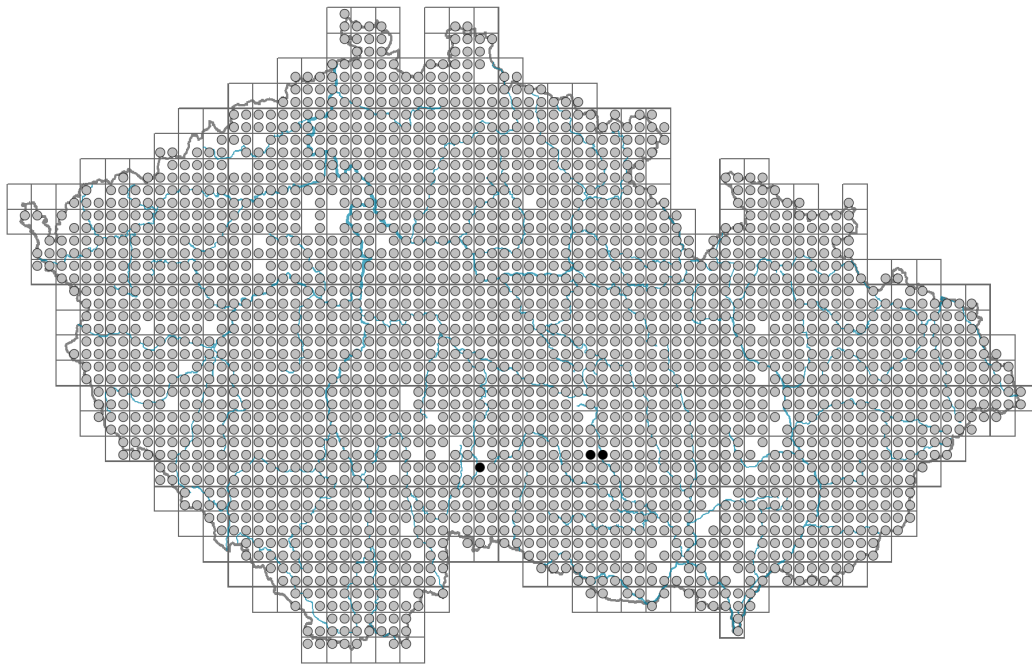


Geranium robertianum

Distribution



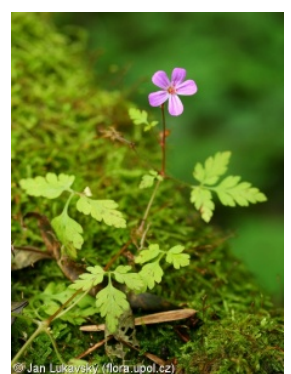
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Map info

● 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]: **0.1-0.5**

Growth form: **annual herb**

Life form: **therophyte (hemicryptophyte)**

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

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

Life strategy (Pierce method, C-score): **32 %**

Life strategy (Pierce method, S-score): **11.3 %**

Life strategy (Pierce method, R-score): **56.7 %**

Leaf

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

Leaf arrangement (phyllotaxis): **opposite, rosulate**

Leaf shape: **simple - palmately divided, compound - ternate**

Stipules: **present**

Petiole: **present**

Leaf life span: **overwintering green**

Leaf anatomy: **hygromorphic**

Flower

Flowering period [month]: **May-September**

Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**
 Flower colour: **pink, pink-violet**
 Flower symmetry: **actinomorphic**
 Perianth type: **calyx and corolla**
 Perianth fusion: **free**
 Calyx fusion: **aposepalous**
 Inflorescence type: **dichasium**
 Dicliny: **gynomonoecious, andromonoecious, gynodioecious, androdioecious**
 Generative reproduction type: **mixed mating**
 Pollination syndrome: **insect-pollination, selfing**
 Pollinator spectrum: **solitary bees, hoverflies, other Diptera, nitidulids (bumblebees, butterflies, beetles)**

