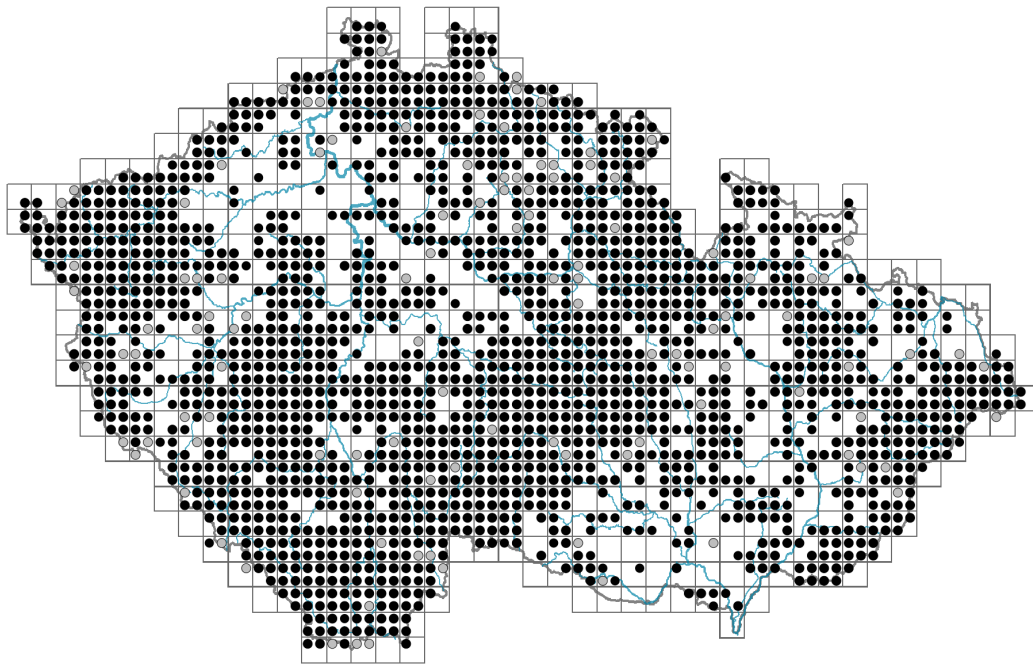


# Carex panicea

## 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]: **0.1-0.4**

Growth form: **clonal herb**

Life form: **hemicryptophyte (geophyte)**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

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

Life strategy (Pierce method, C-score): **15 %**

Life strategy (Pierce method, S-score): **59.9 %**

Life strategy (Pierce method, R-score): **25.1 %**

## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf anatomy: **mesomorphic, helomorphic**

## Flower

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



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

Flower colour: **brown**

Perianth type: **flower achlamydeous**

Inflorescence type: **spica e spiculis composita**

Dicliny: **monoecious**

Generative reproduction type: **mixed mating**

Pollination syndrome: **wind-pollination**

### Fruit, seed and dispersal

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

Fruit colour: **yellow, brown**

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

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

Dispersal strategy: **Allium (mainly autochory)**

Myrmecochory: **probably myrmecochorous**

### 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): **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: **5**

Lateral spreading distance by clonal growth [m]: **0.08**

Clonal index: **5**

### 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**

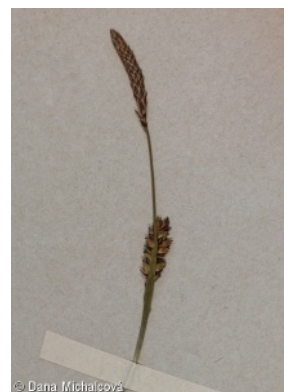
Depth of the belowground bud bank (root buds included) [cm]: **4**

### Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



## Karyology

Chromosome number (2n): **32**

Ploidy level (x): **2**

2C genome size [Mbp]: **1345.55**

1Cx monoploid genome size [Mbp]: **672.77**

Genomic GC content: **37.5 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**

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: **6x - transition between values 5 and 7 (generalist)**

Nutrient indicator value: **4 - transition between values 3 and 5**

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: **-0.52**

Herb layer disturbance frequency indicator value: **-0.46**

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

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

Whole-community structure based disturbance indicator value: **0.63**

Herb layer structure-based disturbance indicator value: **0.77**

## Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **1 - rare occurrence**

3 Aquatic vegetation

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**

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

4G Tall-sedge beds: **1 - rare occurrence**

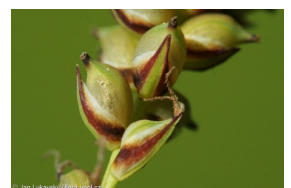
4K Petasites fringes of montane brooks: **1 - rare occurrence**

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: **2 - optimum**



5E Acidic moss-rich fens and peatland meadows: **3 - dominant**

5F Transitional mires: **2 - optimum**

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

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

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

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: **2 - optimum**

6F Intermittently wet *Molinia* meadows: **2 - optimum**

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 - rare occurrence**

7B Submontane *Nardus* grasslands: **2 - optimum**

8 Dry grasslands

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

8F Thermophilous forest fringe vegetation: **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**

