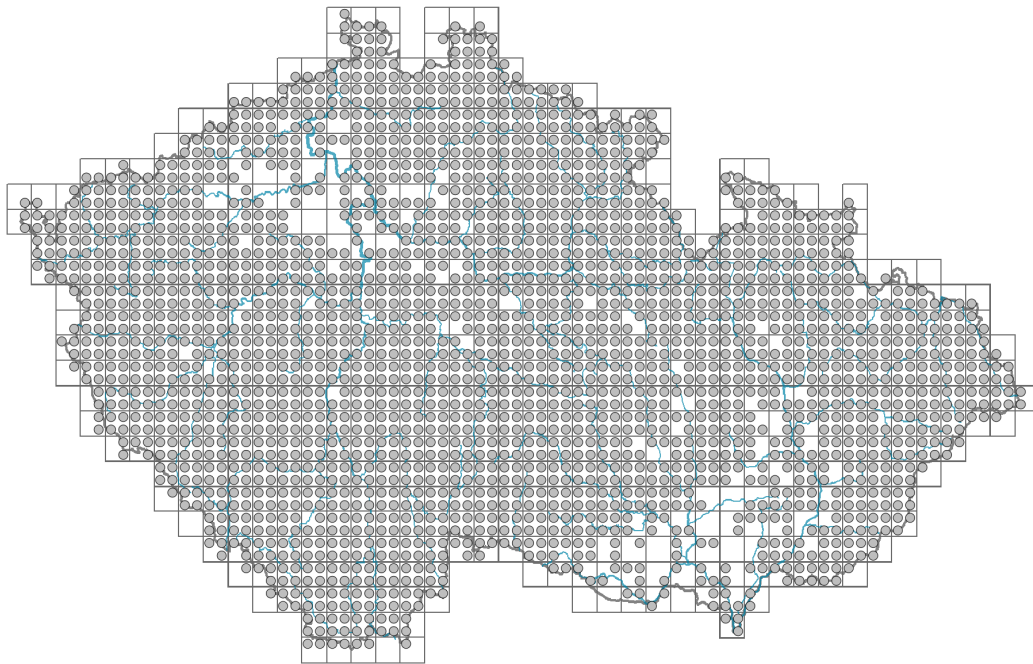


# *Juncus effusus*

## 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**

Life strategy: **C - competitor**

Life strategy (Pierce method based on leaf traits): **CS**

Life strategy (Pierce method, C-score): **52.3 %**

Life strategy (Pierce method, S-score): **42.8 %**

Life strategy (Pierce method, R-score): **4.9 %**



## 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-August**

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

Flower colour: **green**

Flower symmetry: **actinomorphic**

Perianth type: **homochlamydeous**

Perianth fusion: **free**

Inflorescence type: **anthella**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

Pollination syndrome: **wind-pollination, insect-pollination, selfing, cleistogamy**

Pollinator spectrum: **other Diptera, beetles, nitidulids (butterflies)**



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Reproduction type: **by seed/spores and vegetatively**

Dispersal unit (diaspore): **seed**

Dispersal strategy: **Sparganium (mainly autochory and hydrochory)**

Myrmecochory: **probably non-myrmecochorous**

## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome, tuft**

Type of clonal growth organ: **hypogeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

Shoot life span (cyclicality): **monocyclic 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: **3.5**

Lateral spreading distance by clonal growth [m]: **0.08**

Clonal index: **5**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **4**

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): **0**

Size of the belowground bud bank (root buds excluded): **18**

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

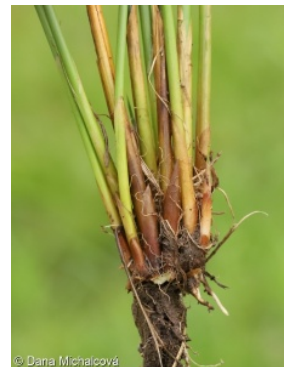
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Size of the belowground bud bank (root buds included): **18**

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): **42**

Ploidy level (x): **2**

2C genome size [Mbp]: **489.59**

1Cx monoploid genome size [Mbp]: **244.8**

Genomic GC content: **33.8 %**

## 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: **5x - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**

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

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

Nutrient indicator value: **4 - transition between values 3 and 5**

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: **-0.91**

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

Whole-community disturbance severity indicator value: **0.28**

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

Whole-community structure based disturbance indicator value: **0.49**

Herb layer structure-based disturbance indicator value: **0.57**

## 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**

4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**

4D Riverine reed vegetation: **1 - rare occurrence**

4E Reed vegetation of brooks: **2 - optimum**

4F Mesotrophic vegetation of muddy substrata: **2 - optimum**

4G Tall-sedge beds: **2 - optimum**

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

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

4K Petasites fringes of montane brooks: **1 - rare occurrence**

## 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: **1 - rare occurrence**
- 5E Acidic moss-rich fens and peatland meadows: **2 - optimum**
- 5F Transitional mires: **2 - optimum**
- 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**
- 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

- 7B Submontane Nardus grasslands: **2 - optimum**
- 9 Sand grasslands and rock-outcrop vegetation
- 9B Open vegetation of acidic sands: **1 - rare occurrence**

## 10 Saline vegetation

- 10I Inland saline meadows: **1 - rare occurrence**
- 11 Heathlands and scrub
- 11A Dry lowland to subalpine heathlands: **1 - rare occurrence**
- 11I Willow carrs: **1 - rare occurrence**
- 11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**
- 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

## 12 Forests

- 12A Alder carrs: **2 - optimum**
- 12B Alluvial 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**
- 12K Acidophilous oak 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**
- 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

- 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: **2 - optimum**

## 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**

Constant taxon

Constant taxon of alliances: [RAC \*Epilobio nutantis-Montion fontanae\*](#), [TDF \*Calthion palustris\*](#)

Constant taxon of associations: [LAA03 \*Carici acutiformis-Alnetum glutinosae\*](#), [LAB01 \*Salicetum auritae\*](#), [LBA02 \*Piceo abietis-Alnetum glutinosae\*](#), [MCA09 \*Typhetum shuttleworthii\*](#), [RAC01 \*Philonotido fontanae-Montietum rivularis\*](#), [RBC01 \*Caricetum nigrae\*](#), [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\*](#), [XDC04 \*Carici pendulae-Eupatorietum cannabini\*](#), [XEA01 \*Senecioni-Epilobietum angustifolii\*](#), [XEA02 \*Digitali purpureae-Epilobietum angustifolii\*](#), [XEA04 \*Junco effusi-Calamagrostietum villosae\*](#)

Dominant taxon

Dominant taxon of associations: [MCC05 \*Scirpetum radicans\*](#), [XDC04 \*Carici pendulae-Eupatorietum cannabini\*](#), [XEA01 \*Senecioni-Epilobietum angustifolii\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.4**

Ecological specialization index for non-forest vegetation: **4.5**

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

Colonization ability

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

Index of colonization potential (ICP): **5**

Optimum successional age [years]: **10**

## Distribution and frequency

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

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **5**

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: **658**

taxon.data.freq\_in\_quad: **2312**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **6.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **11.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.9 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.4 %**

Mean percentage cover in vegetation plots: **3.9 %**

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: **45**

Number of narrow habitats in which the taxon has its optimum: **11**

Number of broad habitats in which the taxon occurs: **10**

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

### **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**