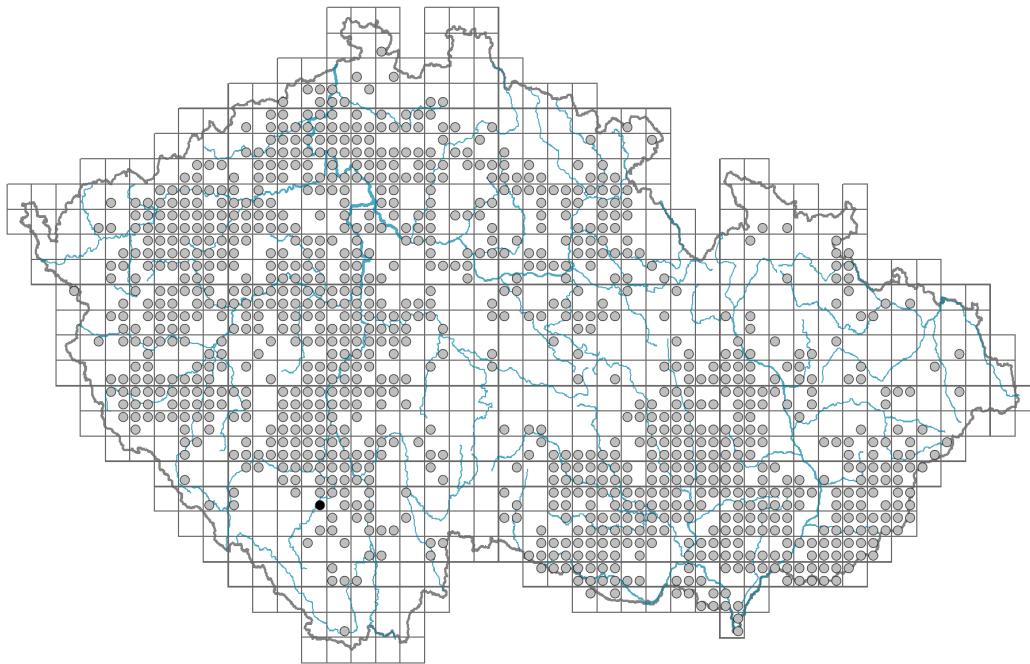


# *Trifolium alpestre*

## 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]: **0.2-0.5**

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

Life form: **hemicryptophyte**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

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

Life strategy (Pierce method, C-score): **22.6 %**

Life strategy (Pierce method, S-score): **70.4 %**

Life strategy (Pierce method, R-score): **7 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **compound - ternate**

Stipules: **present**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**

## Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**  
 Flower colour: **pink, red-violet**  
 Flower symmetry: **zygomorphic**  
 Perianth type: **calyx and corolla**  
 Perianth fusion: **free**  
 Calyx fusion: **synsepalous**  
 Inflorescence type: **capitulum**  
 Dicliny: **synoecious**  
 Generative reproduction type: **allogamy self-incompatibility**  
 Pollination syndrome: **insect-pollination**



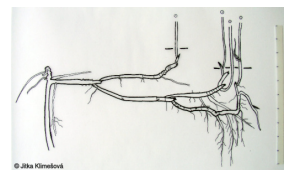
### Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**  
 Fruit colour: **brown**  
 Reproduction type: **by seed/spores and vegetatively**  
 Dispersal unit (diaspore): **seed, fruit, infrutescence or its part**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **non-myrmecochorous (b)**



### Belowground organs and clonality

Shoot metamorphosis: **stolon, pleiocorm**  
 Root metamorphosis: **primary storage root**  
 Storage organ: **stolon, pleiocorm, primary storage root**  
 Shoot life span (cyclicality): **monocyclic shoots prevailing**  
 Branching type of stem-derived organs of clonal growth: **sympodial**  
 Primary root: **present**  
 Position of root buds: **primary root**  
 Role of root buds in life-history of a plant: **regenerative**



### 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): **21**  
 Number of buds per shoot at a depth greater than 10 cm (root buds included): **15**  
 Size of the belowground bud bank (root buds included): **41**  
 Depth of the belowground bud bank (root buds included) [cm]: **8**

### Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**  
 Carnivory: **non-carnivorous**  
 Symbiotic nitrogen fixation: **symbiosis with rhizobia**

## Karyology

Chromosome number (2n): **16**

Ploidy level (x): **2**

2C genome size [Mbp]: **1343.12**

1Cx monoploid genome size [Mbp]: **671.56**

Genomic GC content: **36.8 %**

## 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: **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**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.64**

Herb layer disturbance frequency indicator value: **-0.55**

Whole-community disturbance severity indicator value: **0.23**

Herb layer disturbance severity indicator value: **0.17**

Whole-community structure based disturbance indicator value: **0.25**

Herb layer structure-based disturbance indicator value: **0.33**

## Habitat and sociology

Occurrence in habitats

6 Meadows and mesic pastures

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

6C Pastures and park grasslands: **1 - rare occurrence**

6F Intermittently wet Molinia meadows: **1 - rare occurrence**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **1 - rare occurrence**

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**

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

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

8D Broad-leaved dry grasslands: **2 - optimum**

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

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

## 9 Sand grasslands and rock-outcrop vegetation

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: **1 - rare occurrence**

## 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: **2 - optimum**

## 12 Forests

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

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

12F Limestone beech forests: **1 - rare occurrence**

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

12I Sub-continental thermophilous oak forests: **2 - optimum**

12J Acidophilous thermophilous oak forests: **2 - optimum**

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

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

12O Peri-Alpidic pine forests: **1 - rare occurrence**

12W Pine and larch plantations: **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**

## Diagnostic taxon

Diagnostic taxon of classes: [LC \*Quercetea pubescentis\*](#)

Diagnostic taxon of alliances: [LCA \*Quercion pubescenti-petraeae\*](#), [LCB \*Aceri tatarici-Quercion\*](#), [LCC \*Quercion petraeae\*](#)

Diagnostic taxon of associations: [LCA01 \*Lathyro collini-Quercetum pubescentis\*](#), [LCB02 \*Carici fritschii-Quercetum roboris\*](#), [LCC01 \*Sorbo torminalis-Quercetum\*](#), [LCC02 \*Genisto pilosae-Quercetum petraeae\*](#), [THF02 \*Brachypodio pinnati-Molinietum arundinaceae\*](#)

## Constant taxon

Constant taxon of alliances: [LCB \*Aceri tatarici-Quercion\*](#)

Constant taxon of associations: [LCA01 \*Lathyro collini-Quercetum pubescentis\*](#), [LCB02 \*Carici fritschii-Quercetum roboris\*](#), [LCC02 \*Genisto pilosae-Quercetum petraeae\*](#), [THF02 \*Brachypodio pinnati-Molinietum arundinaceae\*](#)

## Dominant taxon

Dominant taxon of associations: [THG03 \*Viscario vulgaris-Avenuletum pratensis\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.3**

Ecological specialization index for non-forest vegetation: **4.6**

Ecological specialization index for forest vegetation: **5.2**

## Colonization ability

Index of colonization success (ICS): **4**

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **13**

## Distribution and frequency

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

Floristic region: **Europe**

Continentality degree: **5**

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

Elevational belt in the Czech Republic: **colline belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **426**

taxon.data.freq\_in\_quad: **1038**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **6.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.8 %**

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

Mean percentage cover in vegetation plots: **3 %**

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: **26**

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

Number of broad habitats in which the taxon occurs: **6**

Number of broad habitats in which the taxon has its optimum: **3**

## 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**