



# CITES plants of Europe

Edited by  
Živa Fišer and Alicja Kolasińska

 **cost**  
EUROPEAN COOPERATION  
IN SCIENCE & TECHNOLOGY



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## CITES Plants of Europe

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# **CITES plants of Europe –** a short selection





## **ConservePlants - An integrated approach to conservation of threatened plants for the 21st Century**

Even though plants represent an essential part of our lives offering exploitative, supporting and cultural services, we know very little about the biology of the rarest and most threatened plant species, and even less about their conservation status. Rapid changes in the environment and climate, today more pronounced than ever, affect their fitness and distribution causing rapid species declines, sometimes even before they had been discovered. Despite the high goals set by conservationists to protect native plants from further degradation and extinction, the initiatives for the conservation of threatened species in Europe are scattered and have not yielded the desired results.

The main aim of this COST Action is to improve plant conservation in Europe through the establishment of a network of scientists and other stakeholders who deal with different aspects of plant conservation, from plant taxonomy, ecology, conservation genetics, conservation physiology and reproductive biology to protected area's managers, not forgetting social scientists, who are crucial when dealing with the general public.

# The Washington Convention

## (CITES)

Currently, an increasing decline in global biodiversity is being observed. The main reason is the loss of habitats and modifications of natural systems. The second important factor of species decline is their over-exploitation.

A special agreement on international trade in endangered species of wild animals and plants, called the Washington Convention or CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) regulates this practice. The text of the Convention was agreed upon in 1973 at a meeting in Washington, D.C. with the aim to protect certain animal and plant species against over-exploitation through international trade and maintain those species throughout their range at a level consistent with their role in the ecosystem. Currently, 182 countries and the European Union (EU) are Parties to the Convention worldwide.





The Convention encompasses three Annexes including approximately 30,000 species of plants and 5,800 species of animals. Their protection is slightly different according to the Annex they are in and is connected with their threat status.

Annex I—includes over 1,000 species threatened with extinction. Trade is only permitted in exceptional cases.

Annex II—there are about 35,000 species that are currently not endangered, but the trade must be controlled, as acquisition of specimens from the wild may lead to their extinction.

Annex III—contains about 220 protected species in at least one country that has asked CITES Parties for help in controlling trade.



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Text: **MICHAEL KIEHN, MARTIN ROSE**

Photo: **ALICJA KOLASIŃSKA**



# European Union regulations regarding CITES

Since 1 June 1997, the trade of CITES specimens with and within the European Union is regulated by Council Regulation No. 338/97 on 9 December 1996 on the protection of species of wild fauna and flora. It translates CITES principles into the realities of the Union, and in many cases significantly tightens them.







This Regulation contains lists of species subjected to restrictions, listed in four annexes, marked with the letters A, B, C and D. As with CITES attachments, each of these annexes has slightly different restrictions. The Regulation introduces all CITES provisions, but also sets out a number of others. For example, it prohibits commercial exploitation (including sales) in the EU of all species of Annex A, and for species of Annex B with no proof of legal origin. The four annexes contain all species listed in Annexes I and II CITES as well as a number of other species protected in the Union.



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Text: **MICHAEL KIEHN, MARTIN ROSE**

Photo: **ALICJA KOLASIŃSKA**

# Pheasant's eye

*Adonis vernalis* L.

## DESCRIPTION

Perennial plant up to 40 cm tall with multi-pinnate leaves with large, bright golden, shiny flowers.

## HABITAT

Xerothermic grasslands. Dry, sunny hills, thickets, forest edges, on a limestone or gypsum substrate.

## DISTRIBUTION

Southeastern Europe, to the Urals, with several disjunct populations in southwestern and central Europe.





## THREATS

Obtained from nature for commercial purposes, as an ornamental plant and herbal raw material. Habitat loss and modification is also a threat.

## PROTECTION

CITES Washington Convention—Annex II.

Seeds, pollen and finished packaged products for retail trade are not subject to the provisions of the Convention.

IUCN World Red Threatened Species List—Least Concern (Europe).



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Text: **ALICJA KOLASIŃSKA**

Photo: **ALICJA KOLASIŃSKA**



# Wavy cyclamen

*Cyclamen repandum* Sibth. & Sm.

