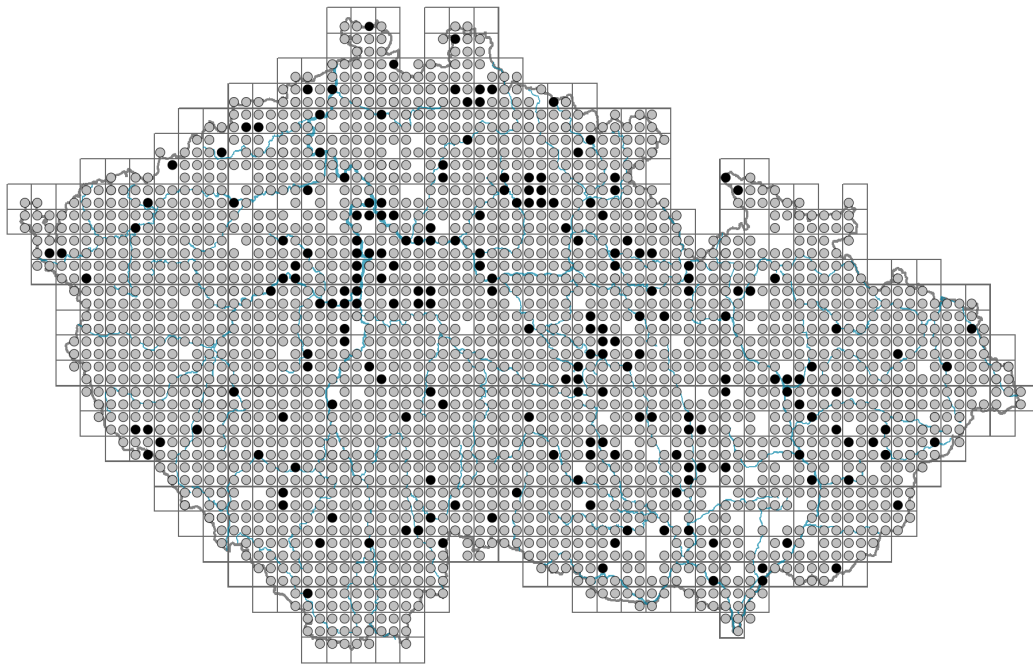


# *Phalaris arundinacea*

## 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]: **0.8-2.5**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **38.9 %**

Life strategy (Pierce method, S-score): **31.4 %**

Life strategy (Pierce method, R-score): **29.7 %**



## 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]: **June-July**

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **green**

Perianth type: **reduced**

Perianth fusion: **reduced**

Inflorescence type: **panicula e spiculis composita**

Dicliny: **synoecious**

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

Pollination syndrome: **wind-pollination, selfing**



## 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, shoot fragment**

Dispersal strategy: **Sparganium (mainly autochory and hydrochory), Zea (no dispersal)**

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 (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: **4.8**

Lateral spreading distance by clonal growth [m]: **0.24**

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): **15**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **4**

Size of the belowground bud bank (root buds excluded): **25**

Depth of the belowground bud bank (root buds excluded) [cm]: **6**

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): **15**

Number of buds per shoot at a depth greater than 10 cm (root buds included): **4**

Size of the belowground bud bank (root buds included): **25**

Depth of the belowground bud bank (root buds included) [cm]: **6**



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

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

Ploidy level (x): **4**

2C genome size [Mbp]: **9080.92**

1Cx monoploid genome size [Mbp]: **2270.23**

Genomic GC content: **47.7 %**

## Taxon origin

Origin in the Czech Republic: **native**

Geographic origin: **anecophyte**

Period of introduction: **Late Modern Period (1800-1950)**

Introduction pathway: **intentional - ornamental**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **7x - 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 (generalist)**

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

Moisture indicator value: **8 - transition between values 7 and 9**

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

Nutrient indicator value: **7 - occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites**

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**

Herb layer disturbance frequency indicator value: **-0.61**

Whole-community disturbance severity indicator value: **0.28**

Herb layer disturbance severity indicator value: **0.3**

Whole-community structure based disturbance indicator value: **0.47**

Herb layer structure-based disturbance indicator value: **0.46**

## Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

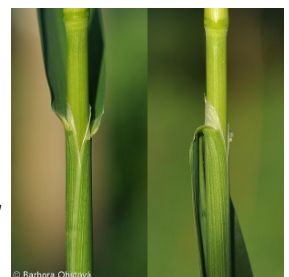
3 Aquatic vegetation

3B Macrophytic vegetation of water streams: **1 - rare occurrence**

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

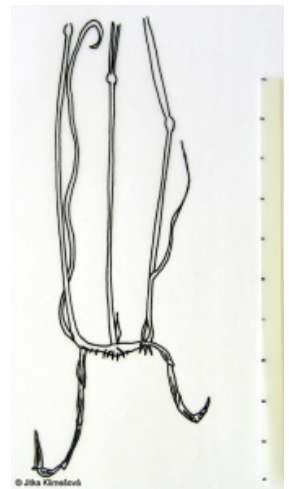
4 Wetland and riverine herbaceous vegetation

