

National flagship CITES plant species across Europe



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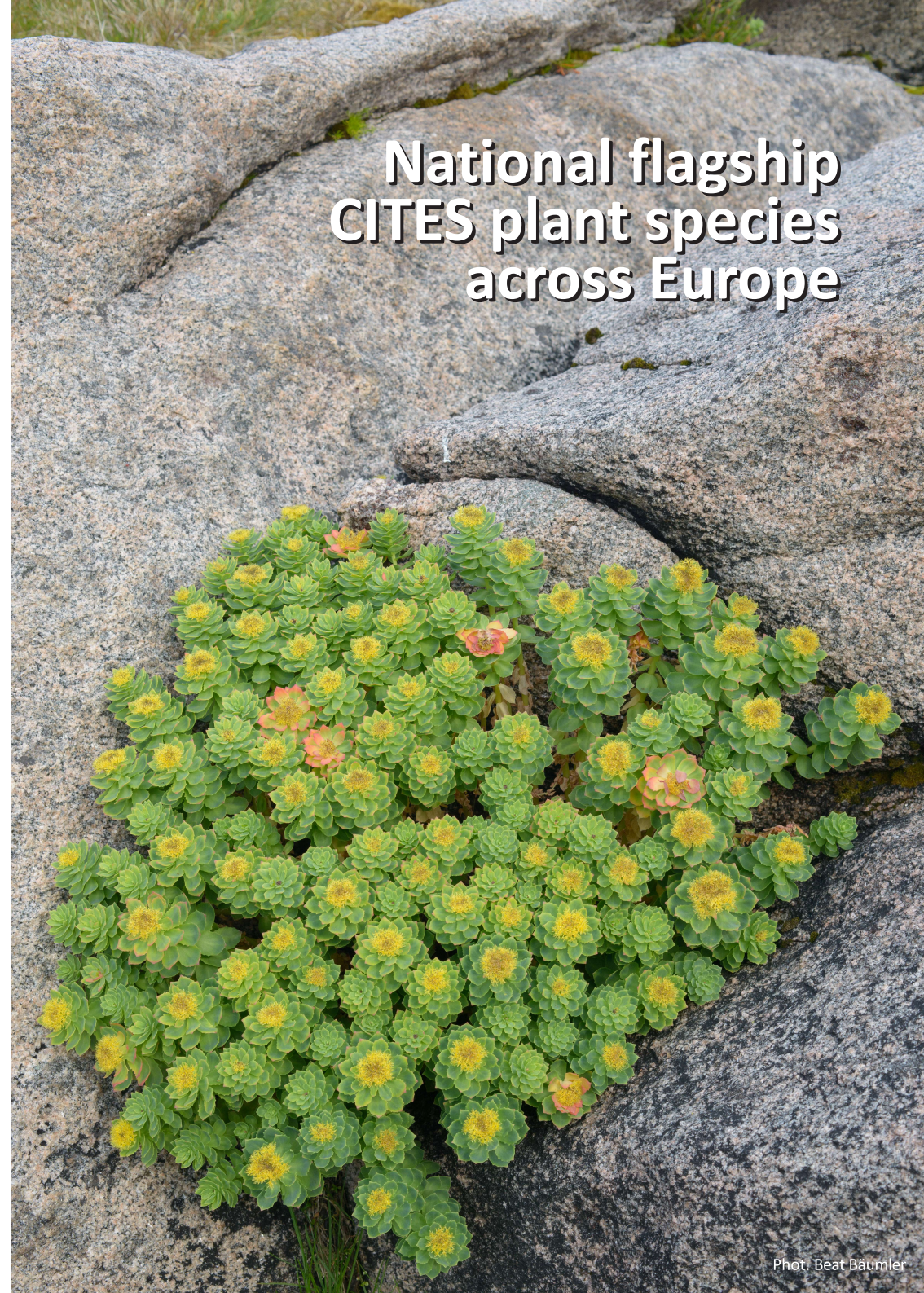
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The Washington Convention is one of the most powerful international treaties supporting protection of plant and animal species endangered by overexploitation. Such species occur not only in the richest hotspots and centres of biological diversity, but also in places with less various flora and fauna, what is connected both with climatic conditions as well as development of human civilisation. Also uses for ethnobotanical, medicinal and cultural purposes contribute to their rarity. Therefore it is important to stress a significance of taxa included in the Appendices of the CITES Convention also for the European countries, where they are represented mainly, but not only, by orchids. These species embody not only the floral diversity of each country, but they are also the examples of its geological and natural history, as well as human influence on their populations.

Representatives of European countries were invited to create this booklet. 21 countries took part in this project and 21 plants, that can be considered as national flagship CITES plant species, were selected. These chosen species are special for the countries they represent, as it is described by the naturalists from each of them.

We hope that the examples presented in this booklet will show, how beautiful and vulnerable our nature is and that we are responsible for its protection and conservation for future generations.

We would like to express our sincere thanks to all the Authors of the texts and photos, for the effort put into creating this booklet.

Alicja Kolańska and Justyna Wiland-Szymańska

Late spider orchid

Ophrys holosericea (Burm.f.) Greuter subsp. *holosericea*

DESCRIPTION

Perennial plant 10 to 40 cm high. Leaves mostly in a rosette, ovate-elliptic. Inflorescence lax, 3 to 7-flowered. Sepals white to pink, with a green midrib; lower petal (the lip) ca. 12 mm long, brownish, with a pattern of yellow, silver or light red; tip with a forwards-projecting small greenish appendage.

HABITAT

Mesic and dry grasslands on neutral or basic soil.

DISTRIBUTION

Europe (mostly France, Italy, Germany, Switzerland), extending to Middle East.



1

THREATS

Together with other species of Orchids, Late Spider Orchid has declined in the second half of the twentieth century. It is threatened by habitat loss and fragmentation, due to shrub encroachment in formerly sheep grazed grassland. It is also threatened by eutrophication, and habitat destruction.

PROTECTION

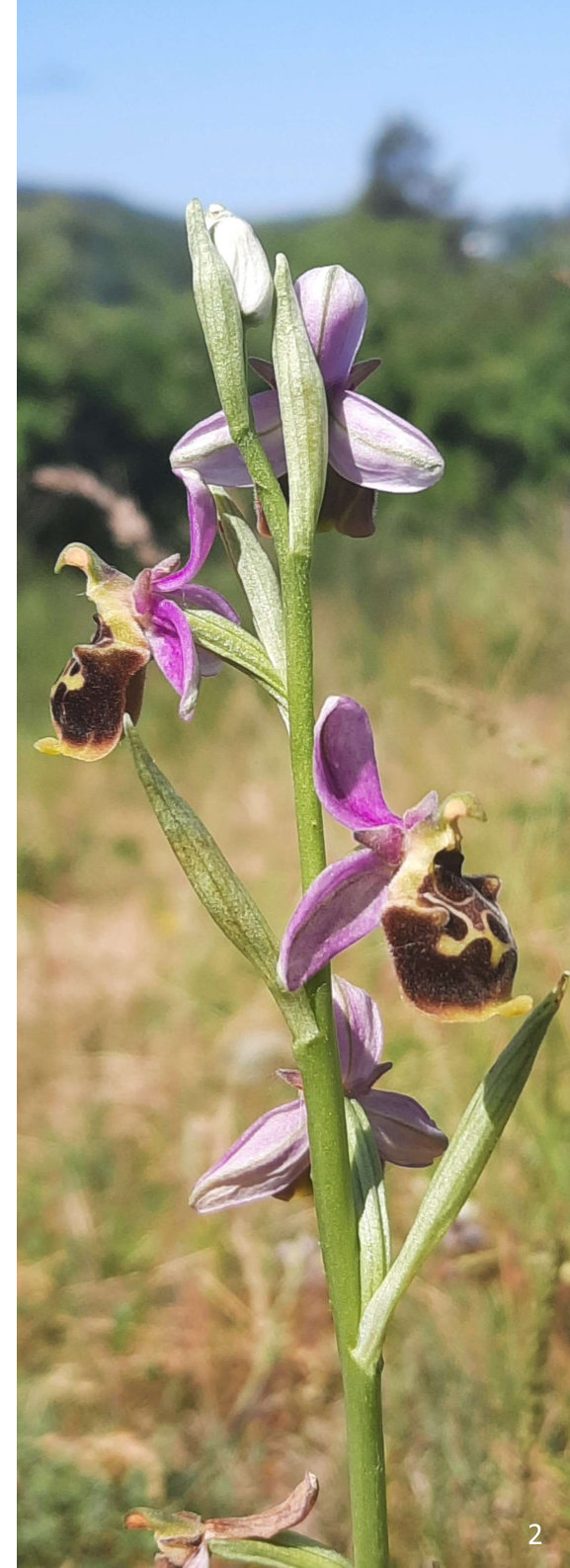
CITES Washington Convention – Annex II.

