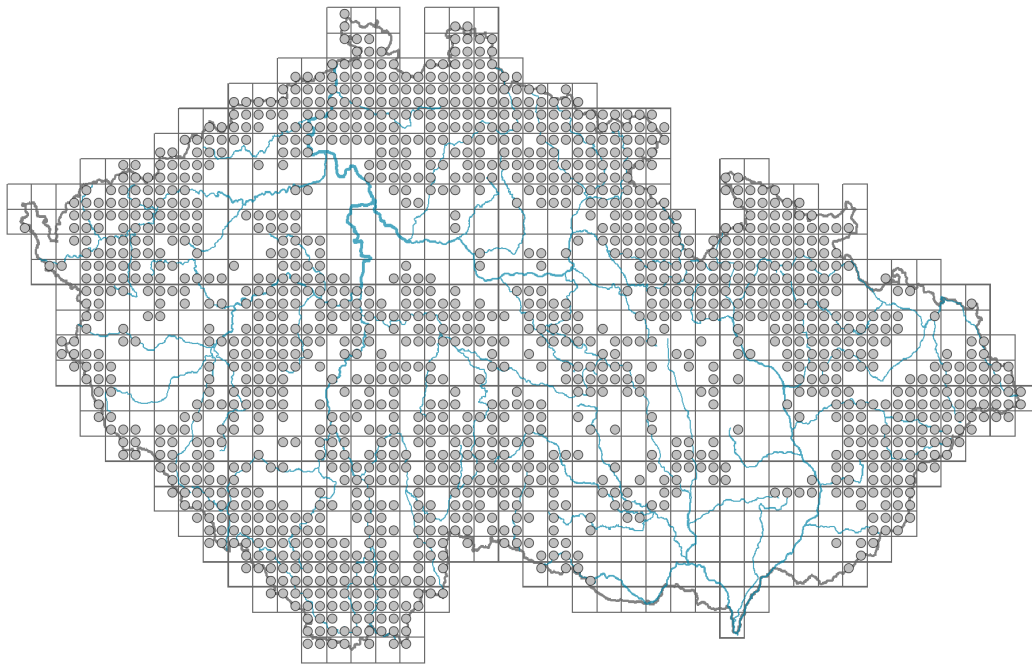


# *Prenanthes purpurea*

## Distribution



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### Map info

● revised records

○ unrevised records

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



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## Habitus and growth type

Height [m]: **0.3-1.6**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CS - competitor/stress-tolerator**

Life strategy (Pierce method based on leaf traits): **R/CR**

Life strategy (Pierce method, C-score): **37.2 %**

Life strategy (Pierce method, S-score): **0 %**

Life strategy (Pierce method, R-score): **62.8 %**

## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic, hygromorphic**

## Flower

Flowering period [month]: **July-September**



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Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **pink-violet, red-violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx reduced, corolla present**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **ligulate**

Calyx fusion: **pappus**

Inflorescence type: **panicula ex anthodiis composita**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

Pollination syndrome: **insect-pollination, geitonogamy**

## Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**

Fruit colour: **brown**

Reproduction type: **by seed/spores and vegetatively**

Dispersal unit (diaspore): **fruit, infrutescence or its part**

Dispersal strategy: **Epilobium (mainly anemochory and autochory)**

Myrmecochory: **non-myrmecochorous (b) nv**

## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

Type of clonal growth organ: **hypogeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

Shoot life span (cyclicality): **monocyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **sympodial**

Primary root: **absent**

Persistence of the clonal growth organ [year]: **4**

Number of clonal offspring: **1**

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): **15**

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): **20**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

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): **15**

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): **20**

Depth of the belowground bud bank (root buds included) [cm]: **4**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**



Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **18**

Ploidy level (x): **2**

2C genome size [Mbp]: **7250.43**

1Cx monoploid genome size [Mbp]: **3625.22**

Genomic GC content: **40.3 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **4 - transition between values 3 and 5**

Temperature indicator value: **4 - transition between values 3 and 5**

Moisture indicator value: **5 - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**

Reaction indicator value: **5 - indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions**

Nutrient indicator value: **6 - transition between values 5 and 7**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.95**

