



# The World Heritage Site



For over five centuries, the Botanical Garden of Padua has stood as an example of outstanding scientific and cultural significance.

Site name	Botanical Garden of Padua
Date of inscription on World Heritage List	1997
Inscription criteria	(ii) (iii)
Category	Cultural site
Location	Via Orto botanico 15, Padova, Italy
Property	2.2 ha
Buffer zone	11.4 ha
Ownership	Italian state, on permanent loan to the University of Padua
Management body	University of Padua
Official information	<a href="http://ortobotanico1545.it">ortobotanico1545.it</a>

*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.*

### 1.1 Statement of Outstanding Universal Value and Boundaries

The reasons for the inscription of the Botanical Garden of the University of Padua on the World Heritage List in 1997 are given in the *Retrospective Statement of Outstanding Universal Value* (RSOUV), which was approved with decision 38 COM 8E in the year 2014 and is given below in its original form. It should be noted that, given that the RSOUV was written over 10 years ago, it contains certain information that is no longer current or not entirely correct when it comes to the requirements for the Site's protection and management (see Action 2).

#### From the original text of the 2014 RSOUV

*The world's first botanical garden was created in Padua in 1545. It still preserves its original layout – a circular central plot, symbolizing the world, surrounded by a ring of water. Other elements were added later, some architectural (ornamental entrances and balustrades) and some practical (pumping installations and greenhouses). It continues to serve its original purpose as a centre for scientific research.*

The world's first university botanical garden was created in Padua in 1545, which makes the Botanical Garden of Padua the oldest surviving example of this type of cultural property. Botanical gardens have played a vital role throughout history in the communication and exchange not only of ideas and concepts but also of plants and knowledge. The Botanical Garden of Padua is the original of botanical gardens in Europe, and represents the birth of botanical science, of scientific exchanges, and understanding of the relationship between nature and culture.

It preserves its original layout, a circular central plot symbolizing the world surrounded by a ring of water representing the ocean. The plan is a perfect circle with a large inscribed square, which is subdivided into four units by orthogonal paths, oriented according to the main cardinal directions. When the four entrances were re-designed in 1704, the wrought-iron gates leading to the inner circles and the four acroteria were placed on eight pillars and surmounted by four pairs of wrought-iron plants. During the first half of the 18th century, the balustrade, which runs along the top of the entire 250 m of the circular wall, was completed. The Botanical Garden of Padua houses two important collections: the library that contains more than 50,000 volumes and manuscripts of historical and bibliographic importance and the herbarium, which is the second most extensive in Italy. Particularly rare plants were also traditionally collected and grown in the garden. Currently, there are over 6,000 species, arranged according to systematic, utilitarian and ecological-environmental criteria, as well as thematic collections.

The Botanical Garden of Padua is exceptional by virtue of its high scientific value in terms of experimentation, education and collection, and of its layout and architecture. Its herbarium and library continue to be among the most important in the world. It has made a profound contribution to the development of many modern scientific disciplines, notably botany, medicine, ecology, and pharmacy.

#### Criterion (ii)

The Botanical Garden of Padua has represented a source of inspiration for many other gardens in Italy and around Europe and has influenced both their architectural and functional designs and their didactic and scientific approaches in medicinal plants studies and related disciplines. Since its foundation, it has been at the centre of a wide network of international relationships, contributing to the dissemination of the various aspects of the medicinal plants and botanical sciences and to the preservation of plant species ex-situ. It also made profound contributions to the development of many modern scientific disciplines, notably botany, medicine, ecology and pharmacy.

#### Criterion (iii)

For more than five centuries, the Botanical Garden of Padua has represented an exceptional testimony of scientific and cultural significance. Its position, size and main characteristics, as well as its main research and didactic features, have remained essentially unchanged over centuries with a constant adaptation to the most advanced discoveries in botanical and educational sciences. Many renowned botanists become 'Praefectus' of the Botanical Garden of Padua, leaving evidence of their scientific works in the plants named after them (e.g. the Pontederiacae family in honor of Praefectus Giulio Pontedera).

#### Integrity

The inscribed property has an area of 2.20 ha with a buffer zone of 11 ha and includes all the necessary elements to convey its Outstanding Universal Value. The Botanical Garden has been continuously maintained over its long history and has retained its integrity in respect to the structural elements, original setting and layout, and in terms of its function, remaining for more than five centuries a location devoted to research, teaching and scientific dissemination.

#### Authenticity

The Botanical Garden has been in continuous use for its original purposes ever since it was created in the 16th century. It still preserves its original layout a circular central plot, symbolizing the world, surrounded by a ring of water. Although other elements were added later, including some architectural features, such as ornamental entrances and balustrades, and some practical ones, such as pumping installations and greenhouses, it maintains its authenticity. Some restoration works had been carried out during the 19th and 20th centuries in full respect of the original characteristics and materials. The modifications carried out to the original design have kept pace with developments in botanical and horticultural theories and practices, but overall it clearly retains the original design and structure.

#### Protection and management requirements

The safeguarding and protection of the Botanical Garden of Padua is the shared responsibility of numerous institutional stakeholders, operating at communal, provincial, regional and national levels. The protection and management of the property is ensured by the framework of national legislation on cultural heritage protection (Decreto Legislativo N° 42/2004, "Codice dei Beni Culturali e del Paesaggio"), which prescribes the necessary preliminary approval of any intervention by the Regional Direction for the Cultural and Landscape Issues of the Veneto Region, the local office of the Ministry of Culture.

