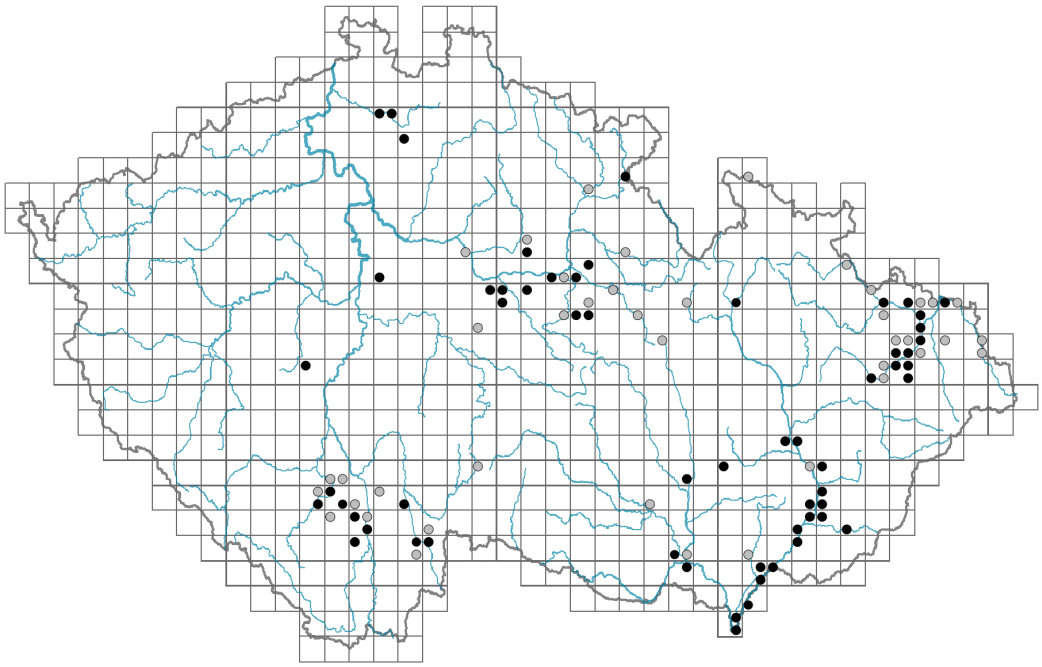
Trapa natans



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]: **0.5–3**
Growth form: **annual herb**
Life form: **therophyte**
Life strategy (Pierce method based on leaf traits): **CS/CSR**
Life strategy (Pierce method, C-score): **34.2 %**
Life strategy (Pierce method, S-score): **40.9 %**
Life strategy (Pierce method, R-score): **24.9 %**

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: **synoecious**
Generative reproduction type: **autogamy**
Pollination syndrome: **selfing, cleistogamy**

Fruit, seed and dispersal

Fruit type: **dry fruit – nut**
Fruit colour: **brown, black**
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 life span (cyclicity): **monocyclic shoots prevailing**
Primary root: **absent**
Number of clonal offspring: **0**

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): **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): **8**
Depth of the belowground bud bank (root buds exluded) [cm]: **1**
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): **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): **8**
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**

Karyology

Chromosome number (2n): **48 (36, 44, 46, 76, 90)**
Ploidy level (x): **2 (3, 4)**
2C genome size [Mbp]: **981.09**
1Cx monoploid genome size [Mbp]: **490.54**
Genomic GC content: **39.8 %**

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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: **7 – heat indicator, occurring in relatively warm lowlands**
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: **7 – occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.5**
Herb layer disturbance frequency indicator value: **-0.5**
Whole-community disturbance severity indicator value: **0.15**
Herb layer disturbance severity indicator value: **0.19**
Whole-community structure based disturbance indicator value: **0.54**
Herb layer structure-based disturbance indicator value: **0.54**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

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

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**
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**
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: **VBA05 *Trapetum natantis***

Constant taxon

Constant taxon of associations: **VBA05 *Trapetum natantis***

Dominant taxon

Dominant taxon of associations: **VBA05 *Trapetum natantis***

Ecological specialization indices

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Ecological specialization index for all vegetation types: **5.3**
Ecological specialization index for non-forest vegetation: **5.3**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional, subtropical**
Floristic region: **Europe, Asia, Africa**
Continentality degree: **6**
Distribution range extension along the continentality gradient: **5**
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: 77
taxon.data.freq_in_quad: 109

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**
Occurrence frequency in vegetation plots with a cover above 5%: **58.1 %**
Occurrence frequency in vegetation plots with a cover above 25%: **41.9 %**
Occurrence frequency in vegetation plots with a cover above 50%: **32.3 %**
Mean percentage cover in vegetation plots: **32 %**
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: **4**
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): **C1b – critically threatened taxon, rare and declining**
Red List 2017 (IUCN categories): **EN – endangered**
Legal protection: **critically threatened taxon**

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