

# *Eleocharis acicularis*

## 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]: **0.02-0.1**

Growth form: **clonal herb**

Life form: **hemicryptophyte (hydrophyte)**

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

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

Life strategy (Pierce method, C-score): **0 %**

Life strategy (Pierce method, S-score): **0 %**

Life strategy (Pierce method, R-score): **100 %**



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200 µm

## Leaf

Leaf presence and metamorphosis: **leaves reduced to sheaths**

Leaf shape: **simple - entire**

Stipules: **absent**

Leaf life span: **evergreen**

Leaf anatomy: **helomorphic, hydromorphic**

## Flower

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

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

Flower colour: **brown**

Perianth type: **reduced**  
Perianth fusion: **reduced**  
Inflorescence type: **spicula**  
Dicliny: **synoecious**  
Generative reproduction type: **facultative allogamy**  
Pollination syndrome: **wind-pollination**

### **Fruit, seed and dispersal**

Fruit type: **dry fruit - achene/cypsela/samara**  
Reproduction type: **by seed/spores and vegetatively**  
Dispersal unit (diaspore): **fruit, infrutescence or its part**  
Dispersal strategy: **Sparganium (mainly autochory and hydrochory)**  
Myrmecochory: **probably non-myrmecochorous**

### **Belowground organs and clonality**

Shoot metamorphosis: **stolon**  
Storage organ: **stolon**  
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]: **2**  
Number of clonal offspring: **3.5**  
Lateral spreading distance by clonal growth [m]: **0.07**  
Clonal index: **5**

#### **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): **20**

Ploidy level (x): **4**  
2C genome size [Mbp]: **2155.31**  
1Cx monoploid genome size [Mbp]: **538.83**  
Genomic GC content: **38 %**

## 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: **10 - aquatic plant that survives long periods without soil flooding**

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: **0 - not salt tolerant, glycophyte**

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.56**

Herb layer disturbance frequency indicator value: **-0.56**

Whole-community disturbance severity indicator value: **0.25**

Herb layer disturbance severity indicator value: **0.29**

Whole-community structure based disturbance indicator value: **0.63**

Herb layer structure-based disturbance indicator value: **0.63**

## Habitat and sociology

### Occurrence in habitats

#### 3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **1 - rare occurrence**

3C Macrophytic vegetation of oligotrophic lakes and pools: **3 - dominant**

#### 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**

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: **3 - dominant**

4I Vegetation of nitrophilous annual hygrophilous herbs: **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: [MA Isoëto-Nano-Juncetea](#), [VD Littorelletea uniflorae](#)

Diagnostic taxon of alliances: [MAA Eleocharition ovatae](#), [VDB Eleocharition acicularis](#)

Diagnostic taxon of associations: [VDB01 Eleocharito-Littorelletum uniflorae](#), [VDB03 Limosello aquaticae-Eleocharitetum acicularis](#), [VDB04 Pilularietum globuliferae](#)

## Constant taxon

Constant taxon of classes: [VD Littorelletea uniflorae](#)

Constant taxon of alliances: [VDB Eleocharition acicularis](#)

Constant taxon of associations: [VDB01 Eleocharito-Littorelletum uniflorae](#), [VDB03 Limosello aquaticae-Eleocharitetum acicularis](#), [VDB04 Pilularietum globuliferae](#)

## Dominant taxon

Dominant taxon of associations: [VBD02 Potamo crispus-Ranunculetum trichophylli](#), [VDB01 Eleocharito-Littorelletum uniflorae](#), [VDB02 Ranunculo-Juncetum bulbosi](#), [VDB03 Limosello aquaticae-Eleocharitetum acicularis](#)

## Ecological specialization indices

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

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

## Colonization ability

Index of colonization success (ICS): **3**

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

Optimum successional age [years]: **8**

**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: **9**

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: **422**

taxon.data.freq\_in\_quad: 867

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **48.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **31.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **27.4 %**

Mean percentage cover in vegetation plots: **26.5 %**

Maximum percentage cover in vegetation plots: **99 %**

## Number of habitats with taxon occurrence in the Czech Republic

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

Number of narrow habitats in which the taxon has its optimum: **2**

Number of broad habitats in which the taxon occurs: **2**

Number of broad habitats in which the taxon has its optimum: **2**

## **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**