Strictly protected by the Belgian law on Nature Conservation (threatened species in the Walloon Region) (Annex VIb).

FLAGSHIP CITES PLANT SPECIES FOR BELGIUM

because Belgium represents the NW limit of the species' distribution range in Europe. Populations of late spider orchid occur in a habitat of high conservation value (dry *Bromus erectus* grasslands on limestone soil) that has experienced dramatic decrease in surface, and fragmentation over the last century. Contrary to other orchid species, *Ophrys holosericea* shows only low colonizing ability of new habitats and limited ecological plasticity.

Text: Pierre Meerts
photos: 1 - Eric Walravens,
2 - Pierre Meerts



2

Fly orchid

Ophrys insectifera L.

DESCRIPTION

This species reaches 15 - 60 cm in height. It is a slender plant, with narrow upright leaves. A flower spike may carry 1 - 15 flowers, which have yellow-green sepals, very reduced, dark brown/black petals resembling the antennae of an insect and a long, narrow, lobed labellum, which is dark in color, varying from maroon to black and on which there are two glossy depressions known as 'pseudo-eyes' as well as an iridescent blue/grey patch evolved to resemble an insect's glistening wings. There is a rare, yellow-flowered form. This species often forms colonies of up to 10 plants, but despite this they remain difficult to find because the drab coloring blends in so well with the surrounding grass and other plants. Flowering time is from April to July.

HABITAT

The plant favors sites with damp, pavements turloughs (seasonal lakes), calcareous, unimproved soil. It can be found growing in beech woodlands, on forest edges, in shrubs, on limestone pavement, limestone grassland, in chalk pits and wet meadows, on cliffs as well as abandoned agricultural lands, at an altitude of 100 - 1.000 meters above sea level.



DISTRIBUTION

It is native to Europe, growing further north than most other species in the genus *Ophrys*, in Scandinavia, Finland and the Baltic states, west Russia and as far south as Greece and Spain in Mediterranean region.

THREATS

Habitat destruction by unplanned urbanization, natural successions in open habitat, underground fires. Also, a special threat is the disappearance of insects adapted for its pollination.

PROTECTION

CITES Washington Convention – Annex II.
IUCN Red List of Threatened Species – Least Concern (Global, Europe).
Listed in the red books of several countries.

FLAGSHIP CITES PLANT SPECIES FOR BOSNIA AND HERZEGOVINA may be a symbol of the perfect symbiosis of two species, as well as of the need for holistic nature protection, because as a species pollinated as a result of pseudocopulation, it shows that for its continued existence it is necessary to protect not only its habitats, but also its pollinators.

Text and photos: Dalibor Ballian



Sword-leaved helleborine

Cephalanthera longifolia (L.) Fritsch

DESCRIPTION

Being up to two cm long, the white inflorescences of *C. longifolia* are the largest among Estonian native orchids. The upright leafy stems of the *C. longifolia* are usually 20–50 cm. The leaves of the plant are long and strong, and have a strong sharp peak (hence also the common name).

HABITAT

Calcareous grasslands, wooded meadows, traditionally grazed semi-open woodlands and forest edges.

DISTRIBUTION

Europe with southern-most populations in Northern Africa, northern range in south of Scandinavia and Baltics, and eastern-most populations in Iran and Himalayas.

THREATS

The main threats are related to the loss of habitats, such as the abandonment and overgrowth of pastures and meadows by shrubs and trees, and real estate development on former calcareous grasslands.

PROTECTION

CITES Washington Convention – Annex II.

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

The species was included in the list of protected species during the adoption of the first Estonian Nature Conservation Act in 1936. The species is designated as vulnerable in Estonian Red List and belongs to protection category II.

Unfortunately, the situation has worsened over the past 10 years.

FLAGSHIP CITES PLANT SPECIES FOR ESTONIA because *C. longifolia* with its majestic white flowers illustrates the fate of numerous other species, whose persistence has increasingly been threatened by the loss of traditionally managed grasslands.

Text: Tsipe Aavik, Tiiu Kull, photos: Arto-Randel Servet





Lapland marsh-orchid

Dactylorhiza lapponica (Laest. ex Hartm.) Soó

DESCRIPTION

Perennial grass species with distinctive lobed tubers and a height of c. 10-25 cm. Upper part of the hollow stalk is dark reddish-brown. There are 5-15 purple flowers with dark patterned petals. Leaves are narrow with large dark dots on top and blue-green-greyish underside.

HABITAT

Calcareous fens and other peatlands.

DISTRIBUTION

Fennoscandian Lapland and Central European Alps.

THREATS

Ditching and draining of wetlands, peat extraction, mining, and potential to crossbreed with other *Dactylorhiza* sp.



PROTECTION

CITES Washington Convention – Annex II.

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

Lapland marsh-orchid is taxonomically problematic as it has also been described as a subspecies of both *D. majalis* and *D. traunsteineri*.

FLAGSHIP CITES PLANT

SPECIES FOR FINLAND as it represents rare flora specialized in threatened habitat type of calcareous fens found especially in Central Finnish Lapland. The species and its equally beautiful congeners form an enigmatic group that tend to be difficult to describe in the means of classic alpha taxonomy and hence pose a challenge to scientists.



Text: Marko Hyvärinen
photos: Jouko Rikkinen

Ruthei's marsh orchid

Dactylorhiza ruthei (M.Schulze ex Ruthe) Soó

DESCRIPTION

Slender, 25-50 cm, stem hollow, 4-6 light green and unspotted leaves, up to 2 cm broad, steeply upright, broadest in the middle or above. Inflorescence short cylindrical, bracts longer than the flowers, flowers pale pink to pale purple, three-lobed lip with broad central lobe, usually without markings.

HABITAT

Seaside meadows and pastures with occasional salt water influence and on over-sanded beach embankments.

DISTRIBUTION

Endemic in North-Eastern Germany at the Baltic Sea (Usedom).

THREATS

Low number of populations, population size, tourism, excavation by hobby gardeners, eutrophication and following emergence of reed, abandonment.

PROTECTION

CITES Washington Convention - Annex II.

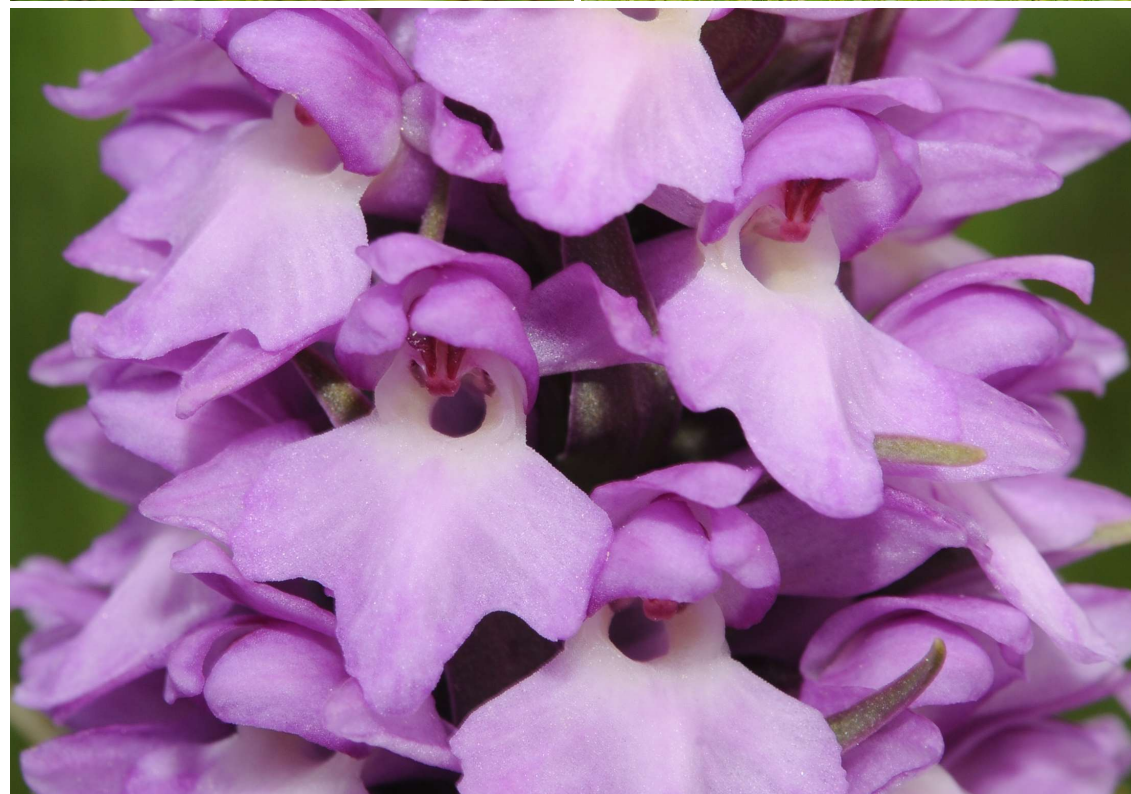
EU Wildlife Trade Regulation – Annex B.