## DESCRIPTION

Perennial with a small tuber and heart-shaped leaves. Flowers uniformly bright cerise pink or pale pink with a darker basal zone.

## HABITAT

Coniferous or deciduous woodland and scrub, in moist, shady places.

## DISTRIBUTION

Southern Europe, from France to the Aegean region.







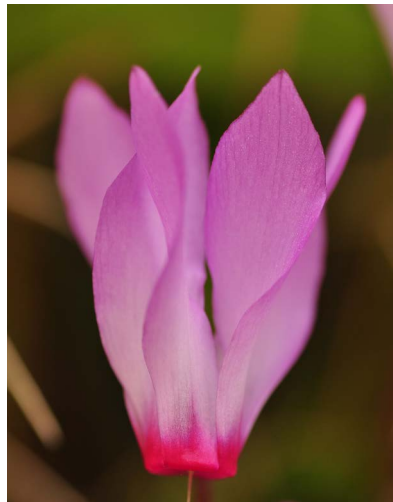
## THREATS

Trade, collection and habitat destruction.

## PROTECTION

CITES Washington Convention—Annex II.

EU Wildlife Trade Regulation—Annex B.



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Text: KATERINA GOULA, PANAYIOTIS DIMITRAKOPOULOS, THEODORA PETANIDOU

Photo: KATERINA GOULA

# Winter daffodil

*Sternbergia lutea* (L.) Ker-Gawl. Ex Spreng

## DESCRIPTION

Blooms and leaves in autumn, from September to November. Leaves bright green, up to 12 mm wide; stay over the winter. Distinctly yellow flowers appear soon after leaves. Flower consists of six tepals about 3–3.5 cm long, six yellow stamens and a stigma.

## HABITAT

In the Mediterranean and sub-Mediterranean on rocky and grassy areas, pastures, among stone boulders. In the Pannonian basin, on dry drained areas with meadow vegetation.

## DISTRIBUTION

From Algeria and Spain in the west, across the Balkan Peninsula to Turkmenistan and southern Russia in the east, and Israel in the south.





## THREATS

Threatened by habitat loss, natural succession processes when the habitat is overgrown with bushes and trees, and the cultivation of meadows where it grows.

## PROTECTION

CITES Washington Convention—Annex II.

EU Wildlife Trade Regulation—Annex A.

IUCN World Red Threatened Species List—Least Concern (Europe).



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Text: DALIBOR BALLIAN

Photo: FARUK BOGUNIĆ



# Common snowdrop

*Galanthus nivalis* L.

## DESCRIPTION

A low perennial plant with a spherical bulb, which produces usually two very narrow leaves and a solitary, pendulous, bell-shaped white flower, held on a slender pedicel.

## HABITAT

Woodland, grassland and shrubland. Likes to grow in well-drained, chalk and limestone soils, under the shade of deciduous trees.

## DISTRIBUTION

Central and southern Europe, the Caucasus, Asia Minor.







## THREATS

One of the most often destroyed spring plants, picked and excavated for ornamental purposes. Another threat is the loss of habitats as a result of shrinking forests and forest management.

## PROTECTION

CITES Washington Convention—Annex II.

Cut flowers obtained from cultivated specimens are not subject to the provisions of the Convention.

EU Wildlife Trade Regulation—Annex B.

IUCN World Red Threatened Species List—Near Threatened (Europe and Global).

Habitats Directive—Annex V.



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Text: ALICJA KOLASIŃSKA

Photo: ALICJA KOLASIŃSKA

# Holy orchid

*Anacamptis sancta* (L.) R.M. Bateman & al.

