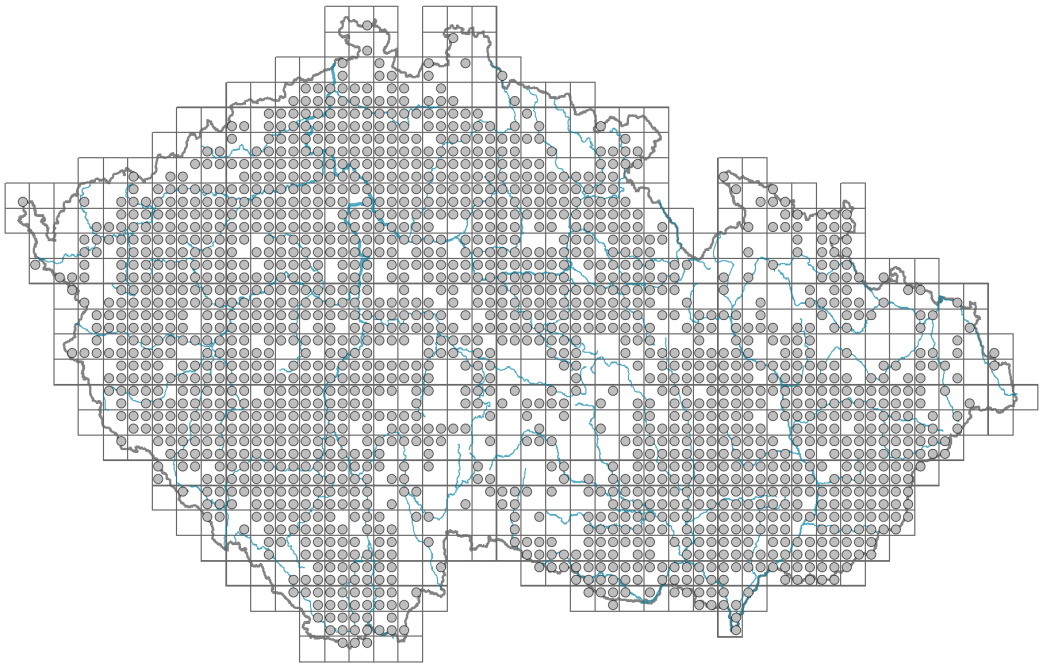
Brachypodium pinnatum

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]: **0.4–1**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **CS – competitor/stress-tolerator**
Life strategy (Pierce method based on leaf traits): **S/CSR**
Life strategy (Pierce method, C-score): **15.5 %**
Life strategy (Pierce method, S-score): **61.5 %**
Life strategy (Pierce method, R-score): **23.1 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **simple – entire**
Stipules: **absent**
Petiole: **absent**
Leaf life span: **summer green**
Leaf anatomy: **scleromorphic, mesomorphic**

Flower

Flowering period [month]: **June–July**

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Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**
Flower colour: **green**
Perianth type: **reduced**
Perianth fusion: **reduced**
Inflorescence type: **racemus e spiculis compositus**
Dicliny: **synoecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **wind-pollination**



Fruit, seed and dispersal

Fruit type: **dry fruit – caryopsis**
Fruit colour: **brown**
Reproduction type: **by seed/spores and vegetatively**
Dispersal unit (diaspore): **fruit, infrutescence or its part**
Dispersal strategy: **Allium (mainly autochory)**
Myrmecochory: **non-myrmecochorous (b)**



Belowground organs and clonality

Shoot metamorphosis: **stolon**
Storage organ: **stolon**
Type of clonal growth organ: **hypogeogenous rhizome**
Freely dispersible organs of clonal growth: **absent**
Shoot life span (cyclicity): **monocyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **sympodial**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **4**
Number of clonal offspring: **2.4**
Lateral spreading distance by clonal growth [m]: **0.13**
Clonal index: **4**



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): **15**
Number of buds per shoot at a depth greater than 10 cm (root buds included): **0**
Size of the belowground bud bank (root buds included): **20**
Depth of the belowground bud bank (root buds included) [cm]: **4**



Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

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Karyology



Chromosome number (2n): **18**
Ploidy level (x): **2**
2C genome size [Mbp]: **1297.58**
1Cx monoploid genome size [Mbp]: **648.79**
Genomic GC content: **47.2 %**