The Botanical Garden is not legally protected *per se*, but it is surrounded by several properties protected under the provisions of the basic Italian cultural heritage protection. Most of the eastern boundary is covered by Ministerial constraints under the same law. The City Administration protects a 40 m belt around the entire Garden, under a law approved in 1995 ("Protection area of the Botanical Garden"). This is also a legal framework, which allows only for conservative restoration interventions to be carried out.

At the regional level (Veneto Region) the territorial and urban planning tools aim at promoting the sustainable development of the whole areas included, with particular attention to the cultural-historical identities of the various settlements and the valorisation of the naturalistic areas.



The plans at the provincial level (PTRC of Padua province) identify the possible synergies for the safeguarding of the natural environment and the promotion of the traditional local economic activities, in particular tourism is seen as the key sector to promote the valorisation of the property.

The Botanical Garden is the property of the Italian State, but is on permanent loan to the University of Padua, which is, since its foundation in 1545, the only entity responsible for the management and upkeep of the Garden; the authority in charge is called 'Praefectus Horti Botanici Patavini' and is appointed by the Rector of the University. For the past two decades a Technical-Scientific Committee (CTS) composed of distinguished experts in botany and plant pathology has supported the Praefectus. The University is responsible for the maintenance of the Garden and the infrastructure of the greenhouses; it maintains a technical staff of permanent employees (gardeners). Additionally, it receives financial support from the Municipality of Padua, which is primarily used to cover the costs of the guided tours and the extended opening time for the tourists.

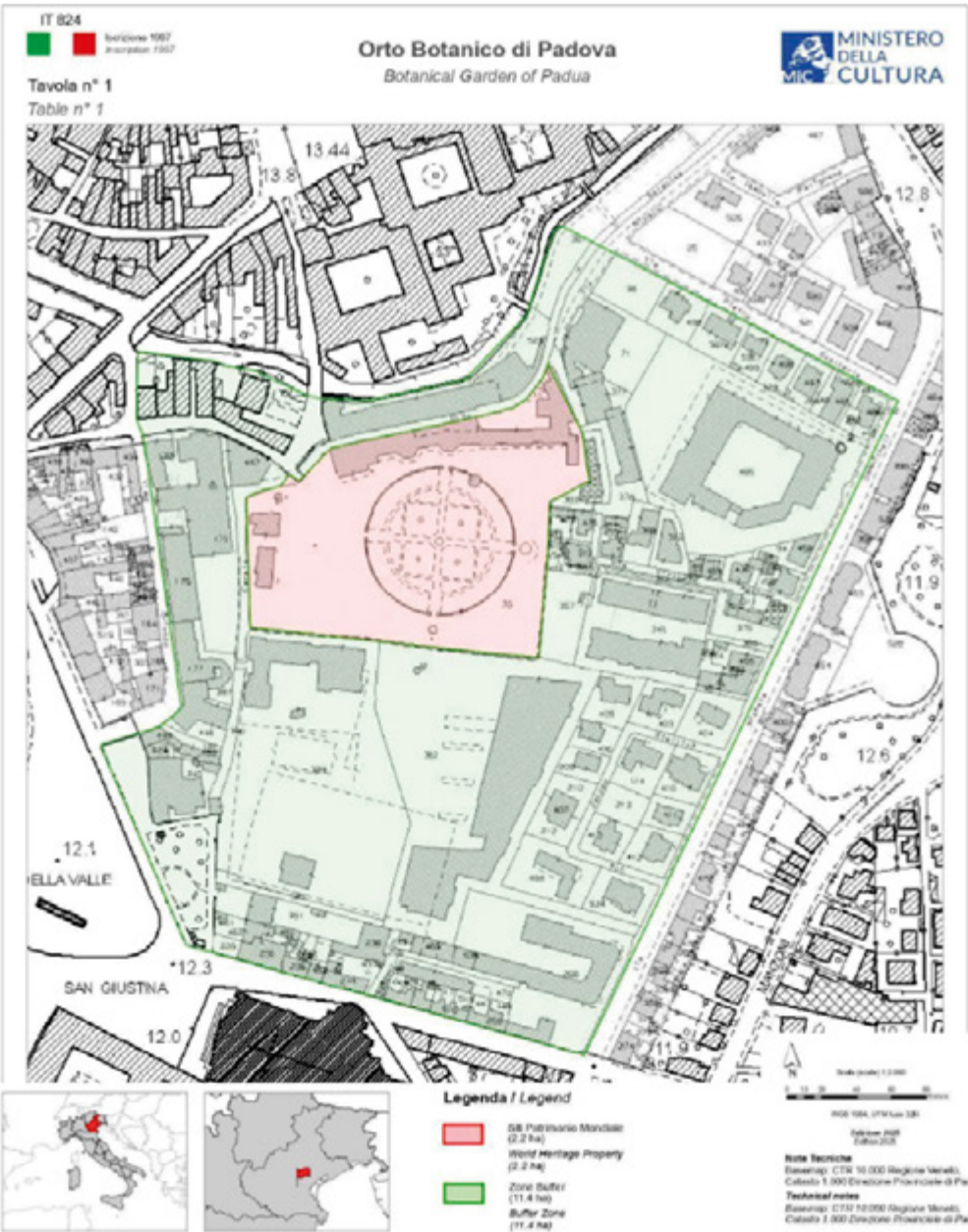
To avoid the continuation of the partial destruction of the surrounding areas and urban expansion, the University of Padua bought a large part of the nearby area to build a modern 'satellite' botanical garden.