Fruit, seed and dispersal

Fruit type: **dry fruit - dry schizocarp with an apical beak**
 Reproduction type: **only by seed/spores**
 Dispersal unit (diaspore): **seed, fruit, infrutescence or its part**
 Dispersal strategy: **Allium (mainly autochory)**
 Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Root metamorphosis: **primary storage root**
 Storage organ: **primary storage root**
 Shoot life span (cyclicality): **monocyclic shoots prevailing**
 Primary root: **present**
 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): **3**
 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): **8**
 Depth of the belowground bud bank (root buds excluded) [cm]: **2**
 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): **3**
 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): **8**
 Depth of the belowground bud bank (root buds included) [cm]: **2**

Trophic mode

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

Karyology

Chromosome number (2n): **64 (32)**
 Ploidy level (x): **4 (2)**



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2C genome size [Mbp]: **2092.51**
 1Cx monoploid genome size [Mbp]: **523.13**
 Genomic GC content: **38 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **5x - semi-shade plant, only exceptionally occurring in full light, but usually at more than 10% of the diffuse radiation incident in an open area (generalist)**

Temperature indicator value: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

Moisture indicator value: **6x - transition between values 5 and 7 (generalist)**

Reaction indicator value: **6x - transition between values 5 and 7 (generalist)**

Nutrient indicator value: **7 - occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.8**

Herb layer disturbance frequency indicator value: **-0.8**

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

Herb layer disturbance severity indicator value: **0.19**

Whole-community structure based disturbance indicator value: **0.19**

Herb layer structure-based disturbance indicator value: **0.21**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **2 - optimum**

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

1C Walls: **1 - rare occurrence**

1D Mobile calcareous screes: **2 - optimum**

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4K Petasites fringes of montane brooks: **1 - rare occurrence**

4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**

5 Vegetation of springs and mires

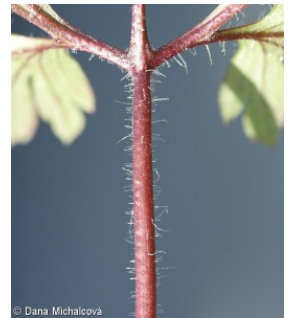
5A Hard-water springs with tufa formation: **2 - optimum**

5B Lowland to montane soft-water springs: **2 - optimum**

8 Dry grasslands

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

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**



- 8F Thermophilous forest fringe vegetation: **1 - rare occurrence**
- 9 Sand grasslands and rock-outcrop vegetation
- 9F Basiphilous vegetation of spring therophytes and succulents: **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: **2 - optimum**
- 11N Low xeric scrub: **1 - rare occurrence**
- 11R Scrub and pioneer woodland of forests clearings: **2 - optimum**
- 12 Forests
- 12A Alder carrs: **1 - rare occurrence**
- 12B Alluvial forests: **2 - optimum**
- 12C Oak-hornbeam forests: **2 - optimum**
- 12D Ravine forests: **2 - optimum**
- 12E Herb-rich beech forests: **2 - optimum**
- 12F Limestone beech forests: **2 - optimum**
- 12G Acidophilous beech forests: **1 - rare occurrence**
- 12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**
- 12I Sub-continental thermophilous oak forests: **1 - rare occurrence**
- 12J Acidophilous thermophilous oak forests: **1 - rare occurrence**
- 12K Acidophilous oak forests: **1 - rare occurrence**
- 12L Boreo-continental pine forests: **1 - rare occurrence**
- 12O Peri-Alpidic pine forests: **1 - rare occurrence**
- 12T Robinia pseudacacia plantations: **2 - optimum**
- 12U Plantations of broad-leaved non-native trees: **2 - optimum**
- 12V Spruce plantations: **2 - optimum**
- 12W Pine and larch plantations: **1 - rare occurrence**
- 13 Anthropogenic vegetation
- 13A Annual vegetation of ruderal habitats: **1 - rare occurrence**
- 13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**
- 13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**
- 13F Herbaceous vegetation of forests clearings and Rubus scrub: **2 - optimum**

