

## Annotations

## World's first botanical garden has roots in medicine

“The Botanical Garden of Padua is the original of all botanical gardens throughout the world, and represents the birth of science, of scientific exchanges, and understanding of the relationship between nature and culture. It has made a profound contribution to the development of many modern scientific disciplines, notably botany, medicine, chemistry, ecology, and pharmacy.”

— inscription on UNESCO World Heritage List

The Botanical Garden (Orto Botanico) of Padua University, Italy, is regarded as the oldest university Horto Medicinale in the world to still be in its original setting. The garden was founded by the Republic of Venice in 1545 to fulfill an urgent request by the medical school of the University of Padua. Four hundred and sixty years later, the garden continues to be a teaching garden for students in pharmacy and botany. The curators, through an *Index seminum* are in touch with 800 botanical gardens on five continents. Medicinal plants continue to be a significant part of the garden's 6000 plants, which also include historic, aquatic and poisonous plants, rare trees and orchids.

By 1546, the garden was in use as a teaching garden and in 1552 it had about 1500 different plants.

The garden is unique as it was developed as a “Simples Garden,” or garden of medicinal plants. “Simples” are remedies obtained directly from nature, ready to be used without further concocting. Originally named “Hortus simplicium,” the garden was established at the request of Dr. Francesco Bonafede to help students learn the uses of medicinal plants. Currently, the garden also contains significant collections of ecologically interesting plants



Wikipedia

The Botanical Garden of Padua, Italy, laid out to represent the world, has made a profound contribution to many scientific disciplines, including medicine.

as well as historical plants. One of the best known is the *Chamaerops humilis* L. or “Goethe’s Palm,” a tree that was planted in 1585, and is the oldest plant in the garden. Well-known German writer and scientist Johann Wolfgang von Goethe visited the garden in 1786. His observations of the sequence of leaves along the stem of this palm inspired him to write his essay “Metamorphosis of Plants.”

The original garden occupied an area of about two hectares (five acres) and was laid out by Andrea Moroni, an architect from Bergamo. At its centre is the *Hortus cinctus* or *Hortus sphaericus* (circular garden), which represented a “paradise” world surrounded by a ring of water representing the ocean. The circle has a square in its centre. This is divided into four quadrants in which plants from all over the world are grown, forming a geometrical pattern. The beds, in their quadrants, are separated by two intersecting paths running

north-south and east-west. In 1704, four gates were built, followed afterward by an elegant white stone balustrade.

In July 2002, Padua’s garden was enlarged by approximately 1.5 hectares (3.75 acres). Two sectors are allotted to a collection of medicinal plants. Labels with each plant’s name and medicinal properties are clearly visible. Some of the most poisonous plants are grown in another sector, with the degree of their toxicity indicated by the number of crosses on the labels.

As well as continuing to be a place of study for Padua University students, the garden is open to the public.

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