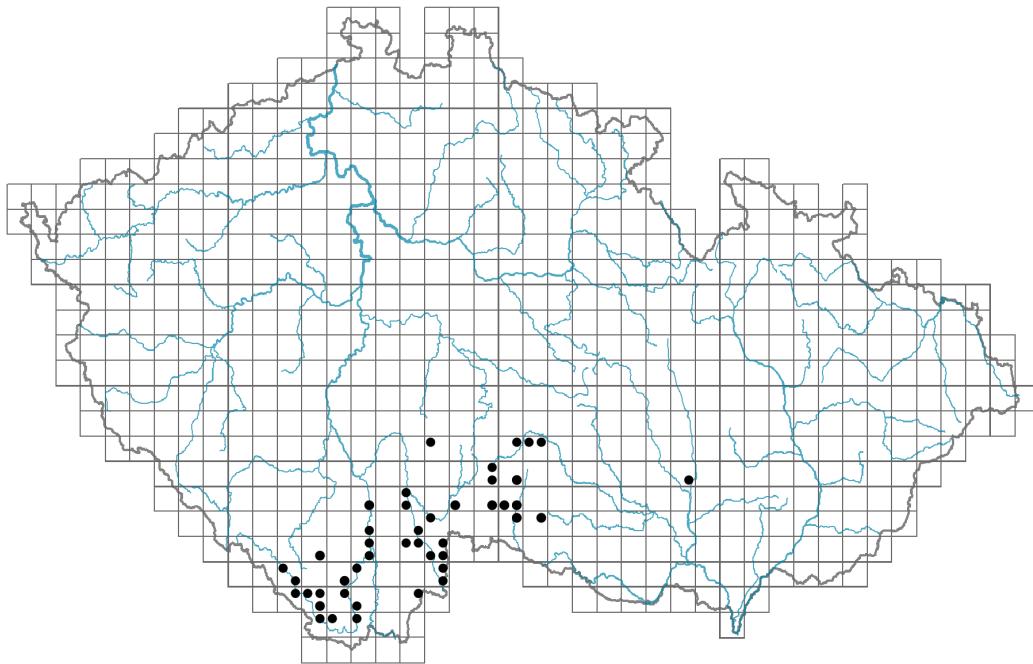


Nuphar pumila

Distribution

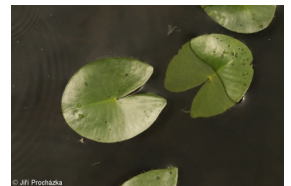


Map info

● 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]: **0.4-1.3**

Growth form: **clonal herb**

Life form: **hydrophyte**

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: **hydromorphic**

Flower

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

Flower colour: **yellow**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **aposepalous**

Inflorescence type: **flores solitarii**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination**

Fruit, seed and dispersal

Fruit type: **fleshy fruit - special type**

Reproduction type: **by seed/spores and vegetatively**

Dispersal unit (diaspore): **seed, fruit, infrutescence or its part**

Dispersal strategy: **Wolffia (mainly hydrochory)**

Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

Type of clonal growth organ: **epigeogenous rhizome**

Freely dispersible organs of clonal growth: **present**

Shoot life span (cyclicity): **monocyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **monopodial**

Primary root: **absent**

Persistence of the clonal growth organ [year]: **4**

Number of clonal offspring: **0.5**

Lateral spreading distance by clonal growth [m]: **0.13**

Clonal index: **3**

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): **15**

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): **23**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

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): **15**

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): **23**

Depth of the belowground bud bank (root buds included) [cm]: **4**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

Karyology

Chromosome number (2n): **34**

Ploidy level (x): **2**

2C genome size [Mbp]: **4342.32**

1Cx monoploid genome size [Mbp]: **2171.16**

Genomic GC content: **40.9 %**

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: **4 - transition between values 3 and 5**

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: **4 - transition between values 3 and 5**

Nutrient indicator value: **4 - transition between values 3 and 5**

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: **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: [**VBA04 Nupharetum pumilae**](#)

Constant taxon

Constant taxon of associations: [**VBA04 Nupharetum pumilae**](#)

Dominant taxon

Dominant taxon of associations: [**VBA04 Nupharetum pumilae**](#)

Ecological specialization indices

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

Ecological specialization index for non-forest vegetation: **5.5**

Distribution and frequency

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

Floristic region: **Europe, Asia**

Continentality degree: **7**

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

Elevational belt in the Czech Republic: **submontane belt, montane belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 43

taxon.data.freq_in_quad: 63

Commonness in vegetation plots from the Czech Republic

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

Occurrence frequency in vegetation plots with a cover above 5%: **81.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **81.8 %**

Occurrence frequency in vegetation plots with a cover above 50%: **45.5 %**

Mean percentage cover in vegetation plots: **55 %**

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: **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): **C1t - critically threatened taxon, declining**

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

Legal protection: **critically threatened taxon**