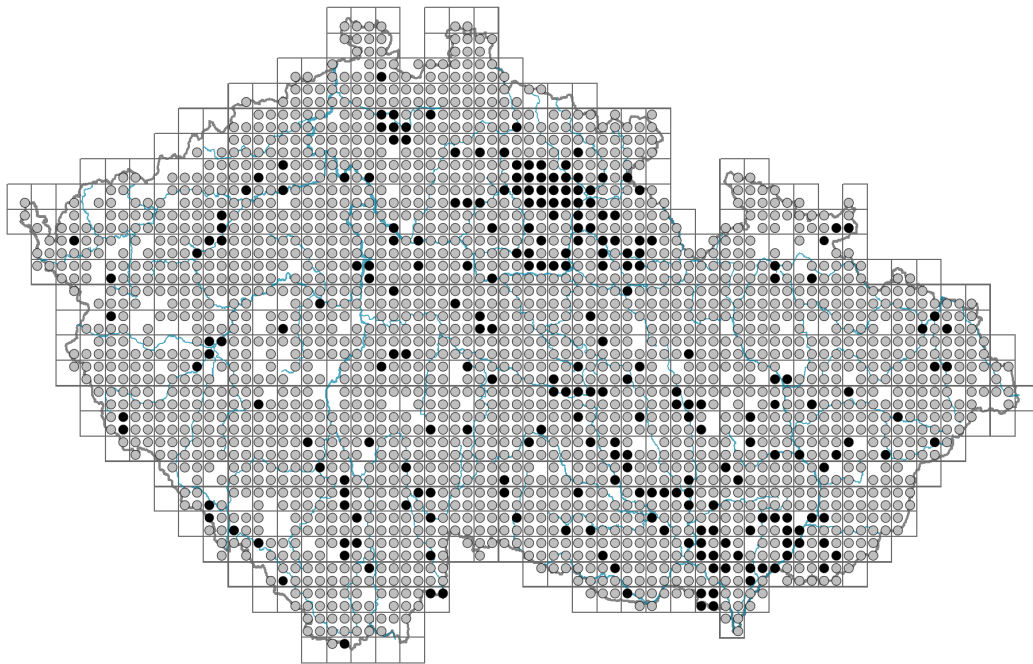


Phragmites australis

Distribution

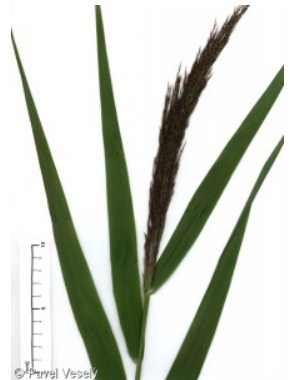


Map info

● 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]: **1-4**

Growth form: **clonal herb**

Life form: **geophyte (hydrophyte)**

Life strategy: **CS - competitor/stress-tolerator**

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

Life strategy (Pierce method, C-score): **42.5 %**

Life strategy (Pierce method, S-score): **45.2 %**

Life strategy (Pierce method, R-score): **12.4 %**

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: **helomorphic**

Flower

Flowering period [month]: **July-September**



Flowering phase: **9 Hedera helix-Solidago (early autumn)**

Flower colour: **green**

Perianth type: **reduced**

Perianth fusion: **reduced**

Inflorescence type: **panicula e spiculis composita**

Dicliny: **synoecious**

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

Pollination syndrome: **wind-pollination**

Fruit, seed and dispersal

Fruit type: **dry fruit - caryopsis**

Fruit colour: **brown**

Reproduction type: **mostly vegetatively, rarely by seed/spores**

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

Dispersal strategy: **Phragmites (mainly anemochory and hydrochory)**

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

Belowground organs and clonality

Shoot metamorphosis: **stolon, rhizome**

Storage organ: **stolon, rhizome**

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: **3.1**

Lateral spreading distance by clonal growth [m]: **0.31**

Clonal index: **5**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **6**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **13**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **14**

Size of the belowground bud bank (root buds excluded): **33**

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

Number of buds per shoot at the soil surface (root buds included): **6**

Number of buds per shoot at a depth of 0–10 cm (root buds included): **13**

Number of buds per shoot at a depth greater than 10 cm (root buds included): **14**

Size of the belowground bud bank (root buds included): **33**

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): **48 (72, 96)**

Ploidy level (x): **4 (6, 8)**

2C genome size [Mbp]: **1848.18**

1Cx monoploid genome size [Mbp]: **462.04**

Genomic GC content: **46.3 %**

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: **10 - aquatic plant that survives long periods without soil flooding**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

