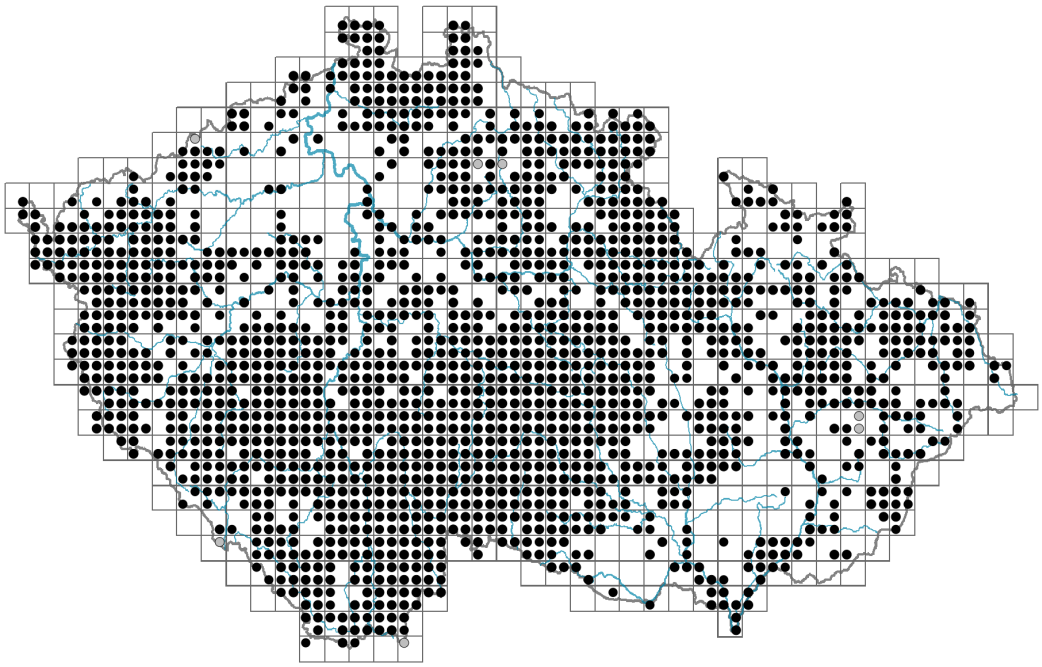
# *Carex vesicaria*

## 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]: **0.3–1.2**
Growth form: **clonal herb**
Life form: **hemicryptophyte (geophyte)**
Life strategy: **CS – competitor/stress-tolerator**
Life strategy (Pierce method based on leaf traits): **S/CSR**
Life strategy (Pierce method, C-score): **26.2 %**
Life strategy (Pierce method, S-score): **53.4 %**
Life strategy (Pierce method, R-score): **20.5 %**

### 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**

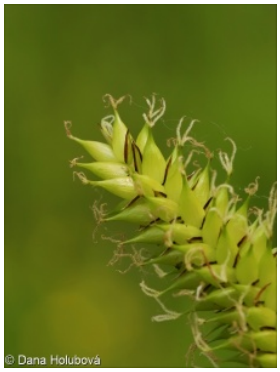
### Flower

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

Flowering phase: **4 Fagus sylvatica-Galeobdolon (start of mid-spring)**
Flower colour: **yellow-green**
Perianth type: **flower achlamydeous**
Inflorescence type: **spica 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: **yellow, 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 non-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 (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: **4.5**
Lateral spreading distance by clonal growth [m]: **0.1**
Clonal index: **5**

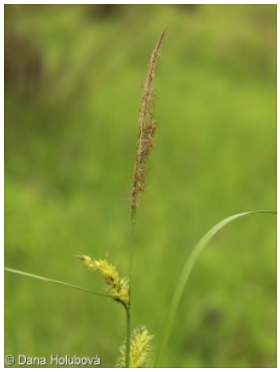

### Bud bank

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 exluded) [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): **80**
Ploidy level (x): **2**
2C genome size [Mbp]: **772.36**
1Cx monoploid genome size [Mbp]: **386.18**
Genomic GC content: **36.1 %**

## 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: **6 – transition between values 5 and 7**
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: **-0.82**
Herb layer disturbance frequency indicator value: **-0.64**
Whole-community disturbance severity indicator value: **0.21**
Herb layer disturbance severity indicator value: **0.24**
Whole-community structure based disturbance indicator value: **0.54**
Herb layer structure-based disturbance indicator value: **0.59**


## Habitat and sociology

### Occurrence in habitats

#### 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**
4B Halophilous reed and sedge beds: **1 – rare occurrence**
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: **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: **1 – rare occurrence**



### 5 Vegetation of springs and mires

5D Calcareous fens: **1 – rare occurrence**
5E Acidic moss-rich fens and peatland meadows: **2 – optimum**
5F Transitional mires: **1 – rare occurrence**
5H Wet peat soils and bog hollows: **1 – rare occurrence**

### 6 Meadows and mesic pastures

6D Alluvial meadows of lowland rivers: **1 – rare occurrence**
6E Wet Cirsium meadows: **2 – optimum**
6F Intermittently wet Molinia meadows: **1 – rare occurrence**

### 10 Saline vegetation

10I Inland saline meadows: **1 – rare occurrence**

### 11 Heathlands and scrub

11I Willow carrs: **2 – optimum**
11J Willow galleries of loamy and sandy river banks: **2 – optimum**

### 12 Forests

12A Alder carrs: **2 – optimum**
12B Alluvial forests: **1 – rare occurrence**
12Q Peatland birch forests: **1 – rare occurrence**
12R Acidophilous spruce 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 alliances: **MCH *Magno-Caricion gracilis***
Diagnostic taxon of associations: **MCH04 *Caricetum vesicariae***, **TDF13 *Lysimachio vulgaris-Filipenduletum ulmariae***

### Constant taxon

Constant taxon of associations: **MCH04 *Caricetum vesicariae***, **TDF13 *Lysimachio vulgaris-Filipenduletum ulmariae***

### Dominant taxon

Dominant taxon of associations: **MCH04 *Caricetum vesicariae***

### 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: **5.5**

### Colonization ability

Index of colonization success (ICS): **5**
Index of colonization potential (ICP): **3**
Optimum successional age [years]: **11**

## Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional**
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: 589

taxon.data.freq_in_quad: 1694

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.4 %**

Occurrence frequency in vegetation plots with a cover above 5%: **35.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **22.9 %**

Occurrence frequency in vegetation plots with a cover above 50%: **20.9 %**

Mean percentage cover in vegetation plots: **20 %**

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: **24**

Number of narrow habitats in which the taxon has its optimum: **6**

Number of broad habitats in which the taxon occurs: **7**

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**