there are several thermocyclers for PCR amplification, and an Automatic Sequencer system

Vegetation Mapping

The laboratory is focused on the vegetation of Spain, and is carried out in collaboration with other departments.