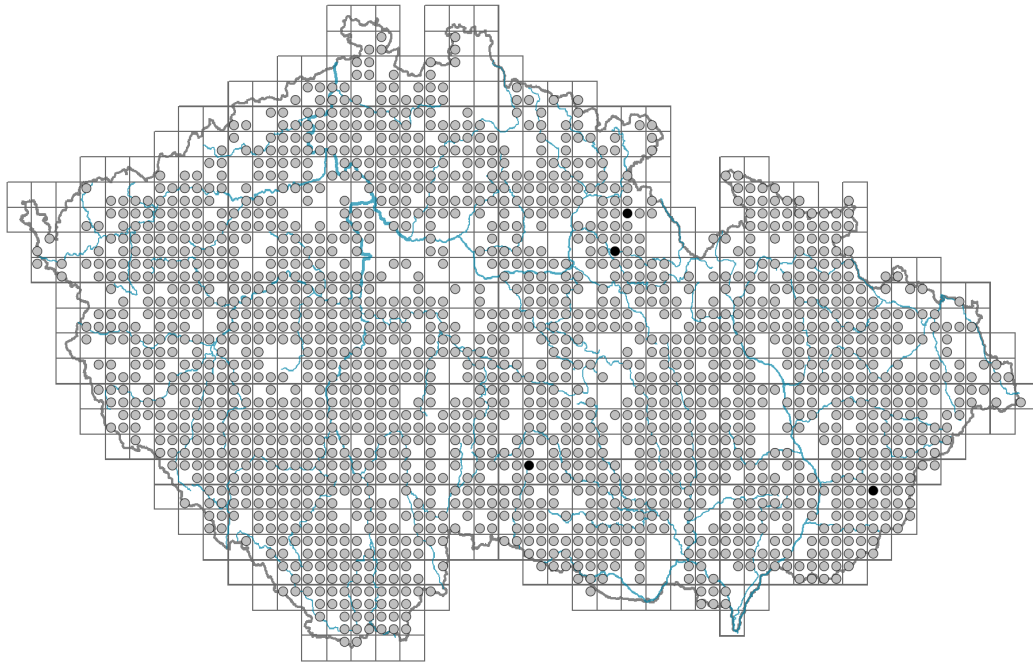


# Campanula persicifolia

## 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]: **0.5-0.8**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **24.8 %**

Life strategy (Pierce method, S-score): **6.8 %**

Life strategy (Pierce method, R-score): **68.4 %**

## Leaf

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

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

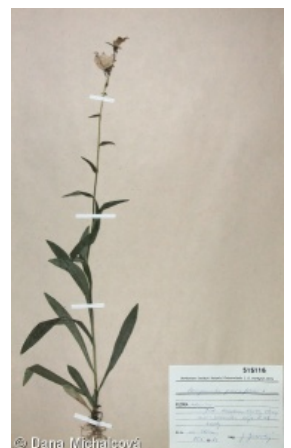
Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **evergreen**

Leaf anatomy: **mesomorphic**



## Flower

Flowering period [month]: **June-August**

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**  
 Flower colour: **blue**  
 Flower symmetry: **actinomorphic**  
 Perianth type: **calyx and corolla**  
 Perianth fusion: **fused**  
 Shape of the sympetalous corolla or syntepalous perianth: **campanulate**  
 Calyx fusion: **synsepalous**  
 Inflorescence type: **racemus**  
 Dicliny: **synoecious**  
 Generative reproduction type: **alogamy self-incompatibility, facultative alogamy**  
 Pollination syndrome: **insect-pollination**



### Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**  
 Fruit colour: **brown**  
 Reproduction type: **by seed/spores and vegetatively**  
 Dispersal unit (diaspore): **seed**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **non-myrmecochorous (b)**

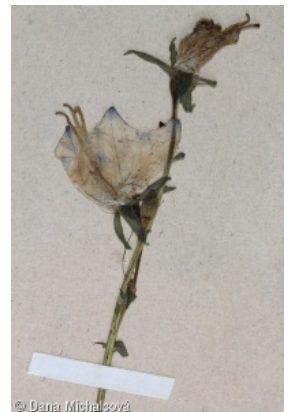


### Belowground organs and clonality

Shoot metamorphosis: **stolon**  
 Storage organ: **stolon**  
 Type of clonal growth organ: **epigeogenous rhizome**  
 Freely dispersible organs of clonal growth: **absent**  
 Shoot life span (cyclicality): **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]: **0.03**  
 Clonal index: **3**  
 Position of root buds: **primary root**  
 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): **13**  
 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): **18**  
 Depth of the belowground bud bank (root buds excluded) [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): **17**  
 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): **37**  
 Depth of the belowground bud bank (root buds included) [cm]: **9**



