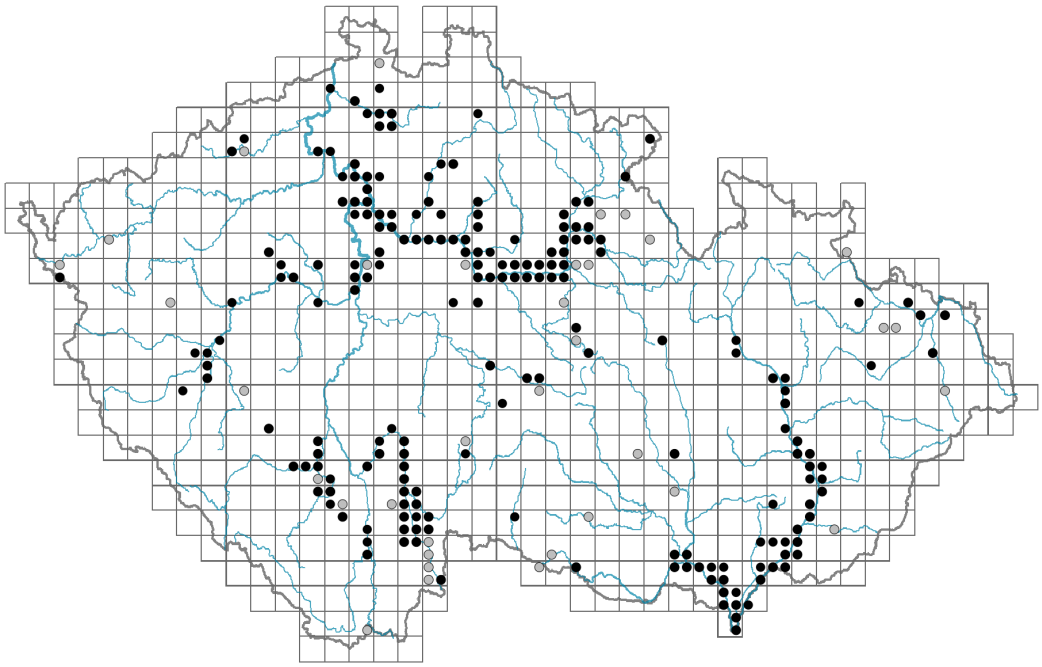
Hydrocharis morsus-ranae

Distribution





Map info

revised records

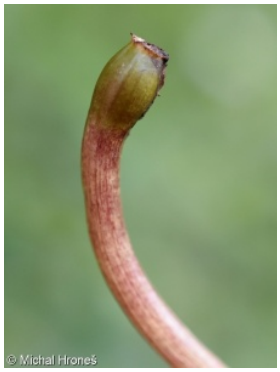
unrevised records

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**

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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 exluded) [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**

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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**

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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**

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