## DESCRIPTION

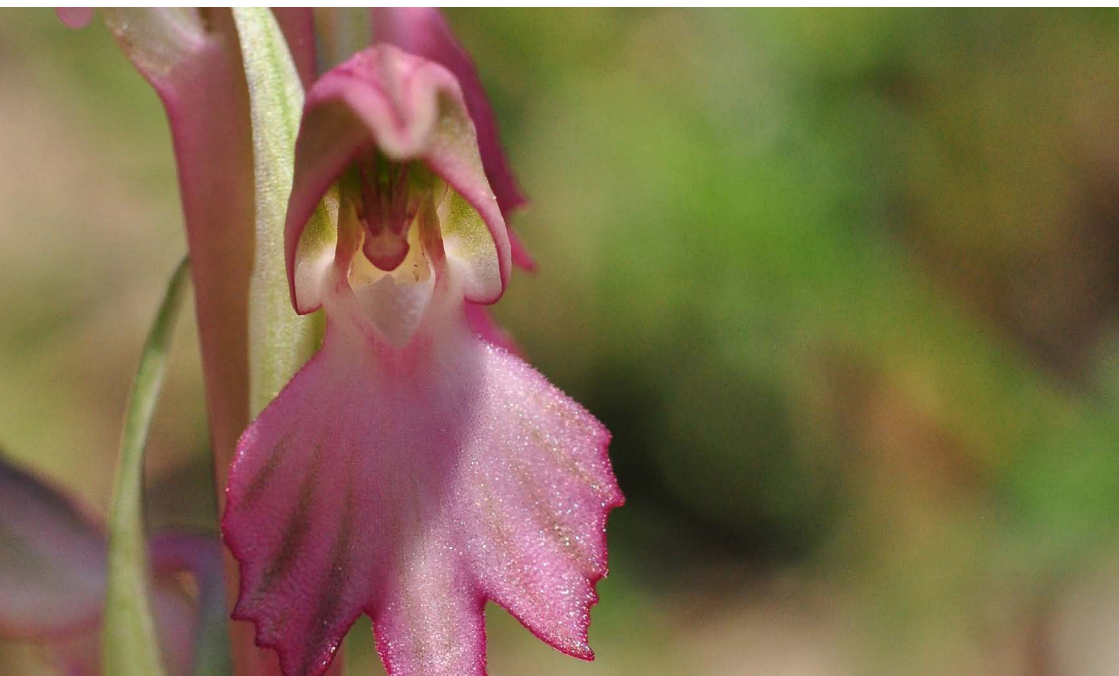
Orchid with a cylindrical inflorescence, formed by uniformly coloured, unspotted flowers.

## HABITAT

Phrygana, short grassland, scrub and open woodland, on dry, calcareous substrates.

## DISTRIBUTION

East Mediterranean: Greece, Cyprus, Turkey, southwards to Jordan and Syria, through Lebanon and Israel.





## THREATS

Residential and commercial development (housing and urban areas; tourism and recreation areas), agriculture (annual and perennial non-timber crops; livestock farming and ranching), biological resource use (plant gathering).

## PROTECTION

CITES Washington Convention—Annex II.

EU regulation of trade of fauna and flora—Annex B.

IUCN Red List of Threatened Species—Near Threatened (Europe), Least Concern (Global).

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Text: KATERINA GOULA, PANAYIOTIS DIMITRAKOPOULOS, THEODORA PETANIDOU

Photo: KATERINA GOULA

# Spurred helleborine

*Cephalanthera epipactoides* Fisch. & C.A. Mey.

## DESCRIPTION

Robust orchid with 2-4 leaves and up to 30, white, spurred flowers which are not fully opened.

## HABITAT

Coniferous and deciduous woodland with oaks or scrub, on alkaline substrates.

## DISTRIBUTION

An East Mediterranean element, apparently restricted to eastern Greece, including the East Aegean Islands, and western Turkey.







## THREATS

Natural system modifications (fire and fire suppression), grazing, tourism, deforestation for building purposes, insecticides (reduction of pollinators), collection, transportation and service corridors (roads and railroads).

## PROTECTION

CITES Washington Convention—Annex II.

EU Wildlife Trade Regulation—Annex B.

IUCN Red List of Threatened Species—Vulnerable (Europe), Data Deficient (Global).

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Text: KATERINA GOULA, PANAYIOTIS DIMITRAKOPOULOS, THEODORA PETANIDOU

Photo: KATERINA GOULA

# Lady's-slipper orchid

*Cypripedium calceolus* L.

