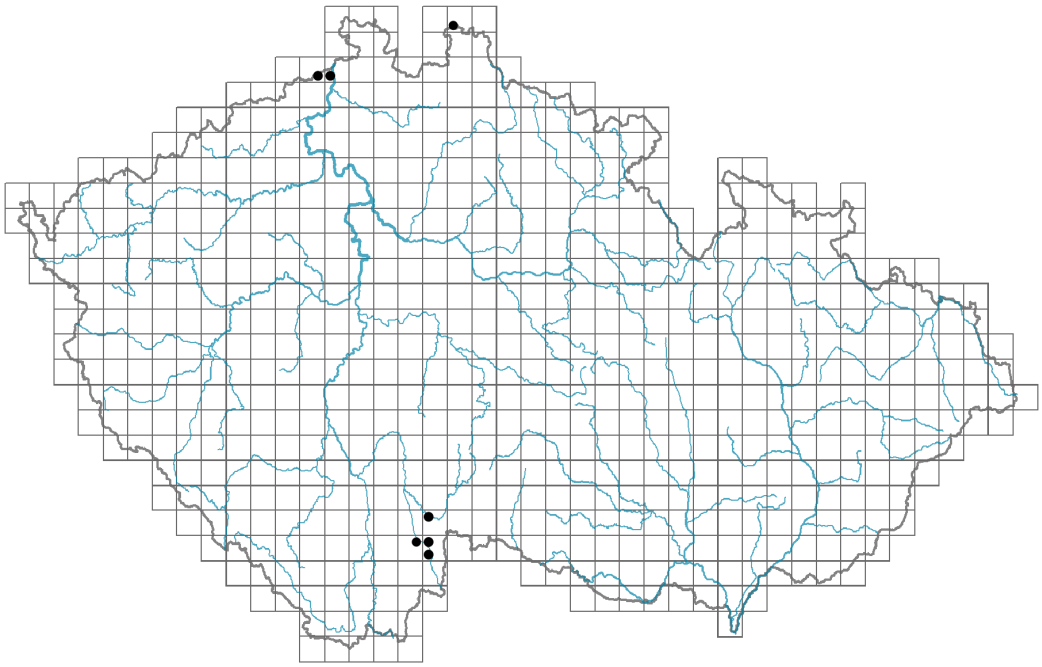
Luronium natans

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]: **0.1–1.4**
Growth form: **clonal herb**
Life form: **hydrophyte**
Life strategy (Pierce method based on leaf traits): **R**
Life strategy (Pierce method, C-score): **13.7 %**
Life strategy (Pierce method, S-score): **0 %**
Life strategy (Pierce method, R-score): **86.4 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **rosulate**
Leaf shape: **simple – entire**
Stipules: **absent**
Petiole: **present**
Leaf life span: **evergreen**
Leaf anatomy: **helomorphic, hydromorphic**

Flower

Flowering period [month]: **June–August**
Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**

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Flower colour: **white**
Flower symmetry: **actinomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **free**
Calyx fusion: **aposepalous**
Inflorescence type: **flores solitarii**
Dicliny: **synoecious**
Pollination syndrome: **insect-pollination, pseudocleistogamy**

Fruit, seed and dispersal

Fruit type: **dry fruit – head of achenes**
Fruit colour: **brown**
Reproduction type: **by seed/spores and vegetatively**
Dispersal unit (diaspore): **fruit, infrutescence or its part, pseudovivipary, shoot fragment**
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: **stolon**
Freely dispersible organs of clonal growth: **present**
Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **sympodial**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **1.3**
Number of clonal offspring: **4.8**
Lateral spreading distance by clonal growth [m]: **0.1**
Clonal index: **5**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **5**
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **7**
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): **12**
Depth of the belowground bud bank (root buds exluded) [cm]: **3**
Number of buds per shoot at the soil surface (root buds included): **5**
Number of buds per shoot at a depth of 0–10 cm (root buds included): **7**
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): **12**
Depth of the belowground bud bank (root buds included) [cm]: **3**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

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Karyology

Chromosome number (2n): **42 (38)**
Ploidy level (x): **6**
2C genome size [Mbp]: **38511.8**
1Cx monoploid genome size [Mbp]: **6418.63**
Genomic GC content: **41.2 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **8 – light plant, only exceptionally occurring at less than 40% 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: **5 – indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions**
Nutrient indicator value: **3 – occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **1 – rare occurrence**
3C Macrophytic vegetation of oligotrophic lakes and pools: **2 – optimum**

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: **VDB05 *Luronietum natantis***

Constant taxon

Constant taxon of associations: **VDB05 *Luronietum natantis***

Dominant taxon

Dominant taxon of associations: **VDB05 *Luronietum natantis***

Distribution and frequency

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

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Floristic region: **Europe**
Continentality degree: **3**
Distribution range extension along the continentality gradient: **3**
Elevational belt in the Czech Republic: **colline belt**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 7
taxon.data.freq_in_quad: 8

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**
Occurrence frequency in vegetation plots with a cover above 5%: **100 %**
Occurrence frequency in vegetation plots with a cover above 25%: **100 %**
Occurrence frequency in vegetation plots with a cover above 50%: **100 %**
Mean percentage cover in vegetation plots: **75.5 %**
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: **2**
Number of narrow habitats in which the taxon has its optimum: **1**
Number of broad habitats in which the taxon occurs: **1**
Number of broad habitats in which the taxon has its optimum: **1**

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: **endangered taxon**

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