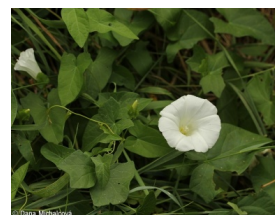


# *Calystegia sepium* subsp. *sepium*

## 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]: **1-3**

Growth form: **clonal herb**

Life form: **geophyte (hemicryptophyte)**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **42.9 %**

Life strategy (Pierce method, S-score): **8.1 %**

Life strategy (Pierce method, R-score): **49 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

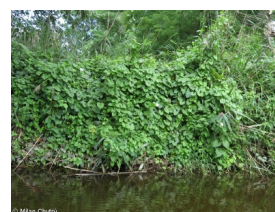
Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**



## Flower

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

Flower colour: **white**  
 Flower symmetry: **actinomorphic**  
 Perianth type: **calyx and corolla**  
 Perianth fusion: **fused**  
 Shape of the sympetalous corolla or syntepalous perianth: **funnel-shaped**  
 Calyx fusion: **synsepalous**  
 Inflorescence type: **flores solitarii**  
 Dicliny: **synoecious**  
 Generative reproduction type: **allogamy self-incompatibility, mixed mating**  
 Pollination syndrome: **insect-pollination, selfing**  
 Pollinator spectrum: **honeybee, bumblebees, hoverflies, flies s. l., other Diptera, beetles, nitidulids**

## Fruit, seed and dispersal

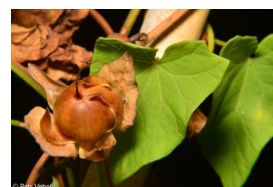
Fruit type: **dry fruit - capsule**  
 Fruit colour: **brown**  
 Reproduction type: **by seed/spores and vegetatively**  
 Dispersal unit (diaspore): **seed**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **non-myrmecochorous (b)**

## Belowground organs and clonality

Shoot metamorphosis: **stolon, stolon with tuberous tip**  
 Storage organ: **stolon, stolon with tuberous tip**  
 Type of clonal growth organ: **stolon with tuber**  
 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]: **1**  
 Number of clonal offspring: **6**  
 Lateral spreading distance by clonal growth [m]: **0.35**  
 Clonal index: **6**

## Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **13**  
 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): **28**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **3**  
 Number of buds per shoot at the soil surface (root buds included): **13**  
 Number of buds per shoot at a depth of 0–10 cm (root buds included): **15**  
 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): **28**  
 Depth of the belowground bud bank (root buds included) [cm]: **3**



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **22**

Ploidy level (x): **2**

2C genome size [Mbp]: **1226.57**

1Cx monoploid genome size [Mbp]: **613.29**

Genomic GC content: **38.8 %**

## 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: **7 - humidity indicator, focus on well moistened, but not wet soils**

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

Nutrient indicator value: **8 - pronounced nutrient indicator**

Salinity indicator value: **1 - salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.72**

Herb layer disturbance frequency indicator value: **-0.58**

Whole-community disturbance severity indicator value: **0.39**

Herb layer disturbance severity indicator value: **0.41**

Whole-community structure based disturbance indicator value: **0.44**

Herb layer structure-based disturbance indicator value: **0.46**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

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

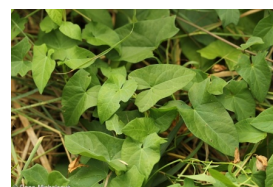
1D Mobile calcareous screes: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **3 - dominant**

4B Halophilous reed and sedge beds: **2 - optimum**

4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**



- 4D Riverine reed vegetation: **2 - optimum**
- 4E Reed vegetation of brooks: **1 - rare occurrence**
- 4F Mesotrophic vegetation of muddy substrata: **1 - rare occurrence**
- 4G Tall-sedge beds: **1 - rare occurrence**
- 4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**
- 4I Vegetation of nitrophilous annual hygrophilous herbs: **2 - optimum**
- 4J River gravel banks: **1 - rare occurrence**
- 4K Petasites fringes of montane brooks: **1 - rare occurrence**
- 4L Nitrophilous herbaceous fringes of lowland rivers: **3 - dominant**
- 6 Meadows and mesic pastures
- 6D Alluvial meadows of lowland rivers: **1 - rare occurrence**
- 6G Vegetation of wet disturbed soils: **1 - rare occurrence**
- 10 Saline vegetation
- 10I Inland saline meadows: **1 - rare occurrence**
- 11 Heathlands and scrub
- 11J Willow galleries of loamy and sandy river banks: **2 - optimum**
- 11L Tall mesic and xeric shrub: **1 - rare occurrence**
- 11R Scrub and pioneer woodland of forests clearings: **2 - optimum**
- 12 Forests
- 12A Alder carrs: **1 - rare occurrence**
- 12B Alluvial forests: **1 - rare occurrence**
- 13 Anthropogenic vegetation
- 13A Annual vegetation of ruderal habitats: **1 - rare occurrence**
- 13B Annual vegetation of arable land: **1 - rare occurrence**
- 13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**
- 13E Perennial nitrophilous herbaceous vegetation of mesic sites: **3 - dominant**
- 13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**
- Affinity to the forest environment
- Affinity to the forest environment in Thermophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**
- Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**
- Diagnostic taxon
- Diagnostic taxon of classes: [KA \*Salicetea purpureae\*](#)
- Diagnostic taxon of alliances: [KAA \*Salicion triandrae\*](#), [KAC \*Salicion albae\*](#), [MCD \*Phalaridion arundinaceae\*](#), [XDA \*Senecionion fluviatilis\*](#)
- Diagnostic taxon of associations: [KAA01 \*Salicetum triandrae\*](#), [KAC01 \*Salicetum albae\*](#), [XDA01 \*Cuscuta europaeae-Calystegietum sepium\*](#), [XDA03 \*Calystegio sepium-Impatientetum glanduliferae\*](#), [XDA04 \*Sicyo angulatae-Echinocystietum lobatae\*](#), [XDE09 \*Asteretum lanceolati\*](#), [XDE10 \*Reynoutrietum japonicae\*](#)
- Constant taxon
- Constant taxon of classes: [KA \*Salicetea purpureae\*](#)
- Constant taxon of alliances: [KAA \*Salicion triandrae\*](#), [KAC \*Salicion albae\*](#), [XDA \*Senecionion fluviatilis\*](#)
- Constant taxon of associations: [KAA01 \*Salicetum triandrae\*](#), [KAC01 \*Salicetum albae\*](#), [XDA01 \*Cuscuta europaeae-Calystegietum sepium\*](#), [XDA03 \*Calystegio sepium-Impatientetum glanduliferae\*](#), [XDA04 \*Sicyo angulatae-Echinocystietum lobatae\*](#)



## Dominant taxon

Dominant taxon of associations: [XDA01 Cuscuta europaeae-Calystegietum sepium](#),  
[XDA02 Calystegio sepium-Epilobietum hirsuti](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **3.7**

Ecological specialization index for non-forest vegetation: **3.7**

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

## Colonization ability

Index of colonization success (ICS): **4**

Index of colonization potential (ICP): **3**

Optimum successional age [years]: **20**

## Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional, austral or antarctic**

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **7**

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: **575**

taxon.data.freq\_in\_quad: **1591**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **17.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **4.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.9 %**

Mean percentage cover in vegetation plots: **5.4 %**

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: **27**

Number of narrow habitats in which the taxon has its optimum: **8**

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): **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**