## DESCRIPTION

A long-lived perennial orchid with shoots growing up to 60 cm and flowers wide up to 9 cm. Each shoot has up to four ovate leaves with parallel venation. Flowers composed of three red-brown, twisted petals and one slipper-shaped yellow labellum. Lady's-slipper orchid blooms from May to early June. Spreads using seeds or horizontal stems.

## HABITAT

It grows in light forests and thickets on calcareous soils.

## DISTRIBUTION

It occurs from central Europe to eastern Asia.





## **DANGER**

The main threat to lady's-slipper is uprooting the plants from natural sites to cultivation in the gardens, picking flowers, and overshadowing of its natural sites in forests and thickets.

## **PROTECTION**

CITES Washington Convention—Annex II.

EU Wildlife Trade Regulation—Annex A.

IUCN Red List of Threatened Species:  
Least Concern (Global), Near Threatened  
(Europe).

Bern Convention—Annex I.

Habitats Directive—Annex II and IV.





# Heath Spotted-orchid

*Dactylorhiza maculata* (L.) Soó

## DESCRIPTION

Perennial plant up to 70 cm tall with 4-10 leaves, usually with spots. Flowers from light to dark pink, gathered in a dense spike.

The genus *Dactylorhiza* has numerous taxa which are often taxonomically problematic, and therefore worthy of critical consideration.

## HABITAT

Damp places in marshes, fens, bogs, and damp meadows; sunny places; also undergrowth of forests, at the edges of streams and in areas with bushes.

## DISTRIBUTION

Almost all of Europe with the exception of the most southern parts and Siberia.







## DANGER

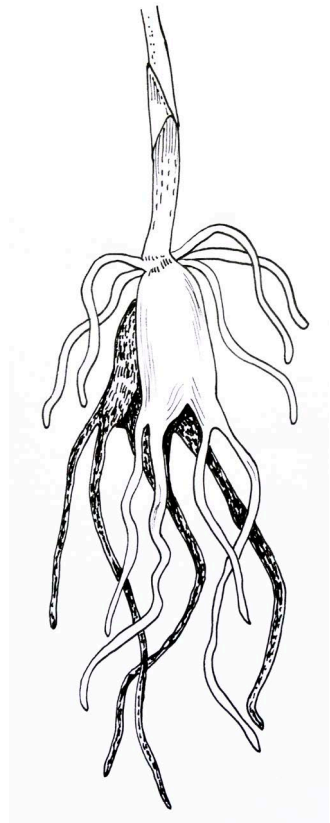
Habitat loss due to melioration, drainage of wetlands, river regulation, destruction of riparian forests.

## PROTECTION

CITES Washington Convention—Annex II.

Seeds and cuttings or tissue cultures obtained in vitro, in solid or liquid medium, transported in sterile containers, and cut flowers of artificially propagated plants are not subject to the provisions of the Convention.

IUCN World Red Threatened Species List—Near Threatened (Europe).



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Text: ALICJA KOLASIŃSKA

Photo and drawing: ALICJA KOLASIŃSKA

# Violet helleborine

*Epipactis purpurata* Sm.

## DESCRIPTION

Mid-high perennial with straight stem, rhizome, lanceolate leaves, inflorescence with many wide-open flowers on short, bent stalks. Many parts of plants with violet tint.

The genus *Epipactis* has numerous taxa which are often taxonomically problematic, and therefore worthy of critical consideration.

## HABITAT

Deciduous forest—hornbeam-oak or beechwood, forest roads margins, often on soils rich in calcium carbonate.

## DISTRIBUTION

From eastern Spain and England to north-eastern Poland. Separate subspecies are endemic on the south Balkan peninsula and south Caucasus.





## THREATS

Loss of habitats associated with transformation of deciduous forests into coniferous monocultures.

## PROTECTION

CITES Washington Convention—Annex II.

Seedpods, pollen (including pollinia), seedling or tissue cultures obtained in vitro, in solid or liquid media, transported in sterile containers and artificially propagated plants are not subject to the provisions of the Convention.

IUCN World Red Threatened Species List—Near Threatened (Europe).





# Frivald's frog orchid

*Gymnadenia frivaldii* Griseb.

## DESCRIPTION

Slender plant, up to 30 cm high, with a dense inflorescence of numerous, small, pinkish-white flowers.

