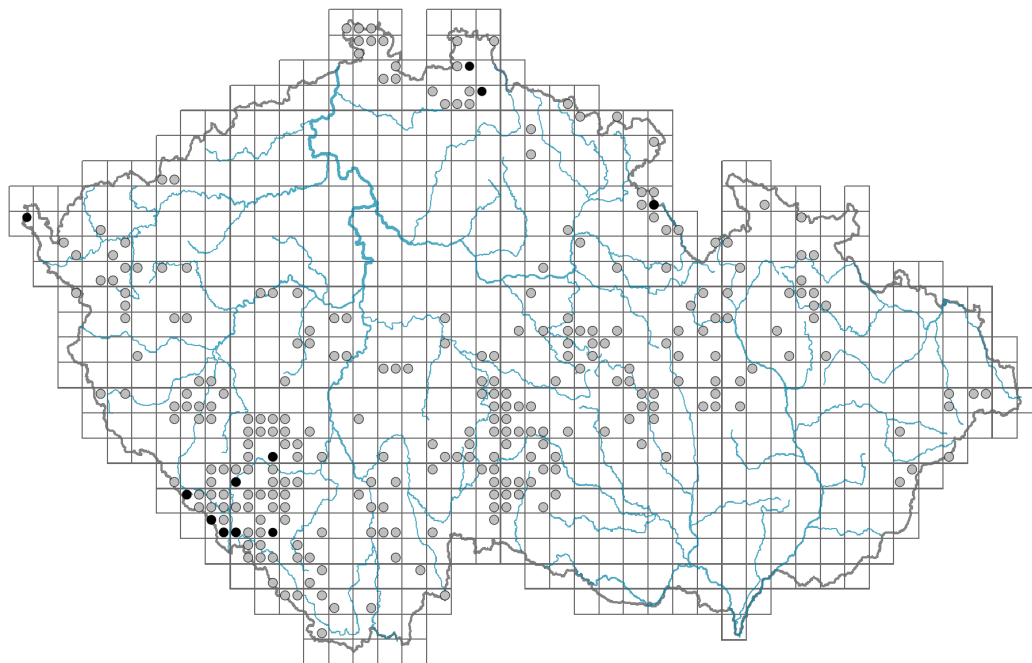


# *Euphrasia nemorosa*

## 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]: **0.05-0.4**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **R - ruderal**

Life strategy (Pierce method based on leaf traits): **SR**

Life strategy (Pierce method, C-score): **1.9 %**

Life strategy (Pierce method, S-score): **44.2 %**

Life strategy (Pierce method, R-score): **53.9 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**

## Flower

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

Flower colour: **white, violet, blue-violet**  
Flower symmetry: **zygomorphic**  
Perianth type: **calyx and corolla**  
Perianth fusion: **fused**  
Shape of the sympetalous corolla or syntepalous perianth: **bilabiate**  
Calyx fusion: **synsepalous**  
Inflorescence type: **racemus**  
Dicliny: **synoecious**  
Generative reproduction type: **facultative autogamy**  
Pollination syndrome: **insect-pollination, selfing**

### **Fruit, seed and dispersal**

Fruit type: **dry fruit - capsule**  
Reproduction type: **only by seed/spores**  
Dispersal unit (diaspore): **seed**  
Dispersal strategy: **Allium (mainly autochory)**  
Myrmecochory: **probably myrmecochorous nv**

### **Belowground organs and clonality**

Shoot life span (cyclicity): **monocyclic shoots prevailing**  
Primary root: **present**  
Bud bank  
Number of buds per shoot at the soil surface (root buds excluded): **0**  
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **0**  
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): **0**  
Number of buds per shoot at the soil surface (root buds included): **0**  
Number of buds per shoot at a depth of 0–10 cm (root buds included): **0**  
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): **0**

### **Trophic mode**

Parasitism and mycoheterotrophy: **root hemiparasite**  
Carnivory: **non-carnivorous**  
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

### **Taxon origin**

Origin in the Czech Republic: **native**

### **Ecological indicator values**

Ellenberg-type indicator values  
Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**  
Temperature indicator value: **5 - moderate heat indicator, occurring from lowland**

**to montane belt, mainly in submontane-temperate areas**

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: **4 - transition between values 3 and 5**

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

4 Wetland and riverine herbaceous vegetation

4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**

5 Vegetation of springs and mires

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**

5F Transitional mires: **1 - rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **2 - optimum**

6B Montane mesic meadows: **2 - optimum**

6C Pastures and park grasslands: **2 - optimum**

6G Vegetation of wet disturbed soils: **2 - optimum**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **2 - optimum**

9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **1 - rare occurrence**

9C Festuca grasslands on acidic sands: **2 - optimum**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **2 - optimum**

13 Anthropogenic vegetation

13C Annual vegetation of trampled habitats: **2 - optimum**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.9**

Ecological specialization index for non-forest vegetation: **5.6**

Colonization ability

Index of colonization success (ICS): **2**

Index of colonization potential (ICP): **9**

Optimum successional age [years]: **75**

## **Distribution and frequency**

Floristic zone: **boreal, northern temperate, southern temperate**

Floristic region: **Europe**

Continentality degree: **4**

Distribution range extension along the continentality gradient: **4**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **191**

taxon.data.freq\_in\_quad: **289**

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: **2 %**

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: **12**

Number of narrow habitats in which the taxon has its optimum: **8**

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

Number of broad habitats in which the taxon has its optimum: **5**

### Threats and protection

Red List 2017 (national categories): **C2t - endangered taxon, declining**

Red List 2017 (IUCN categories): **VU - vulnerable**

Legal protection: **not protected by law**