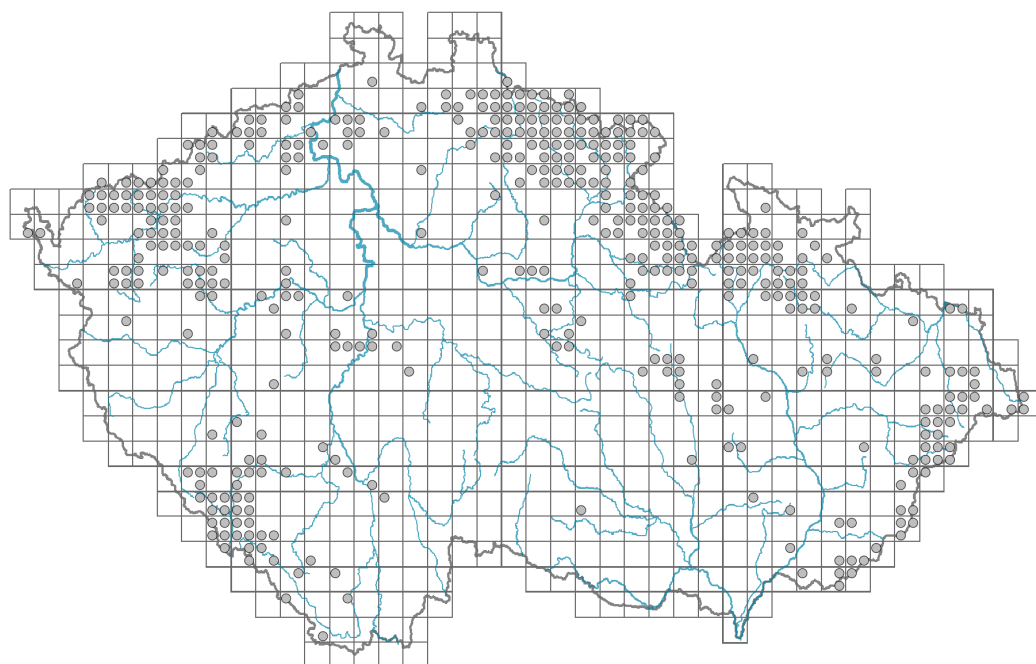


# *Geranium sylvaticum*

## 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]: **0.3-0.6**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

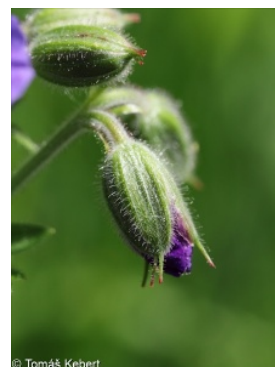
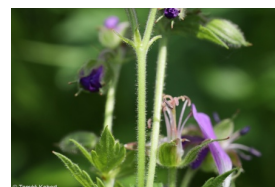
Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **36.3 %**

Life strategy (Pierce method, S-score): **24.2 %**

Life strategy (Pierce method, R-score): **39.5 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - palmately divided**

Stipules: **present**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic, hygromorphic**

## Flower

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

Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**

Flower colour: **pink, violet**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **aposepalous**

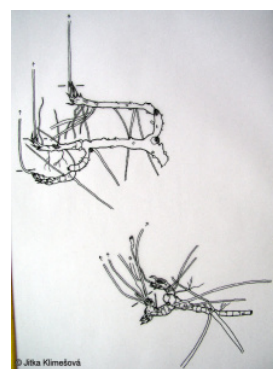
Inflorescence type: **dichasium**

Dicliny: **synoecious, gynomonoecious, gynodioecious**

Generative reproduction type: **allogamy**

Pollination syndrome: **insect-pollination**

Pollinator spectrum: **solitary bees, flies s. l. (honeybee, bumblebees, other Hymenoptera, hoverflies, meat flies s. l., other Diptera, butterflies, beetles, nitidulids, other pollinators, unknown)**



## Fruit, seed and dispersal

Fruit type: **dry fruit - dry schizocarp with an apical beak**

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

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

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

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

## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

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

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

Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**

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

Primary root: **absent**

Persistence of the clonal growth organ [year]:

