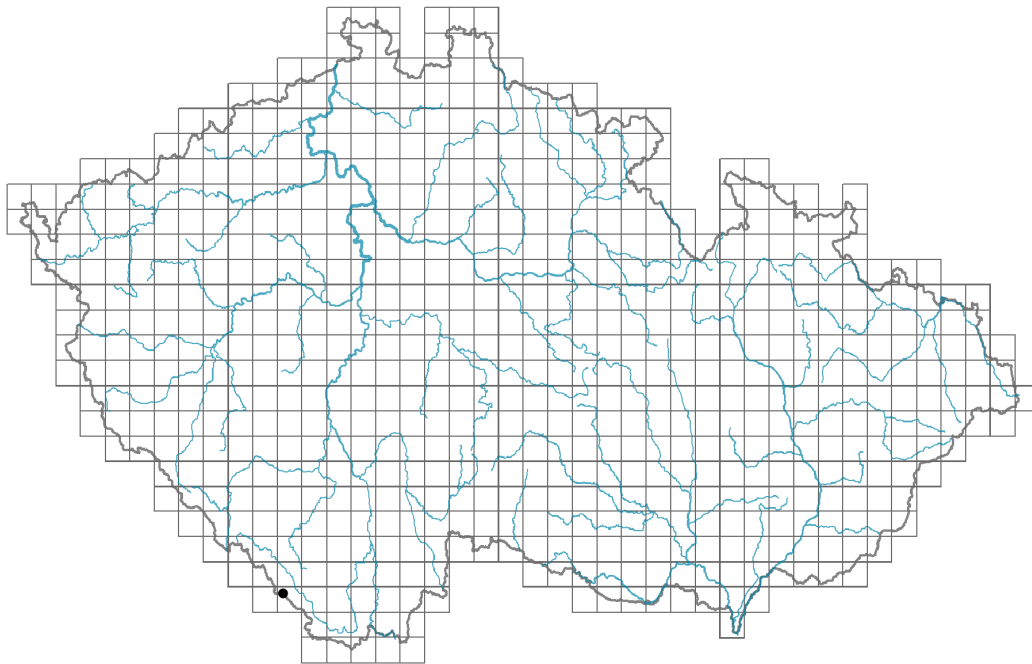


Isoetes echinospora

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]: **0.05-0.15**

Growth form: **polycarpic perennial non-clonal herb**

Life form: **hydrophyte**

Leaf

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

Leaf arrangement (phyllotaxis): **rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Flower

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

Fruit, seed and dispersal

Dispersal unit (diaspore): **spore**

Dispersal strategy: **Wolffia (mainly hydrochory)**

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

Belowground organs and clonality

Primary root: **absent**

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): **0**

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): **5**

Depth of the belowground bud bank (root buds excluded) [cm]: **1**

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): **0**

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): **5**

Depth of the belowground bud bank (root buds included) [cm]: **1**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

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: **3 - cool indicator, occurring mainly in subalpine areas**

Moisture indicator value: **12 - permanently or almost permanently submerged aquatic plant**

Reaction indicator value: **6 - transition between values 5 and 7**

Nutrient indicator value: **1 - occurring at nutrient-poorest sites**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3C Macrophytic vegetation of oligotrophic lakes and pools: **2 - optimum**

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: [VD Littorelletea uniflorae](#)

Diagnostic taxon of alliances: [VDA Littorellion uniflorae](#)

Diagnostic taxon of associations: [VDA01 Isoëtetum echinosporae](#)

Constant taxon

Constant taxon of alliances: [VDA Littorellion uniflorae](#)

Constant taxon of associations: [VDA01 Isoëtetum echinosporae](#)

Distribution and frequency

Distribution range extension along the continentality gradient: **6**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **1**

taxon.data.freq_in_quad: **1**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **1**

Number of narrow habitats in which the taxon has its optimum: **1**

Number of broad habitats in which the taxon occurs: **1**

Number of broad habitats in which the taxon has its optimum: **1**

Threats and protection

Red List 2017 (national categories): **C1r - critically threatened taxon, rare**

Red List 2017 (IUCN categories): **CR - critically endangered**

Legal protection: **critically threatened taxon**