

The **Andalusian Network of Botanic Gardens in Natural Sites** is definitively positioned for the development and efficient application of the World Conservation Strategy for the Nature and the Convention on Biological Diversity. As centres for conservation, recovery and reintroduction of wild species, the Network participates in the conservation strategy of this Ministry and coordinates with other regional, national and international bodies and institutions such as the International Association of Botanic Gardens (IABG) and the Iberian-Macaronesian Association of Botanic Gardens (AIMJB).



Botanical Garden Network distribution
Biogeographic regions

EL ALBARDINAL BOTANIC GARDEN

El Albardinal Botanic Garden represents natural flora and agriculture from semi-arid areas of eastern Andalusia. Almost all the different ways in which plants adapt to dryness can be observed here, and it is a great place to discover unique species from the European continent (Iberian/North African endemism) that teach us about the common geological and biological past of south-eastern Andalusia and Africa.



VISITOR RECOMMENDATION

- Keep the facilities clean. Please put your trash in the bins or take it with you.
- Respect the garden. All species are protected. Do not pick plants, fruits, rocks, insects, other animals, etc.
- Follow the itinerary walking only within the marked paths.
- Photography, drawing, or simple observation are the best ways to enjoy your visit.
- Walking in silence allows you to perceive many different sounds.
- It is recommended not to smoke.
- For any question or queries, go to the garden staff.

USEFUL ADDRESSES

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El Albardinal Botanic Garden
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SYMBOLS USED

The plants are identified with plaques containing 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 legal protection category in Andalusia, which is shown using the following icons:

- In danger of extinction ●
- Vulnerable ●
- Special protection regime ●



EL ALBARDINAL

Andalusia's **prime location** between the Atlantic Ocean and the Mediterranean Sea, as well as between two different continents gives way to a huge range of ecosystems and environments, with extremely varied climates and terrains, where a rich botanical and mycological heritage has developed. Our Community has about 4000 different species of superior plants and about 3500 species of fungi, many of which are endemic to Andalusia and some are threatened 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, distributed with criteria concerning ecology, awareness, conservation and exhibition of the plants and fungi that make up the Mediterranean Forest of Andalusia; in this way, each member of the Network dedicates their efforts to local flora and vegetation, paying special attention to rare and threatened flora, in coordination with the other gardens. The Mycological Garden forms a regional representation of fungi in Andalusia.

Location

It is located in Rodalquilar, an old mining town linked with the extraction of gold. Nowadays, after an intense remodelling process, it has been converted into an environmental management centre for the Cabo de Gata-Níjar Natural Park. Situated 40km from Almería and 20km from Níjar, it can be accessed from Almería by following the N-344 via Retamar, Ruescas and the crossroads at El Pozo de los Frailes, and from Níjar via Fernán Pérez and Las Hortichuelas. From Murcia, via the Mediterranean Motorway, taking the Campohermoso exit, and then passing via Fernán Pérez and Las Hortichuelas.



The Garden

CLIMATE BOUND VEGETATION (Climatophilous)

The evolution of vegetative communities that greatly depend on the general characteristics of the climate is shown. In our tour, we start by looking at copes formed by European fan palms, kermes oaks and mastics (1), *Ziziphus lotus* and *Periploca laevigata* (2) and jujubes (3) which occupy the most favourable locations in the Almerian Sector. As the environmental conditions become worse or further changes occur due to human activity, they are taken over by esparto grass, bushes, tomillar shrubbery and robust grasslands.



