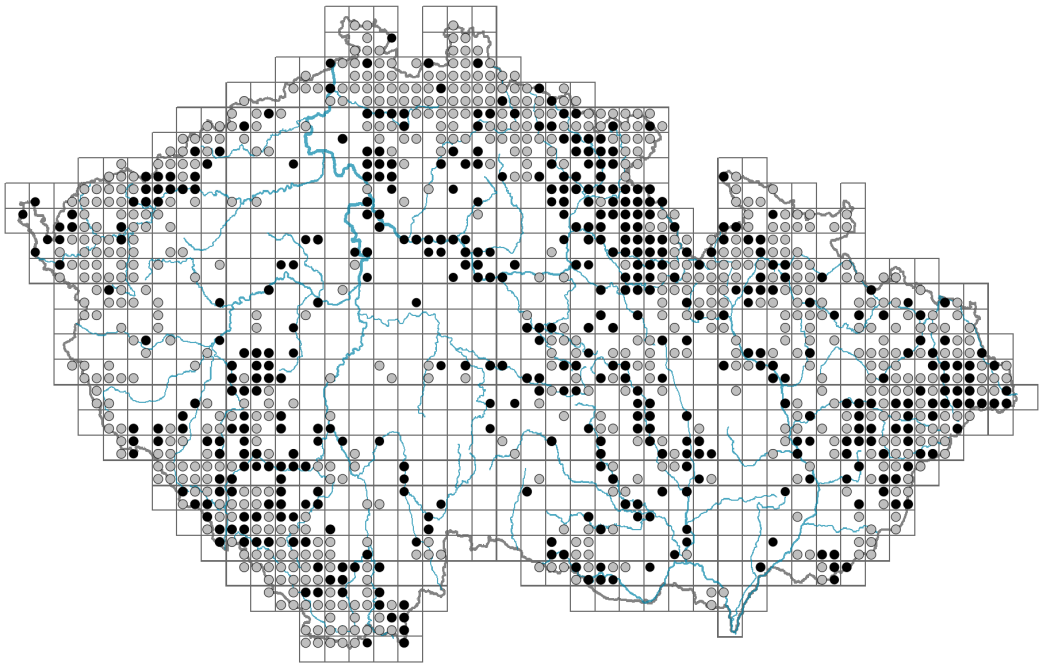
Silene dioica

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]: **0.2–0.7**
Growth form: **polycarpic perennial non-clonal herb**
Life form: **hemicryptophyte**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **CR**
Life strategy (Pierce method, C-score): **48.3 %**
Life strategy (Pierce method, S-score): **0 %**
Life strategy (Pierce method, R-score): **51.7 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **opposite, rosulate**
Leaf shape: **simple – entire**
Stipules: **absent**
Petiole: **both present and absent**
Leaf life span: **evergreen**
Leaf anatomy: **mesomorphic**

Flower

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

Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**
Flower colour: **red-violet**
Flower symmetry: **actinomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **free**
Calyx fusion: **synsepalous**
Inflorescence type: **dichasium**
Dicliny: **dioecious, trioecious**
Generative reproduction type: **allogamy**
Pollination syndrome: **insect-pollination**
Pollinator spectrum: **hoverflies, butterflies, nitidulids (bumblebees, solitary bees, other Hymenoptera, flies s. l., other Diptera, beetles)**

Fruit, seed and dispersal

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

Belowground organs and clonality

Shoot metamorphosis: **rhizome-like pleiocorm**
Storage organ: **rhizome-like pleiocorm**
Shoot life span (cyclicity): **dicyclic or polycyclic 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 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): **19**
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): **39**
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]: **4915.53**
1Cx monoploid genome size [Mbp]: **2457.76**
Genomic GC content: **40.5 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **5x – semi-shade plant, only exceptionally occurring in full light, but usually at more than 10% of the diffuse radiation incident in an open area (generalist)**
Temperature indicator value: **4x – transition between values 3 and 5 (generalist)**
Moisture indicator value: **6 – transition between values 5 and 7**
Reaction indicator value: **6 – transition between values 5 and 7**
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: **-1.57**
Herb layer disturbance frequency indicator value: **-0.6**
Whole-community disturbance severity indicator value: **0.35**
Herb layer disturbance severity indicator value: **0.3**
Whole-community structure based disturbance indicator value: **0.21**
Herb layer structure-based disturbance indicator value: **0.31**

