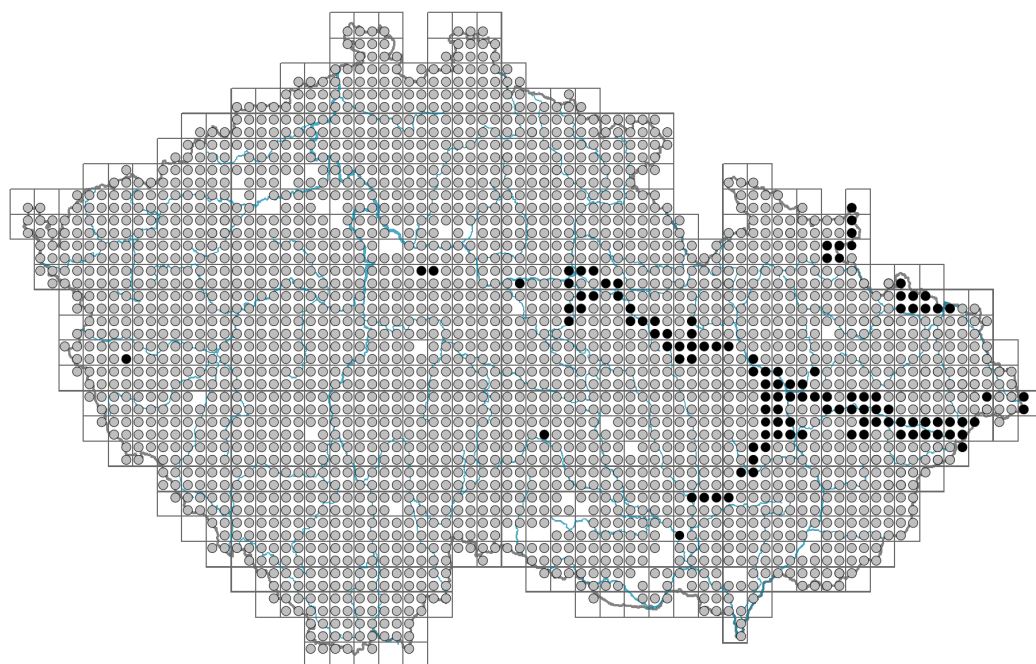


# Betula pendula

## Distribution



© Jan Divišek

### Map info

● revised records

● unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



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## Habitus and growth type

Height [m]: **5-25**

Growth form: **tree**

Life form: **macrophanerophyte (nanophanerophyte)**

Life strategy: **C - competitor**

Life strategy (Pierce method based on leaf traits): **S/CSR**

Life strategy (Pierce method, C-score): **28.7 %**

Life strategy (Pierce method, S-score): **45.1 %**

Life strategy (Pierce method, R-score): **26.2 %**

## 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**



© Petr Václav

## Flower

Flowering period [month]: **April-May**

Flowering phase: **3 Prunus avium-Ranunculus auricomus (end of early spring)**

Flower colour: **yellow-green**

Perianth type: **homochlamydeous, reduced or absent**

Perianth fusion: **reduced**

Inflorescence type: **amentum e floribus masculis, amentum e floribus femineis**

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**

Dispersal strategy: **Epilobium (mainly anemochory and autochory)**

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

## Belowground organs and clonality

Primary root: **absent**

Position of root buds: **lateral roots**

Role of root buds in life-history of a plant: **regenerative**

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): **15**

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): **20**

Depth of the belowground bud bank (root buds excluded) [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): **26**

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): **46**

Depth of the belowground bud bank (root buds included) [cm]: **8**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **28**

Ploidy level (x): **2**

2C genome size [Mbp]: **795.77**

1Cx monoploid genome size [Mbp]: **397.89**

Genomic GC content: **38.1 %**

## 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: **5x - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**

Moisture indicator value: **5x - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out (generalist)**

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

Nutrient indicator value: **3x - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites (generalist)**

Salinity indicator value: **1 - salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.88**

Herb layer disturbance frequency indicator value: **-0.81**

Whole-community disturbance severity indicator value: **0.27**

Herb layer disturbance severity indicator value: **0.13**

Whole-community structure based disturbance indicator value: **0.09**

Herb layer structure-based disturbance indicator value: **0.14**

## 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: **2 - optimum**

5 Vegetation of springs and mires

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**

6 Meadows and mesic pastures

6C Pastures and park grasslands: **1 - rare occurrence**

6E Wet Cirsium meadows: **1 - rare occurrence**

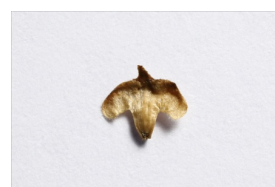
6F Intermittently wet Molinia meadows: **1 - rare occurrence**

