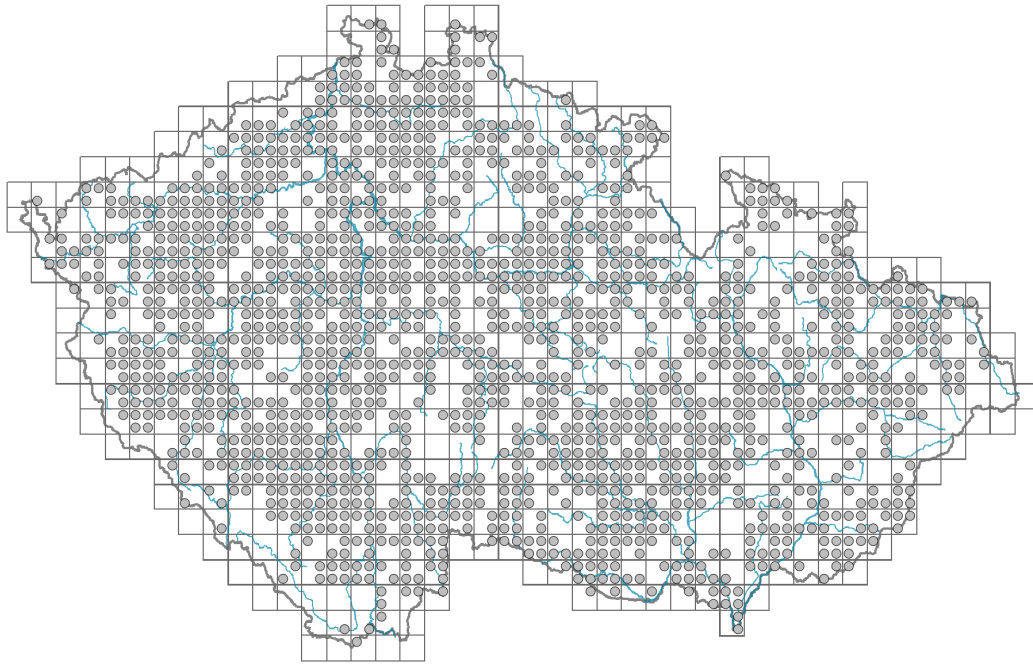


# *Trifolium arvense*

## 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.

## Habitus and growth type

Height [m]: **0.1-0.3**

Growth form: **annual herb**

Life form: **therophyte (hemicryptophyte)**

Life strategy: **SR - stress-tolerator/ruderal**

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

Life strategy (Pierce method, C-score): **11.2 %**

Life strategy (Pierce method, S-score): **58.7 %**

Life strategy (Pierce method, R-score): **30.2 %**



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## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **compound - ternate**

Stipules: **present**

Petiole: **present**

Leaf life span: **overwintering green**

Leaf anatomy: **scleromorphic**

## Flower

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



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

Flower colour: **white, pink**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **synsepalous**

Inflorescence type: **capitulum**

Dicliny: **synoecious**

Generative reproduction type: **facultative autogamy**

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



© Vladimír Motýčka

## Fruit, seed and dispersal

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

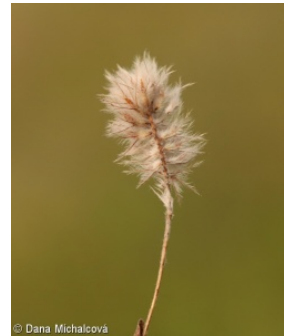
Fruit colour: **brown**

Reproduction type: **only by seed/spores**

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

Dispersal strategy: **Allium (mainly autochory)**

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



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## 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**

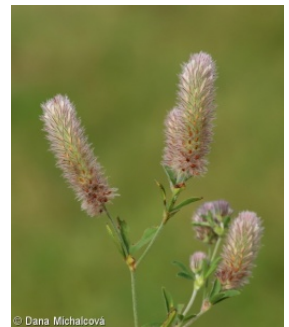
Size of the belowground bud bank (root buds excluded): **0**