The Management Plan intends to preserve and valorise the Botanical Garden in relation to the other key cultural assets (e.g. the Cappella degli Scrovegni, and the system of the medieval squares) that are present within and nearby the territory of the Padua Municipality and Province, by encouraging joint planning and activities.

The strategic perspective is that of the integrated approach, namely the combination of the science promotion activities (e.g. conferences, seminars and exhibitions dedicated to the various aspects of the botany and the related fields) with sustainable tourism management, offering specific visits to target groups (e.g. schools, universities, experts, scientists, and visitors). This intends to respond to the critical aspects identified by the Management Plan related to the reduction of funds.

BOUNDARIES

The boundaries of the inscribed Site and buffer zone are shown on the map below. In 2025, the Site joined the World Heritage Online Map Platform, a monitoring platform that shows the verified georeferenced boundaries of World Heritage properties and their buffer zones, which can be viewed at the following link: <http://bit.ly/4ilkijp>



### 1.2 ICOMOS recommendations and observations

At the time of the Garden's inscription, in 1997, ICOMOS issued the following recommendations for the Site. All of these requirements have been addressed.

RECOMMENDATION	ACTIONS TAKEN
<i>ICOMOS urges the utmost vigilance on the responsible authorities to ensure that the surroundings of the Garden are fully protected from pressures of development and construction.</i>	<ul style="list-style-type: none"><li>• In the late 1990s, the University of Padua purchased a built area looking onto the <i>Hortus cinctus</i> that was home to a sports ground and other buildings and facilities having a significant impact (stadium with stand, gym and swimming pool). The creation of the Biodiversity Garden and research laboratories (2014), involving demolition of dilapidated structures built up against the original boundary, strengthened the buffer zone protecting the inscribed Site (see Biodiversity Garden, sect. 2.2.2.b).</li><li>• The Padua City planning intervention plan (<i>Piano degli Interventi</i>) limits the type of work and redevelopment that can be carried out in the buffer zone (see sect. 2.2.1).</li></ul>
<i>It also requests the State Party to designate the Garden without further delay under the provisions of Law No 1089/1939.</i>	<ul style="list-style-type: none"><li>• In 2011, the State listed the Botanical Garden as a protected monument in accordance with the 2004 Italian cultural heritage and landscape conservation law <i>Codice dei Beni Culturali e del Paesaggio</i> (see sect. 2.2.1).</li><li>• In 2017, the so-called Goethe's Palm (<i>Chamaerops humilis</i>) was added to the national list of protected veteran trees (see sect. 2.2.1).</li></ul>

RECOMMENDATION	ACTIONS TAKEN
<i>It also urges the responsible authorities at national, regional, and local level to give serious consideration to the financing of the Garden, which is minimal and represents a threat to its continued existence.</i>	<ul style="list-style-type: none"><li>• Italian law <i>Legge 77/2006</i> was approved, providing for annual contributions for Italian UNESCO Sites awarded through a public notice process.</li><li>• The Veneto Regional Council set up the UNESCO regional coordination board (<i>Tavolo regionale di coordinamento Unesco</i>) and allocated funds from the regional budget, through a public notice process, for measures to enhance and promote regional Sites. In 2025, a special line of funding was included in the region's ERDF Regional Programme 2021-2027.</li><li>• The University of Padua finances the conservation, enhancement and promotion of the Botanical Garden with funds from its own budget and with the income deriving from its use by the public (see sect. 4.3).</li></ul>
<i>There is also a pressing need for the formulation of an integral restoration programme and policy for aspects such as the replacement of old trees, new planting, treatment of paths and kerbs, and restoration and conditioning of certain areas and minor architectural elements (pergolas, benches, and walls).</i>	<ul style="list-style-type: none"><li>• The architectural heritage and plant heritage Conservation Plans call for constant monitoring of assets, chattels, real estate and vegetation. There is a monitoring plan for the periodic monitoring of the state of repair of manmade structures. The main restoration projects were launched starting in 2008-2009 and are progressing regularly under a long-term schedule (see sect. 2.2).</li><li>• The creation of a Biodiversity Garden provides space for the introduction of a considerable number of new species (see sect. 2.2.2.b). To this same end, new propagation greenhouses and the quarantine greenhouse are under construction as of 2025 to ensure better maintenance conditions for the collections and, at the same time, ensure the risk of plant diseases is contained (see Action 3).</li></ul>



RECOMMENDATION

Consideration should also be given to the possibility of initiating selected archaeological investigations in order to establish the original level of the Garden.

It recommends that the World Heritage Committee should request the State Party to provide evidence of this programme having been prepared and put in hand as soon as possible.

ACTIONS TAKEN

- Between 2008 and 2009, stratigraphic specimens were taken in each of the four quadrants of the Garden, enabling its original level to be verified: they revealed three subsequent stages of construction (in the sixteenth and eighteenth centuries) at the site of the walls running around the quadrants, without any change to their position (see sect. 2.2.2.c).
- The Italian Ministry of Culture set up a special Department tasked with providing technical support to managers of inscribed sites, coordinating periodic monitoring and checking the documentation required relating to possible risks.
- The Botanical Garden promptly writes up Periodic Reports, which report on the programme developed as mentioned in the points above. The first Management Plan for the Site, relating to the 2006-2009 period, and the 2012 update, also provide thorough evidence of actions taken by the Botanical Garden.