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





- 4B Halophilous reed and sedge beds: **1 - rare occurrence**  
 4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**  
 4D Riverine reed vegetation: **3 - dominant**  
 4E Reed vegetation of brooks: **1 - rare occurrence**  
 4F Mesotrophic vegetation of muddy substrata: **1 - rare occurrence**  
 4G Tall-sedge beds: **3 - dominant**  
 4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**  
 4I Vegetation of nitrophilous annual hygrophilous herbs: **2 - optimum**  
 4J River gravel banks: **3 - dominant**  
 4K Petasites fringes of montane brooks: **2 - optimum**  
 4L Nitrophilous herbaceous fringes of lowland rivers: **2 - optimum**  
 5 Vegetation of springs and mires  
 5B Lowland to montane soft-water springs: **1 - rare occurrence**  
 5C Alpine and subalpine soft-water springs: **1 - rare occurrence**  
 5D Calcareous fens: **1 - rare occurrence**  
 5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**  
 5F Transitional mires: **1 - rare occurrence**  
 6 Meadows and mesic pastures  
 6D Alluvial meadows of lowland rivers: **2 - optimum**  
 6E Wet Cirsium meadows: **1 - rare occurrence**  
 6F Intermittently wet Molinia meadows: **1 - rare occurrence**  
 6G Vegetation of wet disturbed soils: **1 - rare occurrence**  
 10 Saline vegetation  
 10I Inland saline meadows: **1 - rare occurrence**  
 11 Heathlands and scrub  
 11H Subalpine deciduous scrub: **1 - rare occurrence**  
 11I Willow carrs: **2 - optimum**  
 11J Willow galleries of loamy and sandy river banks: **4 - constant dominant**  
 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**  
 12 Forests  
 12A Alder carrs: **2 - optimum**  
 12B Alluvial forests: **2 - optimum**  
 12U Plantations of broad-leaved non-native trees: **2 - optimum**  
 12V Spruce plantations: **1 - rare occurrence**  
 12W Pine and larch plantations: **1 - rare occurrence**  
 13 Anthropogenic vegetation  
 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: **2.1 - taxon occurring both in the forest and open vegetation**  
 Diagnostic taxon  
 Diagnostic taxon of classes: [KA Salicetea purpureae](#)  
 Diagnostic taxon of alliances: [KAA Salicion triandrae](#), [KAC Salicion albae](#), [MCD](#)



***Phalaridion arundinaceae*, XDA Senecionion fluviatilis**

Diagnostic taxon of associations: [KAA01 Salicetum triandrae](#), [MCD01 Rorippo-Phalaridetum arundinaceae](#), [MCH08 Phalaridetum arundinaceae](#), [TDE03 Lathyro palustris-Gratioletum officinalis](#), [XDA01 Cuscuta europaeae-Calystegietum sepium](#), [XDA04 Sicyo angulatae-Echinocystietum lobatae](#)

Constant taxon

Constant taxon of classes: [KA Salicetea purpureae](#)

Constant taxon of alliances: [KAA Salicion triandrae](#), [KAC Salicion albae](#), [MCD Phalaridion arundinaceae](#), [XDA Senecionion fluviatilis](#)

Constant taxon of associations: [KAA01 Salicetum triandrae](#), [KAB01 Salicetum elaeagno-purpureae](#), [KAB03 Salici purpureae-Myricarietum germanicae](#), [KAC01 Salicetum albae](#), [KAC02 Salicetum fragilis](#), [KBB05 Rhamno catharticae-Cornetum sanguineae](#), [LAA02 Carici elongatae-Alnetum glutinosae](#), [LAB02 Salicetum pentandro-auritae](#), [MBA06 Polygonetum hydropiperis](#), [MCD01 Rorippo-Phalaridetum arundinaceae](#), [MCD03 Tussilagini farfarae-Calamagrostietum pseudophragmitae](#), [MCH07 Caricetum vulpinae](#), [MCH08 Phalaridetum arundinaceae](#), [TDE01 Poo trivialis-Alopecuretum pratensis](#), [TDE03 Lathyro palustris-Gratioletum officinalis](#), [XDA01 Cuscuta europaeae-Calystegietum sepium](#), [XDA04 Sicyo angulatae-Echinocystietum lobatae](#)

Dominant taxon

Dominant taxon of associations: [KAC01 Salicetum albae](#), [KAC02 Salicetum fragilis](#), [LAA02 Carici elongatae-Alnetum glutinosae](#), [LBA05 Pruno padi-Fraxinetum excelsioris](#), [MCD01 Rorippo-Phalaridetum arundinaceae](#), [MCD03 Tussilagini farfarae-Calamagrostietum pseudophragmitae](#), [MCH08 Phalaridetum arundinaceae](#), [TDE03 Lathyro palustris-Gratioletum officinalis](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.3**

Ecological specialization index for non-forest vegetation: **3.3**

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

Colonization ability

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

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

Optimum successional age [years]: **7**

## Distribution and frequency

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

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **8**

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: **659**

taxon.data.freq\_in\_quad: **2345**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **6.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **27.2 %**

Occurrence frequency in vegetation plots with a cover above 25%: **15.4 %**



Occurrence frequency in vegetation plots with a cover above 50%: **10.7 %**

Mean percentage cover in vegetation plots: **13.2 %**

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: **37**

Number of narrow habitats in which the taxon has its optimum: **12**

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**