IUCN not listed (local endemite).

Red List status: Highly endangered (Germany).

Seed samples are stored at the Dahlem Seed Bank, Botanischer Garten Berlin, plant cultures in the Botanic Gardens Marburg, Berlin and Greifswald.

FLAGSHIP CITES PLANT SPECIES FOR GERMANY because it is an endemic plant of the western Baltic Sea region. The mainly European genus with numerous species which are difficult to distinguish still holds many mysteries for researchers.





The hood-shaped *Cephalanthera*

Cephalanthera cucullata Boiss. & Heldr

DESCRIPTION

Herbaceous perennial orchid, up to 30 cm high, with rather lax inflorescence and cream-whitish to pinkish flowers. Its sepals are acuminate and the petals obtuse, whereas the epichile has usually 4-7 longitudinal ridges of pale-yellowish colour. Its spur is short (1-2 mm long) and obtuse.

HABITAT

Semi-shady sites in mixed forests of kermes oak (*Quercus coccifera*), Mediterranean cypress (*Cupressus sempervirens*) and Cretan maple (*Acer sempervirens*).

DISTRIBUTION

It is a Cretan endemic, mainly occurring on Mt. Idi (Psiloritis) and to a lesser extent on the mountains Dikti and Lefka Ori.

THREATS

It forms small and isolated populations which are seriously threatened by overgrazing (sheep and goats), deforestation, and drought.

PROTECTION

CITES Washington Convention – Annex II.

Bern Convention – Annex II.

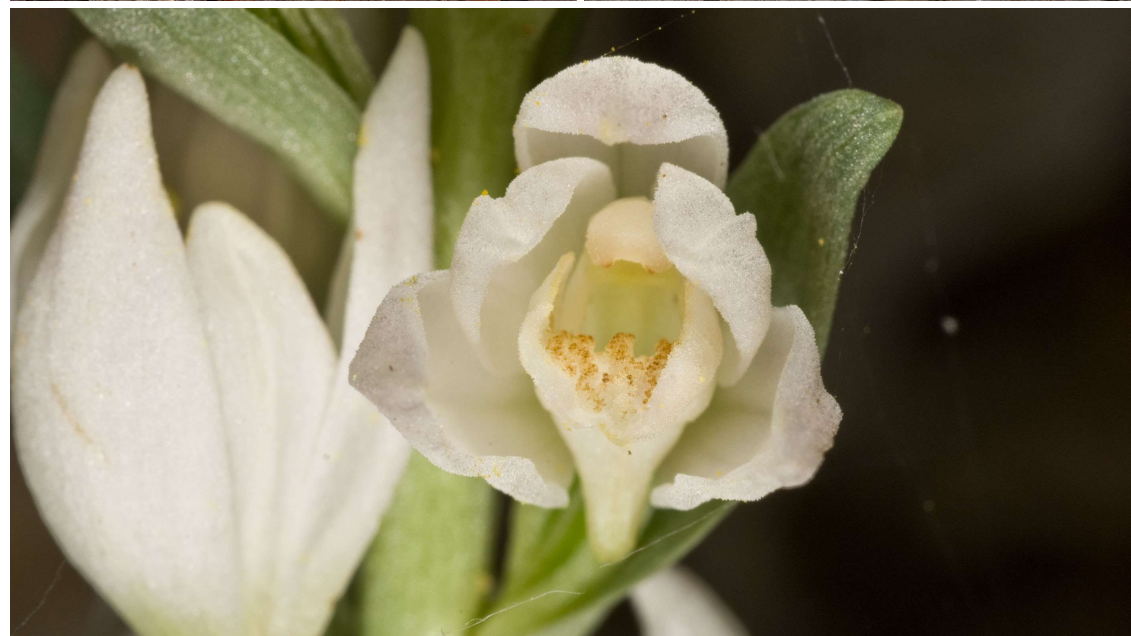
Habitats Directive – Annexes II and IV.

Greek Presidential Decree 67/81.

IUCN Red List of Threatened Species: Vulnerable (Global, Europe, Mediterranean).

A Micro-reserve of the plant has been installed in Lefka Ori (CRETAPLANT project).

FLAGSHIP CITES PLANT SPECIES FOR GREECE because of its beautiful white flowers, its restricted distribution on three historical/mythological Cretan mountains; as a matter of fact, a known population of the plant on Mt. Psiloritis has been characterized as Protected Natural Monument.



Italian orchid

Orchis italica Poir.

DESCRIPTION

Italian orchid has robust appearance, up to 50 cm height, and its dense pink inflorescence make it easily identifiable. It attracts pollinators (hymenopterans) through deception by mimicking the shape and colour of other rewarding flowers.

HABITAT

It grows in rocky areas, abandoned olive groves, lean meadows, scrublands, and bright limestone woodlands, from sea level up to 1300 mt.

DISTRIBUTION

South Europe, west Asia, north Africa. The name refers to the country of origin of the Typus. With a stenomediterranean distribution, *O. italica* is one of the most widespread wild orchids in central-southern Italy.

THREATS

It is mainly threatened by habitat loss resulting from human activities such as urbanization, deforestation, intensive grazing. Additionally, there is collection for ornamental purposes. While populations are declining, it is unlikely that the existing threats will cause a severe decline in the near future, thanks also to past *in-situ* and ongoing *ex-situ* conservation measures.

PROTECTION

CITES Washington Convention – Annex II.

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

It is assessed as "Least Concern" in the Red List of Italian Flora (Rossi et al. 2020) and in the EU Red List of Vascular Plants.

FLAGSHIP CITES PLANT SPECIES FOR ITALY because of its charismatic anthropomorphic flowers, whose deep labellum lobes resemble a human figure. This trait, as well as its abundance and limited morphological variation, makes its identification relatively straightforward. The specific epithet strengthens the choice. Its preference for Mediterranean habitats makes the species a frequently encountered inhabitant of most of the Central-Southern Italian typical landscapes, allowing its observation in the wild quite common, despite its status of threatened and protected species.