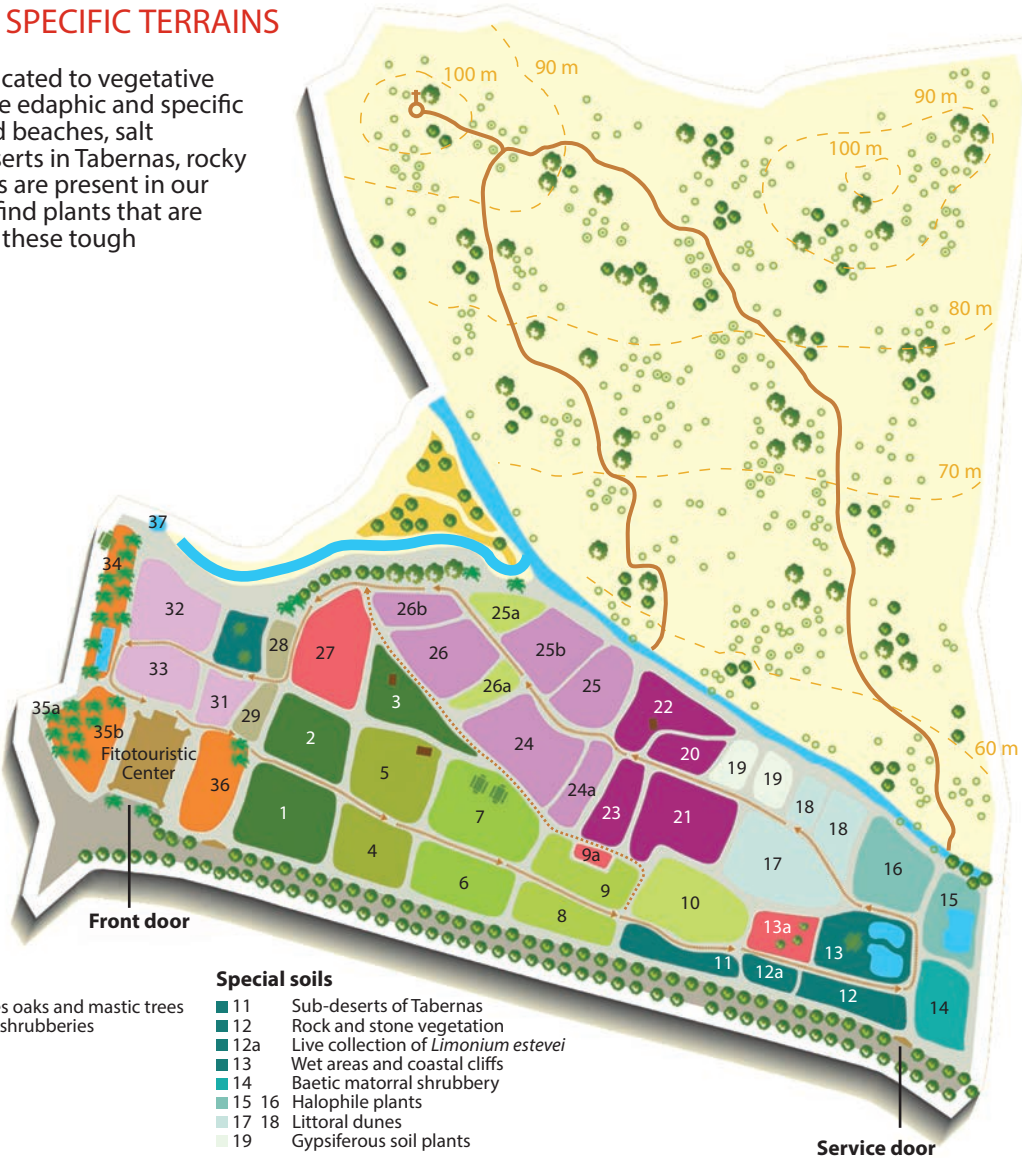
Periploca laevigata

VEGETATION BOUND TO SPECIFIC TERRAINS

This part of the garden is dedicated to vegetative communities that depend on the edaphic and specific microclimatic factors. Dunes and beaches, salt marshes, gypsum areas, sub-deserts in Tabernas, rocky areas and ponds amongst others are present in our tour, and in all of these you will find plants that are perfectly adapted for survival in these tough environments.

TRADITIONAL CROPS

Grain producing steppes (dry farming) of high landscape and ecological value due to the species living there, tree crops both in dry and irrigated farming lands and the skilled traditional vegetable gardens with greens and vegetables (which are nowadays almost completely abandoned), represent the effort people made to adapt to adverse conditions for agricultural development, choosing crops and varieties that were able to put up with these harsh conditions, making the most of the more favourable places and farming according to the cycles imposed by Nature.



Climatophilous vegetation

- 1 Groves of European fan palms, kermes oaks and mastic trees
- 2 *Ziziphus lotus* and *Periploca laevigata* shrubberies
- 3 Jujubes
- 4 Esparto grass plants on volcanic soil
- 5 Esparto grass plants on chalky soil
- 6 Matorral on volcanic soil
- 7 Matorral on chalky soil
- 8 Area of thyme plants
- 9 Area of thyme plants
- 10 Grassland
- 37 Aleppo pine
- 25a *Retama sphaerocarpa* shrubberies
- 26a Sisal shrubberies

Traditional crops

- 20 21 22 23 Arboreal crop
- 24 25 26 Herbaceous crops
- 31 32 33 Horticultural crops
- 26b Weed species
- 24a Grapevine cultivation
- 25b Caper cultivation

Special soils

- 11 Sub-deserts of Tabernas
- 12 Rock and stone vegetation
- 12a Live collection of *Limonium estevei*
- 13 Wet areas and coastal cliffs
- 14 Baetic matorral shrubbery
- 15 16 Halophile plants
- 17 18 Littoral dunes
- 19 Gypsiferous soil plants

Endemism and threats

- 28 29 Endemism and threats

Collections

- 27 Useful plants
- 9a Adaptations
- 13a Bulbous, annual and hemicryptophyte plants

Creek

- 37 Creek

Natural area

- Natural area

Garden area

- 34 35a Palm grove
- 35b Succulent plants
- 36 Garden area

General

- Recommended itinerary
- Paths and exhibition
- Ponds and small lakes
- Buildings
- Building remains
- Rest area
- Roads

COLLECTIONS

The collections of bulbous, annual and hemicryptophyte plants, as well as the adaptations, show us groups of different morphological and/or functional strategies developed by plants in order to face harsh weather conditions. The collection of useful plants shows how people have also learned to use many of the wild plants that they had around them. This knowledge is part of a cultural heritage that must not disappear.



Genista umbellata

THREATENED, RARE AND ENDEMIC VEGETATION

The huge diversity of substrata and the exceptional and demanding climate conditions together determined the appearance of a strange and "rare" flora within Europe. There are numerous endemic species from this part of the World.

PALMS, CACTI AND CRASSULACEAE

This is an exhibition of species that come from other parts of the world, adapted to live in extremely dry conditions.



Limonium sp.

GARDENING

This shows both indigenous and foreign species that are well adapted to the local climate and that have traditionally been used in house gardening; as well as other species that are not currently used for these purposes but could be used as a new economic resource.