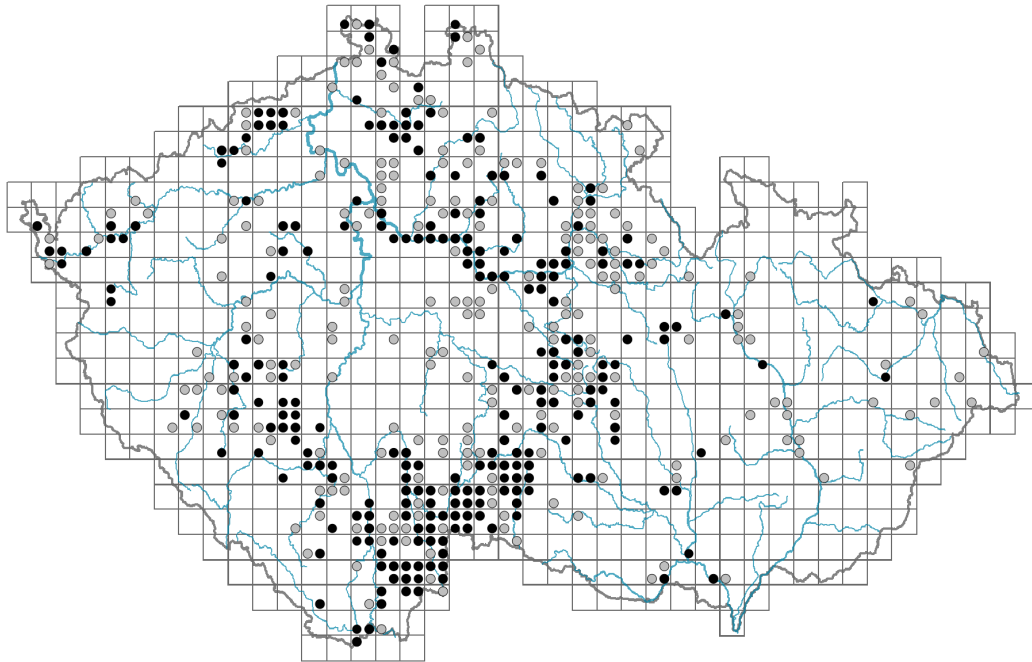


# *Nymphaea candida*

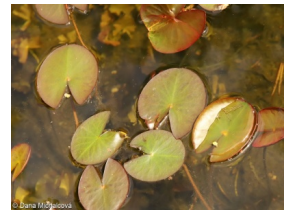
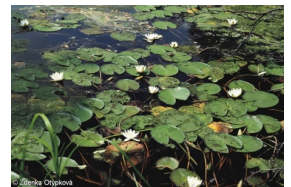
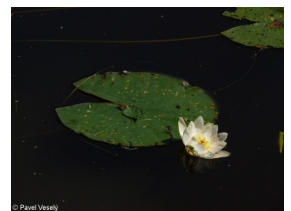
## Distribution



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]: **0.3-1.7**

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: **summer green**

Leaf anatomy: **hydromorphic**

## Flower

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

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **white**

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: **absent**  
Shoot life span (cyclicality): **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): **0**  
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): **15**  
Depth of the belowground bud bank (root buds excluded) [cm]: **5**  
Number of buds per shoot at the soil surface (root buds included): **0**  
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): **15**  
Depth of the belowground bud bank (root buds included) [cm]: **5**

### **Trophic mode**

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

### **Karyology**

Chromosome number (2n): **160 (112)**  
Ploidy level (x): **12 (8)**

2C genome size [Mbp]: **5400.41**  
1Cx monoploid genome size [Mbp]: **450.03**  
Genomic GC content: **43.5 %**

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

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: **0.12**

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

Whole-community structure based disturbance indicator value: **0.61**

Herb layer structure-based disturbance indicator value: **0.59**

## Habitat and sociology

Occurrence in habitats

### 3 Aquatic vegetation

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

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 alliances: [VBA \*Nymphaeion albae\*](#)

Diagnostic taxon of associations: [VBA03 \*Nymphaeetum candidae\*](#)

Constant taxon

Constant taxon of associations: [VBA03 Nymphaeetum candidae](#)

Dominant taxon

Dominant taxon of associations: [VBA03 Nymphaeetum candidae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.8**

Ecological specialization index for non-forest vegetation: **4.9**

## Distribution and frequency

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

Floristic region: **Europe, Western Siberia**

Continentality degree: **7**

Distribution range extension along the continentality gradient: **5**

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: **292**

taxon.data.freq\_in\_quad: **523**

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%: **61.4 %**

Occurrence frequency in vegetation plots with a cover above 25%: **51.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **30 %**

Mean percentage cover in vegetation plots: **31.6 %**

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: **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: **endangered taxon**