Herb layer disturbance frequency indicator value: **-0.72**

Whole-community disturbance severity indicator value: **0.25**

Herb layer disturbance severity indicator value: **0.08**

Whole-community structure based disturbance indicator value: **0.11**

Herb layer structure-based disturbance indicator value: **0.22**

## Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **2 - optimum**

4 Wetland and riverine herbaceous vegetation

4K Petasites fringes of montane brooks: **1 - rare occurrence**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 - rare occurrence**

5C Alpine and subalpine soft-water springs: **1 - rare occurrence**

8 Dry grasslands

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

11 Heathlands and scrub

11D Subalpine acidophilous *Pinus mugo* scrub: **1 - rare occurrence**



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- 11H Subalpine deciduous scrub: **2 - optimum**  
11R Scrub and pioneer woodland of forests clearings: **2 - optimum**  
12 Forests  
12B Alluvial forests: **1 - rare occurrence**  
12C Oak-hornbeam forests: **1 - rare occurrence**  
12D Ravine forests: **2 - optimum**  
12E Herb-rich beech forests: **2 - optimum**  
12F Limestone beech forests: **2 - optimum**  
12G Acidophilous beech forests: **2 - optimum**  
12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**  
12K Acidophilous oak forests: **1 - rare occurrence**  
12R Acidophilous spruce forests: **1 - rare occurrence**  
12S Basiphilous spruce forests: **2 - optimum**  
12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**  
12V Spruce plantations: **2 - optimum**  
12W Pine and larch plantations: **1 - rare occurrence**

### 13 Anthropogenic vegetation

- 13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**  
13F Herbaceous vegetation of forests clearings and Rubus scrub: **2 - optimum**

### Affinity to the forest environment

Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.1 - taxon occurring mainly in the closed forest**

### Diagnostic taxon

Diagnostic taxon of classes: [LB \*Carpino-Fagetea\*](#)

Diagnostic taxon of alliances: [LBC \*Fagion sylvaticae\*](#), [LBE \*Luzulo-Fagion sylvaticae\*](#)

Diagnostic taxon of associations: [ADC01 \*Salici silesiacae-Betuletum carpaticae\*](#), [ADD05 \*Chaerophyllo hirsuti-Cicerbitetum alpinae\*](#), [LBC04 \*Athyrio distentifolii-Fagetum sylvaticae\*](#), [LBE02 \*Calamagrostio villosae-Fagetum sylvaticae\*](#)

### Constant taxon

Constant taxon of alliances: [ADC \*Salicion silesiacae\*](#)

Constant taxon of associations: [ADC01 \*Salici silesiacae-Betuletum carpaticae\*](#), [ADD05 \*Chaerophyllo hirsuti-Cicerbitetum alpinae\*](#), [LBC04 \*Athyrio distentifolii-Fagetum sylvaticae\*](#), [LBE02 \*Calamagrostio villosae-Fagetum sylvaticae\*](#)

### Ecological specialization indices

- Ecological specialization index for all vegetation types: **5.5**  
Ecological specialization index for non-forest vegetation: **4.3**  
Ecological specialization index for forest vegetation: **5.6**

### Colonization ability

- Index of colonization success (ICS): **4**  
Index of colonization potential (ICP): **3**  
Optimum successional age [years]: **4**

### Distribution and frequency

Floristic zone: **southern temperate, submeridional**

Floristic region: **Europe**

Continental degree: **5**

Distribution range extension along the continentality gradient: **3**

Elevational belt in the Czech Republic: **colline belt, submontane belt, montane belt, subalpine belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 538

taxon.data.freq\_in\_quad: 1460

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **4.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.5 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **2.7 %**

Maximum percentage cover in vegetation plots: **38 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **23**

Number of narrow habitats in which the taxon has its optimum: **11**

Number of broad habitats in which the taxon occurs: **7**

Number of broad habitats in which the taxon has its optimum: **4**

### **Threats and protection**

Red List 2017 (national categories): **taxon is not on the Red List**

Red List 2017 (IUCN categories): **LC(NA) - least concern (taxon is not on the Red List)**

Legal protection: **not protected by law**