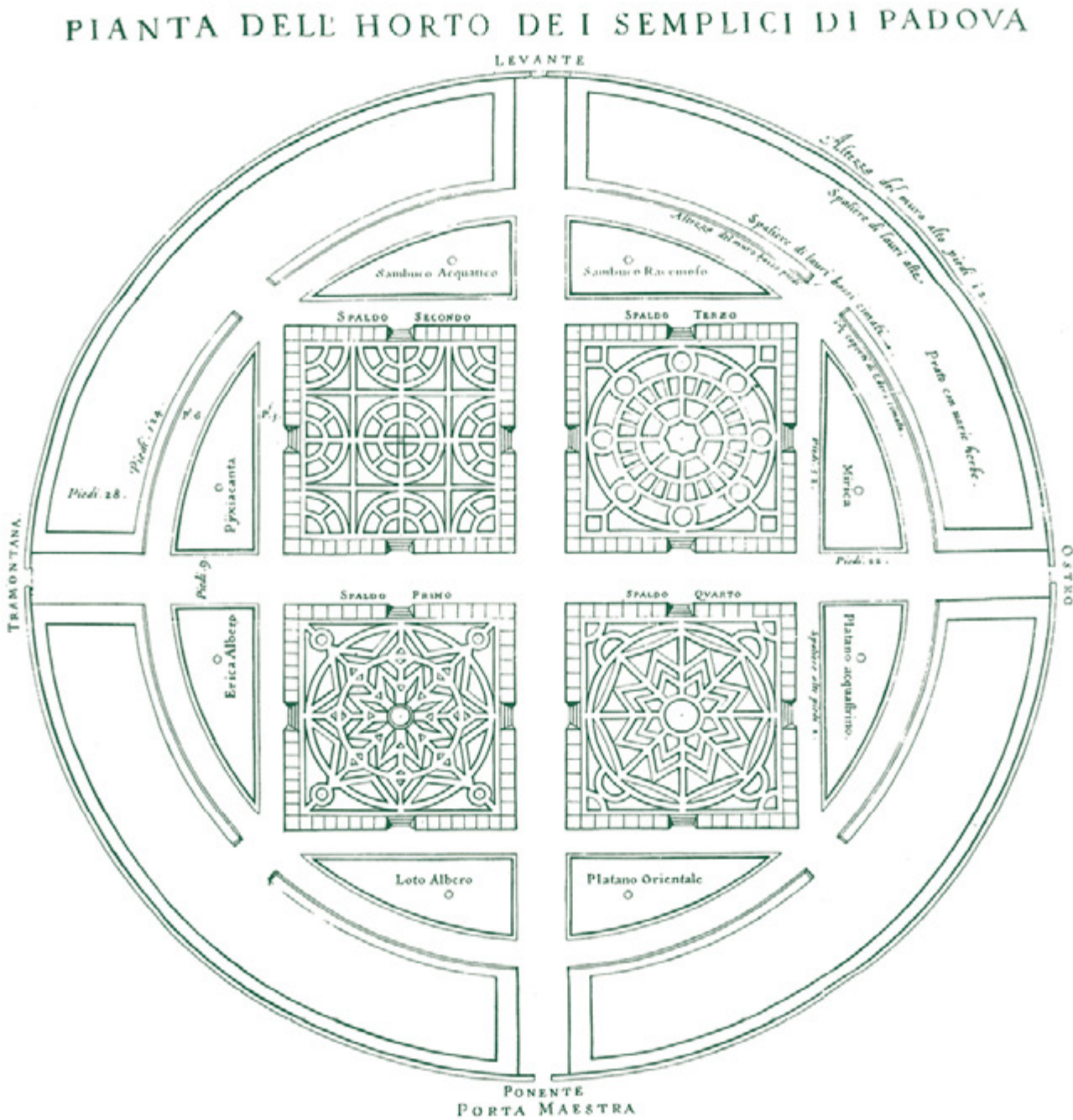
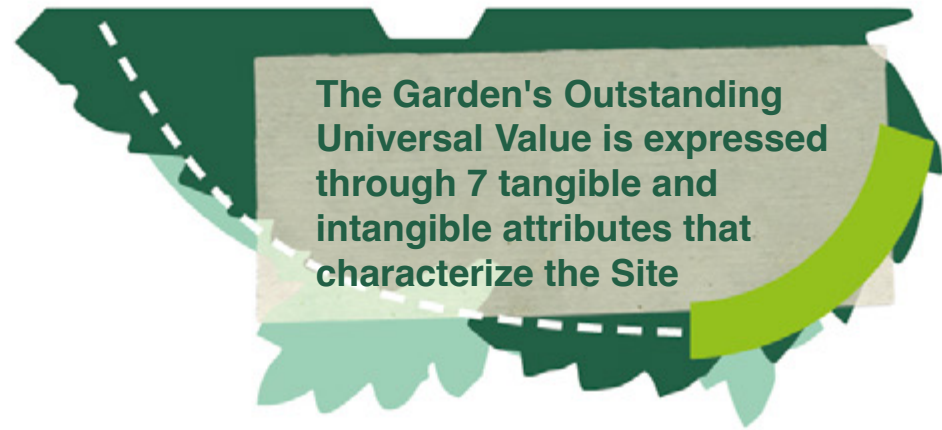


Illustration of the Botanical Garden's plan, from the book *L'Horto dei semplici di Padova* by Giacomo Antonio Cortuso, 1591 ("Vincenzo Pinali e Giovanni Marsili" historic library of medicine and botany)



### 1.3 identification of *attributes*

The identification of attributes — defined as elements, processes or qualities that express and enhance understanding of the Outstanding Universal Value — started with an in-depth analysis of the Statement of Outstanding Universal Value as set out in the Retrospective Statement of Outstanding Universal Value contained in the 2014 decision 38 COM 8E and in the 1997 ICOMOS Advisory Body Evaluation. The contents of the previous Site Management Plan (2006-2009) and the Third Cycle of Periodic Reporting (2023) documents were also factored in.

