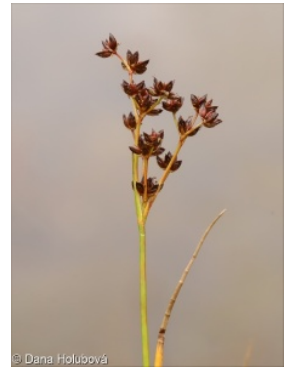
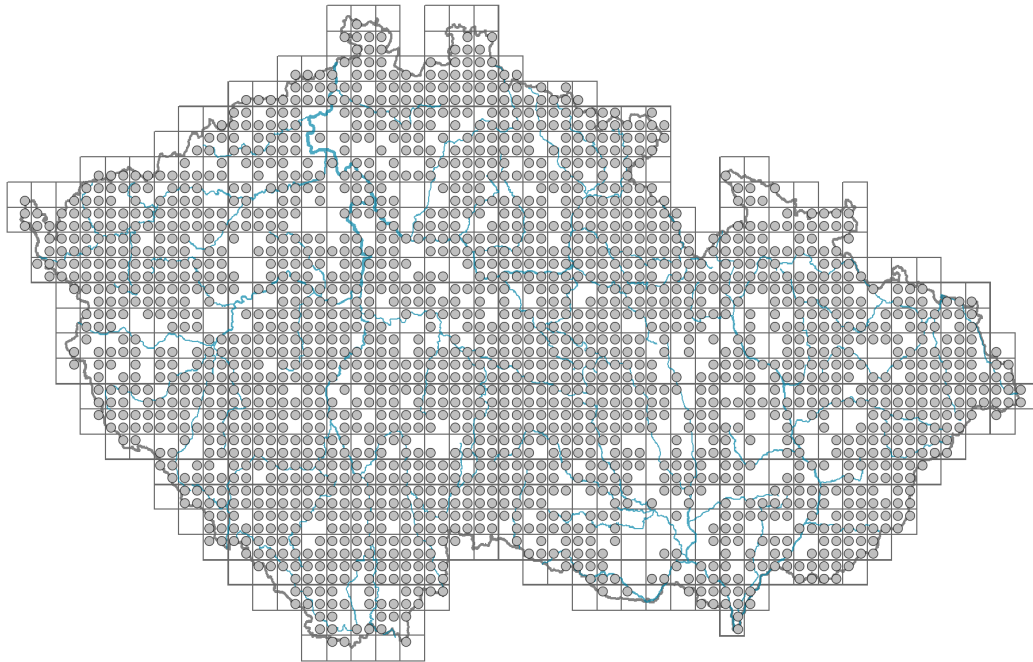


# *Juncus articulatus*

## 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]: **0.1-0.6**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **25.7 %**

Life strategy (Pierce method, S-score): **28.4 %**

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



© Dana Michalová

## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**

Leaf arrangement (phyllotaxis): **alternate**

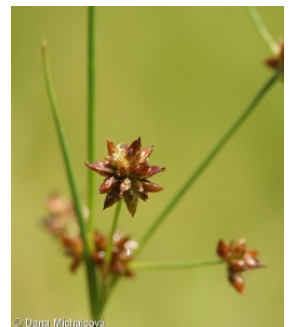
Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf anatomy: **helomorphic**



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## Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**

Flower colour: **brown**

Flower symmetry: **actinomorphic**

Perianth type: **homochlamydeous**

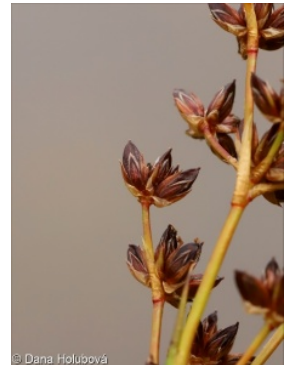
Perianth fusion: **free**

Inflorescence type: **anthella**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **wind-pollination**



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

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

Dispersal unit (diaspore): **seed, shoot fragment**

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

Myrmecochory: **probably non-myrmecochorous**



## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

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

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

Shoot life span (cyclicity): **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: **4.2**

