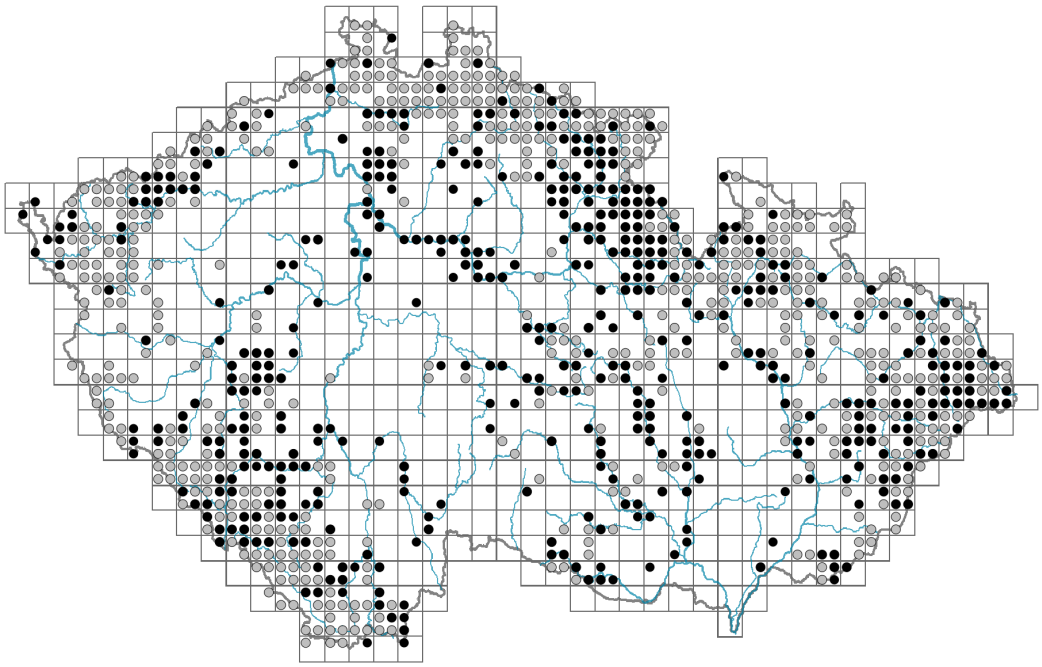
Silene dioica

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):
Number of buds per shoot at a depth of 0–10 cm (root buds excluded):
Number of buds per shoot at a depth greater than 10 cm (root buds excluded):
Size of the belowground bud bank (root buds excluded):
Depth of the belowground bud bank (root buds exluded) [cm]:
Number of buds per shoot at the soil surface (root buds included):
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):
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: 449
taxon.data.freq_in_quad: 1009

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**