

The Botanical Garden of Padua University

History

The Botanical Garden of the University of Padua is the oldest in the world. It was established in 1545 under the name of *Hortus Simplicium*, as documented by the original decree of the Venice Republic *Senatus* dated June 29th 1545, and is still placed in the same location where it was in origin. In a map dated 1568, it can be seen the original circular structure of the garden, still maintained today.



The students of medicine could learn and properly identify the plants on living specimens, instead of on the previously used drawings, therefore the plants cultivated in the *Hortus* were those used as a source of medicines. In the 16th century Europe the Botanical Sciences started a new direction: botanists began to study plants not only for their medicinal properties but also as complete organisms and began to describe them from live specimens. The Botanical Garden of Padua is an important example of this new scientific interest.

The map of Gasparo Abaco – 1568 (Biblioteca dei Musei Civici di Padova)

During the early years the directors of the Garden (*Praefecti*) were mainly attracted by the study of the medicinal plants and their properties. As the medicinal plants were precious and could be inappropriately used, a circular wall with gates was soon built (*Hortus cinctus*) to discourage thieves, and rules were defined for the visitors and severe punishments were established for the trespassers.

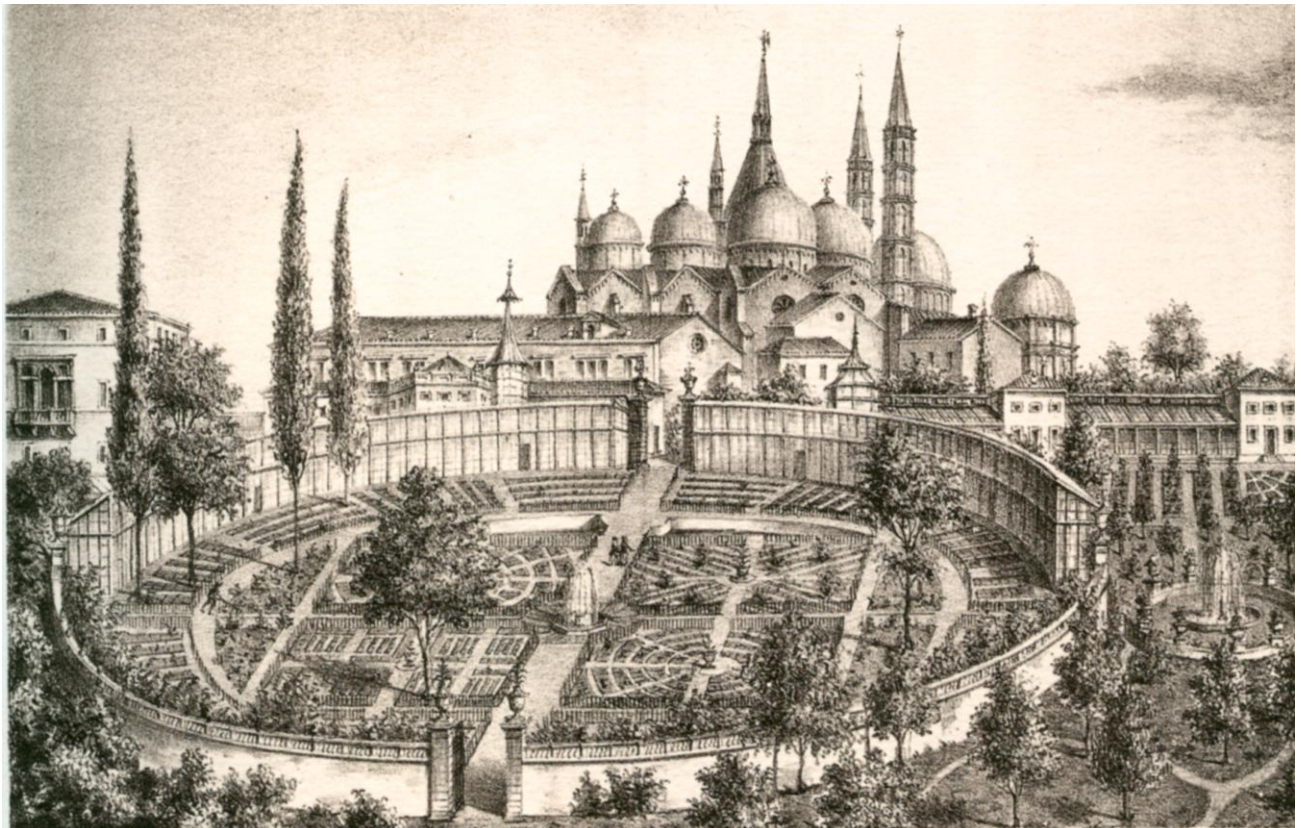
By the end of the 16th century the number of species that were cultivated in the garden was more than one thousand and included species of plants not necessary medicinal, as reported by Giacomo Antonio Cortusi, *Praefectus* in 1590-1603. In fact, thanks to the wide expansion of the Venice Republic trades, a variety of new exotic plants were brought in the Garden, where they were cultivated for the first time far from their original habitat (e.g. *Syringa vulgaris* in 1565, *Helianthus annuus* in 1568, *Solanum tuberosum* and some species of *Jasminum* in 1590, *Rheum rhaponticum* in 1612) and then diffused throughout Europe.