Once the various sources had been analysed, the Site's attributes were set out with reference to two inscription criteria, namely (ii) and (iii).

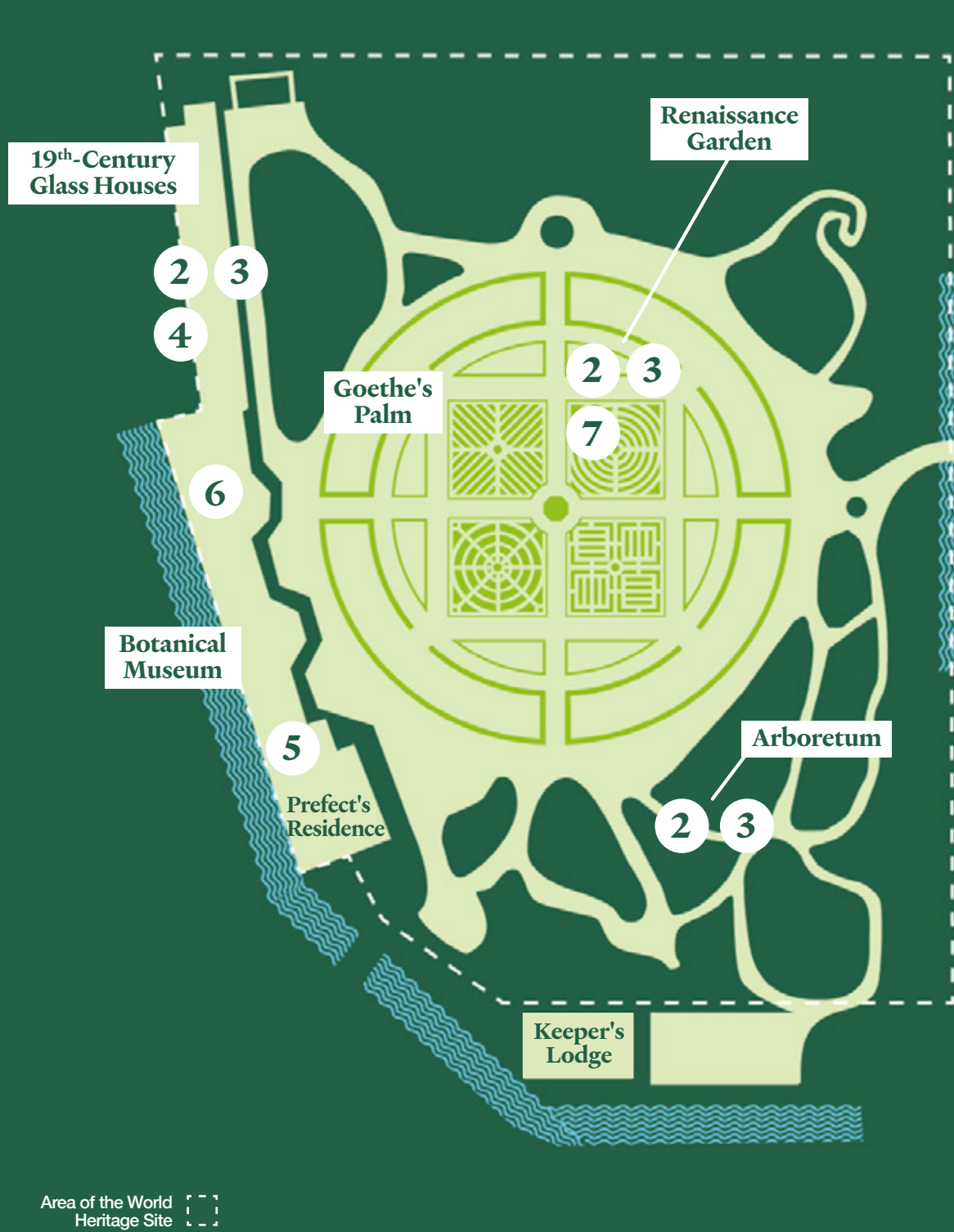
A total of 7 attributes have been identified, both tangible and intangible in nature, as given in the table below.

<b>criterion (ii)</b>	<i>Criterion (ii): The Botanical Garden of Padua has represented a source of inspiration for many other gardens in Italy and around Europe and has influenced both their architectural and functional designs and their didactic and scientific approaches in medicinal plants studies and related disciplines. Since its foundation, it has been at the centre of a wide network of international relationships, contributing to the dissemination of the various aspects of the medicinal plants and botanical sciences and to the preservation of plant species ex-situ. It also made profound contributions to the development of many modern scientific disciplines, notably botany, medicine, ecology and pharmacy.</i>
<b>values</b>	<i>It sets the international standard for education and scientific research in the realm of botany, medicine, ecology and pharmacy.</i>  <i>Globally important plant species conserved ex situ</i>
<b>attributes</b>	<i>1. Scientific studies, research and exchange developed on an ongoing basis by researchers with the University of Padua mainly in the disciplines of botany and ecology</i> <i>2. Over 6,000 plants of 3,500 different species, arranged according to systematic, utilitarian and ecological/environmental criteria, in addition to thematic collections</i> <i>3. Particularly rare plants collected and cultivated, and exotic plants introduced into Europe for the first time</i> <i>4. Index seminum with more than 1,000 species of seeds available for exchange with other universities and research institutes</i> <i>5. Library with approx. 50,000 books and manuscripts of historic and bibliographical importance</i> <i>6. Herbarium with more than 700,000 specimens and key role in the development of plant taxonomy and the Botanical Museum's botanical collections (seeds, wood, educational tools and models)</i>