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

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: **-0.82**

Herb layer disturbance frequency indicator value: **-0.66**

Whole-community disturbance severity indicator value: **0.2**

Herb layer disturbance severity indicator value: **0.24**

Whole-community structure based disturbance indicator value: **0.49**

Herb layer structure-based disturbance indicator value: **0.49**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **1 - rare occurrence**

3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **3 - dominant**

4B Halophilous reed and sedge beds: **3 - dominant**

4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**

4D Riverine reed vegetation: **1 - rare occurrence**

4E Reed vegetation of brooks: **1 - rare occurrence**

4F Mesotrophic vegetation of muddy substrata: **2 - optimum**

4G Tall-sedge beds: **2 - optimum**



4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**

4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**

5 Vegetation of springs and mires

5A Hard-water springs with tufa formation: **1 - rare occurrence**

5B Lowland to montane soft-water springs: **1 - rare occurrence**

5C Alpine and subalpine soft-water springs: **1 - rare occurrence**

5D Calcareous fens: **2 - optimum**

5E Acidic moss-rich fens and peatland meadows: **2 - optimum**

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

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

5H Wet peat soils and bog hollows: **2 - optimum**

6 Meadows and mesic pastures

6D Alluvial meadows of lowland rivers: **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**

8 Dry grasslands

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

9 Sand grasslands and rock-outcrop vegetation

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

10 Saline vegetation

10G Continental vegetation of annual halophilous grasses: **1 - rare occurrence**

10I Inland saline meadows: **2 - optimum**

11 Heathlands and scrub

11I Willow carrs: **3 - dominant**

11J Willow galleries of loamy and sandy river banks: **2 - optimum**

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

11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

12 Forests

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

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

12I Sub-continental thermophilous oak forests: **1 - rare occurrence**

12P Peatland pine forests: **1 - rare occurrence**

12Q Peatland birch forests: **1 - rare occurrence**

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

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

12W Pine and larch plantations: **1 - rare occurrence**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

13B Annual vegetation of arable land: **1 - rare occurrence**

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

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.2 - taxon occurring partly in the forest, but mainly in 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 alliances: [MCB Meliloto dentati-Bolboschoenion maritimi](#)

Diagnostic taxon of associations: [MCA04 Phragmitetum australis](#), [MCF02 Thelypterido palustris-Phragmitetum australis](#), [MCG03 Peucedano palustris-Caricetum lasiocarpae](#), [MCG08 Cladietum marisci](#), [RBA05 Junco subnodulosi-Schoenetum nigricantis](#), [TCB01 Scorzonero parviflorae-Juncetum gerardii](#)

Constant taxon

Constant taxon of associations: [MBB04 Chenopodio chenopodioidis-Atriplicetum prostratae](#), [MCA04 Phragmitetum australis](#), [MCB01 Astero pannonici-Bolboschoenetum compacti](#), [MCF02 Thelypterido palustris-Phragmitetum australis](#), [MCG03 Peucedano palustris-Caricetum lasiocarpae](#), [MCG05 Caricetum diandrae](#), [MCG08 Cladietum marisci](#), [RBA05 Junco subnodulosi-Schoenetum nigricantis](#), [TCB01 Scorzonero parviflorae-Juncetum gerardii](#)

Dominant taxon

Dominant taxon of associations: [MCA04 Phragmitetum australis](#), [MCF02 Thelypterido palustris-Phragmitetum australis](#), [MCG01 Caricetum elatae](#), [MCH01 Caricetum acutiformi-paniculatae](#), [RBC02 Drosero anglicae-Rhynchosporium albae](#), [RBD02 Sphagno recurvi-Caricetum lasiocarpae](#), [RBD04 Polytricho communis-Molinietum caeruleae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **2.8**

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

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

Colonization ability

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

Index of colonization potential (ICP): **6**

Optimum successional age [years]: **15.5**

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional, subtropical, tropical, austral or antarctic**

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **9**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt**

Expansive taxon in the region: **Bohemian Thermophyticum, Bohemian Moravian Mesophyticum, Pannonian Thermophyticum, Carpathian Mesophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **650**

taxon.data.freq_in_quad: **2267**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **4.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **49.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **42.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **39.9 %**

Mean percentage cover in vegetation plots: **35.2 %**

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: **44**

Number of narrow habitats in which the taxon has its optimum: **11**

Number of broad habitats in which the taxon occurs: **10**

Number of broad habitats in which the taxon has its optimum: **5**

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**