

The **Andalusian Network of Botanic Gardens in Natural Areas** is firmly committed to support the development and efficient application of the World Conservation Strategy for Nature and the Convention on Biological Diversity. As centres for conservation, recovery and reintroduction of wild species, the Network takes part in the conservation strategy of the Regional Ministry for the Environment and coordinates actions with other regional, national and international organizations and institutions, such as the International Association of Botanic Gardens (IABG) or the Iberian-Macaronesian Association of Botanic Gardens (AIMJB).



Botanical Garden Network distribution
Biogeographic regions

EL ROBLEDO BOTANIC GARDEN

This garden showcases the flora and the vegetation of Sierra Morena (Marianico/Monchiquense Biogeographic Sector), characterised by the Mediterranean forest and grassland. This vegetation is adapted to the dry summer season with a reduction in the size of leaves, sclerophyllous plants (which have hard leaves due to the waxy layers) and the presence of essential oils in numerous aromatic plants. It is a place where water is a scarce resource, and rivers and streams are of great importance. We can find in this garden examples of other plants with characteristics which are totally different from the previous ones (thin and deciduous leaves).



RED ANDALUZA
JARDINES BOTÁNICOS
EN ESPACIOS NATURALES

RECOMMENDATIONS FOR VISITORS

- Please keep all areas clean and use the bins provided.
- Respect all plants in the garden.
- Follow the signposted routes.
- Taking photographs, drawing or simply observing are the best ways to enjoy your visit.
- If you walk in silence, you will be able to hear many different sounds.
- If you have any questions, please ask a member of staff.

INFORMATION AND RESERVATIONS

e-mail: reservatuvisita.amaya@juntadeandalucia.es

USEFUL ADDRESSES

Regional Ministry for the Environment
Provincial Office of Sevilla
Avenida de Grecia, s/n.
Edificio Administrativo Los Bermejales.
41071 Sevilla
Tfno. 600 163 653 / Fax. 954 231 586

Sierra Norte Natural Park
Carretera Constantina-El Pedroso, km. 1.
41450 Constantina (Sevilla)
Tfno. 600 163 593

El Robledo Botanic Garden
e-mail: jbotanico.robledo.cagpds@juntadeandalucia.es

SYMBOLS USED

All plants are identified with plaques which include the following information: common name in Castilian Spanish and scientific name (in Latin, followed by the name of the authors that wrote the description), botanic family, geographical distribution and level of threat, which is shown using the following icons:

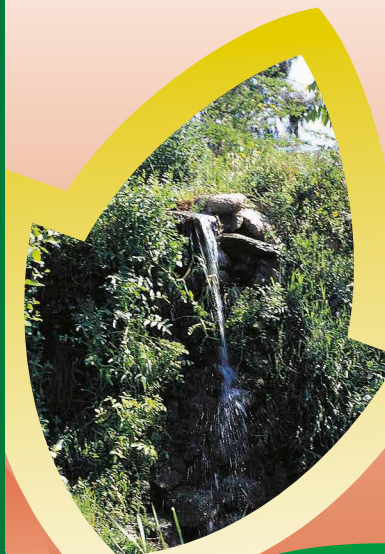
- In danger of extinction ●
- Vulnerable ●
- Of special interest ●



Consejería de Agricultura, Ganadería,
Pesca y Desarrollo Sostenible



RED ANDALUZA
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EL ROBLEDO

Andalusia's **prime location**, between the Atlantic Ocean and the Mediterranean Sea, as well as between two different continents, allows for a huge range of ecosystems and environments, with a great variety of climates and terrains, where a rich botanical and mycological heritage has developed. The region has around 4,000 different species of higher plants and around 3,500 species of fungi. Many of these species are endemic to Andalusia and some of them are endangered due to several factors.



Botanic and mycological gardens contribute to the conservation of this natural heritage. For this reason, a **Network of Gardens** has been set up. They are organised according to ecological criteria, to improve awareness, to promote conservation and to exhibit plants and fungi which make up the Mediterranean Forest of Andalusia. Each of the different gardens in the network is dedicated to local flora and vegetation, paying special attention to rare and endangered flora, in coordination with all the other gardens. The Mycological Garden is a regional showcase of fungi in Andalusia.

Location

El Robledo Botanic Garden is located in the municipality of Constantina (Sevilla), beside the visitor centre with the same name, one kilometre away from the village on the road to El Pedroso.

The BG El Robledo is located inside the area of the "Sierra Norte de Sevilla" Natural Park ("Dehesas de Sierra Morena" Biosphere Reserve, Geopark, Especial Conservation Zone and Especial Protection Zone for Births).



