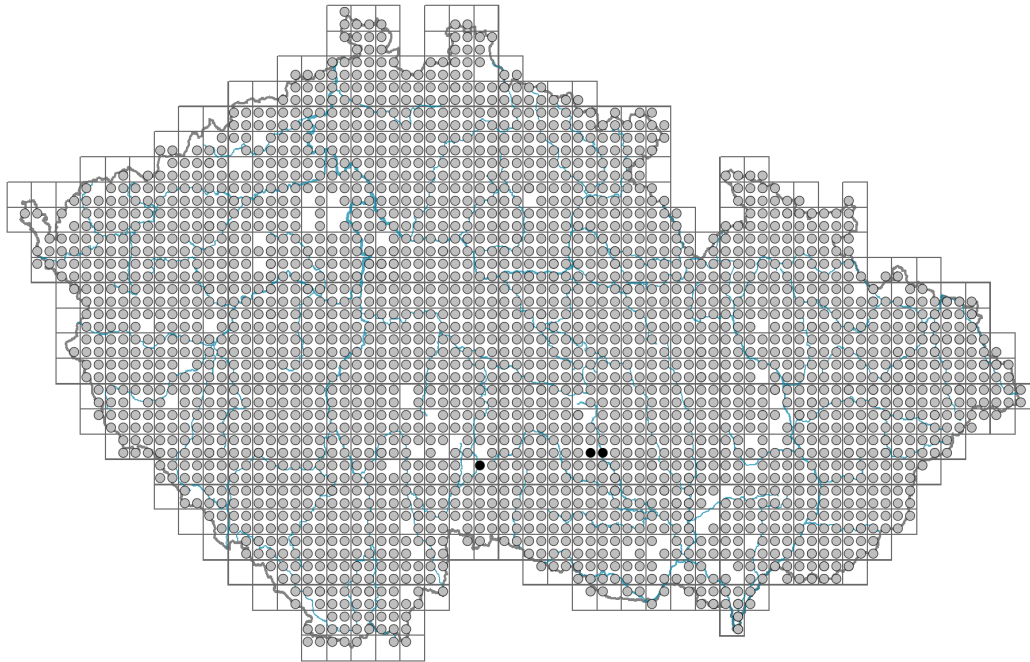


# *Geranium robertianum* agg.

## 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]: **0.05-0.5**

Growth form: **annual herb**

Life form: **hemicryptophyte, therophyte**

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

## 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: **mesomorphic, hygromorphic**

## Flower

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

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

Flower colour: **pink, pink-violet, red-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: **bumblebees, solitary bees, hoverflies, other Diptera, butterflies, beetles, nitidulids**

## 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, infructescence 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): **1**

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): **6**

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): **1**

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): **6**

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**

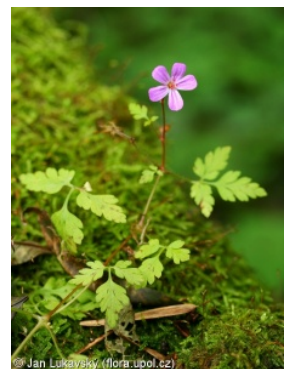
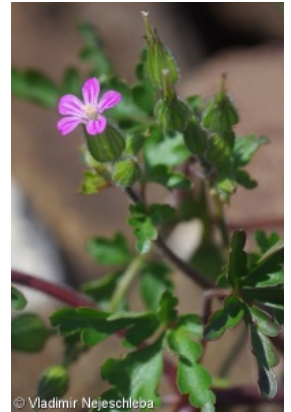
## Karyology

Chromosome number (2n): **32, 64**

Ploidy level (x): **2, 4**

2C genome size [Mbp]: **2092.51**

1Cx monoploid genome size [Mbp]: **523.13**



## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6x - transition between values 5 and 7; rarely at less than 20% of 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**

## 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**



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- 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**

### Distribution and frequency

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

Floristic region: **Europe, Asia**

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: 2377

Commonness in vegetation plots from the Czech Republic

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**

