

Equisetum fluviatile

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.

Habitus and growth type

Height [m]: **0.3-1.5**

Growth form: **clonal herb**

Life form: **hydrophyte**

Life strategy: **CS - competitor/stress-tolerator**

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

Life strategy (Pierce method, C-score): **15.8 %**

Life strategy (Pierce method, S-score): **84.2 %**

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

Leaf

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

Leaf arrangement (phyllotaxis): **verticillate**

Leaf shape: **simple - entire**

Stipules: **absent**

Leaf life span: **summer green**

Leaf anatomy: **helomorphic, hydromorphic**

Flower

Flowering period [month]: **May-July**

Dicliny: **dioecious**



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Fruit, seed and dispersal

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

Dispersal unit (diaspore): **spore**

Dispersal strategy: **Lycopodium (mainly anemochory)**

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

Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

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

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

Shoot life span (cyclicality): **monocyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **dichotomous**

Primary root: **absent**

Persistence of the clonal growth organ [year]: **4**

Number of clonal offspring: **4.3**

Lateral spreading distance by clonal growth [m]: **0.3**

Clonal index: **6**

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): **15**

Size of the belowground bud bank (root buds excluded): **35**

Depth of the belowground bud bank (root buds excluded) [cm]: **9**

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): **15**

Size of the belowground bud bank (root buds included): **35**

Depth of the belowground bud bank (root buds included) [cm]: **9**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

Karyology

Chromosome number (2n): **216**

Ploidy level (x): **2**

2C genome size [Mbp]: **23555.24**

1Cx monoploid genome size [Mbp]: **11777.62**

Genomic GC content: **41.4 %**

Taxon origin

Origin in the Czech Republic: **native**



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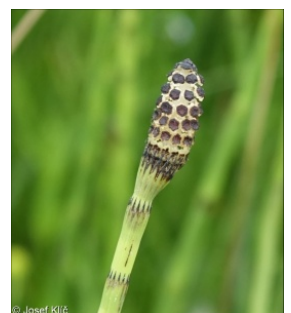
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Ecological indicator values

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: **4x - transition between values 3 and 5 (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: **-0.81**

Herb layer disturbance frequency indicator value: **-0.64**

Whole-community disturbance severity indicator value: **0.19**

Herb layer disturbance severity indicator value: **0.22**

Whole-community structure based disturbance indicator value: **0.56**

Herb layer structure-based disturbance indicator value: **0.6**

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: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **2 - optimum**

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: **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**

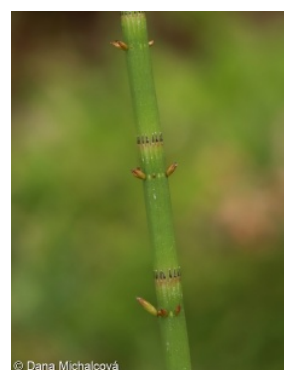
5E Acidic moss-rich fens and peatland meadows: **2 - optimum**

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



- 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**
 10 Saline vegetation
 10I Inland saline meadows: **1 - rare occurrence**
 10J Saline steppes: **1 - rare occurrence**
 11 Heathlands and scrub
 11H Subalpine deciduous scrub: **1 - rare occurrence**
 11I Willow carrs: **2 - optimum**
 11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**
 12 Forests
 12A Alder carrs: **2 - optimum**
 12B Alluvial forests: **1 - rare occurrence**
 12Q Peatland birch forests: **1 - rare occurrence**
 12R Acidophilous spruce forests: **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: [LA *Alnetea glutinosae*](#)

Diagnostic taxon of alliances: [RBB *Sphagno warnstorffii-Tomentypnion nitentis*](#)

Diagnostic taxon of associations: [LAA01 *Thelypterido palustris-Alnetum glutinosae*](#), [LAB01 *Salicetum auritae*](#), [MCA08 *Equisetetum fluviatilis*](#), [MCG04 *Comaro palustris-Caricetum cespitosae*](#), [MCG05 *Caricetum diandrae*](#), [RBB03 *Menyantho trifoliatae-Sphagnetum teretis*](#), [VDC03 *Scorpidio scorpioidis-Utricularietum*](#)

Constant taxon

Constant taxon of associations: [LAA01 *Thelypterido palustris-Alnetum glutinosae*](#), [LAB01 *Salicetum auritae*](#), [MCA08 *Equisetetum fluviatilis*](#), [MCG04 *Comaro palustris-Caricetum cespitosae*](#), [MCG05 *Caricetum diandrae*](#), [MCG06 *Caricetum appropinquatae*](#), [RBB03 *Menyantho trifoliatae-Sphagnetum teretis*](#), [RBC03 *Agrostio caninae-Caricetum diandrae*](#), [VDB04 *Pilularietum globuliferae*](#), [VDC03 *Scorpidio scorpioidis-Utricularietum*](#)

Dominant taxon

Dominant taxon of associations: [MCA08 *Equisetetum fluviatilis*](#), [MCG03 *Peucedano palustris-Caricetum lasiocarpae*](#), [MCG05 *Caricetum diandrae*](#), [MCG06 *Caricetum appropinquatae*](#)

Ecological specialization indices

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

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

Ecological specialization index for forest vegetation: **5.5**

Colonization ability

Index of colonization success (ICS): **4**

Index of colonization potential (ICP): **1**

Optimum successional age [years]: **20**

Distribution and frequency

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

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **7**

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: **620**

taxon.data.freq_in_quad: **1892**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **20.4 %**

Occurrence frequency in vegetation plots with a cover above 25%: **12.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **6.4 %**

Mean percentage cover in vegetation plots: **9.6 %**

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: **31**

Number of narrow habitats in which the taxon has its optimum: **8**

Number of broad habitats in which the taxon occurs: **7**

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**