Number of clonal offspring: **0.9**

Lateral spreading distance by clonal growth [m]: **0.02**

Clonal index: **3**

## Bud bank

Number of buds per shoot at the soil surface (root buds excluded):

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **14**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

Size of the belowground bud bank (root buds excluded): **19**

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

Number of buds per shoot at the soil surface (root buds included):

Number of buds per shoot at a depth of 0–10 cm (root buds included): **14**

Number of buds per shoot at a depth greater than 10 cm (root buds included):

Size of the belowground bud bank (root buds included): **19**

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): **28**

Ploidy level (x): **2**

2C genome size [Mbp]: **3962.7**

1Cx monoploid genome size [Mbp]: **1981.35**

Genomic GC content: **44.7 %**

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

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

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

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: **-0.93**

Herb layer disturbance frequency indicator value: **-0.43**

Whole-community disturbance severity indicator value: **0.28**

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

Whole-community structure based disturbance indicator value: **0.44**

Herb layer structure-based disturbance indicator value: **0.59**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

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

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**

## 6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**6B Montane mesic meadows: **3 - dominant**6E Wet Cirsium meadows: **2 - optimum**

## 7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **2 - optimum**7B Submontane Nardus grasslands: **1 - rare occurrence**

## 11 Heathlands and scrub

11D Subalpine acidophilous Pinus mugo scrub: **1 - rare occurrence**11H Subalpine deciduous scrub: **2 - optimum**

## 12 Forests

12B Alluvial forests: **1 - rare occurrence**

## 13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **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: [ADB Calamagrostion arundinaceae](#), [ADC Salicion silesiacae](#), [ADD Adenostylin alliariae](#), [TDB Polygono bistortae-Trisetion flavescentis](#), [TEB Nardo strictae-Agrostion tenuis](#), [XDF Rumicion alpini](#)Diagnostic taxon of associations: [ADB01 Bupleuro longifoliae-Calamagrostietum arundinaceae](#), [ADC01 Salici silesiacae-Betuletum carpaticae](#), [ADD03 Trollio altissimi-Geranium sylvatici](#), [ADD04 Laserpitio archangelicae-Dactylidetum glomeratae](#), [TDB01 Geranio sylvatici-Trisetetum flavescentis](#), [TDB02 Melandrio rubri-Phleetum alpini](#), [TEB01 Sileno vulgaris-Nardetum strictae](#), [XDF01 Rumicetum alpini](#)

## Constant taxon

Constant taxon of alliances: [ADB Calamagrostion arundinaceae](#), [TDB Polygono bistortae-Trisetion flavescentis](#), [TEB Nardo strictae-Agrostion tenuis](#)Constant taxon of associations: [ADB01 Bupleuro longifoliae-Calamagrostietum arundinaceae](#), [ADD03 Trollio altissimi-Geranium sylvatici](#), [ADD04 Laserpitio archangelicae-Dactylidetum glomeratae](#), [ADE01 Daphno mezerei-Dryopteridetum filicis-maris](#), [KCA02 Adenostylo alliariae-Pinetum mugo](#), [TDB01 Geranio sylvatici-Trisetetum flavescentis](#), [TDB02 Melandrio rubri-Phleetum alpini](#), [TEB01 Sileno vulgaris-Nardetum strictae](#)

## Dominant taxon

Dominant taxon of associations: [ADD03 Trollio altissimi-Geranium sylvatici](#), [TDB01 Geranio sylvatici-Trisetetum flavescentis](#), [TDB02 Melandrio rubri-Phleetum alpini](#), [TDB03 Meo athamantici-Festucetum rubrae](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **5.5**Ecological specialization index for non-forest vegetation: **5.8**Ecological specialization index for forest vegetation: **5.5**

## Colonization ability

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

Index of colonization potential (ICP): **1**

Optimum successional age [years]: **8**

## Distribution and frequency

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

Floristic region: **Europe, Western Siberia**

Continentality degree: **6**

Distribution range extension along the continentality gradient: **5**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **220**

taxon.data.freq\_in\_quad: **424**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **28.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **8.5 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.6 %**

Mean percentage cover in vegetation plots: **7.5 %**

Maximum percentage cover in vegetation plots: **63 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **14**

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

Number of broad habitats in which the taxon occurs: **9**

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**