Text: Rosa Ranalli, Marta Barberis, Marta Galloni

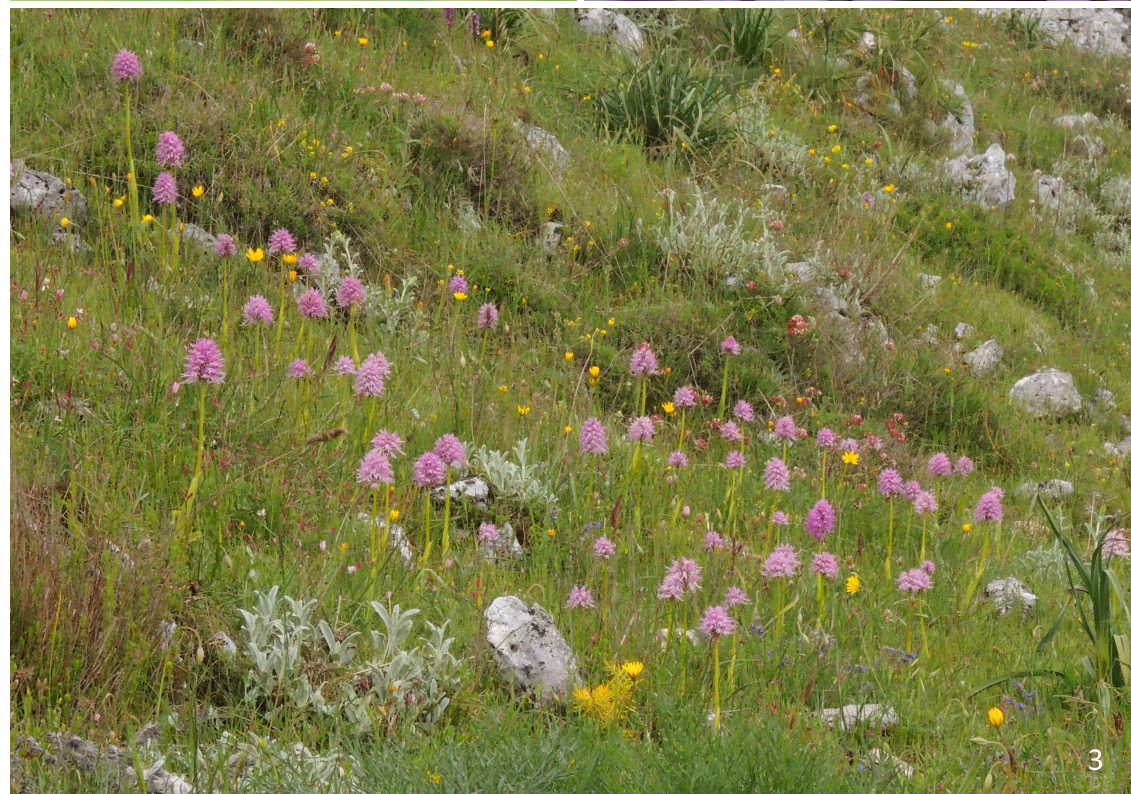
photos: 1 - Luigi Torino, 2 - Sergio Buono, Massimiliano Rempicci, 3 - Andrea Truzzi



1



2



3

Dark red Helleborine

Epipactis atrorubens (Hoffm.) Besser

DESCRIPTION

The plant has a compact rootstalk, often with multiple, fleshy roots, reaching a height of 25-70 cm. It blooms from June to August with upright inflorescences, mostly purple, crowned with densely clustered hairs. The blossoms release vanilla fragrance. The plant primarily reproduces through seeds.

HABITAT

Commonly thrives in pine or birch forests, coastal and inland sand dunes, and river terrace deposits.

DISTRIBUTION

The plant's distribution extends across the whole of Europe to Eastern Siberia through Central Asia.

THREATS

Plant population dwindles from excessive forestation or habitat destruction when weakened erosion processes result in denser herbaceous vegetation. Coastline plants suffer from intense recreation.

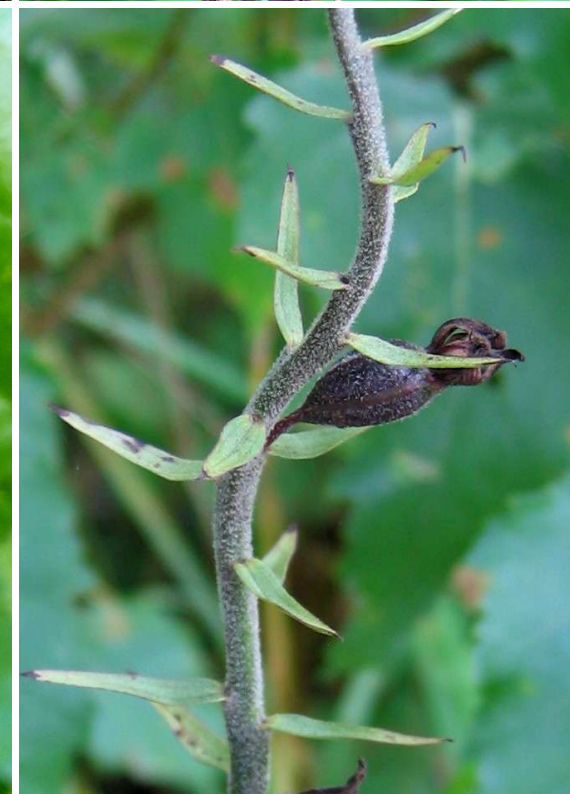
PROTECTION

CITES Washington Convention – Annex II.

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

In the lists of protected plants in Lithuania, this plant was included in 1962. Since 1992, the plant has been included in the Red Book of the Republic of Lithuania.

The orchids stand as **FLAGSHIP CITES PLANT SPECIES FOR LITHUANIA** because they are not only captivating but also predominantly rare in the region.



Green-winged orchid

Anacamptis morio (L.) R.M.Bateman, Pridgeon & M.W.Chase

DESCRIPTION

The combination of violet and green in the flowers, that remind a small helmet make it easy to recognize the green-winged orchid. The lateral petals can have many different colour tints and show apparent green veins.

HABITAT

Nutrient-poor grasslands.

DISTRIBUTION

Central and southern Europe to the Middle East.

THREATS

Habitat loss due to increased fertilisation of formerly barren soils and the disappearance of traditional sheep grazing.

PROTECTION

CITES Washington Convention – Annex II.

IUCN Red List of Threatened Species – Near Threatened (Europe).

EU Wildlife Trade Regulation Annex B.

FLAGSHIP CITES PLANT SPECIES FOR LUXEMBOURG as it is one of the historically most common orchids in Luxembourg that is now acutely under threat of extinction!



Tree spurge

Euphorbia dendroides L.

DESCRIPTION

Perennial hemispherical shrub that can reach heights of 2 m. It is woody and branches profusely from the base and has elongated yellowish-green leaves that can reach 10 cm in length but are often shorter. The plant is deciduous and loses its foliage during the dry season. The flowers are green and inconspicuous.

HABITAT

Open, exposed karstified limestone areas with no shade and shallow, fragmentary soil cover. This species often forms the main habitat framework in areas where it is abundant.

DISTRIBUTION

Native to circum-Mediterranean territories.

THREATS

General habitat loss, especially due to urbanisation and tourist-related development. Clearing of land for bird-trapping. Occasional summer fires.

PROTECTION

CITES Washington Convention – Annex II

IUCN Red List of Threatened Species – Least Concern (Global)

Listed in Schedule III “Animal and plant species of national interest whose conservation requires the designation of special areas of conservation” of the Environment Protection Act of Malta.

FLAGSHIP CITES PLANT SPECIES FOR MALTA because it forms a habitat framework. Its importance is not due to its rarity but because of its ecological importance and relevance.





Monkey orchid

Orchis simia Lam.

DESCRIPTION

Tuberous geophyte perennial. Often spindly, 20-40 (-60) cm tall, stem green, 2-6 basal leaves, near erect to spreading in a rosette, unmarked, whitish-green. Leaves are oblong to lanceolate and also flat. Flowering is from top downwards. The flowers are mostly purplish with a violet-greyish perianth segments converted into a galea and forming a tapering hood. Labellum is 14-16 mm long, longer than wide, with numerous purple spots, divided in three lobes; lateral lobes are linear and obtuse and middle lobe is divided into 2 narrowly linear, obtuse lobules, with very short teeth between them. The ends of the lobes are curled like the "limbs of monkeys". Spur is mostly cylindrical, 1/2 to 3/4 long as the ovary, pointed downwards. Flowering season is March to June.

HABITAT

Full sun to mid – shade on dry, neutral to calcareous substrates. Short, poor grasslands, garrigue, shrub, woodland edges, open woodland, up to 1550 m asl. Grows primarily in the temperate biome.

DISTRIBUTION

Mediterranean-Atlantic, north to southern England and Holland, east to Iran and Turkmenistan. Rather scattered and rare.

THREATS

Low number of populations, population size, habitat endangerment, urbanization, tourism, excavation by hobby gardeners.