<b>criterion (iii)</b>	<i>For more than five centuries, the Botanical Garden of Padua has represented an exceptional testimony of scientific and cultural significance. Its position, size and main characteristics, as well as its main research and didactic features, have remained essentially unchanged over centuries with a constant adaptation to the most advanced discoveries in botanical and educational sciences. Many renowned botanists become 'Praefectus' of the Botanical Garden of Padua, leaving evidence of their scientific works in the plants named after them (e.g. the Pontederiacae family in honor of Praefectus Giulio Pontedera).</i>
<b>values</b>	<i>Layout and original decorative devices</i>  <i>Original purpose ongoing since the 16<sup>th</sup> century</i>
<b>attributes</b>	<i>7. Innovative architectural design:</i> <ul style="list-style-type: none"><li><i>• The plan consists in a large square set inside a perfect circle, which is cut into four quadrants by wide paths set at right angles, following the main cardinal directions (16<sup>th</sup> century).</i></li><li><i>• Circular boundary wall dating from the 16<sup>th</sup> century</i></li><li><i>• Keeper's lodge dating from the 16<sup>th</sup>-18<sup>th</sup> century</i></li><li><i>• Decorative elements including balustrade, fountains, statues, four gateways dating from the 18<sup>th</sup> century</i></li><li><i>• Prefect's Residence dating from the 18<sup>th</sup>-19<sup>th</sup> century</i></li><li><i>• Historic 19<sup>th</sup>-century glass houses</i></li></ul>



# Location of the World Heritage Site's attributes







The Garden has played a vital role in the development of scientific studies, research and exchange since 1545

#### ATTRIBUTE 1

**Scientific studies, research and exchange developed on an ongoing basis by researchers with the University of Padua mainly in the disciplines of botany and ecology**

The Botanical Garden of Padua has played a vital role in the development of scientific studies, research and exchange since its foundation in 1545, setting an international benchmark for the *ex-situ* conservation of plant species.

One of the attributes attesting to its Outstanding Universal Value lies in its studies and research in such disciplines as botany, medicine, ecology and pharmacy. The Garden's laboratories, frequented by researchers from the University of Padua's various departments, are involved in various national and international projects and collaborations, standing as testament to the distinctiveness of a one-of-a-kind cultural site.

In 2025, the Garden put a three-year research plan in place (Piano Strategico Triennale per la Ricerca 2025-2028), focusing on three interconnected priorities: biodiversity, resilience and conservation. The Garden maintains ongoing, longstanding relationships with other Italian and international university botanic gardens, providing opportunities to meet for scientific conferences, cultural events, research projects and participation in common networks. More specifically, the Garden has developed strong institutional and scientific relationships with two other botanic gardens inscribed on the World Heritage List — as cultural properties — namely, Kew Royal Botanic Gardens (London) and Singapore Botanic Gardens.

The Garden is also a member of leading national and international networks, such as the *SBI* (Italian Botanical Society), *BGCI* (Botanic Gardens Conservation International) and *EBGC* (European Botanic Gardens Consortium), championing the mainstreaming of best practices, conventions and shared programmes for plant conservation.

#### ATTRIBUTE 2

**Over 6,000 plants of 3,500 different species, arranged according to systematic, utilitarian and ecological/environmental criteria, in addition to thematic collections**

The Botanical Garden's various spaces (Renaissance Garden, Arboretum, 19<sup>th</sup>-Century Greenhouses, Biodiversity Garden) are home to approx. 6,000 specimens belonging to approx. 3,500 different plant species.

Some of them stand out as significant specimens for their historic importance, others are of specific botanical significance, while others stand as examples of how natural heritage is used in medicinal, food and cultural fields.

The Garden has both a local and global dimension. So, we have both local species belonging to Europe's Mediterranean and continental climate, and species that are native to Asia, Africa, Oceania and North and South America.

Thematic collections (medicinal plants, poisonous plants, rare plants from the wider Triveneto region and flora from the Euganean Hills, succulents, orchids) and reconstructions of specific environments (rocky Alpine habitat and Mediterranean scrub) are joined by significant tree specimens, some rated as historical and veteran and dating as far back as 1585, the year the Garden's oldest specimen — "Goethe's Palm" — was planted.

The **Biodiversity Garden greenhouses**, designed to harness renewable energy from water and the sun, have increased the Garden's plant population by 20%. They offer a journey of discovery through the Earth's climate zones and show how plants have adapted to different environmental conditions. Arranged according to geographical distribution, the plants ideally represent the planet's different biomes: from the tropical rainforest to seasonal tropical forest, from the planet's temperate and Mediterranean zones to arid regions.



**A wealth of botanical treasures comprising 6,000 specimens belonging to 3,500 species, with rare plants and plants introduced into Europe for the first time**

### ATTRIBUTE 3

#### Particularly rare plants collected and cultivated, and exotic plants introduced into Europe for the first time

The collection of rare and endangered plants includes species from the wider Triveneto region that are rare or threatened with extinction, especially as a result of man destroying their habitat through deforestation, land reclamation and the abandonment of age-old farming practices. Arguably the most famous species is the rue of Padua (*Haplophyllum patavinum*) — the only plant to bear the name of the city — which is currently endangered as its habitats continue to disappear.