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

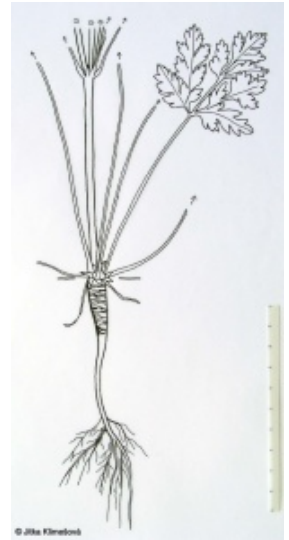
Diagnostic taxon of classes: [LB *Carpino-Fagetea*](#)

Diagnostic taxon of alliances: [LBF *Tilio platyphylli-Acerion*](#), [XDC *Impatienti noli-tangere-Stachyion sylvaticae*](#), [XDD *Geo urbani-Alliarion petiolatae*](#)

Diagnostic taxon of associations: [LBF02 *Mercuriali perennis-Fraxinetum excelsioris*](#), [XDC01 *Stachyo sylvaticae-Impatientetum noli-tangere*](#), [XDC02 *Epilobio montani-Geranium robertiani*](#)

Constant taxon

Constant taxon of alliances: [KAB *Salicion elaeagno-daphnoidis*](#), [LBF *Tilio platyphylli-Acerion*](#), [XDC *Impatienti noli-tangere-Stachyion sylvaticae*](#), [XDD *Geo urbani-Alliarion petiolatae*](#)



Constant taxon of associations: [KAB01 *Salicetum elaeagno-purpureae*](#), [KBB03 *Populo tremulae-Coryletum avellanae*](#), [KBC04 *Senecioni fuchsii-Coryletum avellanae*](#), [KBE01 *Chelidonio majoris-Robinetum pseudoacaciae*](#), [LBA04 *Stellario nemorum-Alnetum glutinosae*](#), [LBC02 *Mercuriali perennis-Fagetum sylvaticae*](#), [LBC05 *Galio rotundifolii-Abietetum albae*](#), [LBF01 *Aceri-Tilietum*](#), [LBF02 *Mercuriali perennis-Fraxinetum excelsioris*](#), [LBF03 *Arunco dioici-Aceretum pseudoplatani*](#), [SAC02 *Festuco pallentis-Saxifragetum rosaceae*](#), [SCA01 *Gymnocarpietum robertiani*](#), [XDC01 *Stachyo sylvaticae-Impatientetum nolitangere*](#), [XDC02 *Epilobio montani-Geranietum robertiani*](#), [XDC04 *Carici pendulae-Eupatorietum cannabini*](#), [XDD01 *Alliario petiolatae-Chaerophylletum temuli*](#), [XDE06 *Anthriscio nitidae-Aegopodietum podagrariae*](#)

Dominant taxon

Dominant taxon of associations: [XDC02 *Epilobio montani-Geranietum robertiani*](#), [XDD01 *Alliario petiolatae-Chaerophylletum temuli*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.5**

Ecological specialization index for non-forest vegetation: **3.4**

Ecological specialization index for forest vegetation: **5**

Colonization ability

Index of colonization success (ICS): **8**

Index of colonization potential (ICP): **6**

Optimum successional age [years]: **39**

Distribution and frequency

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

Floristic region: **Europe, Asia**

Distribution range extension along the continentality gradient: **6**

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

Expansive taxon in the region: **Bohemian Thermophyticum, Bohemian Moravian Mesophyticum, Bohemian Moravian Oreophyticum, Pannonian Thermophyticum, Carpathian Mesophyticum, Carpathian Oreophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **659**

taxon.data.freq_in_quad: **2376**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **5.8 %**

Occurrence frequency in vegetation plots with a cover above 5%: **11.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **3.8 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1.4 %**

Mean percentage cover in vegetation plots: **4.6 %**

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: **38**

Number of narrow habitats in which the taxon has its optimum: **17**

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

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

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**