6G Vegetation of wet disturbed soils: **1 - rare occurrence**

7 Acidophilous grasslands

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

8 Dry grasslands





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

8D Broad-leaved dry grasslands: **1 - rare occurrence**

8E Acidophilous dry grasslands: **1 - rare occurrence**

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

9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **1 - rare occurrence**

9C Festuca grasslands on acidic sands: **1 - rare occurrence**

11 Heathlands and scrub

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

11H Subalpine deciduous scrub: **1 - rare occurrence**

11I Willow carrs: **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: **2 - optimum, 4 - constant dominant**

12 Forests

12A Alder carrs: **1 - rare occurrence**

12B Alluvial forests: **1 - rare occurrence, 2 - optimum**

12C Oak-hornbeam forests: **1 - rare occurrence, 2 - optimum**

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: **2 - optimum**

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, 3 - dominant**

12L Boreo-continental pine forests: **1 - rare occurrence, 3 - dominant**

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**

12S Basiphilous spruce forests: **1 - rare occurrence**

12T Robinia pseudacacia plantations: **1 - rare occurrence**

12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

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

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

13 Anthropogenic vegetation

13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **2 - optimum**

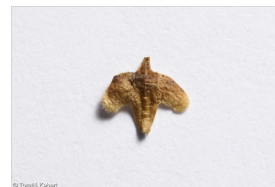
Affinity to the forest environment

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: [LD Quercetea robori-petraeae](#)



Diagnostic taxon of alliances: [LDA Quercion roboris](#), [LFA Festuco-Pinion sylvestris](#), [LFB Dicrano-Pinion sylvestris](#)

Diagnostic taxon of associations: [KBC05 Salicetum capreae](#), [LDA03 Vaccinio vitis-idaeae-Quercetum roboris](#), [LFA01 Festuco-Pinetum sylvestris](#), [LFB03 Hieracio pallidi-Pinetum sylvestris](#), [THC04 Asplenio cuneifolii-Seslerietum caeruleae](#)

Constant taxon

Constant taxon of classes: [LE Erico-Pinetea](#)

Constant taxon of alliances: [LEA Erico carnea-Pinion](#), [LFA Festuco-Pinion sylvestris](#), [LFB Dicrano-Pinion sylvestris](#)

Constant taxon of associations: [KBC05 Salicetum capreae](#), [LAA01 Thelypterido palustris-Alnetum glutinosae](#), [LAB01 Salicetum auritae](#), [LDA03 Vaccinio vitis-idaeae-Quercetum roboris](#), [LDA04 Holco mollis-Quercetum roboris](#), [LEA01 Thlaspio montani-Pinetum sylvestris](#), [LFA01 Festuco-Pinetum sylvestris](#), [LFB03 Hieracio pallidi-Pinetum sylvestris](#), [THC04 Asplenio cuneifolii-Seslerietum caeruleae](#), [XEA03 Rubo idaei-Calamagrostietum arundinaceae](#)

Dominant taxon

Dominant taxon of associations: [KBB03 Populo tremulae-Coryletum avellanae](#), [KBC05 Salicetum capreae](#), [LFD01 Vaccinio uliginosi-Betuletum pubescentis](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.8**

Ecological specialization index for non-forest vegetation: **2.9**

Ecological specialization index for forest vegetation: **4**

Colonization ability

Index of colonization success (ICS): **9**

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

Optimum successional age [years]: **22**

## Distribution and frequency

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

Floristic region: **Europe, Western Siberia**

Distribution range extension along the continentality gradient: **7**

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: **669**

taxon.data.freq\_in\_quad: **2441**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **26 %**

Occurrence frequency in vegetation plots with a cover above 25%: **4.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1 %**

Mean percentage cover in vegetation plots: **6.3 %**

Maximum percentage cover in vegetation plots: **64 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **42**

Number of narrow habitats in which the taxon has its optimum: **15**

Number of broad habitats in which the taxon occurs: **9**



Number of broad habitats in which the taxon has its optimum: **4**

## 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**