## HABITAT

Wet meadows and bogs, on siliceous substrates.

## DISTRIBUTION

Endemic to the Balkan Peninsula, from southern Carpathians to northern Greece.





## THREATS

Residential and commercial development (tourism and recreation areas), agriculture (livestock farming and ranching), human intrusions and disturbance (recreational activities), natural ecosystem modifications.

## PROTECTION

CITES Washington Convention—Annex II.

EU Wildlife Trade Regulation—Annex B.

IUCN Red List of Threatened Species—Least Concern.

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Text: KATERINA GOULA, PANAYIOTIS DIMITRAKOPOULOS, THEODORA PETANIDOU

Photo: KATERINA GOULA

# Lizard orchid

*Himantoglossum adriaticum* H.Baumann

## DESCRIPTION

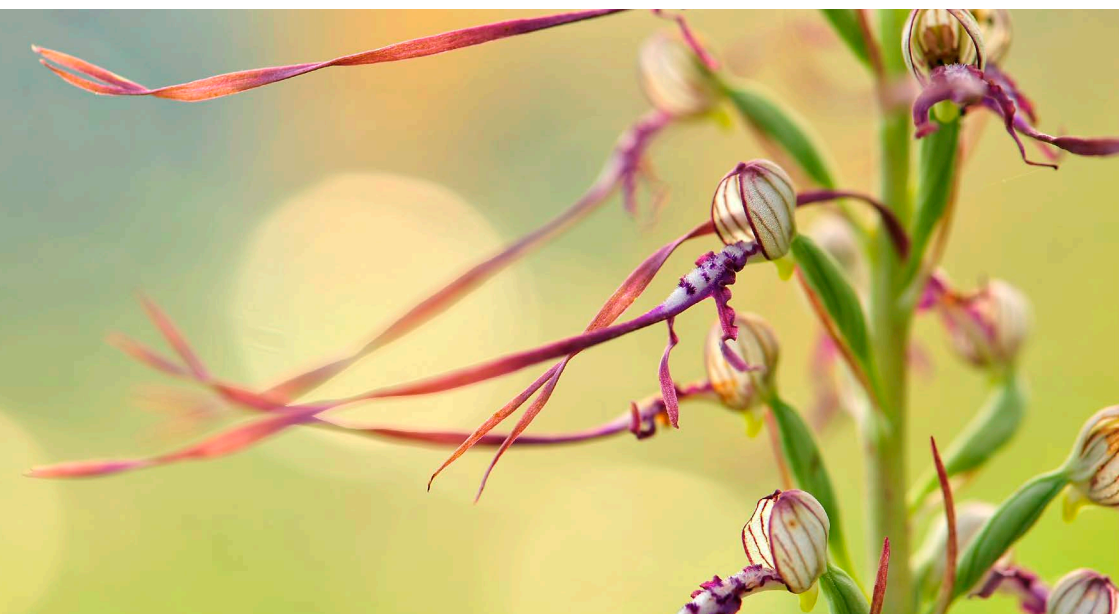
Tall orchid recognised by an extremely long pink curved labellum and a greenish-pinkish-white hood marked with purple veins. Elongate and lax inflorescence, typically composed of 15-40 flowers.

## HABITAT

Calcareous soils in natural and semi-natural, dry and mesophilic grasslands or open woodlands.

## DISTRIBUTION

Adriatic region of the Mediterranean, extending to Hungary, Czech Republic and Slovakia in the northeast.







## THREATS

Decline of dry grasslands due to their abandonment.

## PROTECTION

CITES Washington Convention—Annex II.

EU Wildlife Trade Regulation—Annex B.

IUCN Red List of Threatened Species—Least Concern (Europe, Global).

Bern Convention—Annex I.

Habitats Directive—Annex II and IV.

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Text: ŽIVA FIŠER

Photo: JOŠT STERGARŠEK (1), PETER GLASNOVIĆ (2, 3)



# Komper's orchid

*Himantoglossum comperianum* (Steven) P. Delforge

## DESCRIPTION

Robust and spectacular orchid with large flowers, brownish-purple hood and a paler, rose-pink lip that extends to four narrow and very long segments.

## HABITAT

Open coniferous and deciduous woodland, on calcareous substrates.