Taxon origin



Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 – transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**
Temperature indicator value: **6 – transition between values 5 and 7**
Moisture indicator value: **4 – transition between values 3 and 5**
Reaction indicator value: **7 – indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**
Nutrient indicator value: **4 – transition between values 3 and 5**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.3**
Herb layer disturbance frequency indicator value: **-0.54**
Whole-community disturbance severity indicator value: **0.23**
Herb layer disturbance severity indicator value: **0.22**
Whole-community structure based disturbance indicator value: **0.33**
Herb layer structure-based disturbance indicator value: **0.43**



Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 – rare occurrence**
1D Mobile calcareous screes: **1 – rare occurrence**

5 Vegetation of springs and mires

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

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **2 – optimum**
6B Montane mesic meadows: **1 – rare occurrence**
6C Pastures and park grasslands: **1 – rare occurrence**
6D Alluvial meadows of lowland rivers: **1 – rare occurrence**
6E Wet Cirsium meadows: **1 – rare occurrence**
6F Intermittently wet Molinia meadows: **1 – rare occurrence**

7 Acidophilous grasslands

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



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8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 – rare occurrence**
8B Submediterranean dry grasslands on rock outcrops: **2 – optimum**
8C Narrow-leaved sub-continental steppes: **2 – optimum**
8D Broad-leaved dry grasslands: **4 – constant dominant**
8E Acidophilous dry grasslands: **1 – rare occurrence**
8F Thermophilous forest fringe vegetation: **4 – constant dominant**

9 Sand grasslands and rock-outcrop vegetation

9E Acidophilous vegetation of spring therophytes and succulents: **1 – rare occurrence**
9F Basiphilous vegetation of spring therophytes and succulents: **1 – rare occurrence**

10 Saline vegetation

10I Inland saline meadows: **1 – rare occurrence**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 – rare occurrence**
11I Willow carrs: **1 – rare occurrence**
11L Tall mesic and xeric shrub: **2 – optimum**
11N Low xeric scrub: **3 – dominant**

12 Forests

12A Alder carrs: **1 – rare occurrence**
12C Oak-hornbeam forests: **1 – rare occurrence**
12D Ravine forests: **1 – rare occurrence**
12F Limestone beech forests: **1 – rare occurrence**
12H Peri-Alpidic basiphilous thermophilous oak forests: **4 – constant dominant**
12I Sub-continental thermophilous oak forests: **2 – optimum**
12J Acidophilous thermophilous oak forests: **2 – optimum**
12K Acidophilous oak forests: **1 – rare occurrence**
12L Boreo-continental pine forests: **1 – rare occurrence**
12O Peri-Alpidic pine forests: **3 – dominant**
12T Robinia pseudacacia plantations: **1 – rare occurrence**
12U Plantations of broad-leaved non-native trees: **1 – rare occurrence**
12V Spruce plantations: **1 – rare occurrence**
12W Pine and larch plantations: **2 – optimum**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 – rare occurrence**
13C Annual vegetation of trampled habitats: **1 – rare occurrence**
13D Perennial thermophilous ruderal vegetation: **1 – rare occurrence**
13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 – rare occurrence**
13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 – rare occurrence**

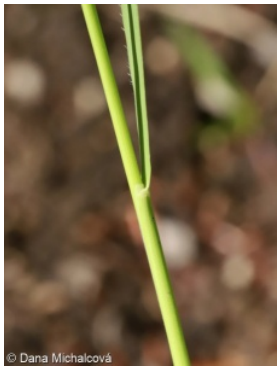
Affinity to the forest environment

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: **2.2 – taxon occurring partly in the forest, but mainly in open vegetation**

Diagnostic taxon

Diagnostic taxon of classes: **LC *Quercetea pubescentis*, TH *Festuco-Brometea***
Diagnostic taxon of alliances: **LCA *Quercion pubescenti-petraeae*, LCB *Aceri tatarici-Quercion*, LFA *Festuco-Pinion sylvestris*, THE *Cirsio-Brachypodion***









pinnati*, THF *Bromion erecti*, THH *Geranion sanguinei

Diagnostic taxon of associations: **LCA01 *Lathyro collini-Quercetum pubescentis*, LCA02 *Lithospermo purpurocaerulei-Quercetum pubescentis*, LFA01 *Festuco-Pinetum sylvestris*, THE01 *Scabioso ochroleucae-Brachypodietum pinnati*, THE02 *Cirsio pannonici-Seslerietum caeruleae*, THE03 *Polygalo majoris-Brachypodietum pinnati*, THF01 *Carlino acaulis-Brometum erecti*, THF02 *Brachypodio pinnati-Molinietum arundinaceae*, THH03 *Geranio sanguinei-Peucedanetum cervariae***