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**

2 Alpine and subalpine grasslands

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

4 Wetland and riverine herbaceous vegetation

4D Riverine reed vegetation: **1 – rare occurrence**
4K Petasites fringes of montane brooks: **2 – optimum**
4L Nitrophilous herbaceous fringes of lowland rivers: **1 – rare occurrence**

6 Meadows and mesic pastures

6B Montane mesic meadows: **2 – optimum**
6D Alluvial meadows of lowland rivers: **1 – rare occurrence**
6E Wet Cirsium meadows: **1 – rare occurrence**

7 Acidophilous grasslands

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

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

11 Heathlands and scrub

11D Subalpine acidophilous Pinus mugo scrub: **1 – rare occurrence**

11H Subalpine deciduous scrub: **1 – rare occurrence**

11J Willow galleries of loamy and sandy river banks: **1 – rare occurrence**

12 Forests

12A Alder carrs: **1 – rare occurrence**

12B Alluvial forests: **2 – optimum**

12C Oak-hornbeam forests: **1 – rare occurrence**

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

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

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

12G Acidophilous beech forests: **1 – rare occurrence**

12R Acidophilous spruce forests: **1 – rare occurrence**

12S Basiphilous spruce forests: **2 – optimum**

12U Plantations of broad-leaved non-native trees: **1 – rare occurrence**

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

13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 – rare occurrence**

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**

Diagnostic taxon

Diagnostic taxon of alliances: **KAB *Salicion elaeagno-daphnoidis***, **TDB *Polygono bistortae-Trisetion flavescentis***, **TEB *Nardo strictae-Agrostion tenuis***, **XDB *Petasition hybridi***, **XDF *Rumicion alpini***

Diagnostic taxon of associations: **ADD04 *Laserpitio archangelicae-Dactylidetum glomeratae***, **ADE02 *Adenostylo alliariae-Athyrietum distentifolii***, **KAB01 *Salicetum elaeagno-purpureae***, **LBA01 *Alnetum incanae***, **TDB02 *Melandrio rubri-Phleetum alpini***, **TEB01 *Sileno vulgaris-Nardetum strictae***, **XDF01 *Rumicetum alpini***

Constant taxon

Constant taxon of alliances: **TEB *Nardo strictae-Agrostion tenuis***, **XDF *Rumicion alpini***

Constant taxon of associations: **ADD04 *Laserpitio archangelicae-Dactylidetum glomeratae***, **ADE02 *Adenostylo alliariae-Athyrietum distentifolii***, **LBA01 *Alnetum incanae***, **TDB02 *Melandrio rubri-Phleetum alpini***, **TEB01 *Sileno vulgaris-Nardetum strictae***, **XDF01 *Rumicetum alpini***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.2**

Ecological specialization index for non-forest vegetation: **4.5**

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

Colonization ability

Index of colonization success (ICS): **5**
Index of colonization potential (ICP): **4**
Optimum successional age [years]: **4.5**

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional**
Floristic region: **Europe, Western Siberia**
Continentality degree: **4**
Distribution range extension along the continentality gradient: **4**
Elevational belt in the Czech Republic: **submontane belt, montane belt (lowlands)**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 475
taxon.data.freq_in_quad: 1122

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.4 %**
Occurrence frequency in vegetation plots with a cover above 5%: **2.4 %**
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: **2.3 %**
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: **26**
Number of narrow habitats in which the taxon has its optimum: **6**
Number of broad habitats in which the taxon occurs: **8**
Number of broad habitats in which the taxon has its optimum: **5**

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**