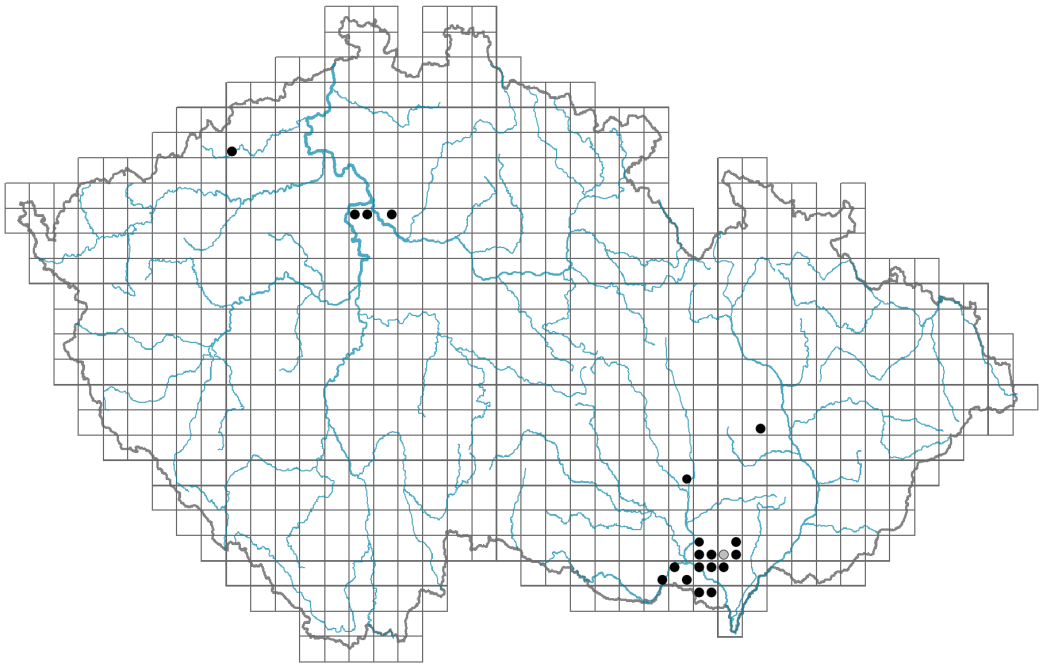
Samolus valerandi

Distribution

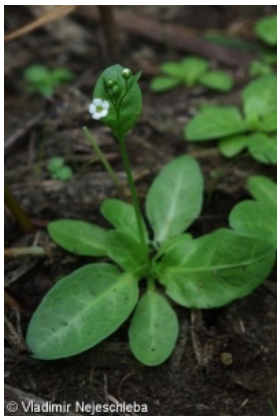


Map info

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]: **0.1–0.4**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **S – stress-tolerator**
Life strategy (Pierce method based on leaf traits): **R/CR**
Life strategy (Pierce method, C-score): **16.7 %**
Life strategy (Pierce method, S-score): **4.3 %**
Life strategy (Pierce method, R-score): **79 %**

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: **helomorphic**

Flower

Flowering period [month]: **June–July**

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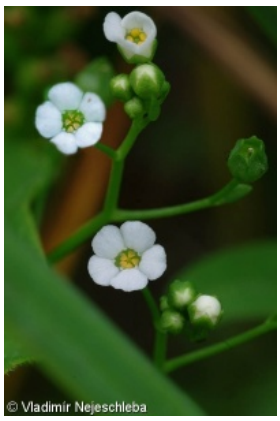

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**
Flower colour: **white**
Flower symmetry: **actinomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **fused**
Shape of the sympetalous corolla or syntepalous perianth: **rotate**
Calyx fusion: **synsepalous**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

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: **probably non-myrmecochorous nv**

Belowground organs and clonality

Shoot metamorphosis: **rhizome, turion**
Storage organ: **rhizome, turion**
Type of clonal growth organ: **epigeogenous rhizome**
Freely dispersible organs of clonal growth: **absent**
Shoot life span (cyclicity): **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]: **0.01**
Clonal index: **3**

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): **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): **20**
Depth of the belowground bud bank (root buds exluded) [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): **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): **20**
Depth of the belowground bud bank (root buds included) [cm]: **4**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

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Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

Karyology

Chromosome number (2n): **26**
Ploidy level (x): **2**
2C genome size [Mbp]: **1029.39**
1Cx monoploid genome size [Mbp]: **514.7**
Genomic GC content: **38.7 %**

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: **8 – transition between values 7 and 9**
Reaction indicator value: **8 – transition between values 7 and 9, occurring mostly in calcium-rich conditions**
Nutrient indicator value: **6 – transition between values 5 and 7**
Salinity indicator value: **6 – α-meso/polyhaline, on soils with moderate to high salt content**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4B Halophilous reed and sedge beds: **1 – rare occurrence**
4C Eutrophic vegetation of muddy substrata: **1 – rare occurrence**
4H Vegetation of low annual hygrophilous herbs: **1 – rare occurrence**

10 Saline vegetation

10I Inland saline meadows: **2 – optimum**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 – taxon that does not spontaneously occur in Czech forests**
Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 – taxon that does not spontaneously occur in Czech forests**

Diagnostic taxon

Diagnostic taxon of associations: **MCC04 *Eleocharito palustris-Hippuridetum vulgaris***, **TCB03 *Agrostio stoloniferae-Juncetum ranarii***

Colonization ability

Index of colonization success (ICS): **1**

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Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional, subtropical, tropical, austral or antarctic**
Floristic region: **Africa, circumpolar**
Continentality degree: **6**
Distribution range extension along the continentality gradient: **6**
Elevational belt in the Czech Republic: **lowlands**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 17
taxon.data.freq_in_quad: 27

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**
Occurrence frequency in vegetation plots with a cover above 5%: **25 %**
Occurrence frequency in vegetation plots with a cover above 25%: **25 %**
Occurrence frequency in vegetation plots with a cover above 50%: **0 %**
Mean percentage cover in vegetation plots: **11 %**
Maximum percentage cover in vegetation plots: **38 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **4**
Number of narrow habitats in which the taxon has its optimum: **1**
Number of broad habitats in which the taxon occurs: **2**
Number of broad habitats in which the taxon has its optimum: **1**

Threats and protection

Red List 2017 (national categories): **C1t – critically threatened taxon, declining**
Red List 2017 (IUCN categories): **CR – critically endangered**
Legal protection: **critically threatened taxon**

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