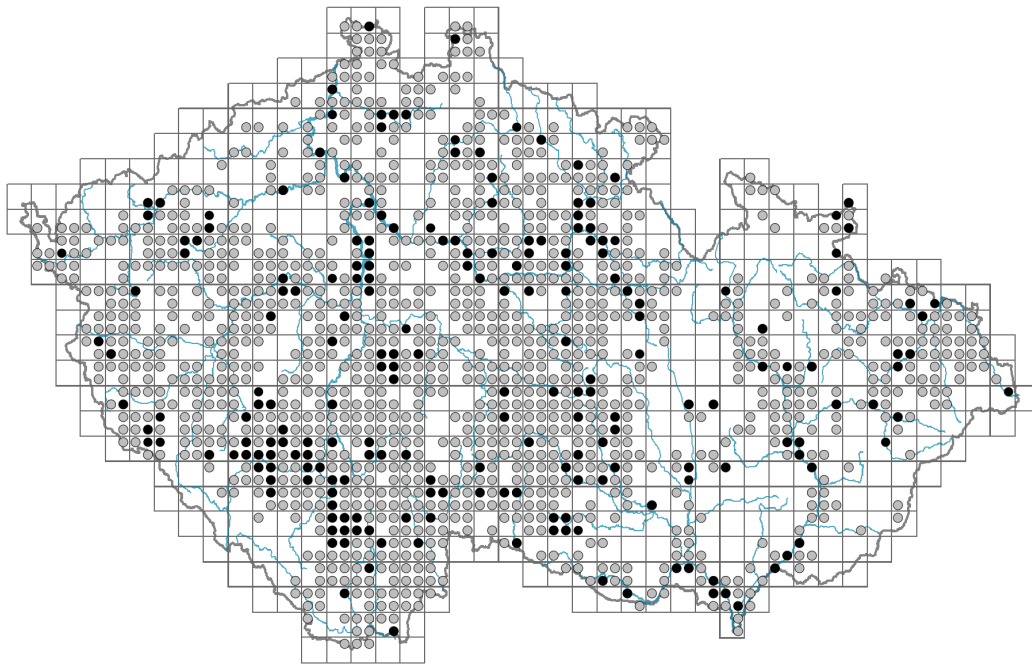


Spirodela polyrhiza

Distribution

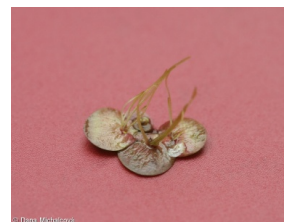
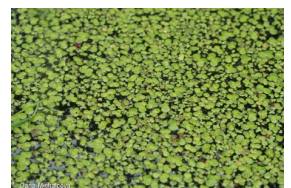


Map info

● 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**

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 excluded) [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**

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

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

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**