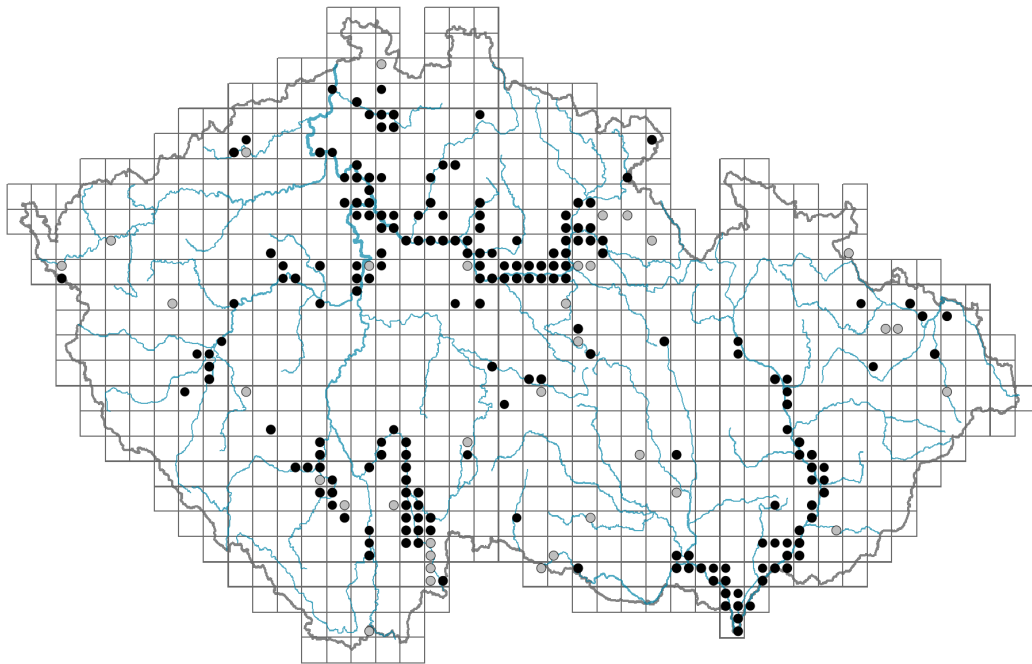


Hydrocharis morsus-ranae

Distribution

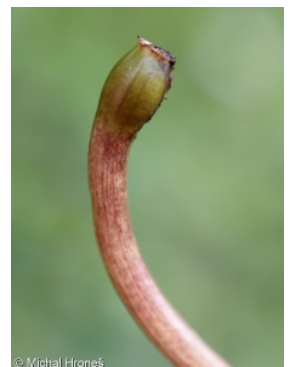
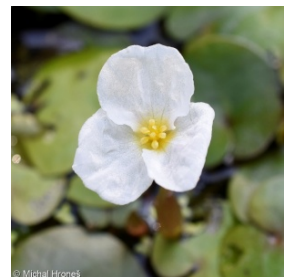
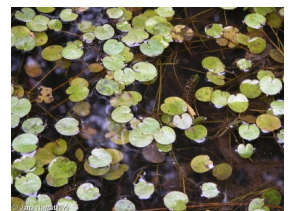
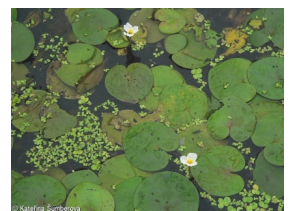


Map info

● 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]: **0.1-0.3**

Growth form: **clonal herb**

Life form: **hydrophyte**

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

Life strategy (Pierce method, C-score): **31.7 %**

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

Life strategy (Pierce method, R-score): **68.3 %**

Leaf

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

Leaf arrangement (phyllotaxis): **rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **hydromorphic**

Flower

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

Flower colour: **white**

Flower symmetry: **actinomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **free**
Calyx fusion: **aposepalous**
Inflorescence type: **flores solitarii**
Dicliny: **dioecious**
Generative reproduction type: **allogamy**
Pollination syndrome: **insect-pollination**



Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**
Fruit colour: **green**
Reproduction type: **mostly vegetatively, rarely by seed/spores**
Dispersal unit (diaspore): **seed, turion, stolon-born plantlet**
Dispersal strategy: **Wolffia (mainly hydrochory)**
Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Shoot metamorphosis: **stolon, turion**
Storage organ: **stolon, turion**
Type of clonal growth organ: **turion**
Freely dispersible organs of clonal growth: **present**
Shoot life span (cyclicity): **monocyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **sympodial**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **1**
Number of clonal offspring: **6**
Lateral spreading distance by clonal growth [m]: **0.33**
Clonal index: **7**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **1**
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): **1**
Depth of the belowground bud bank (root buds excluded) [cm]: **1**
Number of buds per shoot at the soil surface (root buds included): **1**
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): **1**
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): **28**

Ploidy level (x): **4**

2C genome size [Mbp]: **3323.8**

1Cx monoploid genome size [Mbp]: **830.95**

Genomic GC content: **42.8 %**

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

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.34**

Herb layer disturbance frequency indicator value: **-0.34**

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

Herb layer disturbance severity indicator value: **0.23**

Whole-community structure based disturbance indicator value: **0.55**

Herb layer structure-based disturbance indicator value: **0.59**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **2 - optimum**

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**

4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**

4E Reed vegetation of brooks: **1 - rare occurrence**

4F Mesotrophic vegetation of muddy substrata: **1 - rare occurrence**

4H Vegetation of low annual hygrophilous herbs: **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 alliances: [VAC *Hydrocharition morsus-ranae*](#)

Diagnostic taxon of associations: [VAC01 *Hydrocharitetum morsus-ranae*](#), [VAC02 *Stratiotetum aloidis*](#)

Constant taxon

Constant taxon of associations: [VAC01 *Hydrocharitetum morsus-ranae*](#), [VAC02 *Stratiotetum aloidis*](#)

Dominant taxon

Dominant taxon of associations: [VAC01 *Hydrocharitetum morsus-ranae*](#), [VAC02 *Stratiotetum aloidis*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.2**

Ecological specialization index for non-forest vegetation: **5.3**

Distribution and frequency

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

Floristic region: **Europe, Western Asia, North America**

Distribution range extension along the continentality gradient: **7**

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: **143**

taxon.data.freq_in_quad: **237**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **49.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **38.5 %**

Occurrence frequency in vegetation plots with a cover above 50%: **29.7 %**

Mean percentage cover in vegetation plots: **29.1 %**

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: **7**

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

Number of broad habitats in which the taxon occurs: **2**

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

Threats and protection

Red List 2017 (national categories): **C2b - endangered taxon, rare and declining**

Red List 2017 (IUCN categories): **VU - vulnerable**

Legal protection: **not protected by law**