PROTECTION

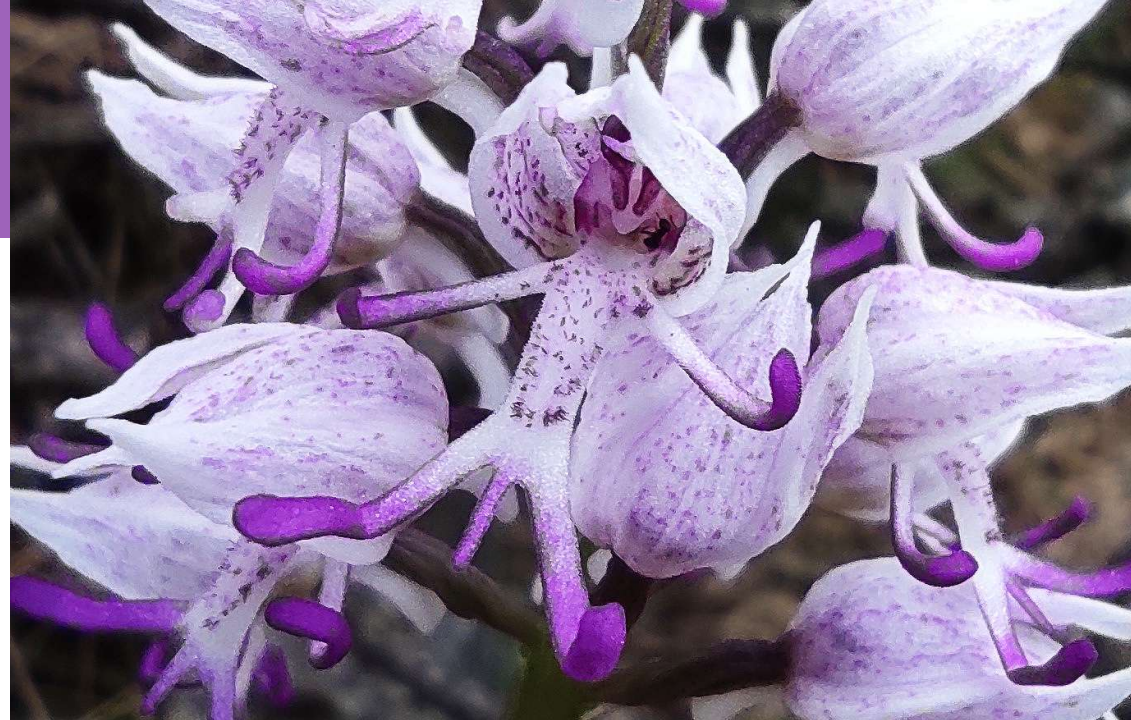
CITES Washington Convention – Annex II.

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

Red List status: There is no Red List of vascular plants in Montenegro.

National level: Protected from 2006 by national legislatives as well as all species of family Orchidaceae.

FLAGSHIP CITES PLANT SPECIES FOR MONTENEGRO because most of the data about Monkey Orchid are very old and refer to coastal areas; most northern locality is on Trebjesa hill near Nikšić where we confirmed it recently. In Croatia, it is found in numerous localities, mostly in coastal region, but treated by IUCN categories as VU (NT). Botanical research was continuous in Montenegro for centuries, but most of the old data are still unconfirmed, so it can be judged that the trend of the species is in decline due to intensive human impact in submediterranean region.





Globe orchid

Traunsteinera globosa (L.) Reichenb.

DESCRIPTION

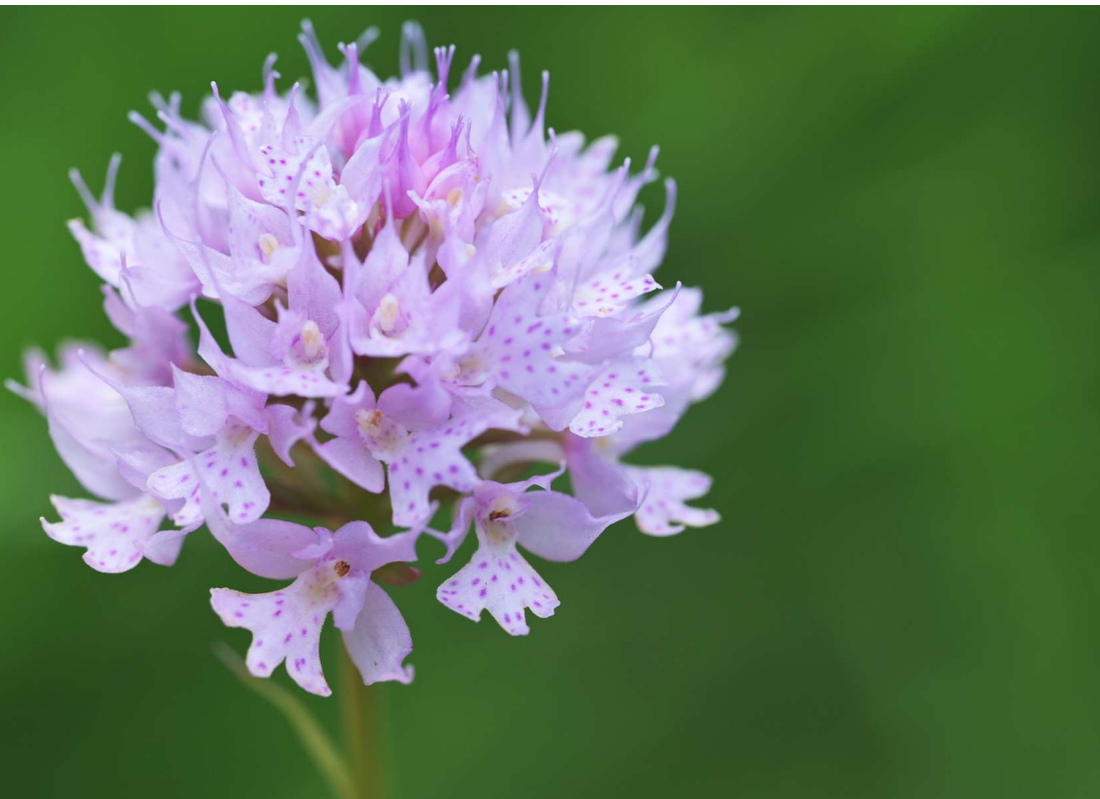
The round headed orchid, or globe orchid, is terrestrial, perennial plant (geophyte) with pinkish-lilac flowers. The lip is three-lobed, with a thin, curved spur. The flower stem does not have a leaf rosette, but scattered leaves on the stem.

HABITAT

On calcareous grasslands and alpine meadows. In medium and high mountain ranges from 1000-3000 m.

DISTRIBUTION

Across Europe and parts of Asia Minor, and is typically found in mountain meadows, from 600 m to 2700 m a.s.l.



THREATS

It is used as an ornamental plant and is collected for medicinal purposes.

PROTECTION

CITES Washington Convention
- Annex II.

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

FLAGSHIP CITES PLANT SPECIES FOR THE REPUBLIC FOR NORTH MACEDONIA

because the globe orchid was recently registered for the first time in this territory (Hristovski et al 2022), on the Korab mountain which is the southernmost one in Europe. It will be added to the national red list and assessed according to IUCN criteria.

Hristovski, Slavco & Ćušterevska, Renata & Chobanova, Marija. (2022). *Traunsteinera globosa* (L.) Rchb. (Orchidaceae), a new species for the flora of the Republic of North Macedonia. 25. 79-82.

Text: Renata Ćušterevska, Slavčo Hristovski, photos: Slavčo Hristovski



Fen orchid

Liparis loeselii (L.) Rich.

DESCRIPTION

Plant with a height 6 - 20 cm, stem usually triangular, at the base usually with two almost opposite, sometimes 3 elliptic-lanceolate shiny leaves, inflorescence with 3 - 25 greenish-white delicate flowers, flowering June - July.

HABITAT

Calcareous and nutrient-poor peaty meadows, dune valleys, in partially flooded calcareous rush bogs, calcareous springs, calcareous tufa.

DISTRIBUTION

Circumboreal species, temperate Western and Central Europe, eastern to western Siberia, Japan, North America.

THREATS

Critically endangered throughout Europe, extinct in many places - sensitive to alterations in the water balance of the site due to groundwater lowering and drainage of bogs and wet meadows, eutrophication, abandonment of mowing, reedification and scrub encroachment.

PROTECTION

CITES Washington Convention – Annex II.

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

Bern Convention – Annex I.

Habitats Directive – Annex II.

In Poland protected by Polish Law and Polish Red Data Book of Plants - Vulnerable.

Red listed and/or protected on a national level in several European countries.

FLAGSHIP CITES PLANT SPECIES FOR POLAND because although it belongs to the orchid family, an endangered and sensitive element of flora, it can be a symbol of adaptation to habitats disturbed and changed by humans. In Poland, it is found in anthropogenic habitats, e.g. in gravel excavations.





