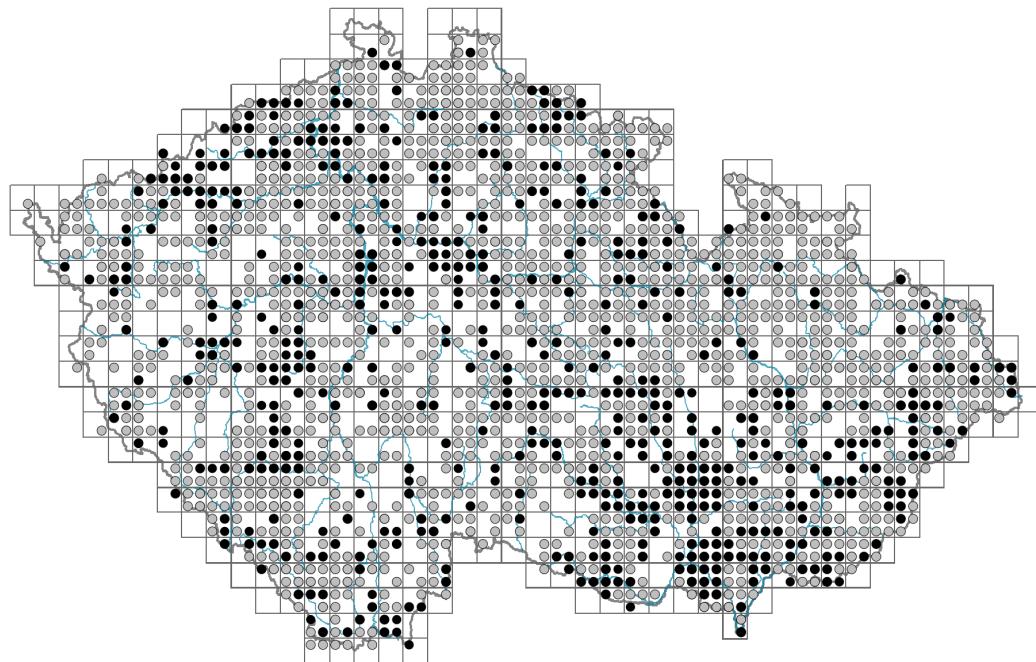


# *Silene vulgaris*

## 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]: **0.3-1**

Growth form: **polycarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **48.1 %**

Life strategy (Pierce method, S-score): **0.2 %**

Life strategy (Pierce method, R-score): **51.7 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent, absent**

Leaf life span: **evergreen**

Leaf anatomy: **scleromorphic, mesomorphic**



## Flower

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

Flowering phase: **6** *Cornus sanguinea*-*Melica uniflora* (start of early summer)

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **synsepalous**

Inflorescence type: **dichasium**

Dicliny: **gynomonoecious, gynodioecious**

Generative reproduction type: **facultative allogamy**

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



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Fruit colour: **brown**

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

Dispersal unit (diaspore): **seed**

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

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



## Belowground organs and clonality

Shoot metamorphosis: **pleiocorm**

Root metamorphosis: **primary storage root**

Storage organ: **pleiocorm, primary storage root**

Shoot life span (cyclicity): **monocyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **sympodial**

Primary root: **present**

Position of root buds: **lateral roots**

Role of root buds in life-history of a plant: **regenerative**

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 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): **18**

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): **38**

Depth of the belowground bud bank (root buds included) [cm]: **8**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **24**

Ploidy level (x): **2**

2C genome size [Mbp]: **1980.36**

1Cx monoploid genome size [Mbp]: **990.18**



## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**

Temperature indicator value: **6x - transition between values 5 and 7 (generalist)**

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

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

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

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.29**

Herb layer disturbance frequency indicator value: **-0.6**

Whole-community disturbance severity indicator value: **0.35**

Herb layer disturbance severity indicator value: **0.34**

Whole-community structure based disturbance indicator value: **0.37**

Herb layer structure-based disturbance indicator value: **0.47**

## 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: **2 - optimum**

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

2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **1 - rare occurrence**

2B Subalpine tall-forb and tall-grass vegetation: **2 - optimum**

5 Vegetation of springs and mires

5C Alpine and subalpine soft-water springs: **1 - rare occurrence**

6 Meadows and mesic pastures

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

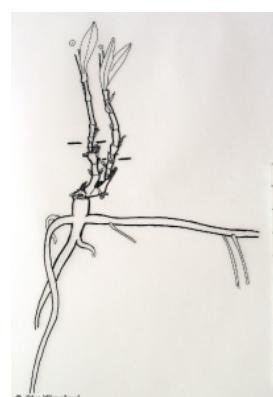
6B Montane mesic meadows: **2 - optimum**

