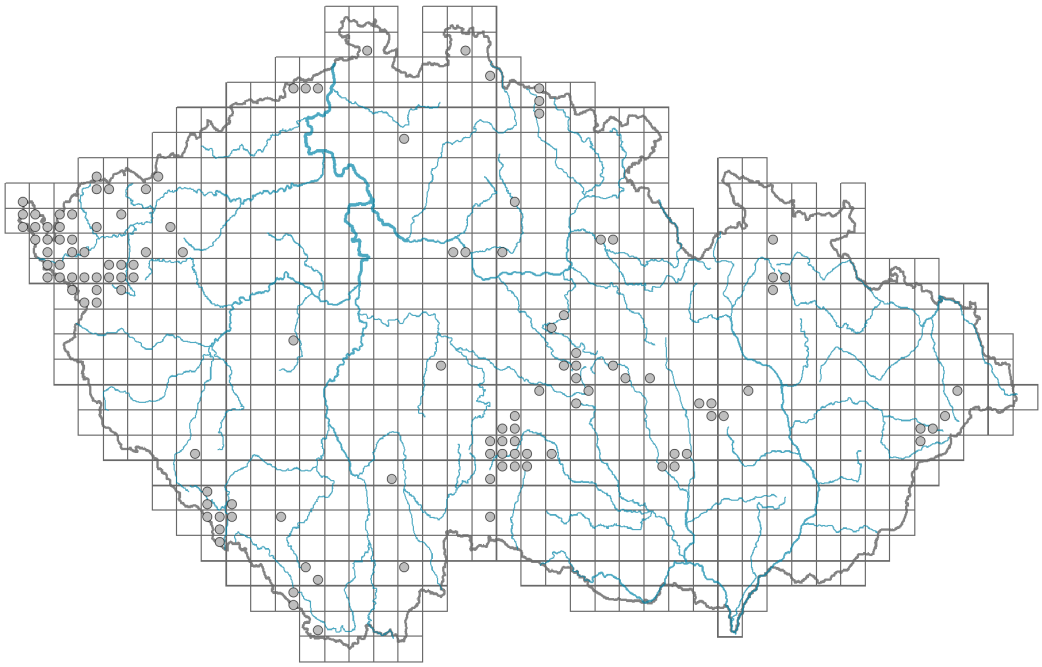
Carex nigra subsp. *nigra*

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]: **0.1–0.8**
Growth form: **clonal herb**
Life form: **hemicryptophyte (geophyte)**
Life strategy: **S – stress-tolerator**
Life strategy (Pierce method based on leaf traits): **S/SR**
Life strategy (Pierce method, C-score): **7 %**
Life strategy (Pierce method, S-score): **68.8 %**
Life strategy (Pierce method, R-score): **24.3 %**

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: **helomorphic**

Flower

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

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Flower colour: **black**
Perianth type: **flower achlamydeous**
Inflorescence type: **spica e spiculis composita**
Dicliny: **monoecious, andromonoecious**
Generative reproduction type: **allogamy self-incompatibility**
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: **non-myrmecochorous (a)**

Belowground organs and clonality

Shoot metamorphosis: **stolon, rhizome**
Storage organ: **stolon, rhizome**
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: **1**
Lateral spreading distance by clonal growth [m]: **0.09**
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 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): **84**
Ploidy level (x): **2**
2C genome size [Mbp]: **786.69**
1Cx monoploid genome size [Mbp]: **393.34**
Genomic GC content: **36.2 %**

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: **8 – transition between values 7 and 9**
Reaction indicator value: **3 – acidity indicator, occurring mainly in acidic conditions, exceptionally in neutral conditions**
Nutrient indicator value: **2 – transition between values 1 and 3**
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: **-0.92**
Herb layer disturbance frequency indicator value: **-0.71**
Whole-community disturbance severity indicator value: **0.21**
Herb layer disturbance severity indicator value: **0.23**
Whole-community structure based disturbance indicator value: **0.53**
Herb layer structure-based disturbance indicator value: **0.66**

Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **1 – rare occurrence**
2B Subalpine tall-forb and tall-grass vegetation: **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**
4F Mesotrophic vegetation of muddy substrata: **1 – rare occurrence**
4G Tall-sedge beds: **2 – optimum**
4H Vegetation of low annual hygrophilous herbs: **1 – rare occurrence**
4K Petasites fringes of montane brooks: **1 – rare occurrence**

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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: **3 – dominant**
5G Raised bogs: **2 – optimum**
5H Wet peat soils and bog hollows: **1 – rare occurrence**

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

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 – rare occurrence**
7B Submontane Nardus grasslands: **2 – optimum**

