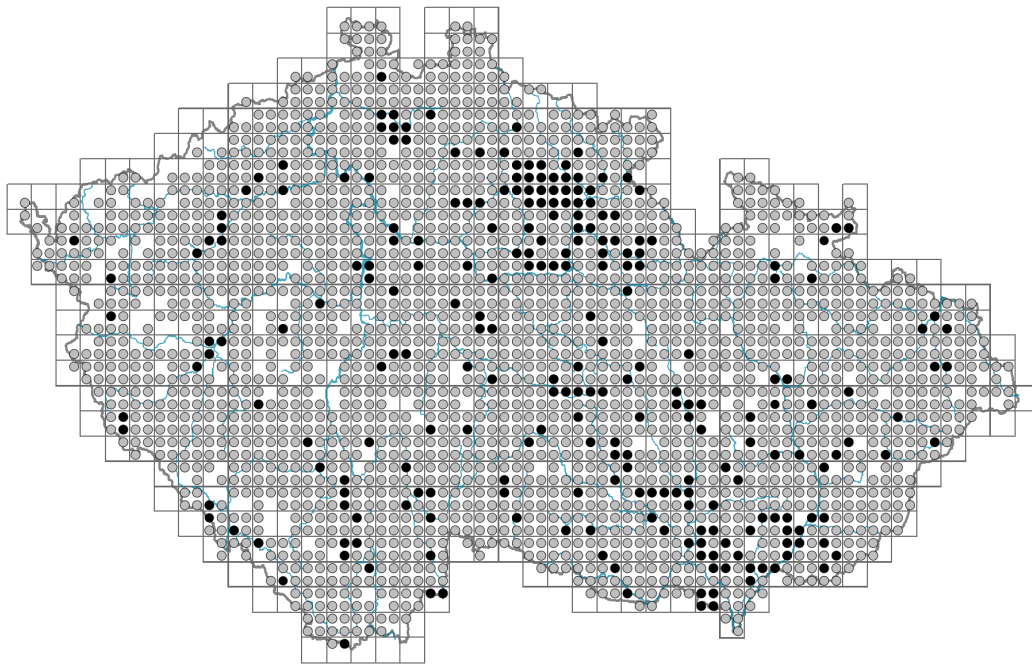


Phragmites australis

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)**

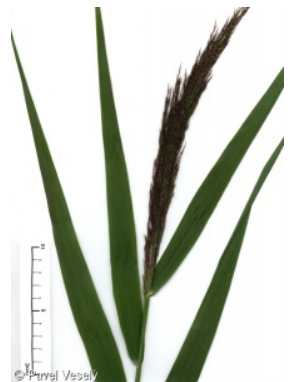
Life strategy: **CS - competitor/stress-tolerator**

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 (cyclicality): **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**