Gomes-Pedro spurge

Euphorbia pedroi Molero & Rovira

DESCRIPTION

Sub-succulent shrub that can develop a dendroid habit and reach 2 m tall, but more often exhibits a smaller and rounded habit. It has grayish bark, thick swollen stems which store water, and semi-fleshy, deciduous leaves that fall in the summer. It blooms between April and August.

HABITAT

It is found only in rocky slopes of south-facing limestone sea cliffs, which are subject to a high sun exposure but also to regular mist and strong oceanic winds.

DISTRIBUTION

Endemic from mainland Portugal, only occurring in the surroundings of cape Espichel.

THREATS

Reduced range and area of occupation and continued decline in population size. The population is subject to various pressures, namely the predation of fruits and seeds and the destruction of individuals due to recreational activities. In addition, increased mortality of mature individuals has been observed due to unknown causes.

PROTECTION

CITES Washington Convention - Annex II.

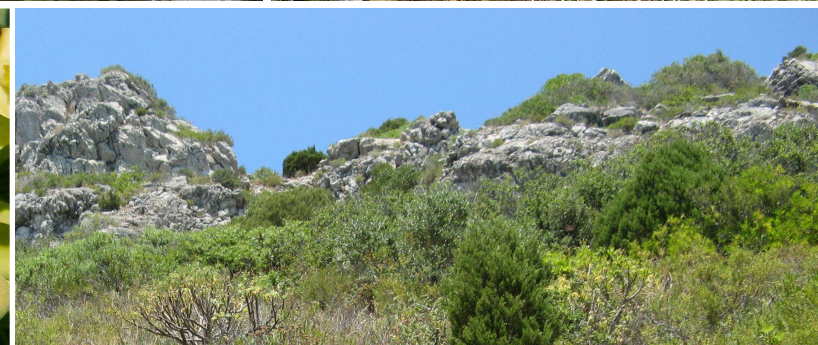
IUCN Red List of Threatened Species – Vulnerable (Global, Europe).

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

Is suggested as **FLAGSHIP CITES PLANT SPECIES FOR PORTUGAL** because it is the only representative of the group of succulent shrubby spurges in mainland Portugal, therefore possessing a high biogenetic value. It represents a rare example of back-colonisation of the mainland by a Macaronesian ancestor.

Text: André Carapeto, João Farminhão

photos: 1, 3 - Ana Júlia Pereira, 2 - Miguel Porto, 4 - André Carapeto



Cornuted woodcock bee-orchid

Ophrys scolopax subsp. cornuta (Steven) E.G.Camus

DESCRIPTION

Perennial plant, with tubers, 10-30 cm tall. Inflorescences with 3-15 flowers. The sepals vary from violet to white. The lateral petals are short, triangular. The labellum is oval, velvety, reddish-brown. At the base has two horn-shaped appendages, almost as long as the labellum.

HABITAT

It grows in partial shade, through the meadows and forest edges, in hilly and mountainous areas.

DISTRIBUTION

The native range of this subspecies is East Italy to Hungary and North Iran.

THREATS

Decline of populations through habitat destruction due to ruderalization and grazing.

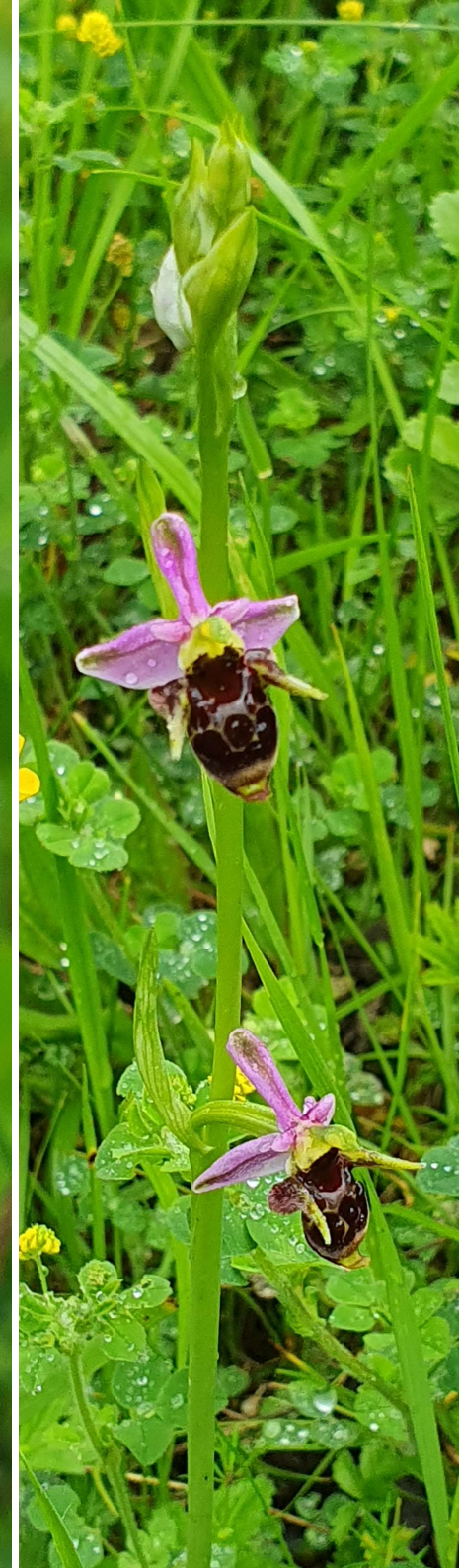
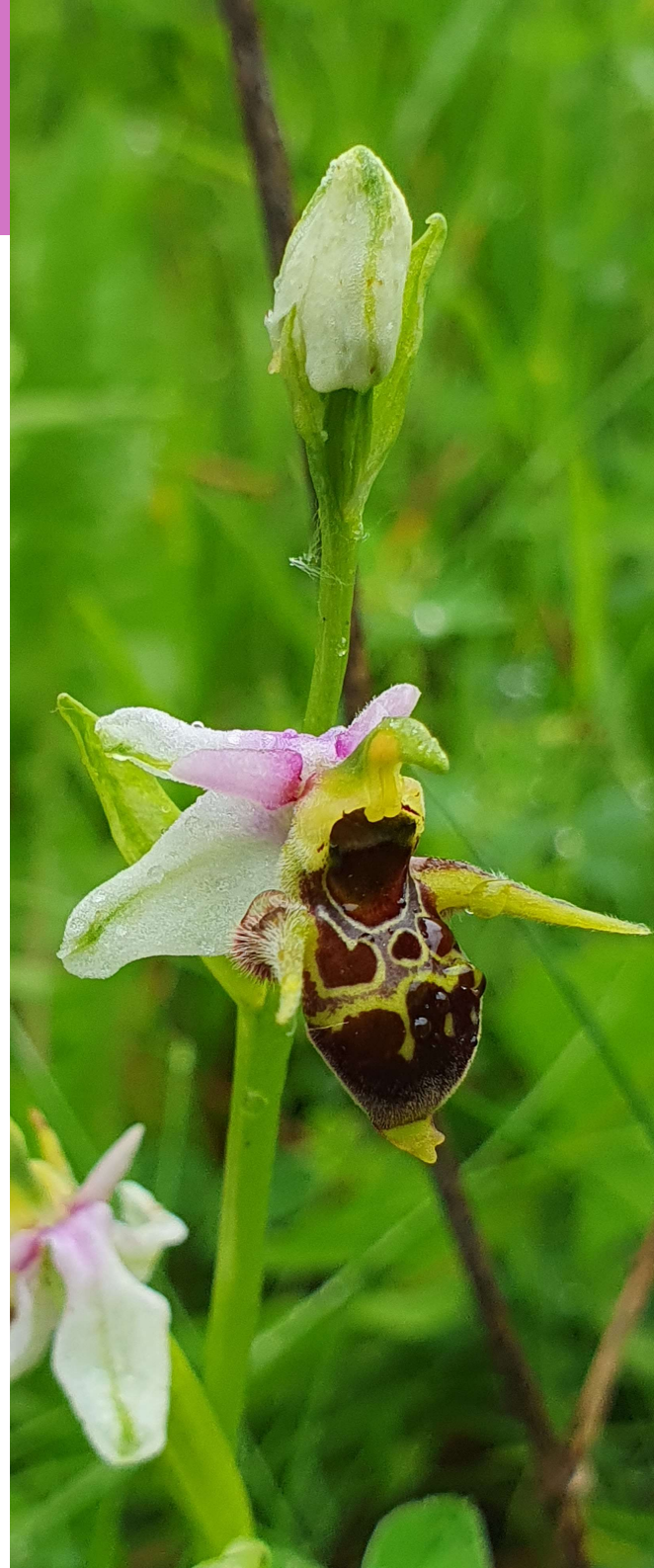
PROTECTION

CITES Convention – Annex II.

