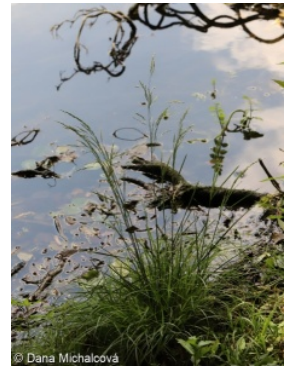
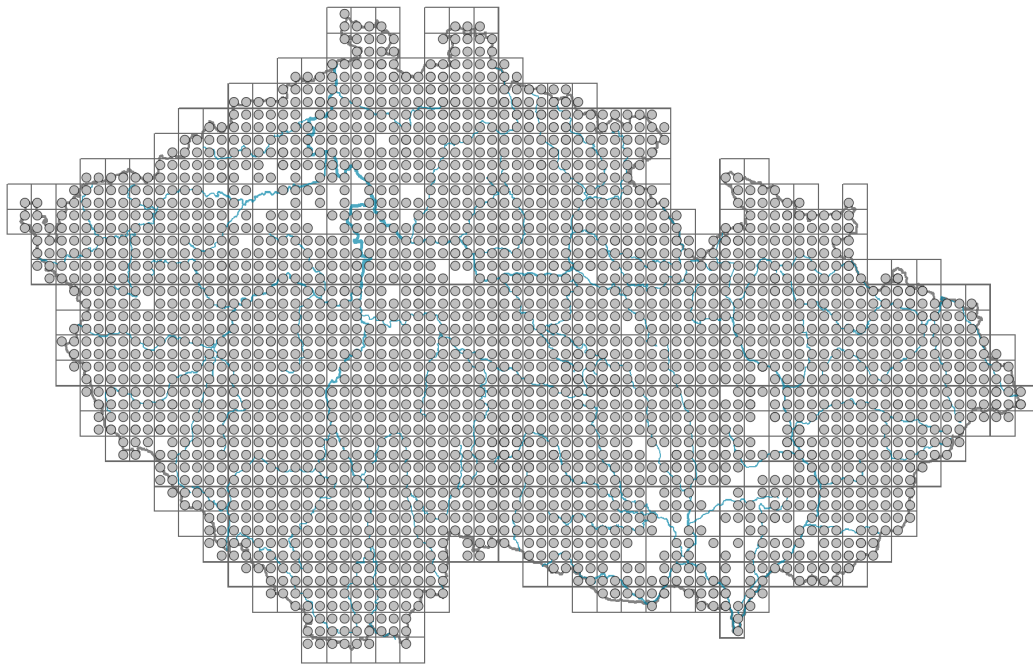


# *Deschampsia cespitosa*

## 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]: **0.6-1.5**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **13.8 %**

Life strategy (Pierce method, S-score): **67.5 %**

Life strategy (Pierce method, R-score): **18.7 %**

## 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: **scleromorphic, helomorphic**

## Flower

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

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **green**

Perianth type: **reduced**

Perianth fusion: **reduced**

Inflorescence type: **panicula e spiculis composita**

Dicliny: **synoecious**

Generative reproduction type: **allogamy**

Pollination syndrome: **wind-pollination**

## Fruit, seed and dispersal

Fruit type: **dry fruit - caryopsis**

Fruit colour: **brown**

Reproduction type: **only by seed/spores**

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

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

Myrmecochory: **non-myrmecochorous (b)**

## Belowground organs and clonality

Shoot metamorphosis: **stolon, brood shoot**

Storage organ: **stolon, tuft**

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]:

Number of clonal offspring: **5.2**

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): **7**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **14**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

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): **7**

Number of buds per shoot at a depth of 0–10 cm (root buds included): **14**

Number of buds per shoot at a depth greater than 10 cm (root buds included):

Size of the belowground bud bank (root buds included): **20**

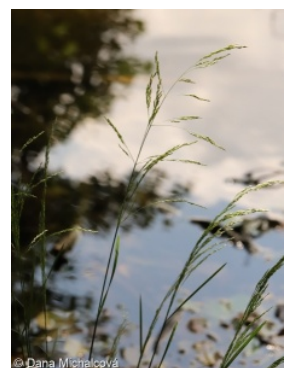
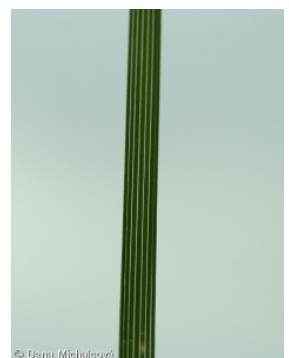
Depth of the belowground bud bank (root buds included) [cm]: **4**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