## DISTRIBUTION

From Crimea southwards to Lebanon, Syria, Iraq and Iran, through Anatolia and the East Aegean Islands. Local and very rare.





## THREATS

Grazing, collection, fire, tourism development, construction, road extension.

## PROTECTION

CITES Washington Convention—Annex II.

EU Wildlife Trade Regulation—Annex B.

IUCN Red List of Threatened Species—Endangered.

Bern Convention—Annex I.

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Text: KATERINA GOULA, PANAYIOTIS DIMITRAKOPOULOS, THEODORA PETANIDOU

Photo: KATERINA GOULA



# Bird's-nest orchid

*Neottia nidus-avis* (L.) Rich.

## DESCRIPTION

A non-photosynthetic orchid that derives all its nutrition from a mycorrhizal fungus in the soil and litter. Name derives from a comparison of the tangled roots to a bird's nest. Beige-brown, yellowish or even white shoot, up to 40 cm. Flowers without spur, gathered in the spike, the same color as the shoot. Labellum divided into two lobes, the remaining petals form a 'helmet'. Flowering occurs from late May to June.



## HABITAT

It grows in shady woodland, especially beech and hornbeam forests.

## DISTRIBUTION

It occurs across most of Europe, up to the Caucasus and the Urals. Also, it can be found in northern Africa.

## DANGER

Forest management and destruction of undergrowth are a threat to the species.

## PROTECTION

CITES Washington Convention—Annex II.

IUCN Red List of Threatened Species—Least Concern (Europe, Global).



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Text: ANNA CWENER

Photo: ANNA CWENER (2),

KRZYSZTOF WOJCIECHOWSKI (1)

# Burnt orchid

*Neotinea ustulata* (L.) R.M.Bateman & al.

## DESCRIPTION

Inflorescence of this small orchid composed of up to 15-50(70) flowers. Each has a three-lobed lip with crimson red spots, while the sepals and petals are red-brown. The specific epithet *ustulata* means “slightly burned”, which refers to the dark appearance of the flower spike.





## HABITAT

Grasslands, fens, mountain meadows, valleys and wet grasslands throughout central and south Europe.

## DISTRIBUTION

Central and southern Europe, reaching southern Sweden in the north and extending to the Caucasus and the Ural Mountains in the east.

## THREATS

Populations of this orchid have suffered large declines due to habitat destruction and intense agriculture. It requires unfertilised and unploughed grasslands.

## PROTECTION

CITES Washington Convention—Annex II.

EU Wildlife Trade Regulation—Annex B.

IUCN Red List of Threatened Species—Least Concern.



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Text: ŽIVA FIŠER

Photo: VITOMIL KRŽIŠNIK (1), JOŠT STERGARŠEK (2)

# Asclepius' spider orchid

*Ophrys aesculapii* Renz

## DESCRIPTION

Up to 14 flowers formed by yellowish-green sepals, and upper petals and a brown median lip usually bearing an H-shaped pattern and a yellow margin.

## HABITAT

Open woodland, scrub or phrygana.

## DISTRIBUTION

Endemic to Greece.





## THREATS

Residential and commercial development (housing and urban areas; tourism and recreation areas), biological resource use (plant gathering).

## PROTECTION

CITES Washington Convention—Annex II.

EU Wildlife Trade Regulation—Annex B.

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Text: KATERINA GOULA, PANAYIOTIS DIMITRAKOPOULOS, THEODORA PETANIDOU

Photo: KATERINA GOULA



# Reinhold's bee-orchid

*Ophrys reinholdii* H. Fleischm.

## DESCRIPTION

Plant with 2–8 flowers. Sepals and upper petals pink, flushed with green. Median lip blackish-purple with hairy lateral lobes and usually white pattern in the center.

## HABITAT

Woodland, phrygana, grassland and olive groves.

## DISTRIBUTION

From Albania to Iran, through Greece, Turkey, Cyprus and Iraq.





## THREATS

Residential and commercial development (housing and urban areas; tourism and recreation areas), biological resource use (plant gathering), human intrusions and disturbance (work and other activities).

## PROTECTION

CITES Washington Convention—Annex II.