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

IUCN Red List of Treated Species – Least Concern (Europe).

FLAGSHIP CITES PLANT SPECIES FOR ROMANIA because this taxon is very rare in the flora of Romania and with very poor populations. It has the status of a critically endangered taxon in the National Red Book. Cornuted bee orchids have complex and delicate interactions with their pollinators, because it use sexual deception to attract them. They are pollinated by solitary bees who are experiencing decreases in their populations.





Marsh helleborine

Epipactis palustris (L.) Crantz

DESCRIPTION

Terrestrial, perennial orchid with horizontal rhizome. Stem 30 (10–90) cm in height, with 4–8 leaves sheathing the base. Racemes usually one-sided with up to 25 small flowers. Flowers are brownish-purple or creamy-green. The fruit is a many-ribbed capsule containing a large number of minute seeds.

HABITAT

Wet to water-saturated habitats, such as marshes, mires, springs, freshwater ponds, seepages, dune slacks and dump grasslands, sometimes within woodlands. Usually in full sun, in habitats with mostly neutral to alkaline groundwater.

DISTRIBUTION

The native range extends from Europe through Turkey, northern Iraq, the Caucasus, northern Iran, to East Siberia and Central Asia.

THREATS

The population has a declining trend, primarily due to habitat degradation: changes in the natural hydrological status, water abstraction, drainage and pollution, mires and marsh degradation, overgrowth of natural habitats, infrastructure and tourism development.

PROTECTION

CITES Washington Convention – Annex II.

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

EU Wildlife Trade Regulation – Annex B.

Red listed and/or protected on a national and regional level in several European countries.

FLAGSHIP CITES PLANT SPECIES FOR SERBIA since it is strictly protected at the national level, and it inhabits several wetland habitat types including calcareous fens, one of the most threatened habitat types in the country.



Kamnik vanilla orchid

Gymnadenia lithopolitanica (Ravnik) Teppner & E.Klein

DESCRIPTION

Small orchid, usually 10 to 20 cm tall, with a pyramidal inflorescence, with pink flowers that change from a darker to a lighter shade with age. The lip is triangular with an upward oriented margin and with a short upward oriented spur. The leaves are short and lanceolate and stand along the spikes almost to the inflorescence. The plant is also characterized by digitate stolons.

HABITAT

Upper montane and subalpine grasslands on carbonate bedrock at elevations between 1500 and 2000 m.

DISTRIBUTION

Kamnik-Savinja Alps in Slovenia, Karavanke Alps between Slovenia and Austria, Koralpe mountains and Styrian Alps in Austria and mount Kanin between Slovenia and Italy.

THREATS

Intensification of grazing, unsuitable management of sky resort surfaces (e.g. stone removal), plant collection.

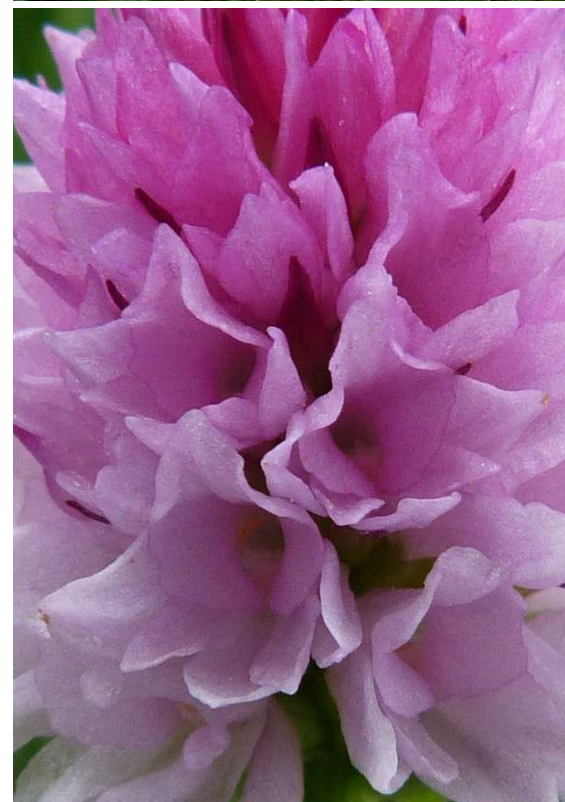
PROTECTION

CITES Washington Convention — Annex II.

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

The species is protected by law in Slovenia, Austria and Italy. In the Slovenian Red List it is listed as rare, in the Austrian Red List as vulnerable.

FLAGSHIP CITES PLANT SPECIES FOR SLOVENIA because it has here the locus classicus and the center of distribution. It is considered one of the flagship species for the conservation of open mountain grassland habitats.



Giant orchid

Barlia robertiana (Loisel.) Greuter

DESCRIPTION

Terrestrial, perennial orchid with two to three globose tubers. Stem 15 to 100 cm. Leaves, 5-10, up to 40 cm long, lower ones arranged in a loose rosette. Racemes at first pyramidal, finally cylindrical. Flowers pinkish paler at the center, darkest to the margins, label up 20 mm long, trilobed.

HABITAT

Open habitats, grassy places, mostly in open scrub, but also on abandoned agricultural lands and, even by roadsides, mainly on calcareous soils.

DISTRIBUTION

Mediterranean basin. It is a dynamic species, and it is believed that its distribution range is expanding northwards due to climate change.

THREATS

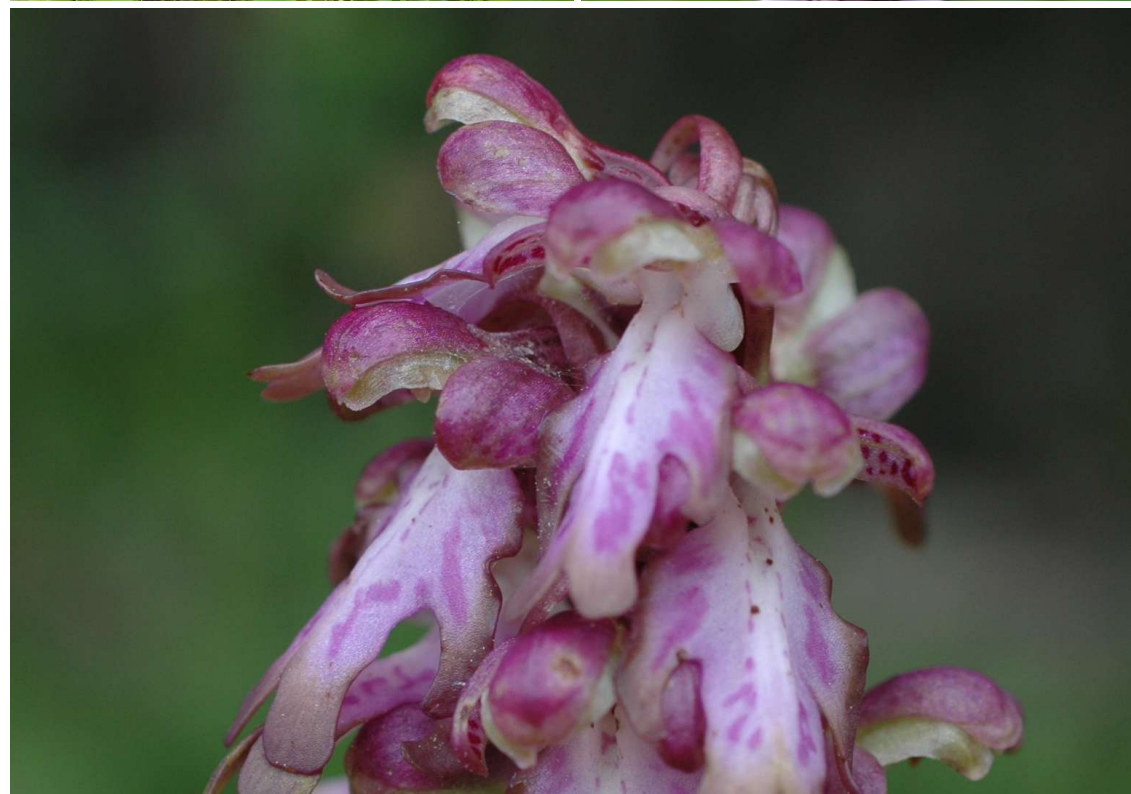
Despite being a species that is increasing its distribution area, it is still scarce in different regions. The showiness of the plant and the flowers make it susceptible to illegal harvesting.

