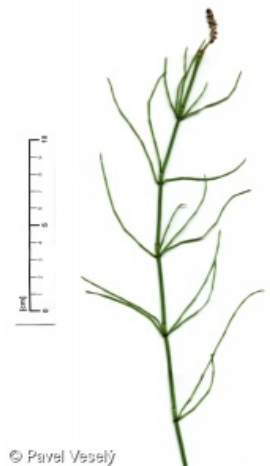


Equisetum palustre

Distribution



© Pavel Veselý

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]: **0.1-0.6**Growth form: **clonal herb**Life form: **geophyte**Life strategy: **CSR - competitor/stress-tolerator/ruderal**

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: **scleromorphic, helomorphic**

Flower

Flowering period [month]: **May-August**Dicliny: **dioecious**

Fruit, seed and dispersal

Reproduction type: **by seed/spores and vegetatively**Dispersal unit (diaspore): **spore**

© Dana Michalčová



© Dana Holubová

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

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

Belowground organs and clonality

Shoot metamorphosis: **stolon, shoot tuber**

Storage organ: **stolon, shoot tuber**

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: **dichotomous**

Primary root: **absent**

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

Number of clonal offspring: **3.4**

Lateral spreading distance by clonal growth [m]: **0.27**

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]: **27042.46**

1Cx monoploid genome size [Mbp]: **13521.23**

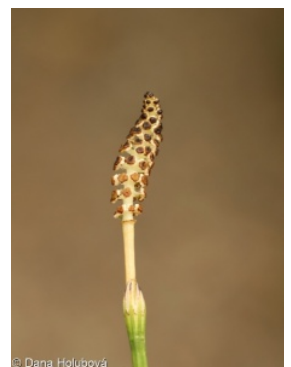
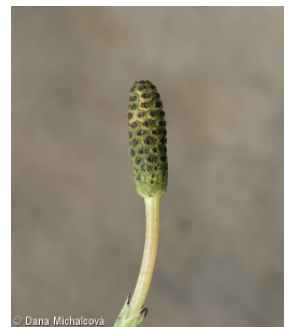
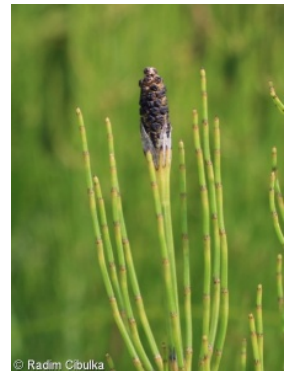
Genomic GC content: **44.2 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values



Light indicator value: **6x - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area (generalist)**

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: **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: **-0.7**

Herb layer disturbance frequency indicator value: **-0.46**

Whole-community disturbance severity indicator value: **0.24**

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

Whole-community structure based disturbance indicator value: **0.57**

Herb layer structure-based disturbance indicator value: **0.67**

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: **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: **2 - optimum**

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**

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: **1 - rare occurrence**

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

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

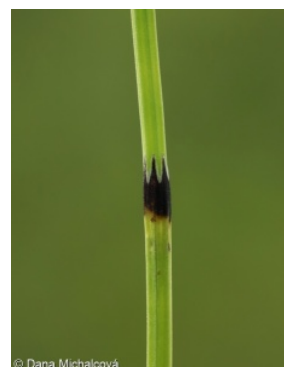
5F Transitional mires: **2 - optimum**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **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: **1 - rare occurrence**

10 Saline vegetation

10I Inland saline meadows: **1 - rare occurrence**

11 Heathlands and scrub

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

11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**

12 Forests

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

12B Alluvial forests: **1 - rare occurrence**

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

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

13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **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: [RBA Caricion davallianae](#), [RBB Sphagno warnstorffii-Tomentypnion nitentis](#)

Diagnostic taxon of associations: [RBA03 Valeriano simplicifoliae-Caricetum flavae](#)

Constant taxon

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

Constant taxon of associations: [KAB02 Salicetum purpureae](#), [MCG06 Caricetum appropinquatae](#), [RBA01 Valeriano dioicae-Caricetum davallianae](#), [RBA02 Carici flavae-Cratoneuretum filicini](#), [RBA03 Valeriano simplicifoliae-Caricetum flavae](#), [RBA04 Campylio stellati-Caricetum lasiocarpae](#), [RBB01 Sphagno warnstorffii-Eriophoretum latifolii](#), [RBB02 Campylio stellati-Trichophoretum alpini](#), [TDF01 Angelico sylvestris-Cirsietum oleracei](#), [TDF07 Scirpo sylvatici-Cirsietum cani](#), [TDF08 Scirpetum sylvatici](#), [TDF09 Caricetum cespitosae](#), [TDF12 Filipendulo ulmariae-Geranium palustris](#)

Dominant taxon

Dominant taxon of associations: [RAB01 Brachythecio rivularis-Cratoneuretum](#), [RBA02 Carici flavae-Cratoneuretum filicini](#), [RBA03 Valeriano simplicifoliae-Caricetum flavae](#), [TDF07 Scirpo sylvatici-Cirsietum cani](#), [TDF11 Junco inflexi-Menthetum longifoliae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5**

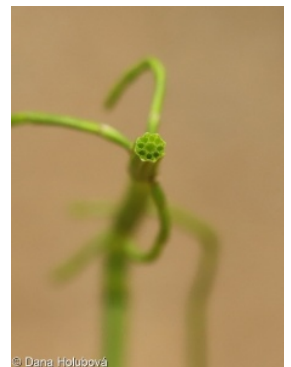
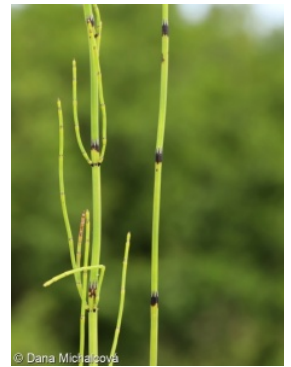
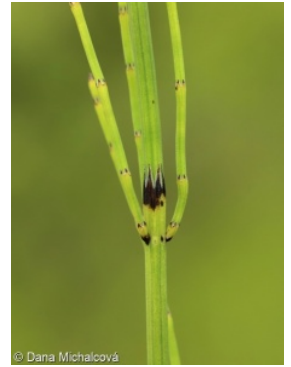
Ecological specialization index for non-forest vegetation: **5.1**

Ecological specialization index for forest vegetation: **4.9**

Colonization ability

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

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



Optimum successional age [years]: **3**

Distribution and frequency

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

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: **654**

taxon.data.freq_in_quad: **2217**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **4.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **15.2 %**

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

Occurrence frequency in vegetation plots with a cover above 50%: **0.3 %**

Mean percentage cover in vegetation plots: **4.8 %**

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: **33**

Number of narrow habitats in which the taxon has its optimum: **7**

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

Number of broad habitats in which the taxon has its optimum: **3**



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**