For centuries, one of the core activities of botanic gardens was collecting and acclimatizing plant species coming from the most remote regions of the Earth, in order to ascertain their properties and potential uses. As a natural result of the Prefects' voyages, Venice's trade relations — which extended as far as the Far East — and a prolific network of exchange with leading institutions across the continent, the Garden of Padua became the first repository of rare and exotic plants. A gold mine of species that would then be introduced to the rest of Italy and Europe.

From an economic standpoint, one of the most important species would have to be the potato (*Solanum tuberosum*), which arrived in Padua — which holds the first record of its introduction — from the Andes following Spanish colonization and, from the late 18<sup>th</sup> century, would become one of the main sources of carbohydrates in the human diet. The sunflower (*Helianthus annuus*) is another species of exotic origin: introduced for the high oil content of its seeds, it is native to the New World. Other species introduced for ornamental purposes have become a common hallmark of Italy's treescape, especially the black locust (*Robinia pseudoacacia*): brought to Europe from the New World, it has spread to the point of becoming invasive, colonizing many woodlands populated by native species. The Garden of Padua is also credited with bringing sesame, agave, lilac, freesia and many other species to the Old Continent for the first time. Notably, the first description of the coffee plant can be attributed to a Prefect in charge of the Botanical Garden, Prospero Alpini: a remarkable botanist who embarked on a voyage of discovery into Africa in the sixteenth century. The list of the Garden's "firsts" also includes two trees that have now earned historical status, namely the Deodar Cedar and evergreen Magnolia.



#### GOETHE'S PALM. THE OLDEST PLANT IN THE BOTANICAL GARDEN

Witness to the ages and guardian of places, observer of prolific cultural and scientific exchange and the Garden's iconic plant par excellence: the *Chamaerops humilis* (European fan palm), planted in 1585 and named in the very first catalogue of plants cultivated in the Garden (*Catalogo delle piante coltivate in Orto*) compiled by Girolamo Porro in 1591, is the oldest plant in the Garden. And undoubtedly the most famous. It is even known internationally as Goethe's Palm because, in the eyes of the world-famous German man of letters, this plant was the living proof that different vegetal forms can all be traced back to the metamorphosis of a single archetypal plant, and these observations were later included in his work *Versuch die Metamorphose der Pflanzen zu erklären* (Metamorphosis of Plants) published in 1790. Today, the Palm is the subject of a specific research project, involving an international team led by the Garden's researchers, aimed at studying its genome and comparing the plant with specimens found in nature in the Mediterranean Basin and throughout the rest of the world.





#### ATTRIBUTE 4

##### ***Index seminum* with more than 1,000 species of seeds available for exchange with other universities and research institutes**

A considerable number of seeds from species grown in the Garden is made available through the *Index seminum*, a catalogue prepared every two years and currently containing more than 1,000 species of seeds and spores. Seeds can be requested and exchanged — in line with the principles of the Convention on Biodiversity (Rio de Janeiro, 1992) — between public institutions for study, reproduction, conservation and educational purposes. Carrying on the centuries-old tradition of international relations, the Botanical Garden of Padua implements the seed exchange programme with around 800 botanic gardens all across the globe. The material is not available to private individuals or for commercial purposes.

The Botanical Garden also has a **Gene Bank** whose purpose is to collect seeds and plant material from the natural environment for long-term storage and to give the scientific community access to them. The Bank's facilities were extended and improved in 2024 to meet the latest storage criteria.

Various research projects are linked to the Garden's Bank, which is a node in the Italian Gene Bank Network (*RIBES*):

- *Dryland biobanking*, studying how microalgae that live in desert areas adapt and play a key role as primary producers in the ecosystems and in global carbon fixation;
- *Plantbank*, to protect and re-establish endangered or declining endemic Alpine species, in collaboration with 14 botanic gardens throughout the European Alpine region;
- *SEEDFORCE*, funded by the EU LIFE programme and initiated with the aim of improving the state of conservation of 29 species of rare and endangered plants in 76 biodiversity hot spots (SCIs/SACs in the *Natura 2000* network), in Italy and neighbouring regions, through an integrated *ex-situ/in-situ* approach. More specifically, the Botanical Garden of Padua is involved in conservation efforts focused on three species: *Kosteletzkya pentacarpos*, in coastal regions in the Veneto and Emilia-Romagna regions, *Adenophora liliifolia* on the Belluno Dolomites and *Marsilea quadrifolia* in the Mesola nature reserve (*Bosco della Mesola*, province of Ferrara).

#### ATTRIBUTE 5

##### **Library with approx. 50,000 books and manuscripts of historic and bibliographical importance**

While it had always existed as part of the Prefects' personal assets, it was not until 12 February 1835 that the Botanical Garden's Library became part of the University's property when the Prefect at the time, Giuseppe Antonio Bonato — medical practitioner, botanist, as well as a former librarian — decided that the Garden should have its own permanent library. The book collection donated by Bonato also included that of his predecessor, Giovanni Marsili, a passionate and eclectic bibliophile who had collected books of great value on all manner of subjects, sourced from all over the world. The Library collection grew over the years with the addition of valuable donations and purchases: books by De Visiani, the precious Saccardo book collection, Forti's algology collection and Trotter's cecidology collection.

Of particular note, the historical records held by the Library document the Garden of Padua's history over the centuries. This is a series of 200 files varying in nature that span a period from the eighteenth century to the second half of the twentieth century. In addition to documents of an administrative and scientific nature, there are noteworthy materials relating to the activities of the Prefects running the Garden over the course of the nineteenth century. A significant part of the archival and bibliographical material has already been digitized and made available on open-access platforms.

