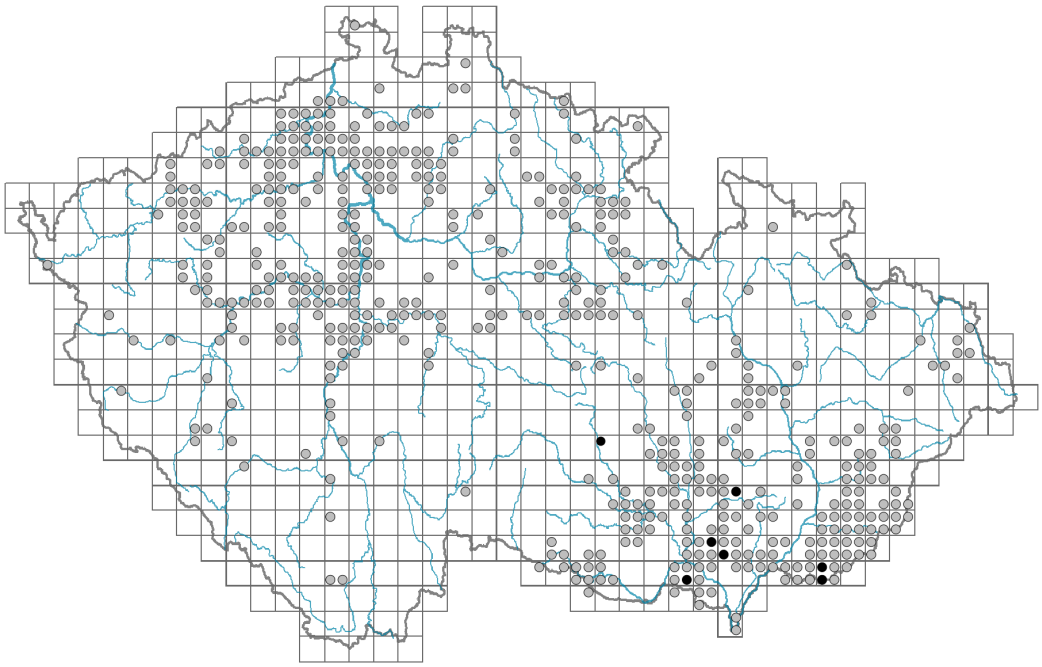
Geranium sanguineum

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]: **0.2–0.5**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **CSR – competitor/stress-tolerator/ruderal**
Life strategy (Pierce method based on leaf traits): **CSR**
Life strategy (Pierce method, C-score): **27.5 %**
Life strategy (Pierce method, S-score): **39 %**
Life strategy (Pierce method, R-score): **33.5 %**





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: **scleromorphic, mesomorphic**

Flower

Flowering period [month]: **May–July**

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Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**
Flower colour: **white, red, red-violet**
Flower symmetry: **actinomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **free**
Calyx fusion: **aposepalous**
Inflorescence type: **flores solitarii**
Dicliny: **gynomonoecious, gynodioecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **insect-pollination, selfing**
Pollinator spectrum: **honeybee, solitary bees, hoverflies (bumblebees)**



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**
Root metamorphosis: **secondary storage root, root shoot**
Storage organ: **rhizome, secondary storage root**
Type of clonal growth organ: **hypogeogenous rhizome**
Freely dispersible organs of clonal growth: **absent**
Shoot life span (cyclicity): **monocyclic 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: **2.1**
Lateral spreading distance by clonal growth [m]: **0.12**
Clonal index: **4**
Position of root buds: **lateral roots**
Role of root buds in life-history of a plant: **additive**



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): **22**
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): **42**
Depth of the belowground bud bank (root buds included) [cm]: **8**



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Trophic mode



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

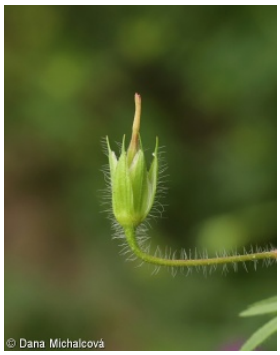
Karyology

Chromosome number (2n): **84**
Ploidy level (x): **6**
2C genome size [Mbp]: **7479.95**
1Cx monoploid genome size [Mbp]: **1246.66**
Genomic GC content: **42.5 %**