The Garden

The itinerary follows the ascent showcasing the vegetation formations of Sierra Morena, and then descends following a stream, from its source to its middle course.

WILD OLIVE TREE WOODLAND

In warmer places there has developed a shrub land composed of wild olive trees, European fan palms, myrtle plants, asparagus plants and *Osyris alba*. Many of these plants have fleshy fruits which many birds eat.



Chamaerops humilis

CISTUS PLANTS

This is considered as a degradation stage of holm oaks. Gum rockrose is very abundant. Labdanum is obtained from it, which was used in medicine, and is nowadays used in cosmetics and cleaning products.



Cistus ladanifer

HOLM OAK WOODLAND

These areas have been turned into "dehesa" (grassland dotted with holm oaks and cork oaks) by humans; they are the most characteristic landscape of Sierra Morena. They are large areas of pastureland with more or less scattered holm oaks and shrub copses in the most inaccessible areas. Smilax plants, wild pear tree or junipers can be found in the same area as holm oak trees.



- 1 Wild olive tree woodland
- 2 *Cistus* plants
- 3 Holm oak woodland
- 4 Aromatic plants
- 5 Heather plants
- 6 Cork oak woodland
- 7 Portuguese oak woodland/ Oak woodland
- 8 Rupicolous vegetation
- 9 Vegetation on limestone rocks
- 10 Cultivated trees and bushes
- 11 Gallery forest
- Perimeter hedge
- Stream
- Entrance
- Parking area
- Buildings

AROMATIC PLANTS

People have used them since very ancient times for cooking, medicine, hygiene and body beauty. Many of these plants are still used nowadays and can be found in everyday products.

CORK OAK WOODLAND

In areas more humid cork oaks replaces the holm oaks. Cork extraction is still a very important source of income in the area. Cork oak woodland is characterized by the presence of "madröños" (*Arbutus unedo*), "olivilla" (*Phillyrea angustifolia*), "brooms" and heathers.

HEATHER PLANTS

They grow in clear patches of cork oak woodland where these trees have disappeared because of fires or other reasons. Other plants such as *Calluna vulgaris*, *Cistus populifolius*, *Halimium halimifolium*, etc., can also be found with heathers. They are very valued because of the quality of the honey they produce.

PORTUGUESE OAK WOODLAND/OAK WOODLAND

Oak woodland (*Quercus pyrenaica*) can be found in the highest area of the biogeographic sector. Portuguese oaks live in places which are very humid. Both types of trees drop their leaves during the winter, which differentiates them from holm oaks and cork oaks.

RUPICOLOUS VEGETATION

Species which are capable of living in the crevices of rocks can produce soil for other plants with greater needs. Plants in rocks are different depending on their level of exposure to the sun (sunny or shady spots).

VEGETATION ON LIMESTONE ROCKS

We can find limestone rock islets with a type of vegetation which is very different to the rest of the mountain range. Kermes oaks, terebinth, *Halimium halimifolium*, "adelfillas" (*Bupleurum fruticosum*) and several species of orchids can be found in these outcrops.

GALLERY FOREST

Most of the species are deciduous, which do not suffer from the dry summer season because they are in constant contact with water.

We can find alders, hazels, willows, ashes, etc., in streams with permanent water, and "tamujo" (*Flueggea tinctoria*), tamarisk, oleanders and rushes in the streams with low water level or even completely dry during summer.

Aquatic plants such as bulrushes or the scarce and endangered four leaf clovers, which are, actually, ferns, can be observed in lagoons.

CULTIVATED TREES AND BUSHES

This zone showcases the most used trees and bushes in the area of Sierra Morena for obtaining fruits, wood, etc.

We can find, for example, chestnut trees, walnut trees, cherry trees, quince trees, olive trees, pomegranate trees and fig trees.



Chestnut tree

TRADITIONAL VEGETABLE GARDEN

This area of the botanic garden showcases a traditional vegetable garden with varieties adapted to the climate of the region, including crops which are currently hardly used. There is an alternation of types of crops according to the different seasons, such as vines, potatoes, tomatoes, peas, etc.

ENDEMIC AND ENDANGERED FLORA

This is an area dedicated to the conservation and reproduction of species which can be found only in this biogeographic sector and also endangered species because of different reasons. Especially the heather of Andevalo, the "centaurea" of Despeñaperros and endemic fox gloves of Sierra Morena.



Digitalis purpurea subsp. mariana