## 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]: **5874.36**

1Cx monoploid genome size [Mbp]: **2937.18**

Genomic GC content: **42.8 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

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

Temperature indicator value: **6 - transition between values 5 and 7**

Moisture indicator value: **4 - transition between values 3 and 5**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **5 - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.88**

Herb layer disturbance frequency indicator value: **-0.73**

Whole-community disturbance severity indicator value: **0.24**

Herb layer disturbance severity indicator value: **0.1**

Whole-community structure based disturbance indicator value: **0.12**

Herb layer structure-based disturbance indicator value: **0.22**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

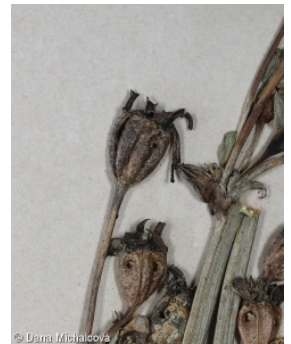
1B Siliceous cliffs and block fields: **1 - rare occurrence**

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

6 Meadows and mesic pastures

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

6C Pastures and park grasslands: **1 - rare occurrence**



## 7 Acidophilous grasslands

7B Submontane *Nardus* grasslands: **1 - rare occurrence**

## 8 Dry grasslands

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

8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**

8D Broad-leaved dry grasslands: **2 - optimum**

8E Acidophilous dry grasslands: **1 - rare occurrence**

8F Thermophilous forest fringe vegetation: **2 - optimum**

## 9 Sand grasslands and rock-outcrop vegetation

9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

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: **1 - rare occurrence**

11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

## 12 Forests

12C Oak-hornbeam forests: **2 - optimum**

12D Ravine forests: **2 - optimum**

12E Herb-rich beech forests: **1 - rare occurrence**

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: **2 - optimum**

12J Acidophilous thermophilous oak forests: **2 - optimum**

12K Acidophilous oak forests: **2 - optimum**

12L Boreo-continental pine forests: **1 - rare occurrence**

12O Peri-Alpidic pine forests: **1 - rare occurrence**

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: **2 - optimum**

## 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: **1.2 - taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**

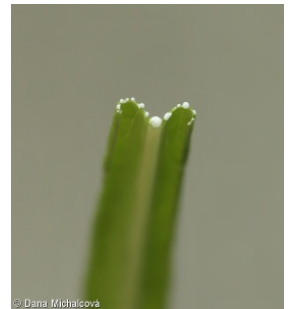
Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.2 - taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**

## Diagnostic taxon

Diagnostic taxon of classes: [LC \*Quercetea pubescentis\*](#)

Diagnostic taxon of alliances: [LBB \*Carpinion betuli\*](#), [LCA \*Quercion pubescenti-petraeae\*](#), [LCC \*Quercion petraeae\*](#)

Diagnostic taxon of associations: [KBB03 \*Populo tremulae-Coryletum avellanae\*](#),



[LBB04 Primulo veris-Carpinetum betuli](#), [LBF04 Seslerio albicantis-Tilietum cordatae](#), [LCA03 Euphorbio-Quercetum](#), [LCC01 Sorbo torminalis-Quercetum](#), [LCC03 Melico pictae-Quercetum roboris](#), [THC04 Asplenio cuneifolii-Seslerietum caeruleae](#), [THF02 Brachypodio pinnati-Molinietum arundinaceae](#)

Constant taxon

Constant taxon of classes: [LC Quercetea pubescentis](#)

Constant taxon of alliances: [LCC Quercion petraeae](#)

Constant taxon of associations: [KBB03 Populo tremulae-Coryletum avellanae](#), [LBB01 Galio sylvatici-Carpinetum betuli](#), [LBB04 Primulo veris-Carpinetum betuli](#), [LBF04 Seslerio albicantis-Tilietum cordatae](#), [LCA03 Euphorbio-Quercetum](#), [LCC01 Sorbo torminalis-Quercetum](#), [LCC03 Melico pictae-Quercetum roboris](#), [THC04 Asplenio cuneifolii-Seslerietum caeruleae](#), [THF02 Brachypodio pinnati-Molinietum arundinaceae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.3**

Ecological specialization index for non-forest vegetation: **4.4**

Ecological specialization index for forest vegetation: **5.1**

Colonization ability

Index of colonization success (ICS): **6**

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

Optimum successional age [years]: **35.5**

## Distribution and frequency

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

Floristic region: **Europe**

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: **596**

taxon.data.freq\_in\_quad: **1791**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **0.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **1.9 %**

Maximum percentage cover in vegetation plots: **13 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **34**

Number of narrow habitats in which the taxon has its optimum: **11**

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

Number of broad habitats in which the taxon has its optimum: **2**

## 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**

