

# Carex flava var. alpina

## 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]: **0.2-0.8**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **15.4 %**

Life strategy (Pierce method, S-score): **42.6 %**

Life strategy (Pierce method, R-score): **42 %**

## 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 phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**

Flower colour: **green**  
Perianth type: **flower achlamydeous**  
Inflorescence type: **spica e spiculis composita**  
Dicliny: **monoecious**  
Generative reproduction type: **mixed mating**  
Pollination syndrome: **wind-pollination, selfing**

### **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: **Allium (mainly autochory)**  
Myrmecochory: **non-myrmecochorous (a)**

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

### **Karyology**

Chromosome number (2n): **56**

Ploidy level (x): **2**  
2C genome size [Mbp]: **675.71**  
1Cx monoploid genome size [Mbp]: **337.86**  
Genomic GC content: **35.8 %**

## 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: **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: **3 - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.58**

Herb layer disturbance frequency indicator value: **-0.53**

Whole-community disturbance severity indicator value: **0.17**

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

Whole-community structure based disturbance indicator value: **0.61**

Herb layer structure-based disturbance indicator value: **0.76**

## 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**

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

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

4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**

#### 5 Vegetation of springs and mires

5A Hard-water springs with tufa formation: **1 - rare occurrence**

5C Alpine and subalpine soft-water springs: **2 - optimum**

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

5E Acidic moss-rich fens and peatland meadows: **2 - optimum**

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

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

## 6 Meadows and mesic pastures

6E Wet *Cirsium* meadows: **1 - rare occurrence**

6F Intermittently wet *Molinia* meadows: **1 - rare occurrence**

## 7 Acidophilous grasslands

7B Submontane *Nardus* grasslands: **1 - rare occurrence**

## 11 Heathlands and scrub

11I Willow carrs: **1 - rare occurrence**

## 12 Forests

12A Alder carrs: **2 - optimum**

### Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

### Diagnostic taxon

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

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

Diagnostic taxon of associations: [RAD02 \*Swertietum perennis\*](#), [RBA01 \*Valeriano dioicae\*-\*Caricetum davallianae\*](#), [RBA02 \*Carici flavae\*-\*Cratoneuretum filicini\*](#), [RBA03 \*Valeriano simplicifoliae\*-\*Caricetum flavae\*](#), [RBB01 \*Sphagno warnstorffii-Eriophoretum latifolii\*](#)

### Constant taxon

Constant taxon of associations: [RAD02 \*Swertietum perennis\*](#), [RBA02 \*Carici flavae\*-\*Cratoneuretum filicini\*](#), [RBA03 \*Valeriano simplicifoliae\*-\*Caricetum flavae\*](#)

### Dominant taxon

Dominant taxon of associations: [RBA02 \*Carici flavae\*-\*Cratoneuretum filicini\*](#), [RBC04 \*Bartsio alpinae\*-\*Caricetum nigrae\*](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **5.6**

Ecological specialization index for non-forest vegetation: **5.6**

Ecological specialization index for forest vegetation: **5.4**

### Colonization ability

Index of colonization success (ICS): **4**

Index of colonization potential (ICP): **3**

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

## 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, submontane belt, montane belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **0**

taxon.data.freq\_in\_quad: **0**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **15.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **3.7 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.3 %**

Mean percentage cover in vegetation plots: **4.8 %**

Maximum percentage cover in vegetation plots: **63 %**

## Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **16**

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

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

Number of broad habitats in which the taxon has its optimum: **2**

## 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**