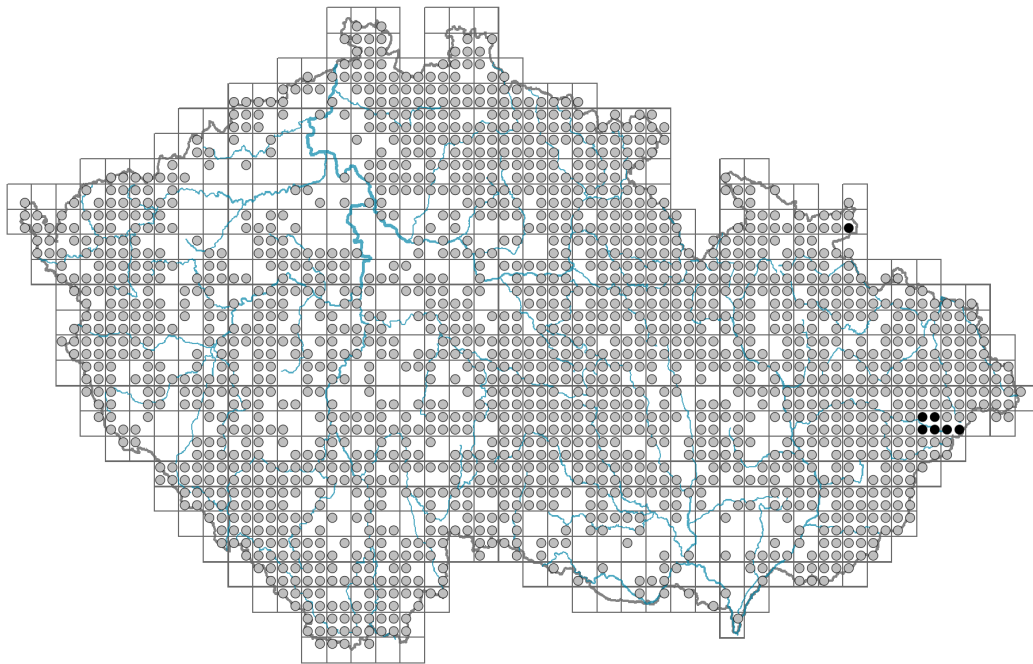


# *Alnus incana*

## 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: **alogamy 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 excluded) [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: **611**

taxon.data.freq\_in\_quad: **1757**

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**