
Securing the flora of Catalonia

Núria Membrives

Marimutra Botanical Garden

Carl Faust, a German businessman, started the Marimutra Botanical Garden (JBM) in 1918 in some old vineyards in Blanes, overlooking the Mediterranean. With his passion for botany and his international outlook, he gathered together some of the most prestigious botanists of the day to create one of the most emblematic botanical gardens in Europe.

The garden enjoys the characteristic Mediterranean climate of the area. It is protected from the colder winds coming down from the nearby mountains and at the same time benefits from the damp mists and winds from the sea. This privileged situation makes it possible for the garden to host plants representing three biomes: subtropical, temperate and Mediterranean.

Scientific investigation, education and conservation are the three main objectives for any botanical garden and naturally these are the established aims of the JBM. At the moment the garden plans to make a significant contribution to the Global Strategy for Plant Conservation (GSPC). More precisely it will be working *ex situ* on the conservation of threatened flora in Catalonia.

Activities within the garden concentrate on better management of the plant collections, cooperation with various institutions on territorial conservation strategies and consolidation of conservation methods *ex situ*.

The JBM is a member of the committee working on a data base for the management of collections in botanical gardens as proposed by the Iberian and Macaronesian Botanical Gardens Association. A new data base will make it possible to organise and manage the garden's plant collections. At the same time a thorough revision of species is being carried out and the characteristics of each area of the garden are being studied. The data base will also cover the collections of wild flowers in the garden's seed banks.

Concerning the study of the region's flora, a contribution is being made to the publication of the red book on endangered species in Catalonia. Biological studies will also be made of these threatened species, concentrating on the more important cases in Girona province.

In order to establish common conservation methods according to specific protocols, the JBM is helping to translate into Catalan the Germoplasm Bank Management Manual produced by the European project GENMEDOC (Creation of a conservation network of genetic material of the Western Mediterranean flora, 2004-2006), in which four European countries participated (Spain, France, Greece and Italy), as well as Tunisia, an invited non EC country. The JBM is also helping to prepare the Wild Flower Rockery Construction Manual in cooperation with the Sóller Botanical Garden (Majorca) and the Barcelona Botanical Garden.

Regarding conservation *ex situ*, a new management plan is being finalised for the Germoplasm Bank to handle four different collections:

- more than 85 populations of some 40 species of the Genus *Androcymbium* cultivated in the JBM greenhouses
- the maximum number of endangered species mentioned in the Generalitat de Catalunya decree *Creation of a Catalogue of endangered indigenous Flora of Catalunya* to be published shortly
- representative species of the principal plant communities in the department of La Selva (Gerona)

- the principal horticultural varieties of the region.

To contribute to the conservation of the genetic diversity of economically important crop species and their sustainability, the JBM is carrying out a project to recover indigenous horticultural species which will have their own special area in the Garden. The seeds will also be kept in the seed bank. Special emphasis is given in this project to inform the public through exhibitions, publications and workshops.

A project on the cork industry based on a cork oak tree wood of about three hectares belonging to the garden is a further lesson in sustainable management and will help people know more about the use of natural resources in the past as part of the local economy.

Thanks to the efforts of everybody involved in the garden, the objectives and work done are reflected more and more in the local and regional media, thus promoting the importance of the local biodiversity, the requirement of rigorous scientific methods in the fields of botany and the environment. To this purpose lectures and visits relating to botany and botanical gardens are organised in the Garden and elsewhere. Formation in subjects of current interest such as gardening and invasive plants, water resources or the principal problems concerning plagues and ornamental gardens is effected by participating in and organising courses and workshops.

By means of all these kinds of activities, the JBM aspires to cooperate and become involved to the full extent of its possibilities, together with all other institutions concerned with conservation, in the achievement of the goals set out by the Global Strategy for Plant Conservation.