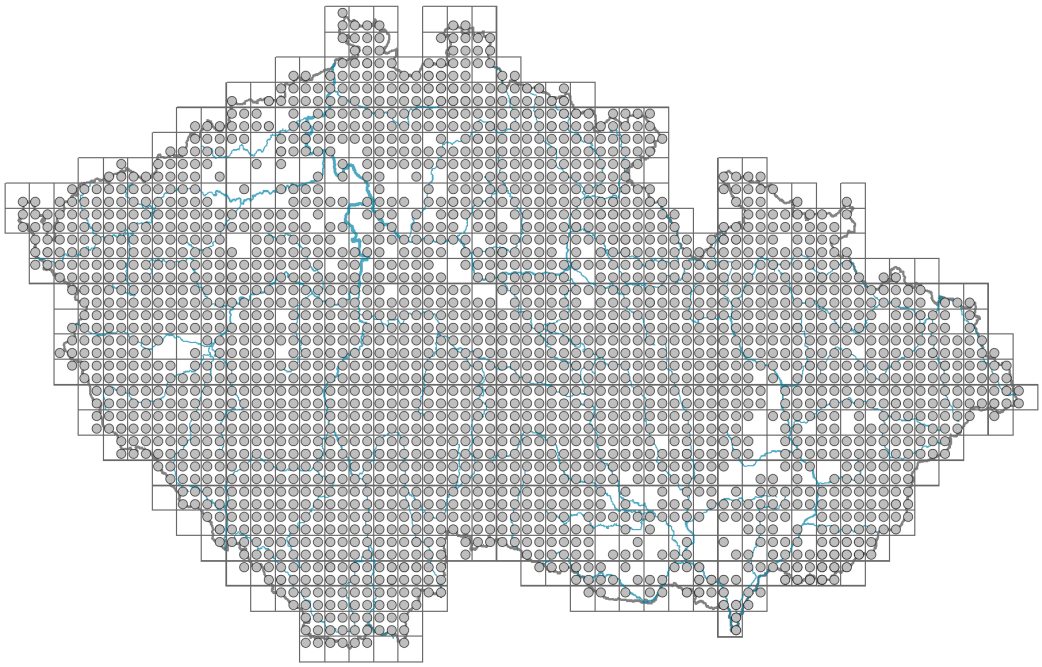
Angelica sylvestris

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]: **0.6–1.5**
Growth form: **monocarpic perennial non-clonal herb**
Life form: **hemicryptophyte**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **S/CSR**
Life strategy (Pierce method, C-score): **15.5 %**
Life strategy (Pierce method, S-score): **63.4 %**
Life strategy (Pierce method, R-score): **21.1 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **compound – bipinnate, compound – tripinnate**
Stipules: **absent**
Petiole: **both present and absent**
Leaf life span: **summer green**
Leaf anatomy: **mesomorphic, helomorphic**

Flower

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

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Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**
Flower colour: **white**
Flower symmetry: **actinomorphic**
Perianth type: **calyx absent, corolla present**
Perianth fusion: **free**
Inflorescence type: **umbella composita**
Dicliny: **andromonoecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **insect-pollination**
Pollinator spectrum: **other Hymenoptera, other Diptera (honeybee, solitary bees, hoverflies, flies s. l., meat flies s. l., butterflies, beetles, nitidulids, other pollinators)**

Fruit, seed and dispersal

Fruit type: **dry fruit – cremocarp**
Fruit colour: **brown**
Reproduction type: **only by seed/spores**
Dispersal unit (diaspore): **fruit, infrutescence or its part**
Dispersal strategy: **Allium (mainly autochory)**
Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Root metamorphosis: **primary storage root**
Storage organ: **primary storage root**
Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**
Primary root: **present**

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): **12**
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): **17**
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): **12**
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): **17**
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): **22**

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Ploidy level (x): **2**
2C genome size [Mbp]: **4429.27**
1Cx monoploid genome size [Mbp]: **2214.63**
Genomic GC content: **39.1 %**

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: **5x – moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**
Moisture indicator value: **8 – transition between values 7 and 9**
Reaction indicator value: **6x – transition between values 5 and 7 (generalist)**
Nutrient indicator value: **6 – transition between values 5 and 7**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.01**
Herb layer disturbance frequency indicator value: **-0.41**
Whole-community disturbance severity indicator value: **0.29**
Herb layer disturbance severity indicator value: **0.3**
Whole-community structure based disturbance indicator value: **0.42**
Herb layer structure-based disturbance indicator value: **0.54**

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: **1 – rare occurrence**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 – rare occurrence**
4D Riverine reed vegetation: **1 – rare occurrence**
4E Reed vegetation of brooks: **1 – rare occurrence**
4G Tall-sedge beds: **1 – rare occurrence**
4J River gravel banks: **1 – rare occurrence**
4K Petasites fringes of montane brooks: **2 – optimum**
4L Nitrophilous herbaceous fringes of lowland rivers: **1 – rare occurrence**