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**



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## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **symbiosis with rhizobia**



© Pavel Veselý

## Karyology

Chromosome number (2n): **14**

Ploidy level (x): **2**

2C genome size [Mbp]: **722.46**

1Cx monoploid genome size [Mbp]: **361.23**

Genomic GC content: **36.2 %**



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## 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: **3 - missing on damp soil**

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

Nutrient indicator value: **2 - transition between values 1 and 3**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.31**

Herb layer disturbance frequency indicator value: **-0.09**

Whole-community disturbance severity indicator value: **0.44**

Herb layer disturbance severity indicator value: **0.47**

Whole-community structure based disturbance indicator value: **0.67**

Herb layer structure-based disturbance indicator value: **0.73**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **1 - rare occurrence**

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

3 Aquatic vegetation

3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

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

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**

6 Meadows and mesic pastures

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

6C Pastures and park grasslands: **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**

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

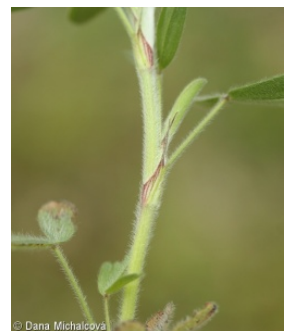
8D Broad-leaved dry grasslands: **1 - rare occurrence**

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

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

9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **2 - optimum**



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

9D Pannonian sand steppes: **2 - optimum**

9E Acidophilous vegetation of spring therophytes and succulents: **2 - optimum**

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**

12 Forests

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

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

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

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

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

13B Annual vegetation of arable land: **1 - rare occurrence**

13C Annual vegetation of trampled habitats: **1 - rare occurrence**

13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**

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

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**

Diagnostic taxon

Diagnostic taxon of classes: [TG Festucetea vaginatae](#)

Diagnostic taxon of alliances: [TFC Armerion elongatae](#), [TGA Festucion vaginatae](#), [THG Koelerio-Phleion phleoidis](#)

Diagnostic taxon of associations: [TFC02 Erysimo diffusi-Agrostietum capillaris](#), [TGA01 Diantho serotini-Festucetum vaginatae](#), [THA04 Helichryso arenariae-Festucetum pallentis](#), [THG01 Potentillo heptaphyllae-Festucetum rupicolae](#), [THG02 Avenulo pratensis-Festucetum valesiaca](#), [THG03 Viscario vulgaris-Avenuletum pratensis](#), [XBJ03 Plantagini arenariae-Senecionetum viscosi](#)

Constant taxon

Constant taxon of classes: [TG Festucetea vaginatae](#)

Constant taxon of alliances: [TFC Armerion elongatae](#), [TGA Festucion vaginatae](#), [THG Koelerio-Phleion phleoidis](#)

Constant taxon of associations: [TFC02 Erysimo diffusi-Agrostietum capillaris](#), [TGA01 Diantho serotini-Festucetum vaginatae](#), [THA04 Helichryso arenariae-Festucetum pallentis](#), [THG01 Potentillo heptaphyllae-Festucetum rupicolae](#), [THG02 Avenulo pratensis-Festucetum valesiaca](#), [THG03 Viscario vulgaris-Avenuletum pratensis](#)

Dominant taxon

Dominant taxon of associations: [MAB02 Junco tenageiae-Radioletum linoidis](#), [XBJ03 Plantagini arenariae-Senecionetum viscosi](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4**

Ecological specialization index for non-forest vegetation: **4**

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

## Colonization ability

Index of colonization success (ICS): 7

Index of colonization potential (ICP): 7

Optimum successional age [years]: 11

## Distribution and frequency

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

Floristic region: **Europe, Western Siberia**

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: 571

taxon.data.freq\_in\_quad: 1505

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **9.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.2 %**

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

Mean percentage cover in vegetation plots: **3.7 %**

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: **29**

Number of narrow habitats in which the taxon has its optimum: **6**

Number of broad habitats in which the taxon occurs: **10**

Number of broad habitats in which the taxon has its optimum: **2**

## 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**