EU regulation of trade of fauna and flora—Annex B.

IUCN Red List of Threatened Species—Least Concern (Europe).



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Text: KATERINA GOULA, PANAYIOTIS DIMITRAKOPOULOS, THEODORA PETANIDOU

Photo: KATERINA GOULA

# Anatolian orchid

*Orchis anatolica* Boiss.

## DESCRIPTION

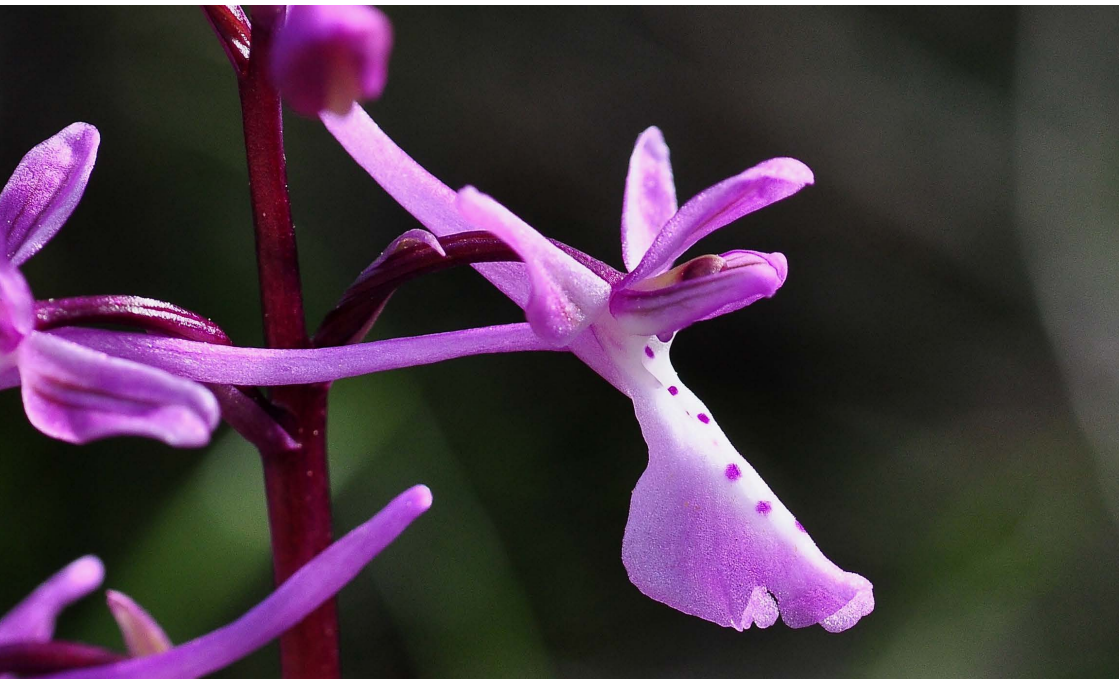
Orchid with a lax inflorescence and spotted leaves. Flowers pink, except for the whitish, purple-spotted center.

## HABITAT

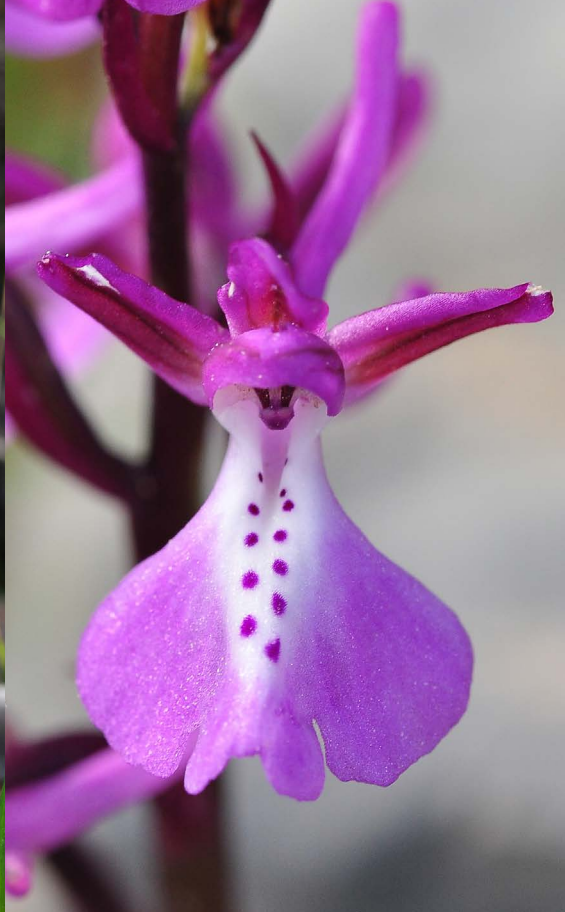
Open places in maquis, scrub, phrygana or coniferous woodland.

