



TAPADA DA AJUDA BOTANICAL GUIDE

FOR MORE INFORMATIONS:



LAT: 38°42'N; LONG: 9°11'W; ALT: 60M

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You will start the botanical route in Tapada da Ajuda. To make it easier to identify the various plants, we have put nameplates on those most representative of Tapada. Follow the written guide as well as the lines of each route on the map. Have a good walk and make use of what the space has to offer.

COURSE I - Duration 30 Minutes

1 - Starts on the stairs of the main building of the ISA **A**

2 - Go down the ramp ahead. This is the Rampa da Asneira (the "Mistake Ramp"), well known because during the construction of the ISA there was a mistake in the orientation of its blueprint.

- You can see Horse-chestnut **1** on the right side and a grove of Mediterranean cypress trees **2** in the middle.

- At the bottom of the ramp, on the left, make a small detour into the woods to see the oldest Portuguese oak **4** in Tapada (approximately 70 years). Look up the slope and you will see a nice big specimen of Bunya pine **3**, a species from Australia, considered sacred to the Aboriginal people.

3 - Shortcut to the Stone Amphitheatre

- Return to the ramp, continue on down. Go slightly left and cross the bridge to the old garden that lead down to the Stone Amphitheatre and observe the imposing wild olive trees **5**. Note the different species of palms (*Brahea armata* **6**, *Livistona chinensis*, *Phoenix canariensis* **7**, *Washingtonia robusta*), elms, laurel **9**, a dragon tree **8** of about 80 years old and a number of narrow-leaved ash tree of which one **10** stands out for its size. In this space, native plants coexist with other species that were planted during the construction of the main building.

4 - Stone Amphitheatre **B**

- At the entrance you will see an old fallen down melaleuca **11**, it shares its space with a carob tree **12** and several plain trees. The amphitheatre is bordered by Mediterranean cypress trees **13** and Mexican white cedar. **14**

5 - Head towards the road and cross back over the water line. Go up the road until the next crossing. Notice, by the route, the wild olives (these are at least a hundred years old), a cork oak tree with virgin cork **15**, as well as the laurel **16** and European hawthorn **17** whose fruit stems have medicinal properties comparable with those of cherries. To finish your route turn left into the main building.

COURSE II - Duration 60 minutes

6 - Continue on the route, turning right onto the dirt road that will take you to the Horto. **C**

- Look left to the Terra Grande **D**, measuring about 5 hectares (approximately 12.4 acres), on top you can see the Lisbon Astronomical Observatory **E**. At the bottom of this road there is a tank with **non-drinking water** from the various water mines that exist in Tapada. On the left there is a weather station **F** and an old trial field covered by a net.

7 - Follow the path close to the wall on the right.

- Before the path splits, on the right side, notice the old pomegranate trees **18**. These don't produce fruits, but grow dazzling scarlet flowers that can be observed in July.

- Continuing on the right, note the Aleppo pine trees **19**. These are indigenous to the Mediterranean coast so they grow very well in Portugal. The aloes, originating from Africa, and prickly-pears **20**, from Mexico which was introduced in the Iberian Peninsula for various purposes, these are now very common in Tapada. You can also see a vine with beautiful red berries known as burst-bulls, but you should not touch these as they are highly poisonous.

8 - Follow the tarmac road keeping to the left on the way to Jardim da Parada **G**

After the Peruvian pepper **21**, observe the impressive mop of *Strelitzia nicotai* **22** on the left, the only one of its kind in Tapada. Similar to a banana tree, it has white flowers with upper leaves arranged in a fan, and is originally from South Africa. Enjoy the vast area, and its rich diversity of species. We direct your attention to the European hackberry tree **23** species which grows naturally here by the Tagus and Sabor rivers, widely used in the city streets owing to its high resistance to pollution. Also in the area is the protected species *Tetraclinis articulata* **24**, a small gymnosperm chosen as Malta's national tree, as well as Judas trees **25** that bloom in March, only then growing leaves. Other species seen on Course I: various species of cypress trees, the Mexican white cedar, a relatively young dragon tree and one river sheoak **26** from Australia, a species used a lot on the east coast

of Africa as a windbreak along the beaches. Along the path of the Jardim da Rainha **H** (Queen's garden) you can find a great stone pine.

9 - Jardim da Rainha (Queen's Garden) **H**

- In the centre of the wide lawn, admire the rare Chilean wine palm **27** surrounded by stone benches whose tile panels dating from 1940 tell the story of the roses' miracle.

