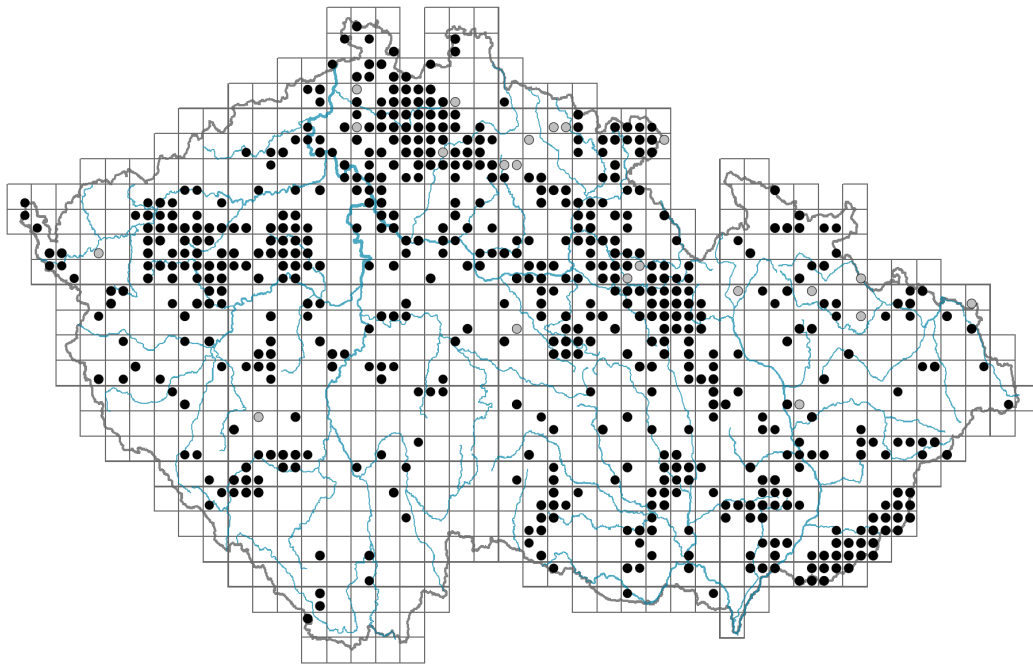


# Carex paniculata

## 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]: **0.6-1.4**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **43.7 %**

Life strategy (Pierce method, S-score): **39.9 %**

Life strategy (Pierce method, R-score): **16.3 %**



## 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, helomorphic**



## Flower

Flowering period [month]: **May-June**

Flowering phase: **4 Fagus sylvatica-Galeobdolon (start of mid-spring)**

Flower colour: **brown**

Perianth type: **flower achlamydeous**

Inflorescence type: **panicula e spiculis composita**

Dicliny: **monoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **wind-pollination**

## Fruit, seed and dispersal

Fruit type: **dry fruit - nut enclosed in an utricle**

Fruit colour: **brown**

Reproduction type: **by seed/spores and vegetatively**

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

Dispersal strategy: **Sparganium (mainly autochory and hydrochory)**

Myrmecochory: **probably myrmecochorous**

## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome, tuft**

Type of clonal growth organ: **epigeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

Shoot life span (cyclicity): **dicyclic or polycyclic 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: **6**

Lateral spreading distance by clonal growth [m]: **0.01**

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 excluded) [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**

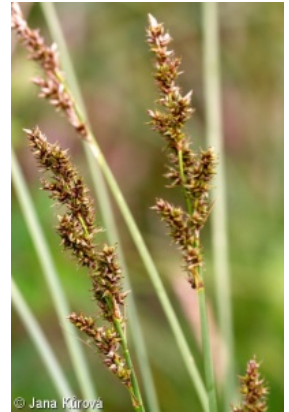
Depth of the belowground bud bank (root buds included) [cm]: **4**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



## Karyology

Chromosome number (2n): **62**

Ploidy level (x): **2**

2C genome size [Mbp]: **731.18**

1Cx monoploid genome size [Mbp]: **365.59**

Genomic GC content: **37.2 %**

## 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: **9 - wetness indicator, focus on often soaked, poorly aerated soils**

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

Nutrient indicator value: **5 - occurring at moderately nutrient-rich sites, and less frequently at poor and rich 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: **-1.1**

Herb layer disturbance frequency indicator value: **-0.78**

Whole-community disturbance severity indicator value: **0.21**

Herb layer disturbance severity indicator value: **0.21**

Whole-community structure based disturbance indicator value: **0.34**

Herb layer structure-based disturbance indicator value: **0.43**

## Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **2 - optimum**

4C Eutrophic vegetation of muddy substrata: **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**

5 Vegetation of springs and mires

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

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**

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

5H Wet peat soils and bog hollows: **1 - rare occurrence**

## 6 Meadows and mesic pastures

6E Wet *Cirsium* meadows: **2 - optimum**6F Intermittently wet *Molinia* meadows: **1 - rare occurrence**6G Vegetation of wet disturbed soils: **1 - rare occurrence**

## 11 Heathlands and scrub

11I Willow carrs: **2 - optimum**

## 12 Forests

12A Alder carrs: **2 - optimum**12B Alluvial forests: **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: [LA \*Alnetea glutinosae\*](#)Diagnostic taxon of alliances: [LAA \*Alnion glutinosae\*](#)Diagnostic taxon of associations: [LAA01 \*Thelypterido palustris-Alnetum glutinosae\*](#), [LAA03 \*Carici acutiformis-Alnetum glutinosae\*](#), [MCH01 \*Caricetum acutiformi-paniculatae\*](#)

## Constant taxon

Constant taxon of associations: [MCH01 \*Caricetum acutiformi-paniculatae\*](#)

## Dominant taxon

Dominant taxon of associations: [LAA01 \*Thelypterido palustris-Alnetum glutinosae\*](#), [MCH01 \*Caricetum acutiformi-paniculatae\*](#), [TDF02 \*Cirsietum rivularis\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.6**Ecological specialization index for non-forest vegetation: **4.7**Ecological specialization index for forest vegetation: **5.7**

## Colonization ability

Index of colonization success (ICS): **1**Index of colonization potential (ICP): **1****Distribution and frequency**Floristic zone: **northern temperate, southern temperate, submeridional, meridional**Floristic region: **Europe**Continental degree: **4**Distribution range extension along the continentality gradient: **4**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: 377

taxon.data.freq\_in\_quad: 678

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%: **43.4 %**

Occurrence frequency in vegetation plots with a cover above 25%: **32.7 %**

Occurrence frequency in vegetation plots with a cover above 50%: **25.7 %**

Mean percentage cover in vegetation plots: **24.2 %**

Maximum percentage cover in vegetation plots: **88 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **15**

Number of narrow habitats in which the taxon has its optimum: **7**

Number of broad habitats in which the taxon occurs: **5**

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

## **Threats and protection**

Red List 2017 (national categories): **C4a - near threatened taxon**

Red List 2017 (IUCN categories): **LC - least concern**

Legal protection: **not protected by law**