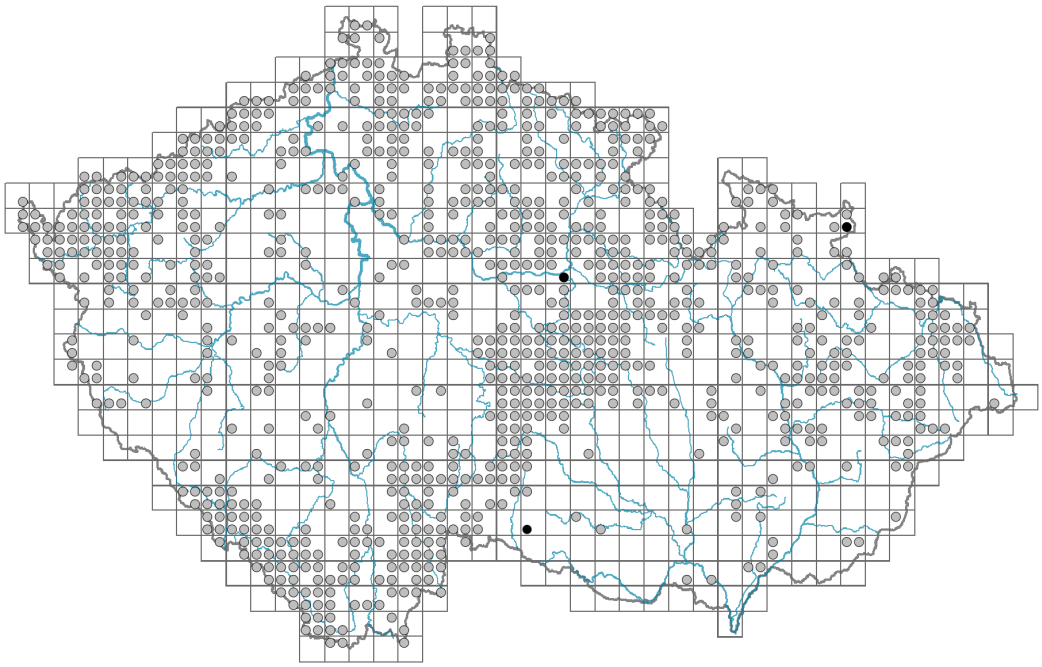
Betula pubescens subsp. *pubescens*

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]: **8–20**
Growth form: **tree**
Life form: **macrophanerophyte**
Life strategy: **CS – competitor/stress-tolerator**
Life strategy (Pierce method based on leaf traits): **S/CSR**
Life strategy (Pierce method, C-score): **28.9 %**
Life strategy (Pierce method, S-score): **49.2 %**
Life strategy (Pierce method, R-score): **21.8 %**

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, helomorphic**
Functional leaf type in woody plants: **broad deciduous or semi-deciduous**

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: **additive**

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 exluded) [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): **56 (58)**
Ploidy level (x): **4**
2C genome size [Mbp]: **1646.73**

1Cx monoploid genome size [Mbp]: **411.68**
Genomic GC content: **38.6 %**

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: **5 – moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**
Moisture indicator value: **8 – transition between values 7 and 9**
Reaction indicator value: **3 – acidity indicator, occurring mainly in acidic conditions, exceptionally in neutral conditions**
Nutrient indicator value: **3 – occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.92**
Herb layer disturbance frequency indicator value: **-1.28**
Whole-community disturbance severity indicator value: **0.19**
Herb layer disturbance severity indicator value: **0.05**
Whole-community structure based disturbance indicator value: **0.06**
Herb layer structure-based disturbance indicator value: **0.11**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

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

5 Vegetation of springs and mires

5E Acidic moss-rich fens and peatland meadows: **1 – rare occurrence**
5F Transitional mires: **2 – optimum**
5G Raised bogs: **2 – optimum**
5H Wet peat soils and bog hollows: **1 – rare occurrence**

6 Meadows and mesic pastures

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**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 – rare occurrence**
11D Subalpine acidophilous Pinus mugo scrub: **1 – rare occurrence**
11I Willow carrs: **1 – rare occurrence**

11R Scrub and pioneer woodland of forests clearings: **2 – optimum**

12 Forests

12A Alder carrs: **2 – optimum**
12B Alluvial forests: **1 – rare occurrence**
12C Oak-hornbeam forests: **1 – rare occurrence**
12K Acidophilous oak forests: **2 – optimum**
12L Boreo-continental pine forests: **1 – rare occurrence**
12P Peatland pine forests: **2 – optimum**
12Q Peatland birch forests: **4 – constant dominant**
12R Acidophilous spruce forests: **2 – optimum**
12V Spruce plantations: **1 – rare occurrence**
12W Pine and larch plantations: **1 – rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 – taxon that does not spontaneously occur in Czech forests**
Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 – taxon that does not spontaneously occur in Czech forests**

Diagnostic taxon

Diagnostic taxon of classes: **LA *Alnetea glutinosae***
Diagnostic taxon of alliances: **LAA *Alnion glutinosae*, LFD *Vaccinio uliginosi-Pinion sylvestris***
Diagnostic taxon of associations: **LAA01 *Thelypterido palustris-Alnetum glutinosae*, LAB01 *Salicetum auritae*, LDA04 *Holco mollis-Quercetum roboris*, LFD01 *Vaccinio uliginosi-Betuletum pubescentis*, LFD02 *Vaccinio uliginosi-Pinetum sylvestris*, LFD03 *Vaccinio-Pinetum montanae*, RCA04 *Sphagno-Pinetum sylvestris*, RCA05 *Ledo palustris-Pinetum uncinatae***

Constant taxon

Constant taxon of associations: **LFD01 *Vaccinio uliginosi-Betuletum pubescentis*, LFD02 *Vaccinio uliginosi-Pinetum sylvestris***

Dominant taxon

Dominant taxon of associations: **LFD01 *Vaccinio uliginosi-Betuletum pubescentis*, LFD03 *Vaccinio-Pinetum montanae***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.1**
Ecological specialization index for non-forest vegetation: **3.8**
Ecological specialization index for forest vegetation: **4.3**

Colonization ability

Index of colonization success (ICS): **7**
Index of colonization potential (ICP): **9**
Optimum successional age [years]: **7**

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional**
Floristic region: **Europe, Siberia**
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: 445
taxon.data.freq_in_quad: 928

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.4 %**
Occurrence frequency in vegetation plots with a cover above 5%: **46.3 %**
Occurrence frequency in vegetation plots with a cover above 25%: **12.4 %**
Occurrence frequency in vegetation plots with a cover above 50%: **1.7 %**
Mean percentage cover in vegetation plots: **12 %**
Maximum percentage cover in vegetation plots: **63 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **23**
Number of narrow habitats in which the taxon has its optimum: **8**
Number of broad habitats in which the taxon occurs: **6**
Number of broad habitats in which the taxon has its optimum: **3**

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**