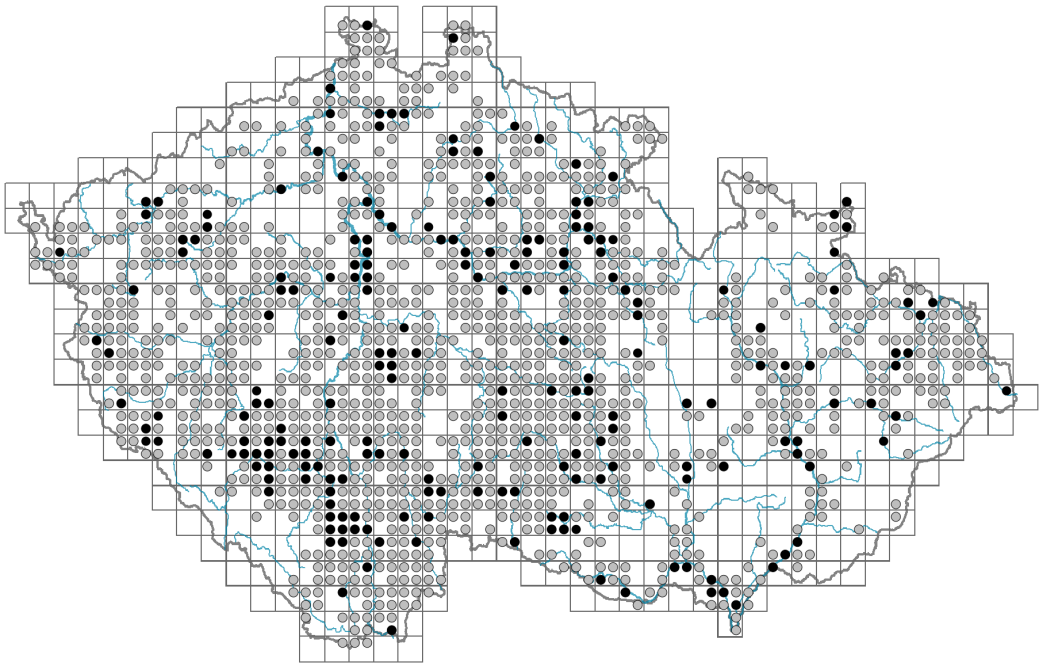
Spirodela polyrhiza



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]: **0.003–0.01**
Growth form: **clonal herb**
Life form: **hydrophyte**
Life strategy (Pierce method based on leaf traits): **R**
Life strategy (Pierce method, C-score): **2 %**
Life strategy (Pierce method, S-score): **0 %**
Life strategy (Pierce method, R-score): **98 %**

Leaf

Leaf presence and metamorphosis: **leaves absent**
Stipules: **absent**
Leaf anatomy: **hydromorphic**

Flower

Flowering period [month]: **May–July**
Perianth type: **flower achlamydeous**
Dicliny: **monoecious**
Generative reproduction type: **facultative autogamy**
Pollination syndrome: **wind-pollination, water-pollination, insect-pollination, selfing**

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Fruit, seed and dispersal

Fruit type: **dry fruit – follicle**
Reproduction type: **only vegetatively**
Dispersal unit (diaspore): **seed, fruit, infrutescence or its part, turion, budding**
Dispersal strategy: **Wolffia (mainly hydrochory)**
Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Shoot metamorphosis: **stolon, turion**
Storage organ: **turion**
Type of clonal growth organ: **budding plant**
Freely dispersible organs of clonal growth: **present**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **1**
Number of clonal offspring: **6.8**
Lateral spreading distance by clonal growth [m]: **0**
Clonal index: **7**

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): **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): **8**
Depth of the belowground bud bank (root buds exluded) [cm]: **1**
Number of buds per shoot at the soil surface (root buds included): **8**
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): **8**
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**

Karyology

Chromosome number (2n): **40 (30, 38, 50, 80)**
Ploidy level (x): **4 (3, 5, 8)**
2C genome size [Mbp]: **337.47**
1Cx monoploid genome size [Mbp]: **84.37**
Genomic GC content: **44.1 %**

Taxon origin

Origin in the Czech Republic: **native**

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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: **6 – transition between values 5 and 7**

Moisture indicator value: **11 – aquatic plant rooted under water, but at least temporarily with leaves above the surface, or a plant floating on the water surface**

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

Nutrient indicator value: **7 – occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor 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: **-0.43**

Herb layer disturbance frequency indicator value: **-0.43**

Whole-community disturbance severity indicator value: **0.2**

Herb layer disturbance severity indicator value: **0.24**

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

Herb layer structure-based disturbance indicator value: **0.58**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **3 – dominant**

3B Macrophytic vegetation of water streams: **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**

4B Halophilous reed and sedge beds: **1 – rare occurrence**

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

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: **1 – rare occurrence**

4H Vegetation of low annual hygrophilous herbs: **1 – rare occurrence**

4I Vegetation of nitrophilous annual hygrophilous herbs: **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**

Affinity to the forest environment

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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: **VA *Lemnetea***

Diagnostic taxon of alliances: **VAA *Lemnion minoris*, VAC *Hydrocharition morsus-ranae***

Diagnostic taxon of associations: **VAA04 *Lemno-Spirodeletum polyrhizae*, VAA05 *Lemnetum gibbae*, VAA06 *Lemno gibbae-Wolffietum arrhizae*, VAA07 *Salvinio natantis-Spirodeletum polyrhizae*, VAC01 *Hydrocharitetum morsus-ranae*, VAC02 *Stratiotetum aloidis*, VBA05 *Trapetum natantis*, VBB11 *Potametum denso-nodosi*, VBB17 *Najadetum minoris***

Constant taxon

Constant taxon of classes: **VA *Lemnetea***

Constant taxon of alliances: **VAA *Lemnion minoris*, VAC *Hydrocharition morsus-ranae***

Constant taxon of associations: **VAA03 *Lemnetum minori-turioniferae*, VAA04 *Lemno-Spirodeletum polyrhizae*, VAA05 *Lemnetum gibbae*, VAA06 *Lemno gibbae-Wolffietum arrhizae*, VAA07 *Salvinio natantis-Spirodeletum polyrhizae*, VAC01 *Hydrocharitetum morsus-ranae*, VAC02 *Stratiotetum aloidis*, VBA05 *Trapetum natantis*, VBB11 *Potametum denso-nodosi*, VBB17 *Najadetum minoris***

Dominant taxon

Dominant taxon of associations: **VAA03 *Lemnetum minori-turioniferae*, VAA04 *Lemno-Spirodeletum polyrhizae*, VAA06 *Lemno gibbae-Wolffietum arrhizae*, VAA07 *Salvinio natantis-Spirodeletum polyrhizae*, VAC01 *Hydrocharitetum morsus-ranae*, VAC02 *Stratiotetum aloidis*, VBB08 *Myriophylletum verticillati***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.7**

Ecological specialization index for non-forest vegetation: **4.7**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional, subtropical, tropical, austral or antarctic**

Floristic region: **Africa, Australia, New Zealand, circumpolar**

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

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: 526

taxon.data.freq_in_quad: 1343

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **5.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **31.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **19.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **11.8 %**

Mean percentage cover in vegetation plots: **15 %**

Maximum percentage cover in vegetation plots: **88 %**

Number of habitats with taxon occurrence in the Czech Republic

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Number of narrow habitats in which the taxon occurs: **16**
Number of narrow habitats in which the taxon has its optimum: **4**
Number of broad habitats in which the taxon occurs: **5**
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**

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