The new **Historic Library of Medicine and Botany** (*Biblioteca storica di medicina e botanica Vincenzo Pinali e Giovanni Marsili*) run by the University Centre for Libraries (CAB) was established when the "Vincenzo Pinali" Medical Library's historic medicine and anatomy collections were transferred to the Botanical Garden in 2023, supplementing the Garden's existing collections.

The collection of medical books originated from a bequest from Vincenzo Pinali (1802-1875), a clinical medicine lecturer who donated his books and a substantial sum of money to the library's foundation. In doing so, it was Pinali's intention to provide the Medical School with a modern specialist library destined to evolve over time to meet the study and research needs of the medical and scientific community.

The new Pinali Marsili Library today brings together under one roof the University's two antique core book collections, highlighting the original close connection between the history of botany and that of medicine. It holds numerous collections, comprising manuscripts, incunabula, antique books and richly illustrated volumes and covers numerous disciplinary areas: medicine, history of medicine, anatomy and natural sciences, scientific medical illustration, botany, history of botany, herbology, ethnobotany, gardening, historic gardens, and botanical illustration. Two stations featuring interactive devices complete the new fitout on the first floor of the Prefect's Residence and use images to teach visitors about the main stages in the history of the two rich collections. Since 2025, the library has been part of the EBHL network - European Botanical and Horticultural Libraries Group.



#### ATTRIBUTE 6

##### Herbarium with 700,000 specimens and key role in the development of plant taxonomy and the Botanical Museum's botanical collections (seeds, wood, educational tools and models)

Established in 1835 and expanded over time with the addition of numerous collections, the Herbarium today serves as a veritable treasure trove of biodiversity, with 700,000 dried samples, ranging from plants and fungi to algae, lichens and galls. In the 1930s, it was divided into two main sections based on the source of the materials:

- *Herbarium Venetum*, with specimens from Italy's Veneto, Trentino and Friuli-Venezia Giulia regions and from Istria;
- *Herbarium Generale*, or General Herbarium, with specimens that came from other Italian regions and from other continents, like Europe, Africa and America.

The Herbarium's other important collections include Pier Andrea Saccardo's fungi collection, Achille Forti's collection of algae from all over the world, Alessandro Trotter's collection of galls, and a number of unique collections, like Bruno Giordano Ugoni's so-called "War Herbarium" (*Erbario di guerra*).

The newly fitted out Botanical Museum, opened to the public in 2023, is housed in the building where the Garden's Prefect once resided, and is an ideal journey spanning botany and medicine that explores the history of the Garden, its plants and the people who studied them.

The exhibits on display mostly date from the nineteenth and early twentieth century, most notably a significant selection of specimens taken from the historic Herbarium (displayed on rotation for conservation reasons) and the *Spermoteca* (an original collection comprising 16,000 test tubes containing seeds from food, medicinal and ornamental species).

The Museum features 19<sup>th</sup>-century educational illustrations, models of fungi and sections of wood used for teaching, alongside volumes of great value from the Library that show the evolution of botanical illustration over time and the relationship between medical science and the study of plants. The museumization of an ancient apothecary's shop (an old 18<sup>th</sup>-century rural pharmacy, donated by the pharmacist Giuseppe Maggioni), with its full complement of remedies and instruments for preparing medicines, is the ideal finishing touch to founder Francesco Bonafede's original plan for the Garden, as he reportedly had hoped to have such a shop operating within the Botanical Garden since its very inception.

The visitor route explores the Garden's prolific network of botanical and scientific exchanges, often with the aid of interactive experiences and exhibits.

The Museum's centrepiece is the Botanical Theatre — a 19<sup>th</sup>-century botany lecture hall made from wood, now fully restored and reclaiming its original role as a stage for cultural activities and for sharing botanical knowledge.



#### ATTRIBUTE 7

##### Innovative architectural design — plan, structures and decorative elements

The Botanical Garden of Padua has retained its original site over the centuries along with the main elements of its distinctive 16<sup>th</sup>-century style. The garden still stands on a plot comprising a circle containing a square that is, in turn, divided into four quadrants by two perpendicular axes, with eight triangles occupying the spaces between the circumference and the perimeter of the square.

The Garden is enclosed within a 16<sup>th</sup>-century boundary wall topped with a balustrade made from Istrian stone surmounted by busts; rusticated stone columns stand at the entrances crowned with acroteria and featuring iron gates. Decorative architectural elements such as fountains, sundials and statues dating from the 18<sup>th</sup> century are dotted around the garden for interest. The Arboretum, created starting in the eighteenth century and housing the Garden's oldest historic trees, is located outside the circular wall.

The 19<sup>th</sup>-Century Greenhouses are used to keep specimens in good health during the colder months and are also home to the collection of insect-eating plants and the Gene Bank laboratories. Goethe's Palm is housed in a special octagonal glass house near the North gate.

The historic building — the original main body of which was used as the Prefect's Residence (18<sup>th</sup>19<sup>th</sup> century) — currently houses the Botanical Museum, the Botanical Theatre, the historic Herbarium and the historic Library; it also contains the Botanical Garden's scientific director's office.

The former Keeper's Lodge (16<sup>th</sup>-18<sup>th</sup> century), which underwent conservation work in 2024, is home to the departments tasked with the Site's enhancement and promotion.





Botanical Garden of Padua, 1928. The laboratories and school of botany



From top: aerial view of the Renaissance Garden; the boundary wall following the latest restoration