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

HOYA DE PEDRAZA BOTANIC GARDEN

The Botanic Garden is found in the central massif of Sierra Nevada at 1900 metres of altitude and it shows flora and vegetation from this site and its Alpujarra mountainside, more than the mountains in Los Filabres, Lújar-La Contraviesa and Gádor (Nevadan and Alpujarran-Gadorian Bio-geographical Sectors) which are the richest in terms of flora in Andalusia, with numerous rare and endemic species. Unfortunately, some of these species are threatened and, consequently, are protected by our legislation.



RECOMMENDATIONS FOR VISITORS

- · Keep the installations clean. Use the bins provided.
- Respect the garden's plants.
- Follow the sign posted routes.
- Photographing, 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.
- For any queries, please ask a member of staff.

INFORMATION AND RESERVATIONS

e-mail: reservatuvisita.amaya@juntadeandalucia.es

USEFUL ADDRESSES

Regional Ministry of Granada Calle Joaquina Eguaras, 2. Edificio de la Junta de Andalucía. 18071 Granada Tfno. 958 025 100 / Fax. 958 026 058

Hoya de Pedraza Botanic Garden e-mail: jbotanico.pedraza.cagpds@juntadeandalucia.es

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 level of threat, which is shown using the following icons:

- In danger of extinction
- Vulnerable
- Of special interest

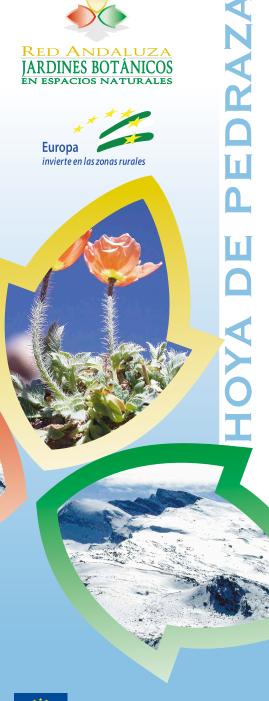








Consejería de Agricultura, Ganadería, Pesca y Desarrollo Sostenible



HOYA DE PEDRAZA BOTANIC GARDEN

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 plats 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.



HOYA DE PEDRAZA BOTANIC GARDEN HOYA DE PEDRAZA BOTANIC GARDEN HOYA DE PEDRAZA BOTANIC GARDEN HOYA DE PEDRAZA BOTANIC GARDEN



It is located in the northwest quadrant of Sierra Nevada, 27.8 km along the A-395 that joins Granada with the Sierra Nevada ski station, 4km from it.

The Garden

The Garden is split into four large units: The Silicole Vegetation Unit: Calcicole Vegetation Unit: Riberas Vegetation and the Threatened Species Garden. The first three collect vegetative formations whereas the last one is ordered by collections of species grouped together by their ecology.

VEGETATION ASSOCIATED WITH BANKS

On the banks of the siliceous areas of Sierra Nevada, the most common type of vegetation are willows found almost in direct contact with water, with the dominant species being the grey willow (Salix atrocinerea). In areas with a deeper terrain and a permanent flow of water, there can be Alnus alutinosa alders, which are uncommon in the Sierra Nevada. In the outskirts of the riverside woodland area you can find ash groves with species such as ash, maple, yew and other species transitioning to the Pyrenean oak: whitebeam or wild cherry tree.

Lavatera oblonaifolia

CALCICOLE UNIT

This unit collects the flora and vegetation that grows on carbonated soils. These materials are mainly formed in sedimentary basins and their decomposition gives the soil a basic character. In this Unit, two territories are represented: Calcicole Holm-oak woodland and Pine-Juniper woodland.