- Turn right and go past the duck's lake where there is a European fan palm **28** of considerable size, this is the only native palm from Portugal's flora (Algarve).

- Follow the path to a bench and note, on your left, a large specimen of a fig tree, and ahead a European fan palm and various laurel trees.

- Following the path, keeping to the left you'll pass by a small lake, then by a garden roundabout and then you'll find yourself back at the Jardim da Rainha. You can finish your route here by heading to the main building.



4



13

COURSE III - Duration 1h e 30 minutes

10 - Starting the journey in the Jardim da Rainha **H**, continue past the duck's lake and the rose garden to the Exhibition Hall **I** straight ahead. In the Exhibition Hall majestic surroundings note the important collection of houses that serve as homes to former employees, as well as the stable **J**, dairy **K**, stall e silos for feeding.

- In the garden surrounding the Exhibition Hall observe, from left to right, the rose pepper **29** from Brazil, the Peruvian pepper, the European yew **30**, a poisonous plant from whose leaves taxol is extracted which is used in cancer treatments, two impressive examples of ponytail palm **31** (a plant native to Mexico), junipers **32** and, on the right side, the cypress. You can still see the true date palm **33**, believed to originate from the oasis of Central Africa.

11 - Lagoa Branca (White Lagoon) **M**

- Follow on from the Hall down the road, past the Chalé **L** flanked by the blue jacaranda **34**, a species from Central America.

- Continuing on the main road, to your right you will see a beautiful view over the city and the bridge '25 de Abril'. You can also see an old quarry, one of many that surrounded the Tapada in the past.

12 - Lagoa Branca Auditorium **N**

- This building is located on an old former quarry, surrounded by several examples of white poplar **35**, a species that may become invasive due to the lack of work carried out on the fields.

- Observe the wild olive trees grove **36** surrounding the lagoon, it's the primitive forest of the Lisbon area.

- Further down the road after the Auditorium, you can see some old trees of the *Maclura pomifera* **37** species, whose wood is used to make bows, in front of which is the entrance to one of the five water mines **O** in Tapada.

13 - Avenue of Olives

- A little ahead of the auditorium, turn left and proceed up the Avenue of Olives. Note the common whole nut **38** and olive trees grove **39** on the left, consisting of a collection of different varieties.

- In front of the common walnut trees you can see several eucalyptus **40**, and afterwards there's a grove of natural vegetation with wild olive trees, kermes oak and rosemary, **41** typical of limestone soils.

The avenue ends in a roundabout adorned with a large specimen of stone pine **42**, the only species in Portugal that produces pine nuts. From the roundabout there are three more roads: one towards the viewpoint, one that goes to the rugby fields and the last leading to the bee-keeping post. To continue your tour, choose the path that will better cater to your curiosity. However, do not forget that the only way out of Tapada is via the Rua Jau's gate. We advise that you return along the same path, to minimize the risk of getting lost.



The Tapada da Ajuda is part of a territory known at least since Roman times for its agricultural wealth and the good weather. The soil, predominantly of limestone and basalt, supports small groves of large wild olive and often carob trees, which comprise the climate appropriate vegetation in the Lisbon area, on the slopes facing the River Tagus. Plants like honeysuckle, damson plum, laurel, laurel, laurel, laurel, laurel and Mediterranean crownvetch are most environmentally appropriate to wild olive trees grove communities and today this can be observed in the forced communion of these plants with the exotic species planted here since the founding of the Instituto Superior de Agronomia (ISA).

The 100 hectares (about 247 acres) now known as Tapada da Ajuda were used during the Philippine Dynasty by the King and his court as a hunting reserve. In 1645 D. João IV decreed by deed the creating of a walled property, which could be used for the raising of cattle, game hunting and from which advantage could be taken of the brush and the wood, being assigned a formal name Tapada Real de Alcântara. This became a place where the royal family would stay during times of recreation and rest. With the change of residence of the king and queen to the Palace in Alto da Ajuda, the Tapada Real de Alcântara became the Tapada Real da Ajuda.

Over time other features of Tapada da Ajuda emerged, such as educational and recreational space. It was open to the public in the nineteenth century, allowing visits to agricultural exhibits and providing a place to walk. In 1910, with the establishment of the Republic, this space would dedicate itself to the teaching of agriculture and forestry, calling itself the Instituto Superior de Agronomia (Institute of Agronomy).

