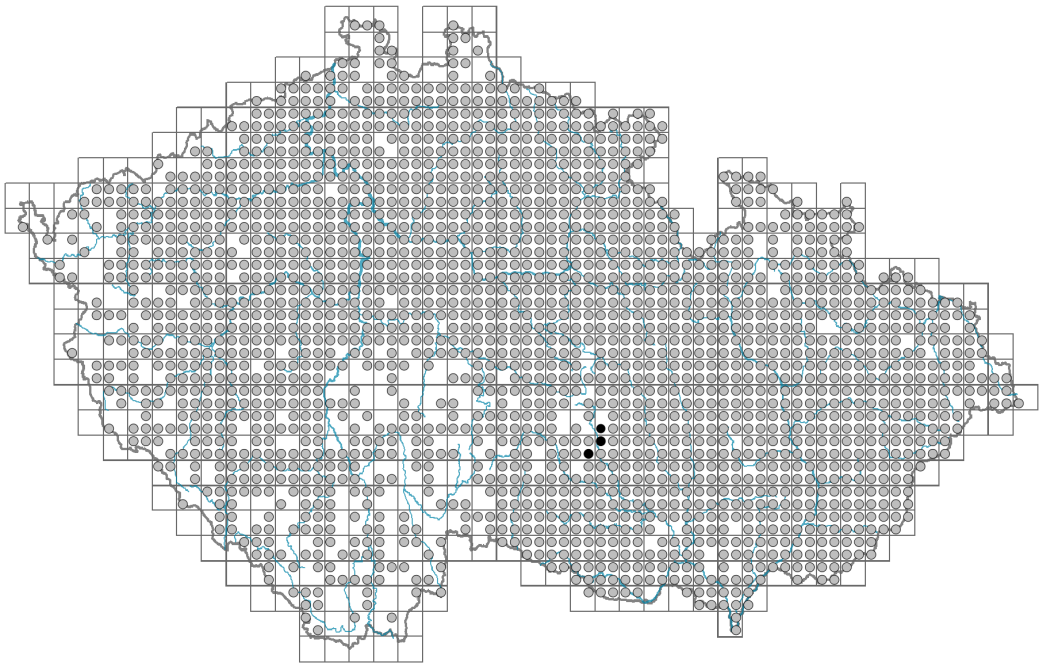
# *Geranium pratense*

## 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): **C/CSR**
Life strategy (Pierce method, C-score): **62.5 %**
Life strategy (Pierce method, S-score): **18.5 %**
Life strategy (Pierce method, R-score): **19 %**

### 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

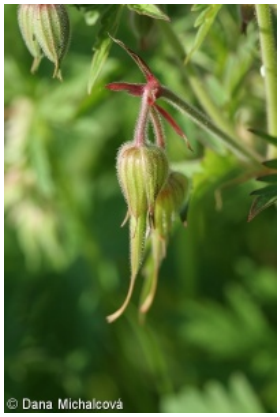
Flowering period [month]: **June–September**

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Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**
Flower colour: **blue, blue-violet**
Flower symmetry: **actinomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **free**
Calyx fusion: **aposepalous**
Inflorescence type: **dichasium**
Dicliny: **gynomonoecious, gynodioecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **insect-pollination**
Pollinator spectrum: **honeybee, bumblebees, hoverflies (solitary bees, other Hymenoptera, flies s. l., meat flies s. l., other Diptera, butterflies, beetles, nitidulids, other pollinators)**

## 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, infrutescence 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]: **4**
Number of clonal offspring: **1**
Lateral spreading distance by clonal growth [m]: **0.01**
Clonal index: **3**

### 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 exluded) [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): **15**
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): **20**
Depth of the belowground bud bank (root buds included) [cm]: **4**

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## 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]: **4020.8**
1Cx monoploid genome size [Mbp]: **2010.4**
Genomic GC content: **45.1 %**



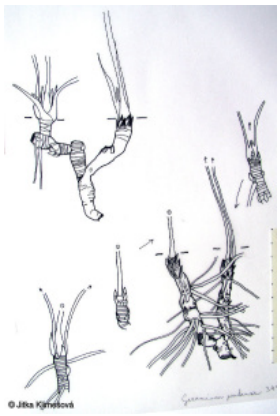
## Taxon origin

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: **5 – indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**
Reaction indicator value: **7 – indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**
Nutrient indicator value: **7 – occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites**
Salinity indicator value: **1 – salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**



### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.33**
Herb layer disturbance frequency indicator value: **-0.31**
Whole-community disturbance severity indicator value: **0.39**
Herb layer disturbance severity indicator value: **0.41**
Whole-community structure based disturbance indicator value: **0.57**
Herb layer structure-based disturbance indicator value: **0.69**

## Habitat and sociology

### Occurrence in habitats

#### 1 Vegetation of cliffs, screes and walls

1C Walls: **1 – rare occurrence**

#### 4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 – rare occurrence**
4B Halophilous reed and sedge beds: **1 – rare occurrence**
4D Riverine reed vegetation: **1 – rare occurrence**

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4E Reed vegetation of brooks: **1 – rare occurrence**
4G Tall-sedge beds: **1 – rare occurrence**
4I Vegetation of nitrophilous annual hygrophilous herbs: **1 – rare occurrence**
4J River gravel banks: **1 – rare occurrence**
4K Petasites fringes of montane brooks: **1 – rare occurrence**
4L Nitrophilous herbaceous fringes of lowland rivers: **2 – optimum**

## 5 Vegetation of springs and mires

5D Calcareous fens: **1 – rare occurrence**

## 6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **3 – dominant**
6B Montane mesic meadows: **1 – rare occurrence**
6C Pastures and park grasslands: **1 – rare occurrence**
6D Alluvial meadows of lowland rivers: **2 – optimum**
6E Wet Cirsium meadows: **1 – rare occurrence**
6F Intermittently wet Molinia meadows: **1 – rare occurrence**
6G Vegetation of wet disturbed soils: **1 – rare occurrence**

## 8 Dry grasslands

8D Broad-leaved dry grasslands: **1 – rare occurrence**
8F Thermophilous forest fringe vegetation: **1 – rare occurrence**

## 9 Sand grasslands and rock-outcrop vegetation

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

## 10 Saline vegetation

10I Inland saline meadows: **1 – rare occurrence**

## 11 Heathlands and scrub

11J Willow galleries of loamy and sandy river banks: **1 – rare occurrence**
11L Tall mesic and xeric shrub: **1 – rare occurrence**
11N Low xeric scrub: **1 – rare occurrence**
11R Scrub and pioneer woodland of forests clearings: **1 – rare occurrence**

## 12 Forests

12B Alluvial forests: **1 – rare occurrence**
12T Robinia pseudacacia plantations: **1 – rare occurrence**
12U Plantations of broad-leaved non-native trees: **1 – rare occurrence**

## 13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 – rare occurrence**
13C Annual vegetation of trampled habitats: **1 – rare occurrence**
13D Perennial thermophilous ruderal vegetation: **1 – rare occurrence**
13E Perennial nitrophilous herbaceous vegetation of mesic sites: **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**

## Constant taxon

Constant taxon of associations: **TDA01 *Pastinaco sativae-Arrhenatheretum elatioris***, **TDA04 *Potentillo albae-Festucetum rubrae***, **TDE01 *Poo trivialis-Alopecuretum pratensis***

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### Dominant taxon

Dominant taxon of associations: **TDA01 *Pastinaco sativae-Arrhenatheretum elatioris*, TDE01 *Poo trivialis-Alopecuretum pratensis***

### Ecological specialization indices

Ecological specialization index for all vegetation types: **5.2**
Ecological specialization index for non-forest vegetation: **5.2**
Ecological specialization index for forest vegetation: **4.5**

### Colonization ability

Index of colonization success (ICS): **4**
Index of colonization potential (ICP): **2**
Optimum successional age [years]: **32**

## Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional**
Floristic region: **Europe, Asia**
Continentality degree: **7**
Distribution range extension along the continentality gradient: **5**
Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt**
Expansive taxon in the region: **Bohemian Moravian Mesophyticum, Carpathian Mesophyticum**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 620
taxon.data.freq_in_quad: 2070

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.7 %**
Occurrence frequency in vegetation plots with a cover above 5%: **23.4 %**
Occurrence frequency in vegetation plots with a cover above 25%: **7.4 %**
Occurrence frequency in vegetation plots with a cover above 50%: **1.5 %**
Mean percentage cover in vegetation plots: **6.9 %**
Maximum percentage cover in vegetation plots: **88 %**

### Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **33**
Number of narrow habitats in which the taxon has its optimum: **4**
Number of broad habitats in which the taxon occurs: **10**
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**

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