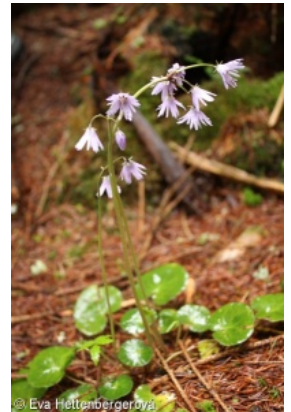
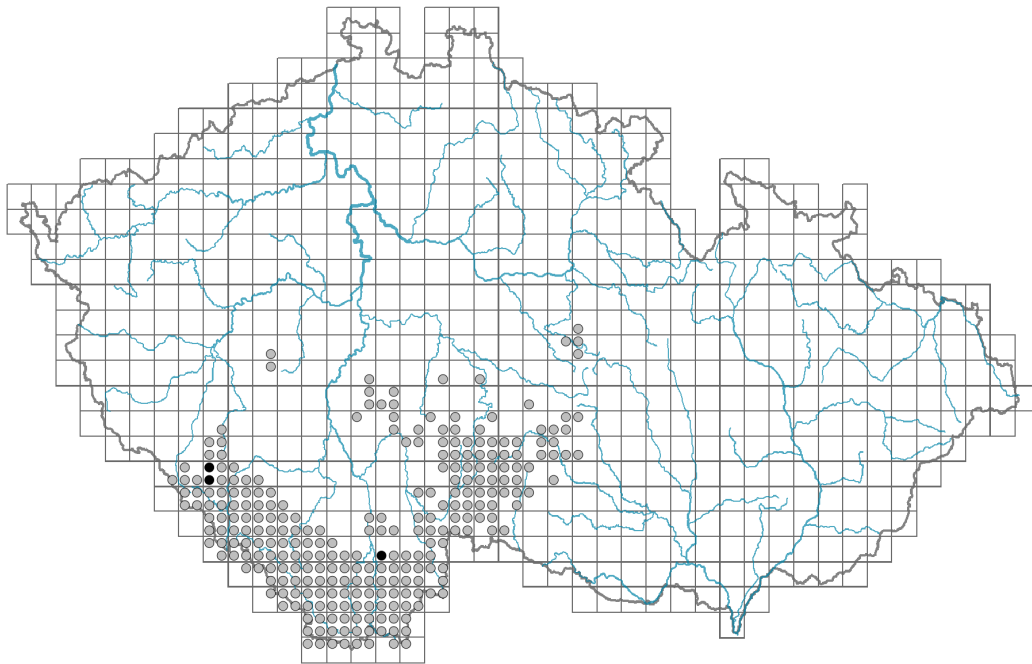


Soldanella montana

Distribution



© Eva Hellenbergerová

Map info

● revised records

○ unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



© Alena Zima



© Dana Michalčová



© Dana Michalčová

Habitus and growth type

Height [m]: **0.04-0.15**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

Leaf

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

Leaf arrangement (phyllotaxis): **rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **mesomorphic**

Flower

Flowering period [month]: **April-June**

Flower colour: **blue-violet**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **campanulate**
Calyx fusion: **synsepalous**
Inflorescence type: **umbella**
Dicliny: **synoecious**
Generative reproduction type: **allogamy self-incompatibility**
Pollination syndrome: **insect-pollination**

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**
Storage organ: **rhizome**
Type of clonal growth organ: **epigeogenous rhizome**
Freely dispersible organs of clonal growth: **absent**
Shoot life span (cyclicality): **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 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): **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**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

Karyology

Chromosome number (2n): **38**

Ploidy level (x): **4**

2C genome size [Mbp]: **3058.26**

1Cx monoploid genome size [Mbp]: **764.56**

Genomic GC content: **39.1 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **5 - semi-shade plant, only exceptionally occurring in full light, but usually at more than 10% of the diffuse radiation incident in an open area**

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

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

Reaction indicator value: **2 - transition between values 1 and 3**

Nutrient indicator value: **3 - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.9**

Herb layer disturbance frequency indicator value: **-0.68**

Whole-community disturbance severity indicator value: **0.28**

Herb layer disturbance severity indicator value: **0.14**

Whole-community structure based disturbance indicator value: **0.09**

Herb layer structure-based disturbance indicator value: **0.19**

Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **2 - optimum**

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 - rare occurrence**

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

12 Forests

12B Alluvial forests: **1 - rare occurrence**

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

12G Acidophilous beech forests: **2 - optimum**

12R Acidophilous spruce forests: **2 - optimum**

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

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

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

Affinity to the forest environment

Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.1 - taxon occurring mainly in the closed forest**

Diagnostic taxon

Diagnostic taxon of associations: [LFC03 Equiseto sylvatici-Piceetum abietis](#)

Constant taxon

Constant taxon of associations: [LFC03 Equiseto sylvatici-Piceetum abietis](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.7**

Ecological specialization index for non-forest vegetation: **5**

Ecological specialization index for forest vegetation: **5.8**

Colonization ability

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

Index of colonization potential (ICP): **1**

Distribution and frequency

Floristic zone: **southern temperate, submeridional**

Floristic region: **Europe**

Continental degree: **5**

Distribution range extension along the continentality gradient: **1**

Elevational belt in the Czech Republic: **submontane belt, montane belt (colline belt)**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **101**

taxon.data.freq_in_quad: 266

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **1.3 %**

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: **12**

Number of narrow habitats in which the taxon has its optimum: **4**

Number of broad habitats in which the taxon occurs: **4**

Number of broad habitats in which the taxon has its optimum: **2**

Threats and protection

Red List 2017 (national categories): **C3 - vulnerable taxon**

Red List 2017 (IUCN categories): **LC - least concern**

Legal protection: **vulnerable taxon**