## Karyology

Chromosome number (2n): **26 (52)**

Ploidy level (x): **4 (8)**

2C genome size [Mbp]: **8577.4**

1Cx monoploid genome size [Mbp]: **2144.35**

Genomic GC content: **46.9 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% 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: **7 - humidity indicator, focus on well moistened, but not wet soils**

Reaction indicator value: **5x - indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions (generalist)**

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: **-1.3**

Herb layer disturbance frequency indicator value: **-0.51**

Whole-community disturbance severity indicator value: **0.29**

Herb layer disturbance severity indicator value: **0.27**

Whole-community structure based disturbance indicator value: **0.36**

Herb layer structure-based disturbance indicator value: **0.48**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **1 - rare occurrence**

2 Alpine and subalpine grasslands

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

2B Subalpine tall-forb and tall-grass vegetation: **2 - optimum**

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: **1 - rare occurrence**  
4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**  
4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**  
4J River gravel banks: **1 - rare occurrence**  
4K Petasites fringes of montane brooks: **1 - rare occurrence**  
4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**  
5 Vegetation of springs and mires  
5A Hard-water springs with tufa formation: **1 - rare occurrence**  
5B Lowland to montane soft-water springs: **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**  
5G Raised bogs: **1 - rare occurrence**  
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: **2 - optimum**  
6C Pastures and park grasslands: **1 - rare occurrence**  
6D Alluvial meadows of lowland rivers: **3 - dominant**  
6E Wet Cirsium meadows: **2 - optimum**  
6F Intermittently wet Molinia meadows: **3 - dominant**  
6G Vegetation of wet disturbed soils: **1 - rare occurrence**  
7 Acidophilous grasslands  
7A Subalpine and montane acidophilous grasslands: **2 - optimum**  
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**  
9 Sand grasslands and rock-outcrop vegetation  
9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**  
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**  
11L Tall mesic and xeric shrub: **1 - rare occurrence**  
11N Low xeric scrub: **1 - rare occurrence**  
11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**



## 12 Forests

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

12B Alluvial forests: **2 - optimum**

12C Oak-hornbeam forests: **1 - rare occurrence**

12D Ravine forests: **1 - rare occurrence**

12E Herb-rich beech forests: **1 - rare occurrence**

12G Acidophilous beech forests: **1 - rare occurrence**

12I Sub-continental thermophilous oak forests: **1 - rare occurrence**

12K Acidophilous oak forests: **1 - rare occurrence**

12L Boreo-continental pine forests: **1 - rare occurrence**

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

12Q Peatland birch forests: **1 - rare occurrence**

12R Acidophilous spruce forests: **1 - rare occurrence**

12S Basiphilous spruce forests: **1 - rare occurrence**

12T Robinia pseudacacia plantations: **1 - rare occurrence**

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

12V Spruce plantations: **1 - rare occurrence**

12W Pine and larch plantations: **1 - rare occurrence**

## 13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

## Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

## Diagnostic taxon

Diagnostic taxon of alliances: [\*\*RAD Swertio perennis-Dichodontion palustris\*\*](#)

## Constant taxon

Constant taxon of classes: [\*\*AD Mulgedio-Aconitetea\*\*](#), [\*\*LA Alnetea glutinosae\*\*](#)

Constant taxon of alliances: [\*\*ADA Calamagrostion villosae\*\*](#), [\*\*ADD Adenostylion alliariae\*\*](#), [\*\*LAA Alnion glutinosae\*\*](#), [\*\*LBA Alnion incanae\*\*](#), [\*\*RAC Epilobio nutantis-Montion fontanae\*\*](#), [\*\*RAD Swertio perennis-Dichodontion palustris\*\*](#), [\*\*SAD Androsacion alpinae\*\*](#), [\*\*TDB Polygono histortae-Trisetion flavescens\*\*](#), [\*\*TDD Molinion caeruleae\*\*](#), [\*\*TDE Deschampsion cespitosae\*\*](#), [\*\*TDF Calthion palustris\*\*](#)