5 Vegetation of springs and mires

5A Hard-water springs with tufa formation: **1 – rare occurrence**
5B Lowland to montane soft-water springs: **1 – rare occurrence**
5C Alpine and subalpine soft-water springs: **1 – rare occurrence**

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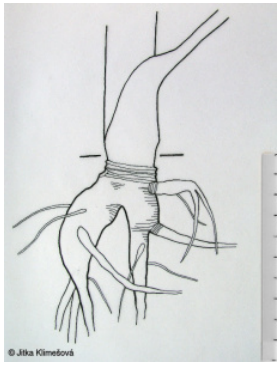

5D Calcareous fens: **2 – optimum**
5E Acidic moss-rich fens and peatland meadows: **2 – optimum**
5F Transitional mires: **1 – rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 – rare occurrence**
6B Montane mesic meadows: **1 – rare occurrence**
6C Pastures and park grasslands: **1 – rare occurrence**
6D Alluvial meadows of lowland rivers: **2 – optimum**
6E Wet Cirsium meadows: **2 – optimum**
6F Intermittently wet Molinia meadows: **2 – optimum**
6G Vegetation of wet disturbed soils: **1 – rare occurrence**

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 – rare occurrence**
7B Submontane Nardus grasslands: **1 – rare occurrence**

8 Dry grasslands

8F Thermophilous forest fringe vegetation: **1 – rare occurrence**

10 Saline vegetation

10I Inland saline meadows: **1 – rare occurrence**

11 Heathlands and scrub

11D Subalpine acidophilous Pinus mugo scrub: **1 – rare occurrence**
11H Subalpine deciduous scrub: **2 – optimum**
11I Willow carrs: **1 – rare occurrence**
11J Willow galleries of loamy and sandy river banks: **2 – optimum**
11L Tall mesic and xeric shrub: **1 – rare occurrence**
11N Low xeric scrub: **1 – rare occurrence**
11R Scrub and pioneer woodland of forests clearings: **2 – optimum**

12 Forests

12A Alder carrs: **2 – optimum**
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**
12H Peri-Alpidic basiphilous thermophilous oak forests: **1 – rare occurrence**
12I Sub-continental thermophilous oak forests: **1 – rare occurrence**
12K Acidophilous oak forests: **1 – rare occurrence**
12Q Peatland birch forests: **1 – rare occurrence**
12T Robinia pseudacacia plantations: **1 – rare occurrence**
12U Plantations of broad-leaved non-native trees: **2 – optimum**
12V Spruce plantations: **1 – rare occurrence**
12W Pine and larch plantations: **1 – rare occurrence**

13 Anthropogenic vegetation

13D Perennial thermophilous ruderal vegetation: **1 – rare occurrence**
13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 – optimum**
13F Herbaceous vegetation of forests clearings and Rubus scrub: **2 – optimum**

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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: **TDF *Calthion palustris***

Diagnostic taxon of associations: **TDF03 *Angelico sylvestris-Cirsietum palustris***

Constant taxon

Constant taxon of alliances: **TDF *Calthion palustris***

Constant taxon of associations: **KAB03 *Salici purpureae-Myricarietum germanicae***, **LAA03 *Carici acutiformis-Alnetum glutinosae***, **TDF01 *Angelico sylvestris-Cirsietum oleracei***, **TDF02 *Cirsietum rivularis***, **TDF03 *Angelico sylvestris-Cirsietum palustris***, **TDF04 *Crepido paludosae-Juncetum acutiflori***, **TDF05 *Polygono bistortae-Cirsietum heterophylli***, **TDF06 *Chaerophyllo hirsuti-Calthetum palustris***, **TDF08 *Scirpetum sylvatici***, **TDF09 *Caricetum cespitosae***, **TDF10 *Scirpo sylvatici-Caricetum brizoidis***, **TDF12 *Filipendulo ulmariae-Geranietum palustris***, **TDF13 *Lysimachio vulgaris-Filipenduletum ulmariae***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.9**

Ecological specialization index for non-forest vegetation: **5.4**

Ecological specialization index for forest vegetation: **4.8**

Colonization ability

Index of colonization success (ICS): **6**

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **15**

Distribution and frequency

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

Floristic region: **Europe, Siberia**

Distribution range extension along the continentality gradient: **6**

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: 663

taxon.data.freq_in_quad: 2276

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **9 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.1 %**

Mean percentage cover in vegetation plots: **3.3 %**

Maximum percentage cover in vegetation plots: **63 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **52**

Number of narrow habitats in which the taxon has its optimum: **14**

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Number of broad habitats in which the taxon occurs: **11**
Number of broad habitats in which the taxon has its optimum: **6**

Threats and protection

Legal protection: **not protected by law**

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