The Tapada da Ajuda is unique among all the green areas of the city, being unquestionable in its historical, forestry related and environmental values, which led to its recognition as a Public Interest (set intramural), being under a protection law.

"The Tapada will be open to the public permanently for the use of walking, for the educational benefits of farmers or any other visitors, as well as for lessons for children and students from all schools"

Provisional Government of the Portuguese Republic, Dec. 12, 1910



Viewpoint
At 135 meters high, this is one of the oldest geological landmarks in Portugal.

Natural Botanical Reserve D. António Xavier Pereira Coutinho

Exhibition Hall
With a unique structure in iron and glass, the Exhibition Hall was designed by the architect Pedro d'Avilla, on the orders of King D. Luís I, to host the 3rd Agricultural Exhibition in Lisbon in 1884. As the ISA's most emblematic building, the Exhibition Hall now hosts celebrations and cultural activities.

Lisbon Astronomical Observatory
The observatory is situated at the top of Terra Grande at 100 meters altitude. It was built by King D. Pedro V as suggested by the French astronomer Faye (1850), because Lisbon was the only location throughout the European continent from which the wonderful star Ar-gelander could be seen using the zenith telescope. In 1995 the observatory was integrated with the Faculty of Sciences at the University of Lisbon.

Main Building of the ISA
Designed by the architect Adães Bermudes, it was inaugurated in 1917. It presents a quadrangular structure with a dausuro and incomplete arches.

Water Mines
Existing since the reign of D. João V, the water mines supplied the Tapada Real da Ajuda. The walls are made of brick, the ceiling of thin slabs of limestone. The floor, now completely covered with limestone, was excavated from basalt rock in order to have a gutter to allow water to flow from the source to the entrance of the mine.

- 1 - *Asculus hippocastanum*
- 2 - *Cupressus sempervirens*
- 3 - *Arctocaria bidwillii*
- 4 - *Quercus faginea* subsp. *broteri*
- 5 - *Olea europaea* var. *syvestris*
- 22 - *Strelitzia nicotai*
- 23 - *Celtis australis*
- 24 - *Tetradalis articulata*
- 25 - *Cercis siliquastrum*
- 26 - *Casuarina cunninghamiana*



6 - *Brahea armata*



27 - *Jubaea chilensis*



28 - *Chamaerops humilis*
29 - *Schinus terebinthifolius*
30 - *Foxus boccata*



31 - *Beaucarnea recurvata*
32 - *Juniperus* sp



7 - *Phoenix canariensis*



- 8 - *Drycaena draco*
- 9 - *Laurus nobilis*
- 10 - *Fraxinus angustifolia*
- 11 - *Melaleuca arnillaris*
- 12 - *Ceratonia siliqua*
- 13 - *Cupressus sempervirens*
- 14 - *Cupressus lusitanica*
- 15 - *Quercus suber*
- 16 - *Viburnum tinus*
- 17 - *Cataglyphis monogyna* subsp. *brevispina*
- 18 - *Punica granatum*
- 19 - *Pinus halepensis*
- 20 - *Opuntia* spp
- 21 - *Schinus mollis*
- 33 - *Phoenix dactylifera*
- 34 - *Jacaranda mimosifolia*
- 35 - *Populus alba*
- 36 - Wild olive tree grove
- 37 - *Maclura pomifera*
- 38 - Common walnut grove
- 39 - Olive tree grove
- 40 - *Eucalyptus globulus*
- 41 - Kermes oak and rosemary
- 42 - *Pinus pinea*

Stone Amphitheatre
Planned by Professor Caldeira Gabral in 1950. With a capacity for 400 people, the Stone Amphitheatre is ideal for performing socio-cultural activities outdoors.



Overall view of Tapada da Ajuda

- A** Main building of the ISA
- B** Stone Amphitheatre
- C** Horto
- D** Terra Grande
- E** Lisbon Astronomical Observatory
- F** Weather station
- G** Jardim da Parada
- H** Jardim da Rainha (Queen's Garden)
- I** Exhibition Hall
- J** Stable
- K** Dairy
- L** Chalet
- M** Lagoa Branca (White Lagoon)
- N** Lagoa Branca Auditorium
- O** Water Mines
- P** Car Park
- WC** Toilet
- Viewpoint**

Entrance
RUA JAU
CALÇADA DA TAPADA