

The changing role of botanic gardens in the Mediterranean

GIANNANTONIO DOMINA & CRISTINA SALMERI

Orto botanico & Herbarium Mediterraneum, University of Palermo, via Lincoln 2, 90133 Palermo, Italy. E-mail: giannantonio.domina@unipa.it, cristinamaria.salmeri@unipa.it

In the last 700 years botanic gardens have had a major influence not only on the science and economy but also on culture, economy, architecture, and sociology of the Mediterranean region. In fact their collections and structures represent a significant and rich heritage.

The first academic university botanic gardens were established in the first half of the 16th century in the Italian cities of Pisa (1544), Padua (1545), Firenze (1545) and Bologna (1547) that still today host the oldest botanical gardens in the western world. This development spread through much of Europe with the foundation of the botanic gardens of Zurich, Leiden, Paris, Leipzig, Montpellier, Valencia, etc.

Born as medicinal plant gardens (Gardens of Simples, Giardini dei semplici), for the cultivation and study of medicinal plants and the use their active principles, very soon, botanical gardens adapted themselves to the emerging needs of an era of great exploration, trade and political changes by expanding their activities towards the introduction, cultivation and acclimatization of exotic species and becoming centres of interest to the ruling political classes. Botanical gardens have, in fact, introduced and popularized many plants that are now part of our everyday life as sources of food, fibres, herbs and spices and the ornamentals that largely characterize the anthropic landscapes.

In recent years, in response to growing environmental and social problem, the function of Mediterranean botanical gardens has evolved towards meeting new goals. So, besides horticulture, plant introduction and taxonomy, an increasing effort has been directed towards the *in situ* and *ex situ* conservation of the Mediterranean flora. This involves developing species recovery and reintroduction programmes and environmental education. More recently, botanical gardens are having to respond to the challenges of global, particularly climatic, change and biological invasions.

The activities undertaken inside botanical gardens have increasingly benefited from the application of new technologies and new ways of communication both experimental and digital-interactive, very much in tune with the interests and habits of the younger generations. So, despite ever decreasing financial resources, botanical gardens succeed also in generate an awareness of national and local identities and cultures, in which plants, their cultivation and uses constitute an important element. These new roles require an adjustment by the historic botanical gardens and their scientific, horticultural and technical staff, while the most recently established gardens are already created with a modern vision of their new roles – mainly education and conservation of plant biodiversity. All this calls for greater investments by national and local authorities, not only to finance new botanical gardens or for staff salaries of the existing ones, but to meet these new roles and commitments. Financial resources are required for maintenance of the living collections and the conservation projects that need continue care and cannot rely on short-term project finance, as happens for other research structures.

Networks of botanical gardens and associated institutions are important for the exchange of experience and common programmes, thereby reducing duplication of effort and allowing the achievement of results unattainable by single institutions. It is incumbent on those institutions with greater knowledge and experience to collaborate with younger institutions and those with fewer resources to foster the transfer of knowledge, methods and technical skills.



XV OPTIMA Meeting

June 6-11, 2016
MONTPELLIER

Abstracts

Oral presentations
Poster presentations

Montpellier (France), 6-11 June 2016

