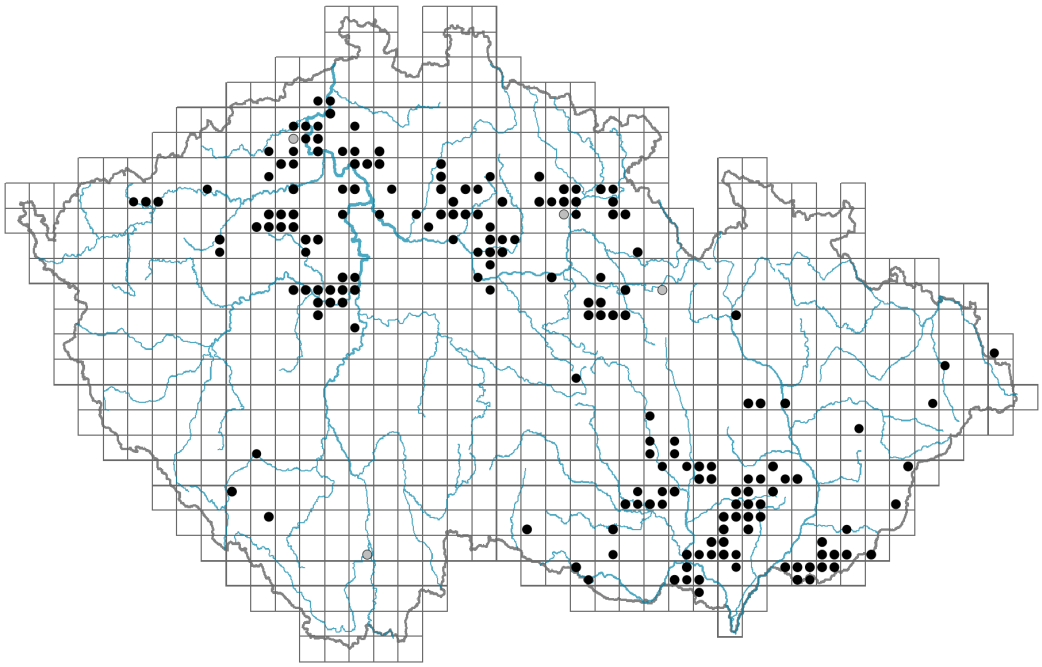
Orchis purpurea

Distribution





Map info

revised records

unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.







Habitus and growth type

Height [m]: **0.4–0.6**
Growth form: **clonal herb**
Life form: **geophyte**
Life strategy: **CSR – competitor/stress-tolerator/ruderal**
Life strategy (Pierce method based on leaf traits): **C/CR**
Life strategy (Pierce method, C-score): **64.5 %**
Life strategy (Pierce method, S-score): **0 %**
Life strategy (Pierce method, R-score): **35.5 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **simple – entire**
Stipules: **absent**
Petiole: **absent**
Leaf life span: **spring green**
Leaf anatomy: **mesomorphic, hygromorphic**

Flower

Flowering period [month]: **May–June**

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz

Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**
Flower colour: **red-violet**
Flower symmetry: **zygomorphic**
Perianth type: **homochlamydeous**
Perianth fusion: **free**
Inflorescence type: **spica**
Dicliny: **synoecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **insect-pollination**



Fruit, seed and dispersal

Fruit type: **dry fruit – capsule**
Fruit colour: **green, brown**
Reproduction type: **mostly by seed/spores, rarely vegetatively**
Dispersal unit (diaspore): **seed**
Dispersal strategy: **Lycopodium (mainly anemochory)**
Myrmecochory: **non-myrmecochorous (b)**



Belowground organs and clonality

Root metamorphosis: **root tuber**
Storage organ: **root tuber**
Type of clonal growth organ: **root tuber**
Freely dispersible organs of clonal growth: **absent**
Shoot life span (cyclicity): **monocyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **sympodial**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **1**
Number of clonal offspring: **2.3**
Lateral spreading distance by clonal growth [m]: **0.01**
Clonal index: **3**



Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **5**
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **5**
Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **0**
Size of the belowground bud bank (root buds excluded): **10**
Depth of the belowground bud bank (root buds exluded) [cm]: **3**
Number of buds per shoot at the soil surface (root buds included): **5**
Number of buds per shoot at a depth of 0–10 cm (root buds included): **5**
Number of buds per shoot at a depth greater than 10 cm (root buds included): **0**
Size of the belowground bud bank (root buds included): **10**
Depth of the belowground bud bank (root buds included) [cm]: **3**



Trophic mode

Parasitism and mycoheterotrophy: **partial or initial mycoheterotroph**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz



Karyology

Chromosome number (2n): **42**
Ploidy level (x): **2**
2C genome size [Mbp]: **10008.48**
1Cx monoploid genome size [Mbp]: **5004.24**
Genomic GC content: **43.2 %**

Taxon origin

Origin in the Czech Republic: **native**





Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6x – transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area (generalist)**
Temperature indicator value: **7 – heat indicator, occurring in relatively warm lowlands**
Moisture indicator value: **4 – transition between values 3 and 5**
Reaction indicator value: **8 – transition between values 7 and 9, occurring mostly in calcium-rich conditions**
Nutrient indicator value: **3 – occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Habitat and sociology

Occurrence in habitats

8 Dry grasslands

8F Thermophilous forest fringe vegetation: **1 – rare occurrence**

11 Heathlands and scrub

11L Tall mesic and xeric shrub: **1 – rare occurrence**

12 Forests

12C Oak-hornbeam forests: **1 – rare occurrence**
12D Ravine forests: **1 – rare occurrence**
12F Limestone beech forests: **2 – optimum**
12H Peri-Alpidic basiphilous thermophilous oak forests: **2 – optimum**
12I Sub-continental thermophilous oak forests: **1 – rare occurrence**
12O Peri-Alpidic pine forests: **1 – rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.1 – taxon occurring both in the forest and open vegetation**
Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.1 – taxon occurring both in the forest and open vegetation**

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.5**

Colonization ability

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz

Index of colonization success (ICS): **2**
Index of colonization potential (ICP): **8**
Optimum successional age [years]: **40**

Distribution and frequency

Floristic zone: **southern temperate, submeridional**
Floristic region: **Europe**
Continentality degree: **5**
Distribution range extension along the continentality gradient: **3**
Elevational belt in the Czech Republic: **lowlands, colline belt**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 123
taxon.data.freq_in_quad: 196

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**
Occurrence frequency in vegetation plots with a cover above 5%: **0 %**
Occurrence frequency in vegetation plots with a cover above 25%: **0 %**
Occurrence frequency in vegetation plots with a cover above 50%: **0 %**
Mean percentage cover in vegetation plots: **1.9 %**
Maximum percentage cover in vegetation plots: **2 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **8**
Number of narrow habitats in which the taxon has its optimum: **2**
Number of broad habitats in which the taxon occurs: **3**
Number of broad habitats in which the taxon has its optimum: **1**

Threats and protection

Red List 2017 (national categories): **C2b – endangered taxon, rare and declining**
Red List 2017 (IUCN categories): **EN – endangered**
Legal protection: **endangered taxon**

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz