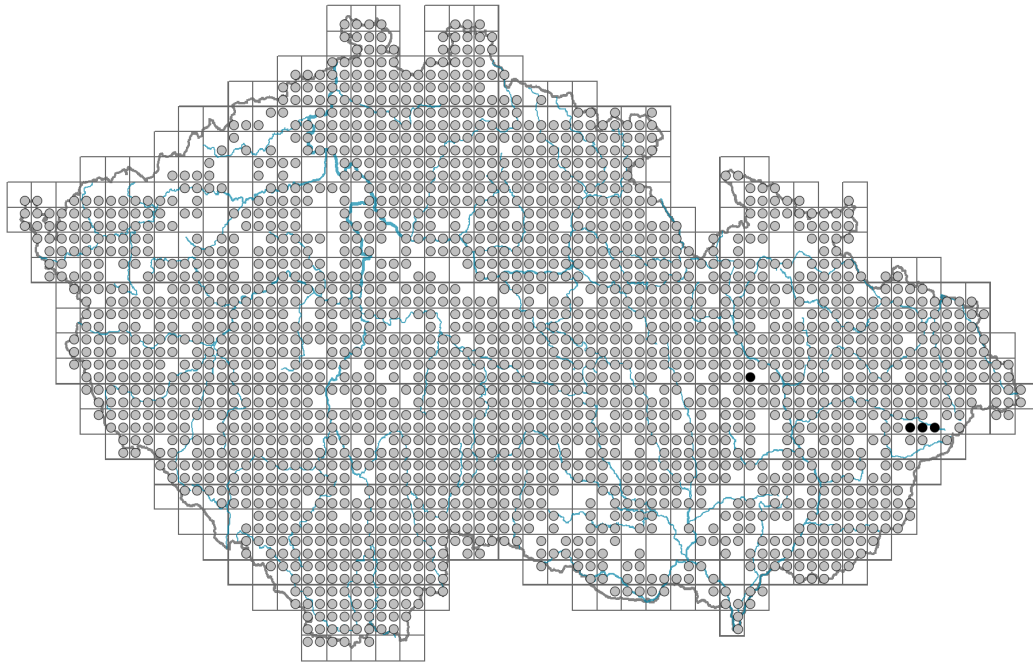


# Frangula alnus

## 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]:

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): **26.8 %**

Life strategy (Pierce method, S-score): **41.4 %**

Life strategy (Pierce method, R-score): **31.9 %**

## 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]: **May-June**

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

Flower colour: **green-white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **funnel-shaped**

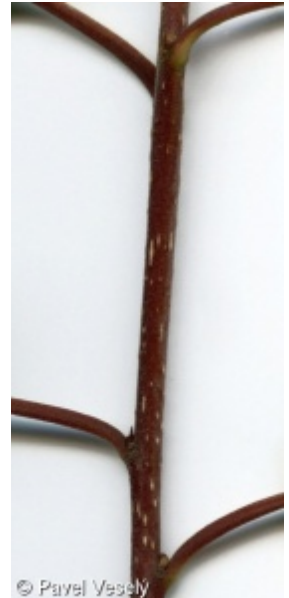
Calyx fusion: **synsepalous**

Inflorescence type: **fasciculus**

Dicliny: **synoecious**

Generative reproduction type: **allogamy self-incompatibility**

Pollination syndrome: **insect-pollination**



## Fruit, seed and dispersal

Fruit type: **fleshy fruit - drupe**

Fruit colour: **violet, red, black**

Reproduction type: **only by seed/spores**

Dispersal unit (diaspore): **seed, fruit, infrutescence or its part**

Dispersal strategy: **Cornus (mainly autochory and endozoochory)**

Myrmecochory: **non-myrmecochorous (b)**



## Belowground organs and clonality

Root metamorphosis: **root shoot**

Primary root: **absent**

Position of root buds: **lateral roots**

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):

Number of buds per shoot at a depth of 0–10 cm (root buds excluded):

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

Size of the belowground bud bank (root buds excluded):

Depth of the belowground bud bank (root buds excluded) [cm]:

Number of buds per shoot at the soil surface (root buds included):

Number of buds per shoot at a depth of 0–10 cm (root buds included): **16**

Number of buds per shoot at a depth greater than 10 cm (root buds included):

Size of the belowground bud bank (root buds included): **36**

Depth of the belowground bud bank (root buds included) [cm]: **9**



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **20 (22, 26)**

Ploidy level (x): **2**

2C genome size [Mbp]: **572.88**

1Cx monoploid genome size [Mbp]: **286.44**

Genomic GC content: **37.7 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6x - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area (generalist)**

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

Moisture indicator value: **7 - humidity indicator, focus on well moistened, but not wet soils**

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

Nutrient indicator value: **4x - transition between values 3 and 5 (generalist)**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.89**

Herb layer disturbance frequency indicator value: **-0.87**

Whole-community disturbance severity indicator value: **0.23**

Herb layer disturbance severity indicator value: **0.08**

Whole-community structure based disturbance indicator value: **0.1**

Herb layer structure-based disturbance indicator value: **0.17**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 - rare occurrence**

4F Mesotrophic vegetation of muddy substrata: **1 - rare occurrence**

4G Tall-sedge beds: **1 - rare occurrence**

5 Vegetation of springs and mires

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

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

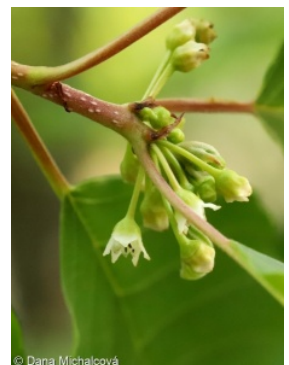
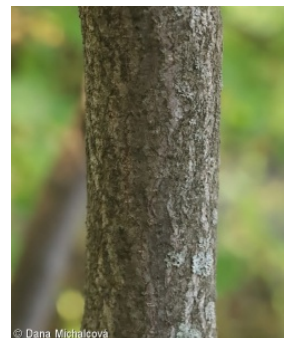
5F Transitional mires: **1 - rare occurrence**

5G Raised bogs: **1 - rare occurrence**

5H Wet peat soils and bog hollows: **1 - rare occurrence**

7 Acidophilous grasslands

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





## 8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**

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

## 11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **2 - optimum**

11I Willow carrs: **2 - optimum**

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

11L Tall mesic and xeric shrub: **1 - rare occurrence**

11N Low xeric scrub: **1 - rare occurrence**

11R Scrub and pioneer woodland of forests clearings: **3 - dominant**

## 12 Forests

12A Alder carrs: **2 - optimum**

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

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: **2 - optimum**

12J Acidophilous thermophilous oak forests: **1 - rare occurrence**

12K Acidophilous oak forests: **2 - optimum**

12L Boreo-continental pine forests: **2 - optimum**

12O Peri-Alpidic pine forests: **2 - optimum**

12P Peatland pine forests: **2 - optimum**

12Q Peatland birch forests: **2 - optimum**

12R Acidophilous spruce forests: **1 - rare occurrence**

12V Spruce plantations: **2 - optimum**

12W Pine and larch plantations: **2 - optimum**

## 13 Anthropogenic vegetation

13F Herbaceous vegetation of forests clearings and Rubus scrub: **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

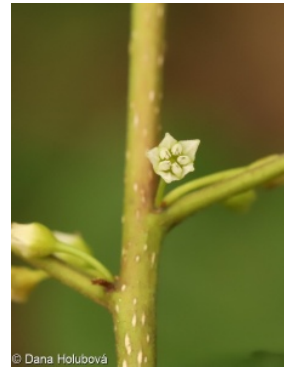
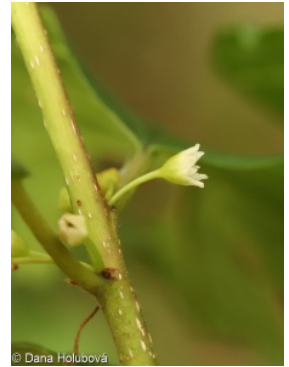
Diagnostic taxon of classes: [LA \*Alnetea glutinosae\*](#), [LD \*Quercetea robori-petraeae\*](#)

Diagnostic taxon of alliances: [LAA \*Alnion glutinosae\*](#), [LAB \*Salicion cinereae\*](#), [LDA \*Quercion roboris\*](#), [LFA \*Festuco-Pinion sylvestris\*](#)

Diagnostic taxon of associations: [LAA01 \*Thelypterido palustris-Alnetum glutinosae\*](#), [LAB01 \*Salicetum auritae\*](#), [LCB02 \*Carici fritschii-Quercetum roboris\*](#), [LDA04 \*Holco mollis-Quercetum roboris\*](#), [LFA01 \*Festuco-Pinetum sylvestris\*](#), [LFD02 \*Vaccinio uliginosi-Pinetum sylvestris\*](#)

## Constant taxon

Constant taxon of classes: [LA \*Alnetea glutinosae\*](#)



Constant taxon of alliances: [LAA Alnion glutinosae](#), [LFA Festuco-Pinion sylvestris](#)

Constant taxon of associations: [LAA01 Thelypterido palustris-Alnetum glutinosae](#), [LAB01 Salicetum auritae](#), [LCB02 Carici fritschii-Quercetum roboris](#), [LDA04 Holco mollis-Quercetum roboris](#), [LFA01 Festuco-Pinetum sylvestris](#), [LFD02 Vaccinio uliginosi-Pinetum sylvestris](#)

Dominant taxon

Dominant taxon of associations: [LAA01 Thelypterido palustris-Alnetum glutinosae](#), [LAB01 Salicetum auritae](#), [LAB02 Salicetum pentandro-auritae](#), [LDA04 Holco mollis-Quercetum roboris](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.9**

Ecological specialization index for non-forest vegetation: **3.1**

Ecological specialization index for forest vegetation: **4.1**

Colonization ability

Index of colonization success (ICS): **7**

Index of colonization potential (ICP): **8**

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

## Distribution and frequency

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

Floristic region: **Europe, Western Asia**

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

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: 636

taxon.data.freq\_in\_quad: 2084

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.4 %**

Occurrence frequency in vegetation plots with a cover above 5%: **19 %**

Occurrence frequency in vegetation plots with a cover above 25%: **4.5 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.7 %**

Mean percentage cover in vegetation plots: **5.6 %**

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: **38**

Number of narrow habitats in which the taxon has its optimum: **12**

Number of broad habitats in which the taxon occurs: **8**

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**