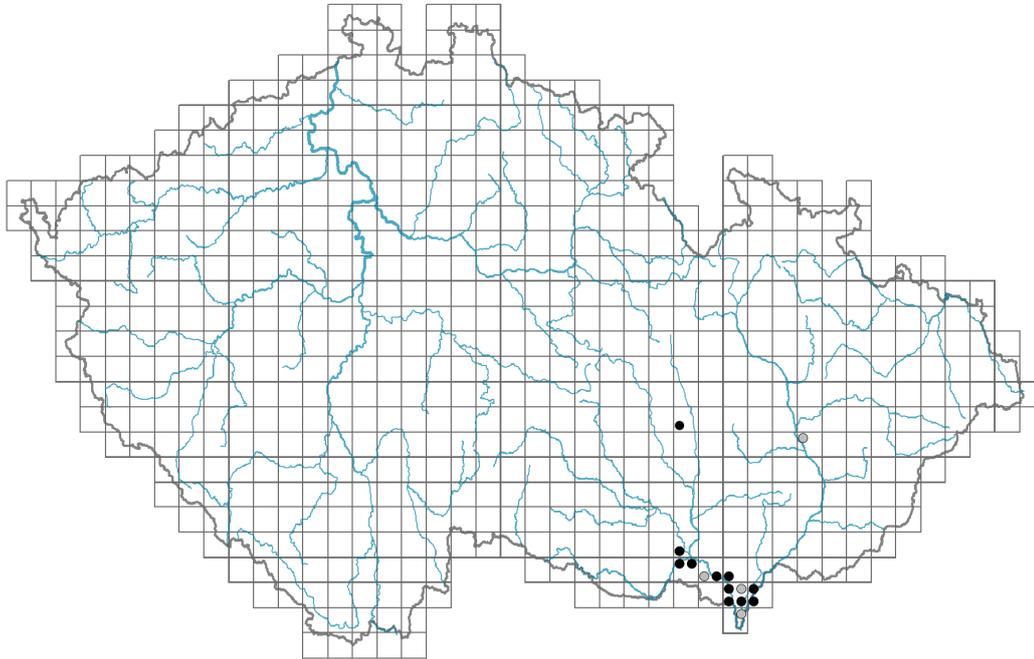


Wolffia arrhiza

Distribution

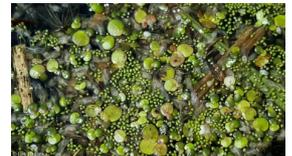


Map info

● 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

Growth form: **clonal herb**

Life form: **hydrophyte**

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

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

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

Life strategy (Pierce method, R-score): **100 %**

Leaf

Leaf presence and metamorphosis: **leaves absent**

Stipules: **absent**

Leaf anatomy: **hydromorphic**

Flower

Flowering period [month]: **April-June**

Perianth type: **flower achlamydeous**

Dicliny: **monoecious**

Pollination syndrome: **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**

Root metamorphosis: **rootless**

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]:

Number of clonal offspring:

Lateral spreading distance by clonal growth [m]:

Clonal index: **7**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded):

Number of buds per shoot at a depth of 0–10 cm (root buds excluded):

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

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

Number of buds per shoot at the soil surface (root buds included):

Number of buds per shoot at a depth of 0–10 cm (root buds included):

Number of buds per shoot at a depth greater than 10 cm (root buds included):

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

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

Karyology

Chromosome number (2n): **80 (30, 40, 50, 60, 70)**

Ploidy level (x): **8 (3, 4, 5, 6, 7)**

2C genome size [Mbp]: **4046.54**

1Cx monoploid genome size [Mbp]: **505.82**

Genomic GC content: **43.2 %**

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: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

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**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **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 associations: [VAA06 *Lemno gibbae-Wolffietum arrhizae*](#)

Constant taxon

Constant taxon of associations: [VAA06 *Lemno gibbae-Wolffietum arrhizae*](#)

Dominant taxon

Dominant taxon of associations: [VAA06 *Lemno gibbae-Wolffietum arrhizae*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **7.6**

Ecological specialization index for non-forest vegetation: **7.5**

Distribution and frequency

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

Floristic region: **Europe, Asia, Africa, Australia, New Zealand**

Distribution range extension along the continentality gradient: **5**

Elevational belt in the Czech Republic: **lowlands, colline belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **9**

taxon.data.freq_in_quad: 15

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**

Occurrence frequency in vegetation plots with a cover above 5%: **85.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **71.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **57.1 %**

Mean percentage cover in vegetation plots: **50.8 %**

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: **1**

Number of narrow habitats in which the taxon has its optimum: **0**

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

Number of broad habitats in which the taxon has its optimum: **0**

Threats and protection

Red List 2017 (national categories): **C1b - critically threatened taxon, rare and declining**

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

Legal protection: **not protected by law**