Lateral spreading distance by clonal growth [m]: **0.19**

Clonal index: **5**

## Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **8**

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): **23**

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

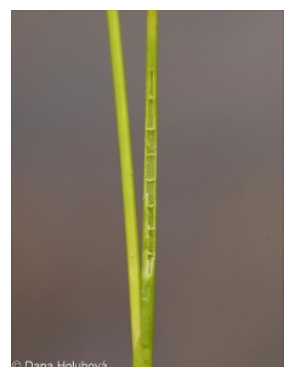
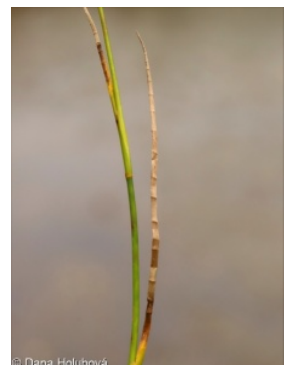
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Size of the belowground bud bank (root buds included): **23**

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): **80**

Ploidy level (x): **4**

2C genome size [Mbp]: **3496.56**

1Cx monoploid genome size [Mbp]: **874.14**

Genomic GC content: **38.1 %**

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

Moisture indicator value: **9 - wetness indicator, focus on often soaked, poorly aerated 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: **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: **-0.52**

Herb layer disturbance frequency indicator value: **-0.5**

Whole-community disturbance severity indicator value: **0.26**

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

Whole-community structure based disturbance indicator value: **0.68**

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: **2 - optimum**

4 Wetland and riverine herbaceous vegetation

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

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

4C Eutrophic vegetation of muddy substrata: **2 - optimum**

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

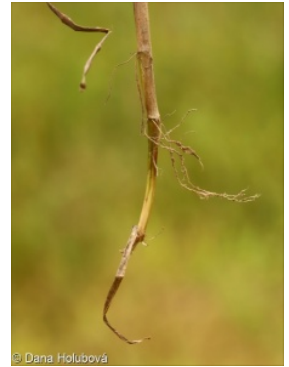
4E Reed vegetation of brooks: **2 - optimum**

4F Mesotrophic vegetation of muddy substrata: **1 - rare occurrence**

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

4H Vegetation of low annual hygrophilous herbs: **2 - optimum**

4I Vegetation of nitrophilous annual hygrophilous herbs: **2 - optimum**



4J River gravel banks: **1 - rare occurrence**

4K Petasites fringes of montane brooks: **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**

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

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

5F Transitional mires: **2 - optimum**

5H Wet peat soils and bog hollows: **1 - rare occurrence**

6 Meadows and mesic pastures

6C Pastures and park grasslands: **1 - rare occurrence**

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

6E Wet Cirsium meadows: **2 - optimum**

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

6G Vegetation of wet disturbed soils: **1 - rare occurrence**

7 Acidophilous grasslands

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

10 Saline vegetation

10I Inland saline meadows: **2 - optimum**

11 Heathlands and scrub

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

12 Forests

12A Alder carrs: **1 - rare occurrence**

13 Anthropogenic vegetation

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

Diagnostic taxon of associations: [MCC08 Alismatetum lanceolati](#), [RBA02 Carici flavae-Cratoneuretum filicini](#), [RBA06 Eleocharitetum quinqueflorae](#), [RBB02 Campylio stellati-Trichophoretum alpini](#)

Constant taxon

Constant taxon of alliances: [RBA Caricion davallianae](#)

Constant taxon of associations: [MBB04 Chenopodio chenopodioidis-Atriplicetum prostratae](#), [MCC08 Alismatetum lanceolati](#), [RBA02 Carici flavae-Cratoneuretum filicini](#), [RBA03 Valeriano simplicifoliae-Caricetum flavae](#), [RBA06 Eleocharitetum quinqueflorae](#), [RBB01 Sphagno warnstorffii-Eriophoretum latifolii](#), [RBB02 Campylio stellati-Trichophoretum alpini](#), [VDC03 Scirpidio scorpioidis-Utricularietum](#)

Dominant taxon

Dominant taxon of associations: [RBA02 Carici flavae-Cratoneuretum filicini](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.2**

Ecological specialization index for non-forest vegetation: **4.2**

Ecological specialization index for forest vegetation: **4.2**

## Colonization ability

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

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

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

## Distribution and frequency

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

Floristic region: **Europe, Asia, Americas**

Distribution range extension along the continentality gradient: **8**

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: 640

taxon.data.freq\_in\_quad: 1975

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.8 %**

Occurrence frequency in vegetation plots with a cover above 5%: **9.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **3.3 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.6 %**

Mean percentage cover in vegetation plots: **4.1 %**

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: **29**

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

Number of broad habitats in which the taxon occurs: **9**

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**