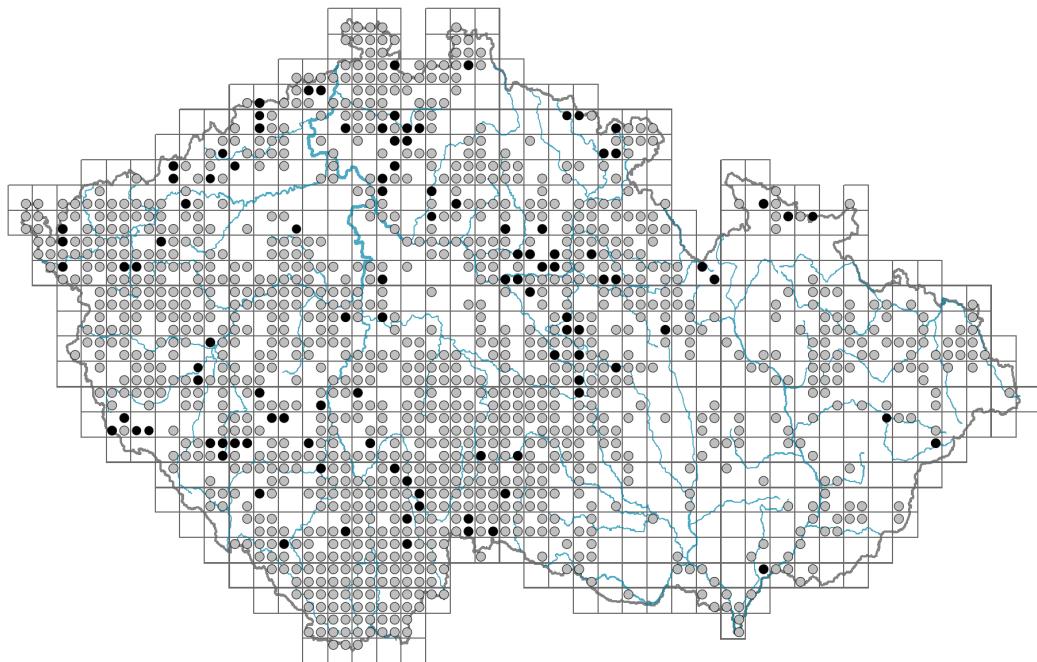


# *Potamogeton natans*

## 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]: **0.15-1.8**

Growth form: **clonal herb**

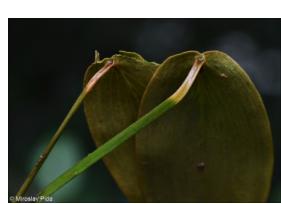
Life form: **hydrophyte**

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

Life strategy (Pierce method, C-score): **42.1 %**

Life strategy (Pierce method, S-score): **17.6 %**

Life strategy (Pierce method, R-score): **40.2 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

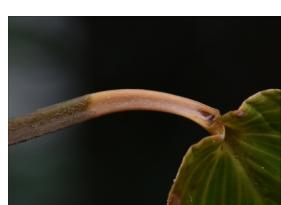
Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **hydromorphic**



## Flower

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

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

Flower colour: **green**

Flower symmetry: **actinomorphic**

Perianth type: **homochlamydeous**

Perianth fusion: **free**

Inflorescence type: **spica**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

Pollination syndrome: **wind-pollination**

## Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**

Fruit colour: **green, brown**

Reproduction type: **mostly vegetatively, rarely by seed/spores**

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

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

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

## Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

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

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]: **1.3**

Number of clonal offspring: **4.3**

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

Clonal index: **7**

### Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **10**

Number of buds per shoot at a depth of 0-10 cm (root buds excluded): **13**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **3**

Size of the belowground bud bank (root buds excluded): **26**

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

Number of buds per shoot at the soil surface (root buds included): **10**

Number of buds per shoot at a depth of 0-10 cm (root buds included): **13**

Number of buds per shoot at a depth greater than 10 cm (root buds included): **3**

Size of the belowground bud bank (root buds included): **26**

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): **52**

Ploidy level (x): **4**

2C genome size [Mbp]: **1497.03**

1Cx monoploid genome size [Mbp]: **374.26**

Genomic GC content: **40.1 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**

Temperature indicator value: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

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

Nutrient indicator value: **6 - transition between values 5 and 7**

Salinity indicator value: **1 - salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.54**

Herb layer disturbance frequency indicator value: **-0.54**

Whole-community disturbance severity indicator value: **0.14**

Herb layer disturbance severity indicator value: **0.19**

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

Herb layer structure-based disturbance indicator value: **0.55**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

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

3B Macrophytic vegetation of water streams: **1 - rare occurrence**

3C Macrophytic vegetation of oligotrophic lakes and pools: **2 - optimum**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **2 - optimum**

4B Halophilous reed and sedge beds: **1 - rare occurrence**

4C Eutrophic vegetation of muddy substrata: **2 - optimum**

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

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

4G Tall-sedge beds: **1 - rare occurrence**

4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**

4I Vegetation of nitrophilous 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 classes: **[VB Potametea](#)**

Diagnostic taxon of alliances: **[VBB Potamion](#), [VCA Nitellion flexilis](#)**

Diagnostic taxon of associations: **[VBA03 Nymphaeetum candidae](#), [VBB01 Potametum natantis](#), [VBB22 Potametum acutifolii](#)**

Constant taxon

Constant taxon of associations: **[VBA03 Nymphaeetum candidae](#), [VBB01 Potametum natantis](#), [VBB22 Potametum acutifolii](#)**

Dominant taxon

Dominant taxon of associations: **[MCC04 Eleocharito palustris-Hippuridetum vulgaris](#), [VBA03 Nymphaeetum candidae](#), [VBB01 Potametum natantis](#)**

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.4**

Ecological specialization index for non-forest vegetation: **4.3**

Colonization ability

Index of colonization success (ICS): **3**

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **16.5**

## Distribution and frequency

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

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **8**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt (montane belt)**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 513

taxon.data.freq\_in\_quad: 1243

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **52.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **41 %**

Occurrence frequency in vegetation plots with a cover above 50%: **32.4 %**

Mean percentage cover in vegetation plots: **31.5 %**

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: **11**

Number of narrow habitats in which the taxon has its optimum: **4**

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

Number of broad habitats in which the taxon has its optimum: **2**

## Threats and protection

Red List 2017 (national categories): **taxon is not on the Red List**

Red List 2017 (IUCN categories): **LC(NA) - least concern (taxon is not on the Red List)**

Legal protection: **not protected by law**