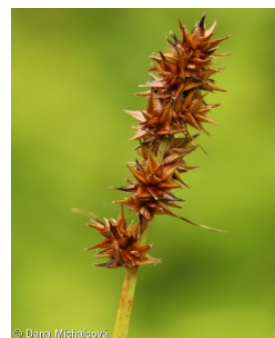
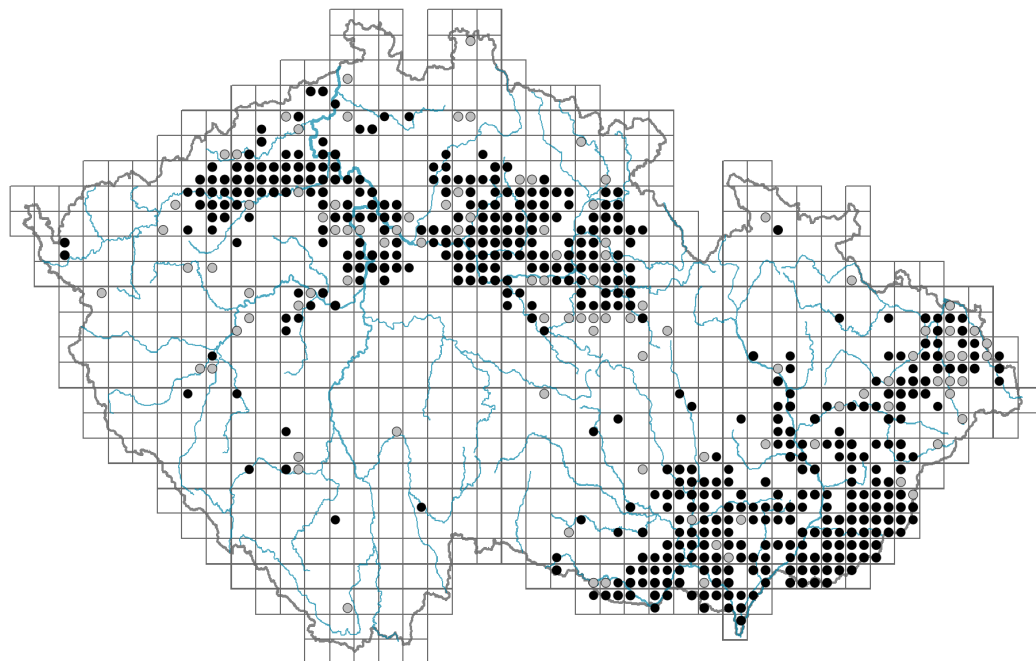


# Carex otrubae

## Distribution



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### Map info

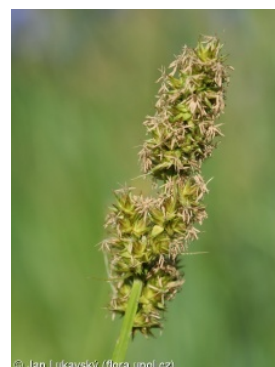
● revised records

● unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



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## Habitus and growth type

Height [m]: **0.2-0.8**

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): **32.9 %**

Life strategy (Pierce method, S-score): **45.9 %**

Life strategy (Pierce method, R-score): **21.2 %**

## 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]: **May-June**

Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**  
 Flower colour: **green**  
 Perianth type: **flower achlamydeous**  
 Inflorescence type: **panicula 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: **brown**  
 Reproduction type: **by seed/spores and vegetatively**  
 Dispersal unit (diaspore): **fruit, infrutescence or its part**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **probably non-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 (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**  
 Carnivory: **non-carnivorous**  
 Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**



## Karyology

Chromosome number (2n): **59**

Ploidy level (x): **2**

2C genome size [Mbp]: **768.44**

1Cx monoploid genome size [Mbp]: **384.22**

Genomic GC content: **36.5 %**

## 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: **6 - transition between values 5 and 7**

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

Reaction indicator value: **8 - transition between values 7 and 9, occurring mostly in calcium-rich conditions**

Nutrient indicator value: **6 - transition between values 5 and 7**

Salinity indicator value: **3 -  $\beta$ -mesohaline, mostly on soils with low salt content**

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.61**

Herb layer disturbance frequency indicator value: **-0.4**

Whole-community disturbance severity indicator value: **0.27**

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

Whole-community structure based disturbance indicator value: **0.51**

Herb layer structure-based disturbance indicator value: **0.58**

## Habitat and sociology

### Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

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

4B Halophilous reed and sedge beds: **2 - optimum**

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

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

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**

6 Meadows and mesic pastures

6D Alluvial meadows of lowland rivers: **1 - rare occurrence**

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

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

6G Vegetation of wet disturbed soils: **2 - optimum**

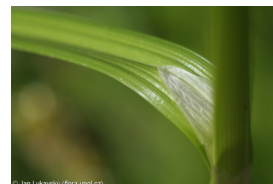
10 Saline vegetation

10I Inland saline meadows: **3 - dominant**

11 Heathlands and scrub



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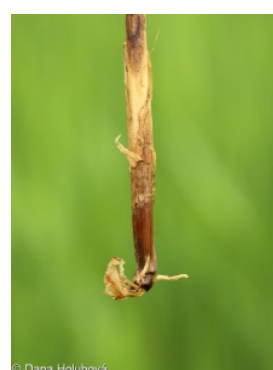
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11I Willow carrs: **1 - rare occurrence**

12 Forests

12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

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: [TC Festuco-Puccinellietea](#)

Diagnostic taxon of alliances: [MCB Meliloto dentati-Bolboschoenion maritimi](#), [TCB Juncion gerardii](#)

Diagnostic taxon of associations: [MCB01 Astero pannonici-Bolboschoenetum compacti](#), [TCB01 Scorzonero parviflorae-Juncetum gerardii](#), [TCB03 Agrostio stoloniferae-Juncetum ranarii](#)

Constant taxon

Constant taxon of associations: [TCB03 Agrostio stoloniferae-Juncetum ranarii](#)

Dominant taxon

Dominant taxon of associations: [TCB01 Scorzonero parviflorae-Juncetum gerardii](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.6**

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

Colonization ability

Index of colonization success (ICS): **2**

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **24**

## Distribution and frequency

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

Floristic region: **Europe**

Distribution range extension along the continentality gradient: **7**

Elevational belt in the Czech Republic: **lowlands, colline belt (submontane belt)**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **265**

taxon.data.freq\_in\_quad: **598**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **26.2 %**

Occurrence frequency in vegetation plots with a cover above 25%: **8.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **6.6 %**

Mean percentage cover in vegetation plots: **9.1 %**

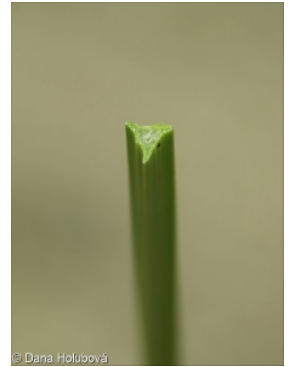
Maximum percentage cover in vegetation plots: **88 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **12**

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

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



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

### **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**