PROTECTION

CITES Washington Convention – Annex II.

IUCN Red List of Threatened Species – Least Concern (Europe, Mediterranean). Red listed and/or protected on a national and regional level in several European countries.

FLAGSHIP CITES PLANT SPECIES FOR SPAIN It is legally protected by several autonomous communities. It is one of the largest and showiest orchids of the Iberian flora. The thick and wide leaves stand out, unusual for terrestrial Mediterranean orchids.





Roseroot

Rhodiola rosea L.

DESCRIPTION

Perennial succulent plant, hairless and glaucous green in colour, with unbranched stems growing up to 40 cm from a rhizome. Leaves are sessile, 1-4 cm long, dense, alternate, with spaced teeth in the upper half. The unisexual flowers have 4 sepals and 4 petals, are yellow and often washed with red.

HABITAT

Humic grasslands, wet meadows and boggy soils, rock crevices, mountain gorges and damp cliff tops; on siliceous soils.

DISTRIBUTION

Holarctic, includes the Arctic regions and the mountainous regions of Eurasia and North America.

THREATS

Commercial harvesting for medicinal use against fatigue, sleep disorders and depression has led to population declines in several range states. Habitat loss and climate change are also threats.

PROTECTION

CITES Washington Convention – Annex II: international trade is regulated for all parts and derivatives except seeds, pollen and finished products packaged and ready for retail trade.

Registered on national red lists and protected regionally or nationally in several range states.

FLAGSHIP CITES PLANT SPECIES FOR SWITZERLAND

In Switzerland, work on the domestication of Roseroot has started in 2005. The resulting 'Mattmark' variety is derived from plants from the Swiss Alps and offers high levels of active compounds.





Pleated snowdrop

Galanthus plicatus M.Bieb.

DESCRIPTION

G. plicatus has a bulb with a subglobose to ovoid, 2-3 x 1.7-2 cm. It is larger than the common snowdrop (*G. nivalis*). Its foliage is broader and characterised by the plication (folding under) of the leaf margin when young. Leaves narrowly oblanceolate to strap-shaped, margins explicative in bud, sometimes only slightly revolute at maturity, 12-17 x 1-1.5 cm at anthesis, to 29-30 x 1.8 cm and upright at maturity, apex obtuse, cucullate, glaucous, often with a paler central band on upper surface. *Galanthus plicatus* is an easily identifiable species of snowdrop, due to the sharp downward fold towards the underside of the leaves. It is this folding and the residual 'fold lines' on the mature leaves that give the plant its name: 'plicatus' means 'pleated'.

HABITAT

Open turf or margins of *Abies* and *Fagus* forest in deep leaf-mould, 45-1100 m.

DISTRIBUTION

Romania, Türkiye, Ukraine.

THREATS

Intensive forestry work; conversion of forests into clearings for wood production and road construction. Unplanned tourism investments, dam investments and open quarry mining operations.

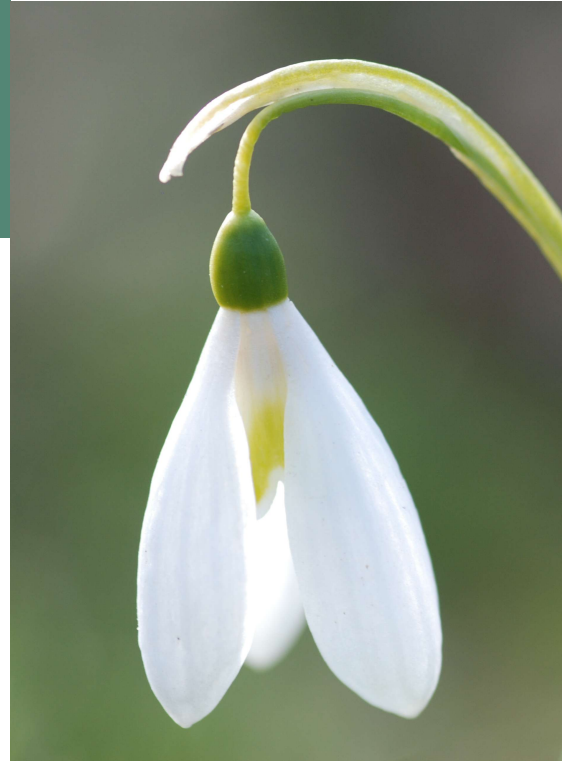
PROTECTION

CITES Washington Convention – Annex II.

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

There are two subspecies: subsp. *plicatus* and subsp. *byzantinus*. The former occurs throughout the natural distribution of the species and has a single marking on each inner perianth segment; the latter is restricted to the extreme part of northwestern Türkiye and has two markings on each inner perianth segment. This snowdrop is related to *G. nivalis* and *G. reginae-olgae*, but is rarely confused with these species and is genetically distinct. Both subspecies hybridise readily in gardens. The distinction between them can become blurred in cultivated material.

FLAGSHIP CITES SUBSPECIES (SUBSP. *BYZANTINUS*) FOR TÜRKIYE as it represents an endemic flora specialized in threatened habitat type of calcareous Oak and *Fagus* forests found especially in Marmara region of Türkiye.



Small white orchid

Pseudorchis albida (L.) Á. & D. Löve

DESCRIPTION

A perennial plant 10–30 cm tall. Lateral roots are long. The stem is ascending, upright, with alternating oblong leaves. The lower leaves are 3–4. Upper leaves, 1 or 2, are much smaller. Inflorescences are up to 7 cm long. The flowers are white and small, sometimes with a yellowish tinge shade.

HABITAT

Wet meadows, crooked woods on sunny areas, grassy slopes in alpine and subalpine belts. Tundra and coniferous forests.

DISTRIBUTION

Holarctic arctic-alpine relict species. Sporadic in almost all mountain areas in the Ukrainian Carpathians.

THREATS

Intensive livestock grazing, unregulated mowing of grass, changes in the hydrological regime in habitats. Populations are usually small — there are from several dozen to 150 individuals in habitats.

PROTECTION

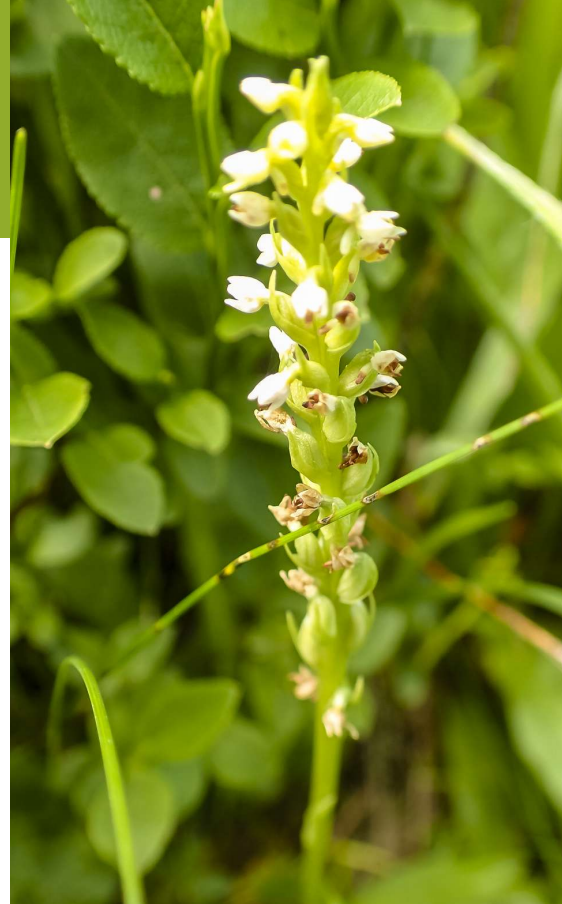
CITES Washington Convention – Annex II.

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

The species listed in the Red Book of Ukraine in the category is vulnerable.

Proposed to the regional Red List of the Ukrainian Carpathians, category — vulnerable. Protected also in Poland and Slovakia.

FLAGSHIP CITES PLANT SPECIES FOR UKRAINE because it is a glacial relic on the northeastern border of the southern part of the distribution area, sensitive to the not sustainable economic development of the territories.





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