Constant taxon

Constant taxon of classes: **TH *Festuco-Brometea***

Constant taxon of alliances: **LCA *Quercion pubescenti-petraeae*, LCB *Aceri tatarici-Quercion*, LFA *Festuco-Pinion sylvestris*, THE *Cirsio-Brachypodion pinnati*, THF *Bromion erecti*, THH *Geranion sanguinei*, THI *Trifolion medii***

Constant taxon of associations: **KBA01 *Prunetum fruticosae*, KBB03 *Populo tremulae-Coryletum avellanae*, KBB04 *Pruno spinosae-Ligustretum vulgaris*, LCA01 *Lathyro collini-Quercetum pubescentis*, LCA02 *Lithospermo purpurocaerulei-Quercetum pubescentis*, LCB01 *Quercetum pubescenti-roboris*, LCC03 *Melico pictae-Quercetum roboris*, LFA01 *Festuco-Pinetum sylvestris*, TDC02 *Anthoxantho odorati-Agrostietum tenuis*, THD05 *Stipetum tirsae*, THE01 *Scabioso ochroleucae-Brachypodietum pinnati*, THE02 *Cirsio pannonici-Seslerietum caeruleae*, THE03 *Polygalo majoris-Brachypodietum pinnati*, THE04 *Plantagini maritimae-Caricetum flaccae*, THF01 *Carlino acaulis-Brometum erecti*, THF02 *Brachypodio pinnati-Molinietum arundinaceae*, THH01 *Trifolio alpestris-Geranietum sanguinei*, THH02 *Geranio sanguinei-Dictamnetum albae*, THH03 *Geranio sanguinei-Peucedanetum cervariae*, THI01 *Trifolio medii-Agrimonietum eupatoriae***



Dominant taxon

Dominant taxon of associations: **KBA01 *Prunetum fruticosae*, KBB03 *Populo tremulae-Coryletum avellanae*, KBB04 *Pruno spinosae-Ligustretum vulgaris*, LCA03 *Euphorbio-Quercetum*, LCC01 *Sorbo torminalis-Quercetum*, LCC03 *Melico pictae-Quercetum roboris*, LFA01 *Festuco-Pinetum sylvestris*, TEC02 *Campanulo rotundifoliae-Dianthetum deltoidis*, THE01 *Scabioso ochroleucae-Brachypodietum pinnati*, THE03 *Polygalo majoris-Brachypodietum pinnati*, THF01 *Carlino acaulis-Brometum erecti*, THH01 *Trifolio alpestris-Geranietum sanguinei*, THH03 *Geranio sanguinei-Peucedanetum cervariae*, THI01 *Trifolio medii-Agrimonietum eupatoriae***



Ecological specialization indices

Ecological specialization index for all vegetation types: **4.4**

Ecological specialization index for non-forest vegetation: **4.8**

Ecological specialization index for forest vegetation: **4.5**

Colonization ability

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

Index of colonization potential (ICP): **4**

Optimum successional age [years]: **44.5**

Distribution and frequency

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

Floristic region: **Europe, Western Asia**

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Distribution range extension along the continentality gradient: **6**
Elevational belt in the Czech Republic: **lowlands, colline belt (montane belt)**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 572
taxon.data.freq_in_quad: 1723

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.6 %**
Occurrence frequency in vegetation plots with a cover above 5%: **52.4 %**
Occurrence frequency in vegetation plots with a cover above 25%: **25.4 %**
Occurrence frequency in vegetation plots with a cover above 50%: **7.8 %**
Mean percentage cover in vegetation plots: **16.5 %**
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: **42**
Number of narrow habitats in which the taxon has its optimum: **12**
Number of broad habitats in which the taxon occurs: **10**
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**

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