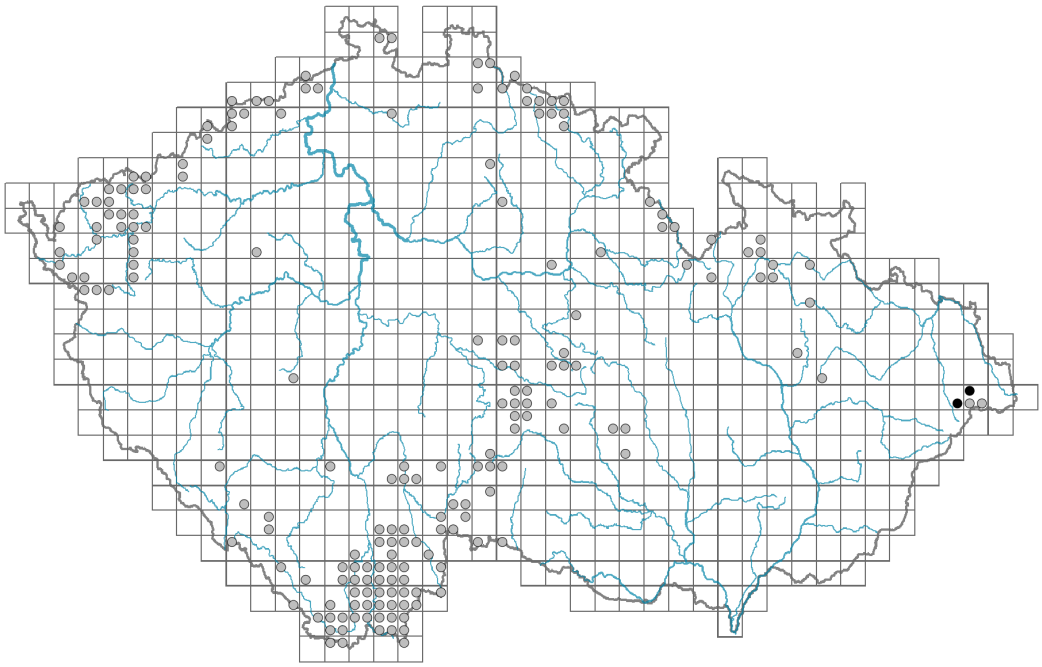
Alnus alnobetula

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]: **1–3**
Growth form: **shrub**
Life form: **nanophanerophyte**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **CSR**
Life strategy (Pierce method, C-score): **29.5 %**
Life strategy (Pierce method, S-score): **40.9 %**
Life strategy (Pierce method, R-score): **29.6 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **simple – entire**
Stipules: **present**
Petiole: **present**
Leaf life span: **summer green**
Leaf deciduousness in woody plants: **winter deciduous**
Leaf anatomy: **mesomorphic**
Functional leaf type in woody plants: **broad deciduous or semi-deciduous**

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Flower

Flowering period [month]: **April–May**
Flowering phase: **4 Fagus sylvatica-Galeobdolon (start of mid-spring)**
Flower colour: **yellow-green**
Perianth type: **homochlamydeous, reduced or absent**
Perianth fusion: **reduced**
Inflorescence type: **amentum e floribus masculis, strobilus**
Dicliny: **monoecious**
Generative reproduction type: **allogamy self-incompatibility**
Pollination syndrome: **wind-pollination**

Fruit, seed and dispersal

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

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **symbiosis with Frankia**

Karyology

Chromosome number (2n): **28**
Ploidy level (x): **2**
2C genome size [Mbp]: **1039.29**
1Cx monoploid genome size [Mbp]: **519.64**
Genomic GC content: **39.4 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **7 – half-light plant, mostly occurring at full light, but also in the shade up to about 30% of diffuse radiation incident in an open area**
Temperature indicator value: **3 – cool indicator, occurring mainly in subalpine areas**
Moisture indicator value: **6 – transition between values 5 and 7**
Reaction indicator value: **4 – transition between values 3 and 5**
Nutrient indicator value: **5 – occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

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Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

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

11 Heathlands and scrub

11D Subalpine acidophilous Pinus mugo scrub: **1 – rare occurrence**
11H Subalpine deciduous scrub: **1 – rare occurrence**
11L Tall mesic and xeric shrub: **1 – rare occurrence**
11R Scrub and pioneer woodland of forests clearings: **2 – optimum**

12 Forests

12U Plantations of broad-leaved non-native trees: **1 – rare occurrence**
12V Spruce plantations: **1 – rare occurrence**
12W Pine and larch plantations: **1 – rare occurrence**

13 Anthropogenic vegetation

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

Affinity to the forest environment

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 – taxon occurring partly in the forest, but mainly in open vegetation**

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.1**
Ecological specialization index for non-forest vegetation: **5.2**
Ecological specialization index for forest vegetation: **7.3**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional**
Floristic region: **Europe**
Continentality degree: **5**
Distribution range extension along the continentality gradient: **3**
Elevational belt in the Czech Republic: **colline belt, submontane belt, montane belt**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 116
taxon.data.freq_in_quad: 193

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**
Occurrence frequency in vegetation plots with a cover above 5%: **87.5 %**
Occurrence frequency in vegetation plots with a cover above 25%: **87.5 %**
Occurrence frequency in vegetation plots with a cover above 50%: **75 %**
Mean percentage cover in vegetation plots: **70.9 %**
Maximum percentage cover in vegetation plots: **88 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **10**
Number of narrow habitats in which the taxon has its optimum: **1**
Number of broad habitats in which the taxon occurs: **4**

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Number of broad habitats in which the taxon has its optimum: **1**

Threats and protection

Red List 2017 (national categories): **C2b – endangered taxon, rare and declining**
Red List 2017 (IUCN categories): **VU – vulnerable**
Legal protection: **not protected by law**

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