Gallery forests Calcicole pine and Spanish juniper groves Holm oak groves on chalky soil 1 Willow groves 4 Grassland Area of salvia plants 2 Ash groves 5 Pine grove Spanish groom and Retama 3 Alder groves 6 Spanish juniper grove sphaerocarpa shrubberies 7 Thorny xeric matorral (10) Kermes oak grove 11 Holm and Portuguese oak grove Vehicle Access Nurserv

Calcicole Holm-oak woodland territory

In favourable humidity conditions, the Holm-oak woodland is enriched with gall-oaks and other trees or deciduous shrubs such as St Lucie cherry trees and sweet and sour laurestines. The clearings and drier areas are occupied by co-habiting kermes oaks, among others, and mallow from La Alpujarra (Lavatera oblongifolia). Retama sphaerocarpa, Spanish brooms and salvias (with a strong presence of aromatic herbs like salvia and lavender) occupy areas with shallower terrains.

Calcicole Pine-Juniper territory

These dry and cold pines are formed in Sierra Nevada by a local variety of scots pines (*Pinus sylvestris* var. nevadensis) that is accompanied by shrubs with a nice appearance such as junipers if the terrain allows. In the more unfavourable areas, vegetation is formed by prickly bushes with a compound stuffed appearance, among others, thistles and blue broom, with other species as unique as Veronica tenuifolia.



Astragalus tremolsianus

Lastly, in the in the areas with less soil, a meadow could be formed with species as uncommon as: Alyssum gadorense, Astragalus tremolsianus. Arenaria tetraqueta subsp. murcica, Erodium daucoides, etc.

THREATENED SPECIES **GARDEN**

In this site, vegetative gems are collected from the bio-geographical sectors

represented in the Garden, which require all of our attention to prevent them from becoming extinct. Some human activities that go against natural processes and their consequences (such as climate change) are amongst the factors causing them to be in a delicate situation.

Endangered species

- (2) Understory of holm oak groves
- (3) Gravel and sand formations on chalky or dolomitic soil
- Deciduous small forests and matorral
- (5) shrubberies
- (6) Hydrophilous grasslands
- Tall forb communities
- (8) Flooded grasslands
- Alpine Matorral and adenocarpus shrubberies Siliceous rocky and gravel formations

Traditional crops

Traditional crops

Silicole holm oak groves

- 2) Thinleaf false brome plants-grassland
- Spanish groom shrubberies
- Spinose plants
- 29 Holm oak grove

Pyrenean oak groves

- 25 Cistus plants
- Pyrenean oaks
- 27 Hardwoods

Juniper-adenocarpus plants

- 28 Area of thyme plants
- Oromediterranean grasslands
- 30 Juniper-adenocarpus plants

Alpine grassland

- 31 Rocky formations
- 32 Loose gravel formations Psychroxerophile grasslands



Scutellaria javalambrensis

Spanish brooms. Silicole Holm-oak woodland: open formation of holm-oaks, blackthorns and hawthorns, in which Pyrenean oak species pastures penetrate.

Areas that are high up in the mountains are particularly sensitive to changes because they have ended up like islands from which the plants can not escape in order to move somewhere with adequate conditions. This Unit is ordered according to the ecology of each plant.



Next to the Threatened Species Garden is the Traditional Crops plot, dedicated to crops that existed in Sierra Nevada until halfway through the 20th century.

THE LABYRINTH

This runs like an imaginary pathway from the sea to the peaks. At some forks you will find plants that live at different altitudes and that can help you on your "journey to the heiahts".

SILICOLE UNIT

This unit collects vegetation from soils that are slightly acidic, formed by the disintegration of siliceous rocks. The most common are schists, which break up into layers. Four territories are represented:

Alpine grassland: vegetation from cold and dry places, such as rocky areas, stony places and snow drift areas. Here lives, amongst other species, chamomile from Sierra Nevada (Artemisia granatensis).

Junipers and brooms: in stocky and round shapes as an adaptation against the wind and snow.

Pyrenean oak (oak forest): it lives with other leafy plants that stand out for their rarity as birch trees, whitebeams and wild cherry trees as well as Cistus and

Narcissus triandrus