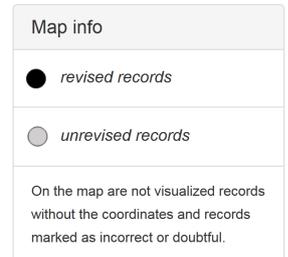
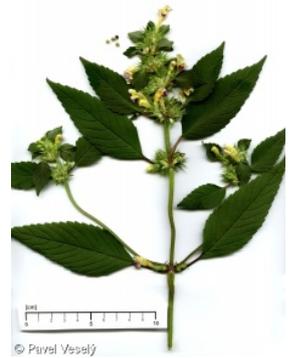
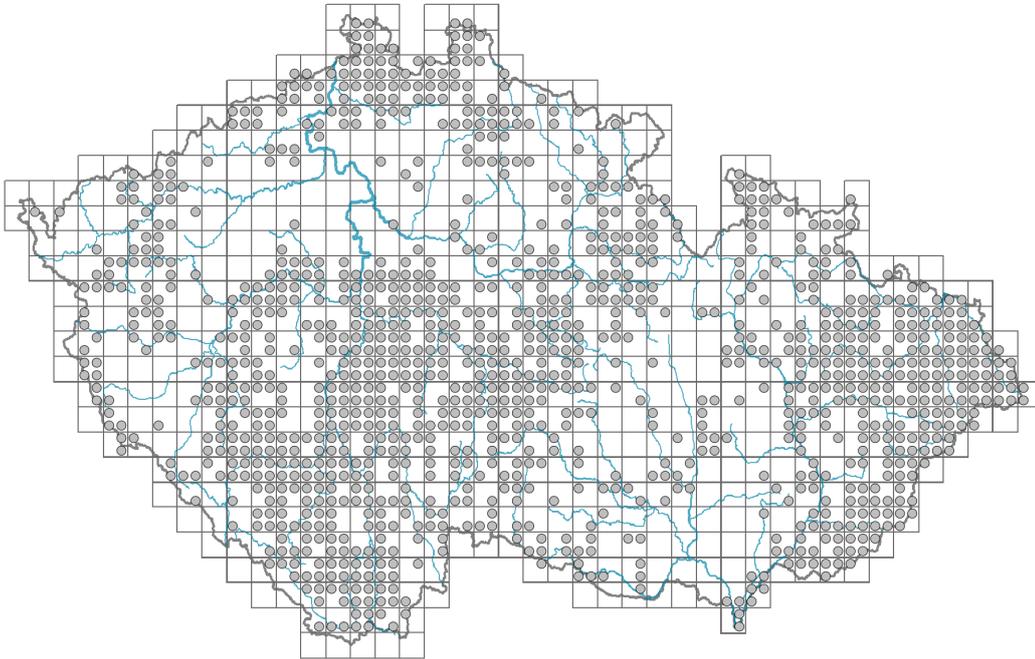


# *Galeopsis speciosa*

## Distribution



## Habitus and growth type

Height [m]: **0.6-1.5**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **CR - competitor/ruderal**

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

Life strategy (Pierce method, C-score): **47.3 %**

Life strategy (Pierce method, S-score): **0 %**

Life strategy (Pierce method, R-score): **52.7 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**



## Flower

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

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **yellow**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **bilabiate**

Calyx fusion: **synsepalous**

Inflorescence type: **pseudospica e verticillastris composita**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination, selfing**

### Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of four one-seeded nutlets**

Fruit colour: **brown**

Reproduction type: **only by seed/spores**

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

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

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

### Belowground organs and clonality

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): **0**

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): **5**

Depth of the belowground bud bank (root buds excluded) [cm]: **1**

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): **0**

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): **5**

Depth of the belowground bud bank (root buds included) [cm]: **1**

### Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

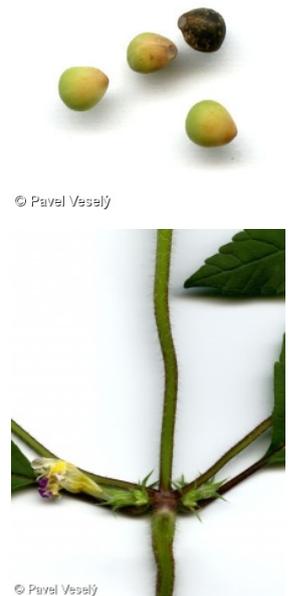
### Karyology

Chromosome number (2n): **16**

Ploidy level (x): **2**

2C genome size [Mbp]: **1913.18**

1Cx monoploid genome size [Mbp]: **956.59**



Genomic GC content: **39.3 %**

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

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: **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: **-1.77**

Herb layer disturbance frequency indicator value: **-0.7**

Whole-community disturbance severity indicator value: **0.32**

Herb layer disturbance severity indicator value: **0.22**

Whole-community structure based disturbance indicator value: **0.27**

Herb layer structure-based disturbance indicator value: **0.36**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

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

1D Mobile calcareous screes: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4D Riverine reed vegetation: **1 - rare occurrence**

4E Reed vegetation of brooks: **1 - rare occurrence**

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

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

6 Meadows and mesic pastures

6E Wet Cirsium meadows: **1 - rare occurrence**

8 Dry grasslands

8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

11 Heathlands and scrub

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**  
12T Robinia pseudacacia plantations: **1 - rare occurrence**  
12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**  
12V Spruce plantations: **1 - rare occurrence**  
12W Pine and larch plantations: **1 - rare occurrence**

### 13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **3 - dominant**  
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**

### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.6**  
Ecological specialization index for non-forest vegetation: **4**  
Ecological specialization index for forest vegetation: **5.3**

### Colonization ability

Index of colonization success (ICS): **5**  
Index of colonization potential (ICP): **7**  
Optimum successional age [years]: **15.5**

## Distribution and frequency

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

Floristic region: **Europe, Western Asia**

Continental degree: **5**

Distribution range extension along the continentality gradient: **4**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **484**

taxon.data.freq\_in\_quad: **1146**

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.7 %**  
Occurrence frequency in vegetation plots with a cover above 5%: **5 %**  
Occurrence frequency in vegetation plots with a cover above 25%: **1.8 %**  
Occurrence frequency in vegetation plots with a cover above 50%: **0.5 %**  
Mean percentage cover in vegetation plots: **3.2 %**  
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: **21**  
Number of narrow habitats in which the taxon has its optimum: **8**

Number of broad habitats in which the taxon occurs: **8**

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**