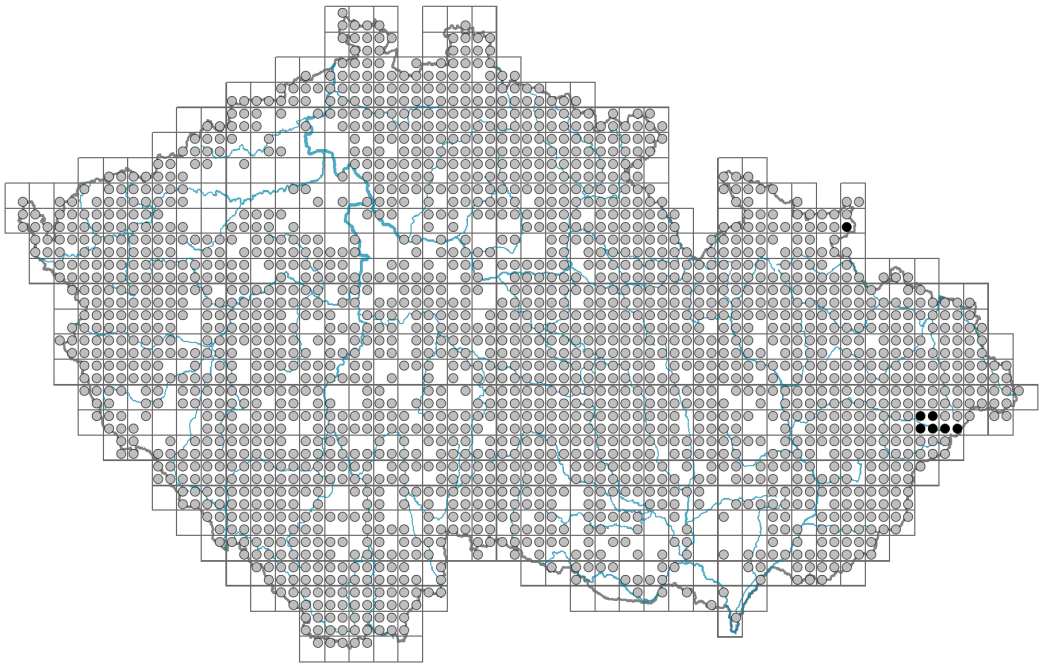
Alnus incana

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]: **6–20**
Growth form: **tree**
Life form: **macrophanerophyte (nanophanerophyte)**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **CR/CSR**
Life strategy (Pierce method, C-score): **45.5 %**
Life strategy (Pierce method, S-score): **22.8 %**
Life strategy (Pierce method, R-score): **31.7 %**

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**

Flower

Flowering period [month]: **March–April**
Flowering phase: **1 Corylus avellana-Leucojum vernum (pre-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: **by seed/spores and vegetatively**
Dispersal unit (diaspore): **seed, fruit, infrutescence or its part**
Dispersal strategy: **Epilobium (mainly anemochory and autochory)**
Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Root metamorphosis: **root shoot**
Position of root buds: **primary root**
Role of root buds in life-history of a plant: **additive**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **0**
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **8**
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): **8**
Depth of the belowground bud bank (root buds exluded) [cm]: **5**
Number of buds per shoot at the soil surface (root buds included): **0**
Number of buds per shoot at a depth of 0–10 cm (root buds included): **20**
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): **35**
Depth of the belowground bud bank (root buds included) [cm]: **9**

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]: **1055.09**

1Cx monoploid genome size [Mbp]: **527.55**
Genomic GC content: **38.7 %**

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: **4 – transition between values 3 and 5**
Moisture indicator value: **7 – humidity indicator, focus on well moistened, but not wet soils**
Reaction indicator value: **6 – transition between values 5 and 7**
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: **-1.86**
Herb layer disturbance frequency indicator value: **-0.73**
Whole-community disturbance severity indicator value: **0.28**
Herb layer disturbance severity indicator value: **0.14**
Whole-community structure based disturbance indicator value: **0.14**
Herb layer structure-based disturbance indicator value: **0.25**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 – rare occurrence**
4J River gravel banks: **2 – optimum**
4K Petasites fringes of montane brooks: **2 – optimum**

5 Vegetation of springs and mires

5D Calcareous fens: **1 – rare occurrence**

11 Heathlands and scrub

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

12 Forests

12A Alder carrs: **2 – optimum**
12B Alluvial forests: **4 – constant dominant**
12C Oak-hornbeam forests: **1 – rare occurrence**
12D Ravine forests: **1 – rare occurrence**
12Q Peatland birch forests: **1 – rare occurrence**
12R Acidophilous spruce forests: **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**

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*, LBA *Alnion incanae***

Diagnostic taxon of associations: **KAB01 *Salicetum elaeagno-purpureae*, KAB02 *Salicetum purpureae*, LBA01 *Alnetum incanae*, LBA02 *Piceo abietis-Alnetum glutinosae***

Constant taxon

Constant taxon of alliances: **KAB *Salicion elaeagno-daphnoidis***

Constant taxon of associations: **KAB01 *Salicetum elaeagno-purpureae*, KAB02 *Salicetum purpureae*, LBA01 *Alnetum incanae***

Dominant taxon

Dominant taxon of associations: **LBA01 *Alnetum incanae*, LBA02 *Piceo abietis-Alnetum glutinosae***

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.1**

Ecological specialization index for non-forest vegetation: **4.4**

Ecological specialization index for forest vegetation: **5.3**

Colonization ability

Index of colonization success (ICS): **5**

Index of colonization potential (ICP): **7**

Optimum successional age [years]: **27**

Distribution and frequency

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

Floristic region: **Europe, Western Siberia**

Continentality degree: **6**

Distribution range extension along the continentality gradient: **3**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 630

taxon.data.freq_in_quad: 2034

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **57.9 %**

Occurrence frequency in vegetation plots with a cover above 25%: **42.8 %**

Occurrence frequency in vegetation plots with a cover above 50%: **22.8 %**

Mean percentage cover in vegetation plots: **28.9 %**

Maximum percentage cover in vegetation plots: **99 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **14**

Number of narrow habitats in which the taxon has its optimum: **4**
Number of broad habitats in which the taxon occurs: **5**
Number of broad habitats in which the taxon has its optimum: **2**

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**