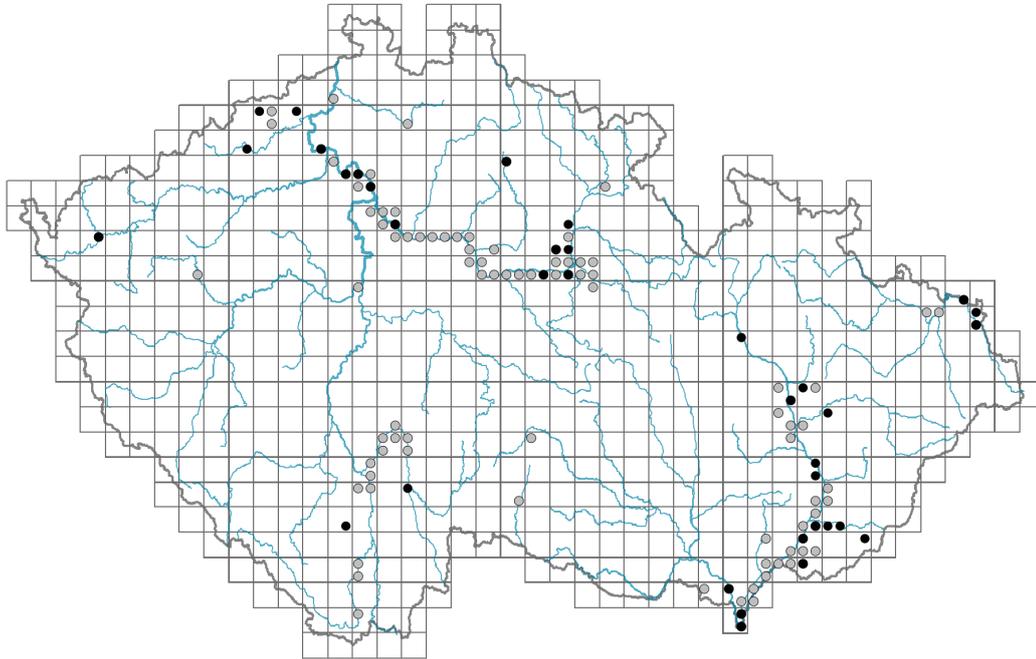


# Potamogeton nodosus

## 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]: **0.2**

Growth form: **clonal herb**

Life form: **hydrophyte**

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

Life strategy (Pierce method, C-score): **47.2 %**

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

Life strategy (Pierce method, R-score): **52.8 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **hydromorphic**

## Flower

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

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, water-pollination**

### Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**  
 Fruit colour: **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, turion**  
 Storage organ: **stolon, turion**  
 Type of clonal growth organ: **hypogeous rhizome**  
 Freely dispersible organs of clonal growth: **present**  
 Shoot life span (cyclicality): **monocyclic shoots prevailing**  
 Branching type of stem-derived organs of clonal growth: **sympodial**  
 Primary root: **absent**  
 Persistence of the clonal growth organ [year]:  
 Number of clonal offspring: **9.3**  
 Lateral spreading distance by clonal growth [m]: **0.13**  
 Clonal index: **5**

### 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): **12**  
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded):  
 Size of the belowground bud bank (root buds excluded):  
 Depth of the belowground bud bank (root buds excluded) [cm]: **6**  
 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): **12**  
 Number of buds per shoot at a depth greater than 10 cm (root buds included):  
 Size of the belowground bud bank (root buds included):  
 Depth of the belowground bud bank (root buds included) [cm]: **6**

### 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]: **1480.68**

1Cx monoploid genome size [Mbp]: **370.17**

Genomic GC content: **39.5 %**

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

Moisture indicator value: **12 - permanently or almost permanently submerged aquatic plant**

Reaction indicator value: **8 - transition between values 7 and 9, occurring mostly in calcium-rich conditions**

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: **-0.49**

Herb layer disturbance frequency indicator value: **-0.49**

Whole-community disturbance severity indicator value: **0.12**

Herb layer disturbance severity indicator value: **0.16**

Whole-community structure based disturbance indicator value: **0.62**

Herb layer structure-based disturbance indicator value: **0.63**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

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

3B Macrophytic vegetation of water streams: **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**

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: [VBB11 \*Potametum denso-nodosi\*](#)

## Constant taxon

Constant taxon of associations: [VBB11 \*Potametum denso-nodosi\*](#)

## Dominant taxon

Dominant taxon of associations: [VBB11 \*Potametum denso-nodosi\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **6**

Ecological specialization index for non-forest vegetation: **5.7**

## Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional, subtropical, tropical**

Floristic region: **circumpolar**

Continentality degree: **7**

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: **68**

taxon.data.freq\_in\_quad: 115

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **72.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **66.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **59.7 %**

Mean percentage cover in vegetation plots: **53.2 %**

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: **5**

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

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): **C3 - vulnerable taxon**

Red List 2017 (IUCN categories): **NT - near threatened**

Legal protection: **not protected by law**