10 Saline vegetation

10I Inland saline meadows: **1 – rare occurrence**
10J Saline steppes: **1 – rare occurrence**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 – rare occurrence**
11D Subalpine acidophilous Pinus mugo scrub: **1 – rare occurrence**
11H Subalpine deciduous scrub: **1 – rare occurrence**
11I Willow carrs: **1 – rare occurrence**
11J Willow galleries of loamy and sandy river banks: **1 – rare occurrence**

12 Forests

12A Alder carrs: **1 – rare occurrence**
12G Acidophilous beech forests: **1 – rare occurrence**
12K Acidophilous oak forests: **1 – rare occurrence**
12P Peatland pine forests: **1 – rare occurrence**
12Q Peatland birch forests: **2 – optimum**
12R Acidophilous spruce forests: **1 – rare occurrence**
12S Basiphilous spruce forests: **1 – rare occurrence**
12V Spruce plantations: **1 – rare occurrence**

13 Anthropogenic vegetation

13F Herbaceous vegetation of forests clearings and Rubus scrub: **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***

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Diagnostic taxon of alliances: **RBA *Caricion davallianae***, **RBB *Sphagno warnstorfii-Tomentypnion nitentis***, **RBC *Caricion canescenti-nigrae***, **RBD *Sphagno-Caricion canescentis***

Diagnostic taxon of associations: **RBA03 *Valeriano simplicifoliae-Caricetum flavae***, **RBB01 *Sphagno warnstorfii-Eriophoretum latifolii***, **RBC01 *Caricetum nigrae***, **RBC03 *Agrostio caninae-Caricetum diandrae***, **RBD03 *Carici echinatae-Sphagnetum***, **TDF03 *Angelico sylvestris-Cirsietum palustris***

Constant taxon

Constant taxon of classes: **RB *Scheuchzerio palustris-Caricetea nigrae***

Constant taxon of alliances: **RBA *Caricion davallianae***, **RBC *Caricion canescenti-nigrae***, **RBD *Sphagno-Caricion canescentis***, **TDD *Molinion caeruleae***, **TDF *Calthion palustris***, **TED *Nardo strictae-Juncion squarrosi***

Constant taxon of associations: **LAA01 *Thelypterido palustris-Alnetum glutinosae***, **LAB01 *Salicetum auritae***, **MCG04 *Comaro palustris-Caricetum cespitosae***, **MCG06 *Caricetum appropinquatae***, **RBA01 *Valeriano dioicae-Caricetum davallianae***, **RBA02 *Carici flavae-Cratoneuretum filicini***, **RBA03 *Valeriano simplicifoliae-Caricetum flavae***, **RBA04 *Campylio stellati-Caricetum lasiocarpae***, **RBB01 *Sphagno warnstorfii-Eriophoretum latifolii***, **RBB02 *Campylio stellati-Trichophoretum alpini***, **RBB03 *Menyantho trifoliatae-Sphagnetum teretis***, **RBC01 *Caricetum nigrae***, **RBC03 *Agrostio caninae-Caricetum diandrae***, **RBD01 *Sphagno recurvi-Caricetum rostratae***, **RBD02 *Sphagno recurvi-Caricetum lasiocarpae***, **RBD03 *Carici echinatae-Sphagnetum***, **TDD02 *Junco effusi-Molinietum caeruleae***, **TDF01 *Angelico sylvestris-Cirsietum oleracei***, **TDF02 *Cirsietum rivularis***, **TDF03 *Angelico sylvestris-Cirsietum palustris***, **TDF04 *Crepido paludosae-Juncetum acutiflori***, **TDF06 *Chaerophyllo hirsuti-Calthetum palustris***, **TDF08 *Scirpetum sylvatici***, **TDF10 *Scirpo sylvatici-Caricetum brizoidis***, **TED01 *Juncetum squarrosi***

Dominant taxon

Dominant taxon of associations: **RBA03 *Valeriano simplicifoliae-Caricetum flavae***, **RBC01 *Caricetum nigrae***, **RBD03 *Carici echinatae-Sphagnetum***, **TDF03 *Angelico sylvestris-Cirsietum palustris***

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.5**

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

Ecological specialization index for forest vegetation: **5.1**

Colonization ability

Index of colonization success (ICS): **6**

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

Optimum successional age [years]: **28**

Distribution and frequency

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

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, subalpine belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 631

taxon.data.freq_in_quad: 2030

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Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **5.4 %**
Occurrence frequency in vegetation plots with a cover above 5%: **26.5 %**
Occurrence frequency in vegetation plots with a cover above 25%: **8.2 %**
Occurrence frequency in vegetation plots with a cover above 50%: **2.1 %**
Mean percentage cover in vegetation plots: **7.8 %**
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: **41**
Number of narrow habitats in which the taxon has its optimum: **10**
Number of broad habitats in which the taxon occurs: **10**
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**

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