Constant taxon of associations: [\*\*ADA01 Sphagno compacti-Molinietum caeruleae\*\*](#), [\*\*ADA03 Viola sudeticae-Deschampsietum cespitosae\*\*](#), [\*\*ADD01 Ranunculo platanifolii-Adenostyletum alliariae\*\*](#), [\*\*ADD02 Salicetum lapponum\*\*](#), [\*\*ADD03 Trollio altissimi-Geranium sylvatici\*\*](#), [\*\*ADD04 Laserpitio archangelicae-Dactylidetum glomeratae\*\*](#), [\*\*LAA01 Thelypterido palustris-Alnetum glutinosae\*\*](#), [\*\*LAA02 Carici elongatae-Alnetum glutinosae\*\*](#), [\*\*LAA03 Carici acutiformis-Alnetum glutinosae\*\*](#), [\*\*LBA01 Alnetum incanae\*\*](#), [\*\*LBA02 Piceo abietis-Alnetum glutinosae\*\*](#), [\*\*LBA03 Carici remotae-Fraxinetum excelsioris\*\*](#), [\*\*LBA07 Fraxino pannonicae-Ulmetum glabrae\*\*](#), [\*\*LFC03 Equiseto sylvatici-Piceetum abietis\*\*](#), [\*\*MCH07 Caricetum vulpinae\*\*](#), [\*\*RAC01 Philonotido fontanae-Montietum rivularis\*\*](#), [\*\*RAD01 Crepidio paludosae-Philonotidetum seriatae\*\*](#), [\*\*RAD02 Swertietum perennis\*\*](#), [\*\*RAD03 Cardaminetum opicii\*\*](#), [\*\*RBC04 Bartsio alpinae-Caricetum nigrae\*\*](#), [\*\*SAD01 Cryptogrammetum\*\*](#)

[crispae](#), [TDB02 Melandrio rubri-Phleetum alpini](#), [TDB03 Meo athamantici-Festucetum rubrae](#), [TDC05 Alchemillo hybridae-Poëtum supinae](#), [TDD01 Molinietum caeruleae](#), [TDD02 Junco effusi-Molinietum caeruleae](#), [TDE01 Poo trivialis-Alopecuretum pratensis](#), [TDE02 Holcetum lanati](#), [TDF01 Angelico sylvestris-Cirsietum oleracei](#), [TDF02 Cirsietum rivularis](#), [TDF03 Angelico sylvestris-Cirsietum palustris](#), [TDF05 Polygono bistortae-Cirsietum heterophylli](#), [TDF07 Scirpo sylvatici-Cirsietum cani](#), [TDF09 Caricetum cespitosae](#), [TDF10 Scirpo sylvatici-Caricetum brizoidis](#)

#### Dominant taxon

Dominant taxon of associations: [ADA03 Viola sudeticae-Deschampsietum cespitosae](#), [ADD01 Ranunculo platanifolii-Adenostyletum alliariae](#), [ADD02 Salicetum lapponum](#), [LBA02 Piceo abietis-Alnetum glutinosae](#), [LBA07 Fraxino pannonicae-Ulmetum glabrae](#), [RAD02 Swertietum perennis](#), [RBC04 Bartsio alpinae-Caricetum nigrae](#), [TCB01 Scorzonero parviflorae-Juncetum gerardii](#), [TDB03 Meo athamantici-Festucetum rubrae](#), [TDD01 Molinietum caeruleae](#), [TDE01 Poo trivialis-Alopecuretum pratensis](#), [TDE02 Holcetum lanati](#), [TDE03 Lathyro palustris-Gratioletum officinalis](#), [TDF07 Scirpo sylvatici-Cirsietum cani](#)

#### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.1**

Ecological specialization index for non-forest vegetation: **4.8**

Ecological specialization index for forest vegetation: **4.6**

#### Colonization ability

Index of colonization success (ICS): **8**

Index of colonization potential (ICP): **4**

Optimum successional age [years]: **14.5**

#### Distribution and frequency

Floristic zone: **arctic, boreal, northern temperate, southern temperate, submeridional, meridional, subtropical, tropical, austral or antarctic**

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **6**

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: **668**

taxon.data.freq\_in\_quad: **2399**

#### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **9.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **17 %**

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

Occurrence frequency in vegetation plots with a cover above 50%: **1.1 %**

Mean percentage cover in vegetation plots: **5.2 %**

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: **67**

Number of narrow habitats in which the taxon has its optimum: **12**

Number of broad habitats in which the taxon occurs: **13**

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

## **Threats and protection**

Legal protection: **not protected by law**