## DISTRIBUTION

East Mediterranean region, extending from Greece to Iran.







## THREATS

Residential and commercial development (housing and urban areas; tourism and recreation areas), agriculture (annual and perennial non-timber crops), biological resource use (plant gathering; logging and wood harvesting).

## PROTECTION

CITES Washington Convention—Annex II.

EU regulation of trade of fauna and flora—Annex B.

IUCN Red List of Threatened Species—Least Concern.

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Text: KATERINA GOULA, PANAYIOTIS DIMITRAKOPOULOS, THEODORA PETANIDOU

Photo: KATERINA GOULA

# Greater butterfly-orchid

*Platanthera chlorantha* (Custer) Rchb.

## DESCRIPTION

Greater butterfly-orchid is a herbaceous perennial growing up to 50 cm. The shoot with two large, elliptical, shiny leaves at the base and smaller, lanceolate leaves on the upper part. The flowers greenish-white, with spreading sepal and petals, narrow and undivided labellum and long spur form a loose spike. Anthers widely spaced, close to each other at the top. Blooms from May to July.

## HABITAT

The greater butterfly-orchid grows in forests, scrubs and grassland on calcareous soils.

## DISTRIBUTION

It occurs in Europe, northern Africa and Turkey.





## **DANGER**

Forest management and the direct uprooting of plants are a threat to the species.

## **PROTECTION**

CITES Washington Convention—Annex II.

IUCN Red List of Threatened Species—Least Concern (Europe).

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Text: ANNA CWENER

Photo: ANNA CWENER, KRZYSZTOF WOJCIECHOWSKI





# Long-lipped tongue-orchid

*Serapias vomeracea* (Burm.f.) Briq.

## DESCRIPTION

Species usually 20-40 cm high, inflorescence bears 3-10 reddish flowers and conspicuous lanceolate bracts. Species highly variable in colour and shape.

## HABITAT

Dry and wet meadows, pastures, thickets, clearings and scrubland, frequently on clayey substrate, from full light to partial shade.

## DISTRIBUTION

Mediterranean-Atlantic distribution.

## THREATS

The populations are decreasing in parts of its range due to habitat loss but can also increase due to new habitat colonisation.

## PROTECTION

CITES Washington Convention—Annex II.

EU regulation of trade of fauna and flora—Annex B.

IUCN Red List of Threatened Species—Least Concern (Europe).





Text: ŽIVA FIŠER

Photo: PETER GLASNOVIĆ (1), JOŠT STERGARŠEK (2)

# Autumn lady's-tresses

*Spiranthes spiralis* (L.) Chevall.

## DESCRIPTION

Slender orchid with small, white to yellowish-green flowers, arranged in a helicoid inflorescence.

## HABITAT

Sunny places in open coniferous woodland, maquis and olive groves.

## DISTRIBUTION

Europe, eastwards to Iran and southwards to North Africa.







## THREATS

Residential and commercial development (housing and urban areas; tourism and recreation areas), agriculture (annual and perennial non-timber crops), biological resource use (plant gathering), human intrusions and disturbance (work and other activities), natural ecosystem modifications, pollution (agricultural and forestry effluents).

## PROTECTION

CITES Washington Convention—Annex II.

EU regulation of trade of fauna and flora—Annex B.

IUCN Red List of Threatened Species—Least Concern (Europe).

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Text: KATERINA GOULA, PANAYIOTIS DIMITRAKOPOULOS, THEODORA PETANIDOU

Photo: KATERINA GOULA



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