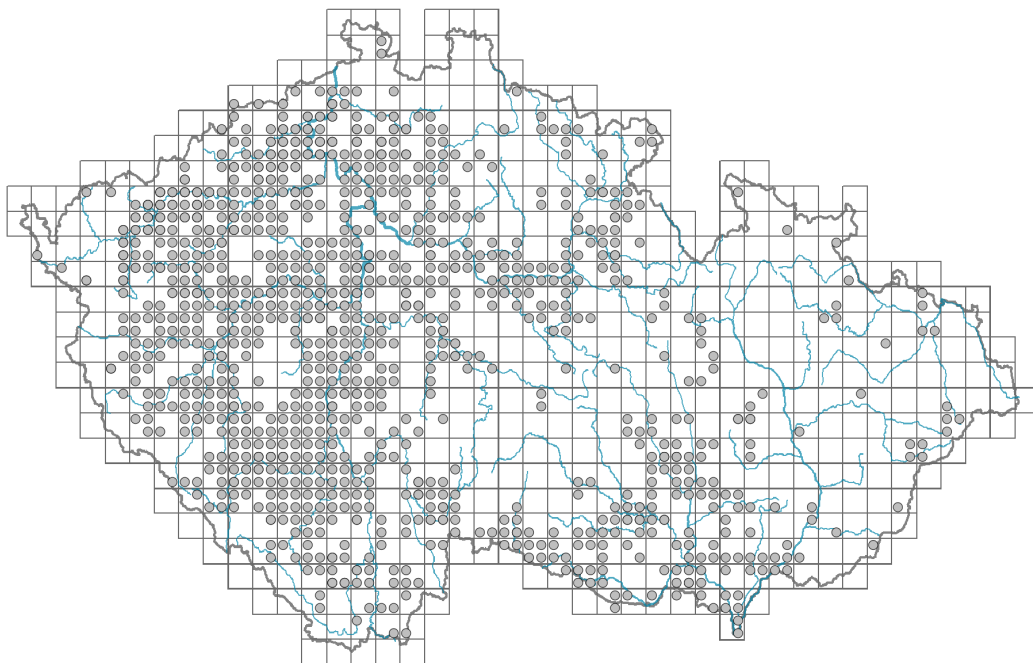


# *Verbascum lychnitis*

## 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]: **1-1.4**

Growth form: **monocarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

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

Life strategy (Pierce method based on leaf traits): **C/CS**

Life strategy (Pierce method, C-score): **78.7 %**

Life strategy (Pierce method, S-score): **12.1 %**

Life strategy (Pierce method, R-score): **9.3 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate, rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**

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

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

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

### **Belowground organs and clonality**

Root metamorphosis: **primary storage root**  
Storage organ: **primary storage root**  
Shoot life span (cyclicality): **dicyclic or polycyclic shoots prevailing**  
Primary root: **present**  
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): **7**  
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): **12**  
Depth of the belowground bud bank (root buds excluded) [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): **7**  
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): **12**  
Depth of the belowground bud bank (root buds included) [cm]: **3**

### **Trophic mode**

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

### **Karyology**

Chromosome number (2n): **26, 32, 34**  
Ploidy level (x): **2**  
2C genome size [Mbp]: **691.72**

1Cx monoploid genome size [Mbp]: **345.86**

Genomic GC content: **36.5 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **7 - half-light plant, mostly occurring at full light, but also in the shade up to about 30% of diffuse radiation incident in an open area**

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

Moisture indicator value: **3 - missing on damp soil**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **5 - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.02**

Herb layer disturbance frequency indicator value: **-0.54**

Whole-community disturbance severity indicator value: **0.29**

Herb layer disturbance severity indicator value: **0.3**

Whole-community structure based disturbance indicator value: **0.41**

Herb layer structure-based disturbance indicator value: **0.45**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1D Mobile calcareous screes: **1 - rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**

8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

8C Narrow-leaved sub-continental steppes: **2 - optimum**

8D Broad-leaved dry grasslands: **1 - rare occurrence**

8E Acidophilous dry grasslands: **2 - optimum**

8F Thermophilous forest fringe vegetation: **2 - optimum**

9 Sand grasslands and rock-outcrop vegetation

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

9C Festuca grasslands on acidic sands: **1 - rare occurrence**

9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

9F Basiphilous vegetation of spring therophytes and succulents: **2 - optimum**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 - rare occurrence**

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

11N Low xeric scrub: **1 - rare occurrence**

## 12 Forests

12C Oak-hornbeam forests: **1 - rare occurrence**

12D Ravine forests: **1 - rare occurrence**

12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**

12I Sub-continental thermophilous oak forests: **1 - rare occurrence**

12J Acidophilous thermophilous oak forests: **1 - rare occurrence**

12K Acidophilous oak forests: **1 - rare occurrence**

12L Boreo-continental pine forests: **1 - rare occurrence**

12O Peri-Alpidic pine forests: **2 - optimum**

12T Robinia pseudoacacia plantations: **1 - rare occurrence**

12W Pine and larch plantations: **1 - rare occurrence**

## 13 Anthropogenic vegetation

13D Perennial thermophilous ruderal vegetation: **2 - optimum**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

## Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

## Diagnostic taxon

Diagnostic taxon of alliances: [KBG \*Euphorbio cyparissiae-Robinion pseudoacaciae\*](#)

Diagnostic taxon of associations: [KBG01 \*Melico transsilvanicae-Robinetum pseudoacaciae\*](#), [THA02 \*Seselio ossei-Festucetum pallentis\*](#), [THD02 \*Erysimo crepidifolii-Festucetum valesiaca\*](#), [THH02 \*Geranio sanguinei-Dictamnenum albae\*](#)

## Constant taxon

Constant taxon of alliances: [KBG \*Euphorbio cyparissiae-Robinion pseudoacaciae\*](#)

Constant taxon of associations: [KBG01 \*Melico transsilvanicae-Robinetum pseudoacaciae\*](#), [THA02 \*Seselio ossei-Festucetum pallentis\*](#), [THD02 \*Erysimo crepidifolii-Festucetum valesiaca\*](#), [THH02 \*Geranio sanguinei-Dictamnenum albae\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.2**

Ecological specialization index for non-forest vegetation: **4.3**

Ecological specialization index for forest vegetation: **4.7**

## Colonization ability

Index of colonization success (ICS): **7**

Index of colonization potential (ICP): **7**

Optimum successional age [years]: **15**

## Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional**

Floristic region: **Europe**

Continental degree: **6**

Distribution range extension along the continentality gradient: **6**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 385

taxon.data.freq\_in\_quad: 916

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.9 %**

Occurrence frequency in vegetation plots with a cover above 5%: **3.9 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.7 %**

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

Mean percentage cover in vegetation plots: **2.6 %**

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: **27**

Number of narrow habitats in which the taxon has its optimum: **9**

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**

Legal protection: **not protected by law**