12 Forests

12A Alder carrs: **1 - rare occurrence**

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

12Q Peatland birch forests: **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 classes: [RB \*Scheuchzerio palustris\*-\*Caricetea nigrae\*](#)

Diagnostic taxon of alliances: [RBA \*Caricion davallianae\*](#), [RBB \*Sphagno warnstorffii-Tomentypnion nitentis\*](#), [RBC \*Caricion canescenti-nigrae\*](#)

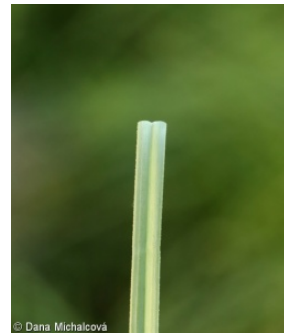
Diagnostic taxon of associations: [RBA01 \*Valeriano dioicae\*-\*Caricetum davallianae\*](#), [RBA02 \*Carici flavae\*-\*Cratoneuretum filicini\*](#), [RBA03 \*Valeriano simplicifoliae\*-\*Caricetum flavae\*](#), [RBA05 \*Junco subnodulosi\*-\*Schoenetum nigricantis\*](#), [RBB01 \*Sphagno warnstorffii\*-\*Eriophoretum latifolii\*](#), [RBB02 \*Campylio stellati-Trichophoretum alpini\*](#), [RBC01 \*Caricetum nigrae\*](#), [TDD02 \*Junco effusi-Molinietum caeruleae\*](#), [TDF03 \*Angelico sylvestris\*-\*Cirsietum palustris\*](#), [VDC03 \*Scorpidio scorpioidis\*-\*Utricularietum\*](#)

Constant taxon

Constant taxon of classes: [RB \*Scheuchzerio palustris\*-\*Caricetea nigrae\*](#)

Constant taxon of alliances: [RBA \*Caricion davallianae\*](#), [RBC \*Caricion canescenti-nigrae\*](#), [TDD \*Molinion caeruleae\*](#)

Constant taxon of associations: [RBA01 \*Valeriano dioicae\*-\*Caricetum davallianae\*](#),



[RBA02 Carici flavae-Cratoneuretum filicini](#), [RBA03 Valeriano simplicifoliae-Caricetum flavae](#), [RBA04 Campylio stellati-Caricetum lasiocarpae](#), [RBA05 Junco subnodulosi-Schoenetum nigricantis](#), [RBA06 Eleocharitetum quinqueflorae](#), [RBB01 Sphagno warnstorffii-Eriophoretum latifolii](#), [RBB02 Campylio stellati-Trichophoretum alpini](#), [RBB03 Menyantho trifoliatae-Sphagnetum teretis](#), [RBC01 Caricetum nigrae](#), [RBC02 Drosero anglicae-Rhynchosporium albae](#), [RBC03 Agrostio caninae-Caricetum diandrae](#), [TDD01 Molinietum caeruleae](#), [TDD02 Junco effusi-Molinietum caeruleae](#), [TDF01 Angelico sylvestris-Cirsietum oleracei](#), [TDF02 Cirsietum rivularis](#), [TDF03 Angelico sylvestris-Cirsietum palustris](#), [TDF04 Crepido paludosae-Juncetum acutiflori](#), [VDC03 Scorpido scorpioidis-Utricularietum](#)

Dominant taxon

Dominant taxon of associations: [RAB01 Brachythecio rivularis-Cratoneuretum](#), [RBA01 Valeriano dioicae-Caricetum davallianae](#), [RBA02 Carici flavae-Cratoneuretum filicini](#), [RBA03 Valeriano simplicifoliae-Caricetum flavae](#), [RBA05 Junco subnodulosi-Schoenetum nigricantis](#), [RBB01 Sphagno warnstorffii-Eriophoretum latifolii](#), [RBB02 Campylio stellati-Trichophoretum alpini](#), [RBC01 Caricetum nigrae](#), [RBC02 Drosero anglicae-Rhynchosporium albae](#), [RBD03 Carici echinatae-Sphagnetum](#), [TDD02 Junco effusi-Molinietum caeruleae](#), [TDF07 Scirpo sylvatici-Cirsietum cani](#), [TDF11 Junco inflexi-Menthetum longifoliae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.7**

Ecological specialization index for non-forest vegetation: **5.7**

Ecological specialization index for forest vegetation: **4.7**

Colonization ability

Index of colonization success (ICS): **1**

Index of colonization potential (ICP): **1**

## Distribution and frequency

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

Floristic region: **Europe, Asia, Americas**

Distribution range extension along the continentality gradient: **5**

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: **620**

taxon.data.freq\_in\_quad: **1871**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **4.6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **32.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **7.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.9 %**

Mean percentage cover in vegetation plots: **7.9 %**

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: **29**

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

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

Number of broad habitats in which the taxon has its optimum: **3**

### **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**