The number of plants in the Garden greatly varied through time. It rapidly increased during the 19th century to 16 thousand specimens.



Aerial view of the Botanical Garden

The 19th century was the period of the Garden's most important contribution to the development of modern scientific disciplines, notably botany, medicine, ecology, and pharmacy. Today the plants cultivated in the Garden are about 6,000.



A perspective view of the Hortus cinctus and its wall by Andrea Tosini (1842); in the background the Saint Anthony Basilica

The Historical Archive of the Botanical Garden documents that the *Praefecti* were in contact with scientists of different European countries (e.g. Gaspar Bahuin, Mathias de l'Obel, Conrad Gesner, Rembert Dodoens, Jean Brancion di Malines, Carolus Clusius, Joachim Camerarius jun., Joseph Pitton de Tournefort, Giovanni Francesco Séguier, Carl Linnaeus). Their papers were published by Paduan, Venetian and also European



Goethe's palm, *Chamaerops humilis*, planted in 1568

editors at Frankfurt, Basel, Lausanne, Leipzig, Regensburg. English and German versions of the books were also published. The *Praefecti* visited a variety of countries to study and collect plants. Some of them were foreign students of the *Studium Patavinum* who became professors and *praefecti* of the Botanical Garden.

In the Garden plants can be found dating from the earliest years: a greenhouse protects a *Chamaerops humilis*, which was planted in 1568 and cited by Johann Wolfgang von Goethe, a *Platanus orientalis* planted in 1680, a *Ginkgo biloba* planted in 1750 in the homonymous *quarto*. This plant is exceptionally bisexual because the original male specimen bears a female branch that was grafted onto the trunk. It is quite curious that a similar bisexual and almost as old specimen lives in the very old Botanical Garden of Leiden.

Activities

Today the Botanical Garden is in the centre of the historical town of Padova near the Saint Anthony Basilica and extends over 2 hectares. The Garden is divided into many sections with different educational and conservation tasks: medicinal and aromatic plants, *arboretum*, alpine rock garden, plants from the Euganean Hills, rare species from North-Eastern Italy, Mediterranean maquis, poisonous plants, insectivorous plants and aquatic plants and a precious collection of orchids in a dedicated glasshouse.



In the ancient structure of the *Hortus cinctus* a square area is subdivided into 4 smaller *quarti* by two orthogonal paths, the *cardo* and the *decumano*. Inside each *quarto* 250 flowerbeds are arranged according to an elegant plan that resembles the original one shown in the first illustrated guide of the Garden published by Girolamo Porro in 1591. The plants are distributed in the flowerbeds according to a systematic order.

Medicinal plants

The main tasks for the Botanical Garden are to provide plant material and horticultural support for research and education within the University of Padua and to promote knowledge on botanical issues.

In 1997 the Botanical Garden was inscribed in the UNESCO World Heritage List as a cultural good.



Victoria cruziana, in the background Goethe's Palm glasshouse

Plans

A few years ago the University of Padova bought 1.5 hectares of land just at the South of the Garden. The Garden staff is now confronted with an unprecedented and unexpected challenge: that of fitting the latter space with significant new activities in accordance to the best practice of the major botanical gardens in the

world. The construction of the satellite garden has already started: five new greenhouses are under construction for the cultivation of plants coming from a great variety of environments so that the visitors will be able to appreciate the richness of the plant diversity in the world.

The Botanical Garden of Padova will develop education programmes for children, families, visitors, teachers and students aimed at increasing their skills at identifying plants, widely considered the basis of the conservation of biodiversity in the world.

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The elegant arrangement of the flowerbeds inside the Hortus cinctus