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

6D Alluvial meadows of lowland rivers: **1 - rare occurrence**

6F Intermittently wet Molinia meadows: **1 - rare occurrence**

7 Acidophilous grasslands



7A Subalpine and montane acidophilous grasslands: **2 - optimum**

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: **1 - rare occurrence**

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

8D Broad-leaved dry grasslands: **1 - rare occurrence**

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

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

9 Sand grasslands and rock-outcrop vegetation

9C Festuca grasslands on acidic sands: **1 - rare occurrence**

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**

11D Subalpine acidophilous Pinus mugo scrub: **2 - optimum**

11H Subalpine deciduous scrub: **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

12D Ravine forests: **1 - rare occurrence**

12F Limestone beech forests: **1 - rare occurrence**

12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**

12I Sub-continental thermophilous oak forests: **1 - rare occurrence**

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

12K Acidophilous oak forests: **1 - rare occurrence**

12L Boreo-continental pine forests: **2 - optimum**

12O Peri-Alpidic pine forests: **2 - optimum**

12T Robinia pseudacacia plantations: **1 - rare occurrence**

12V Spruce plantations: **1 - rare occurrence**

12W Pine and larch plantations: **1 - rare occurrence**

## 13 Anthropogenic vegetation

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: **1 - rare occurrence**

## Diagnostic taxon

Diagnostic taxon of classes: [\*\*LE Erico-Pinetea\*\*](#)

Diagnostic taxon of alliances: [\*\*ADA Calamagrostion villosae\*\*](#), [\*\*ADB Calamagrostion arundinaceae\*\*](#), [\*\*KAB Salicion elaeagno-daphnoidis\*\*](#), [\*\*LCB Aceri tatarici-Quercion\*\*](#), [\*\*LEA Erico carneae-Pinion\*\*](#), [\*\*SAB Asplenion cuneifolii\*\*](#), [\*\*TEA Nardion strictae\*\*](#), [\*\*TEB Nardo strictae-Agrostion tenuis\*\*](#)

Diagnostic taxon of associations: [\*\*ADA02 Crepido conyzifoliae-Calamagrostietum villosae\*\*](#), [\*\*ADB01 Bupleuro longifoliae-Calamagrostietum arundinaceae\*\*](#), [\*\*ADD03 Trollio altissimi-Geranietum sylvatici\*\*](#), [\*\*KAB01 Salicetum elaeagno-purpureae\*\*](#), [\*\*LCB01 Quercetum pubescenti-roboris\*\*](#), [\*\*LCB02 Carici fritschii-Quercetum roboris\*\*](#), [\*\*LEA01 Thlaspio montani-Pinetum sylvestris\*\*](#), [\*\*LFB04 Asplenio cuneifolii-Pinetum sylvestris\*\*](#), [\*\*SAB01 Asplenietum cuneifolii\*\*](#), [\*\*TDB02 Melandrio rubri-Phleetum\*\*](#)



[alpini, TEA02 Thesio alpini-Nardetum strictae, TEB01 Sileno vulgaris-Nardetum strictae](#)

Constant taxon

Constant taxon of classes: [LE Erico-Pinetea](#)

Constant taxon of alliances: [ADA Calamagrostion villosae, ADB Calamagrostion arundinaceae, LCB Aceri tatarici-Quercion, LEA Erico carneae-Pinion, SAB Asplenion cuneifolii, TEA Nardion strictae, TEB Nardo strictae-Agrostion tenuis](#)

Constant taxon of associations: [ADA02 Crepido conyzifoliae-Calamagrostietum villosae, ADB01 Bupleuro longifoliae-Calamagrostietum arundinaceae, ADD03 Trollio altissimi-Geranietum sylvatici, KAB01 Salicetum elaeagno-purpureae, KAB03 Salici purpureae-Myricarietum germanicae, LCB01 Quercetum pubescenti-roboris, LCB02 Carici fritschii-Quercetum roboris, LEA01 Thlaspio montani-Pinetum sylvestris, LFB04 Asplenio cuneifolii-Pinetum sylvestris, SAB01 Asplenietum cuneifolii, TDB02 Melandrio rubri-Phleetum alpini, TEA02 Thesio alpini-Nardetum strictae, TEB01 Sileno vulgaris-Nardetum strictae, THC04 Asplenio cuneifolii-Seslerietum caeruleae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.6**

Ecological specialization index for non-forest vegetation: **3.9**

Ecological specialization index for forest vegetation: **3.9**

Colonization ability

Index of colonization success (ICS): **7**

Index of colonization potential (ICP): **7**

Optimum successional age [years]: **26.5**

## Distribution and frequency

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

Floristic region: **Europe, Asia**

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

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 623

taxon.data.freq\_in\_quad: 1827

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.8 %**

Occurrence frequency in vegetation plots with a cover above 5%: **6.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.7 %**

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

Mean percentage cover in vegetation plots: **2.9 %**

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: **42**

Number of narrow habitats in which the taxon has its optimum: **9**

Number of broad habitats in which the taxon occurs: **10**

Number of broad habitats in which the taxon has its optimum: **7**

## Threats and protection

Legal protection: **not protected by law**