Taxon origin

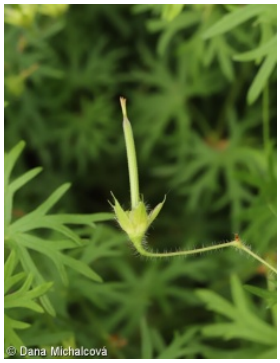
Origin in the Czech Republic: **native**

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: **8 – transition between values 7 and 9, occurring mostly in calcium-rich 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: **-1.25**
Herb layer disturbance frequency indicator value: **-0.56**
Whole-community disturbance severity indicator value: **0.22**
Herb layer disturbance severity indicator value: **0.21**
Whole-community structure based disturbance indicator value: **0.38**
Herb layer structure-based disturbance indicator value: **0.48**



Habitat and sociology



Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 – rare occurrence**
1B Siliceous cliffs and block fields: **1 – rare occurrence**
1D Mobile calcareous screes: **1 – rare occurrence**

6 Meadows and mesic pastures

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

8 Dry grasslands

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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: **2 – optimum**
8E Acidophilous dry grasslands: **1 – rare occurrence**
8F Thermophilous forest fringe vegetation: **3 – dominant**

9 Sand grasslands and rock-outcrop vegetation

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: **3 – dominant**

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: **2 – optimum**
12J Acidophilous thermophilous oak forests: **2 – optimum**
12L Boreo-continental pine forests: **1 – rare occurrence**
12O Peri-Alpidic pine forests: **1 – rare occurrence**
12W Pine and larch plantations: **1 – rare occurrence**

13 Anthropogenic vegetation

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

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.1 – 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 alliances: **KBA *Prunion fruticosae***, **LCA *Quercion pubescenti-petraeae***, **LCB *Aceri tatarici-Quercion***, **THH *Geranion sanguinei***
Diagnostic taxon of associations: **KBA01 *Prunetum fruticosae***, **LCA01 *Lathyro collini-Quercetum pubescentis***, **LCA02 *Lithospermo purpurocaerulei-Quercetum pubescentis***, **LCB02 *Carici fritschii-Quercetum roboris***, **THF02 *Brachypodio pinnati-Molinietum arundinaceae***, **THH01 *Trifolio alpestris-Geranietum sanguinei***

Constant taxon

Constant taxon of alliances: **LCB *Aceri tatarici-Quercion***, **THH *Geranion sanguinei***
Constant taxon of associations: **LCA02 *Lithospermo purpurocaerulei-Quercetum pubescentis***, **LCB02 *Carici fritschii-Quercetum roboris***, **THF02 *Brachypodio pinnati-Molinietum arundinaceae***, **THH01 *Trifolio alpestris-Geranietum sanguinei***

Dominant taxon

Dominant taxon of associations: **THH01 *Trifolio alpestris-Geranietum sanguinei***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.4**
Ecological specialization index for non-forest vegetation: **4.6**











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Ecological specialization index for forest vegetation: **4.9**

Colonization ability

Index of colonization success (ICS): **5**
Index of colonization potential (ICP): **5**
Optimum successional age [years]: **42**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional**
Floristic region: **Europe**
Distribution range extension along the continentality gradient: **5**
Elevational belt in the Czech Republic: **lowlands, colline belt**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 258
taxon.data.freq_in_quad: 499

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%: **44 %**
Occurrence frequency in vegetation plots with a cover above 25%: **24.5 %**
Occurrence frequency in vegetation plots with a cover above 50%: **5.8 %**
Mean percentage cover in vegetation plots: **14.7 %**
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: **23**
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: **3**

Threats and protection

Red List 2017 (national categories): **C4a – near threatened taxon**
Red List 2017 (IUCN categories): **NT – near threatened**
Legal protection: **not protected by law**







