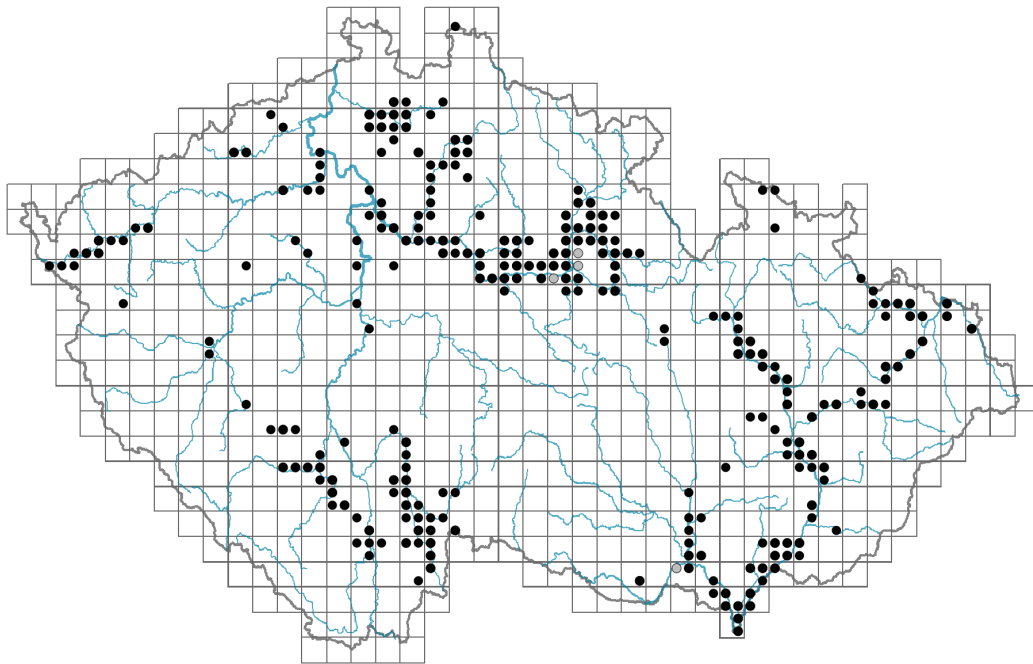


# *Hottonia palustris*

## Distribution

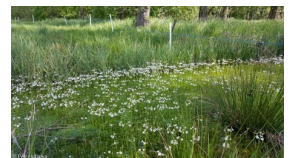


### Map info

● 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]: **0.15-0.8**

Growth form: **clonal herb**

Life form: **hydrophyte**

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

Life strategy (Pierce method, C-score): **7.1 %**

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

Life strategy (Pierce method, R-score): **92.9 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite, verticillate**

Leaf shape: **simple - pinnately divided**

Stipules: **absent**

Petiole: **present**

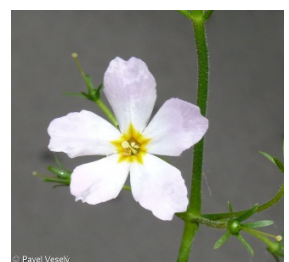
Leaf life span: **evergreen**

Leaf anatomy: **hydromorphic**

## Flower

Flowering period [month]: **May-July**

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



Flower colour: **white, pink**  
 Flower symmetry: **actinomorphic**  
 Perianth type: **calyx and corolla**  
 Perianth fusion: **fused**  
 Shape of the sympetalous corolla or syntepalous perianth: **rotate**  
 Calyx fusion: **synsepalous**  
 Inflorescence type: **racemus**  
 Dicliny: **synoecious**  
 Generative reproduction type: **facultative allogamy**  
 Pollination syndrome: **insect-pollination**



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**  
 Fruit colour: **brown**  
 Reproduction type: **by seed/spores and vegetatively**  
 Dispersal unit (diaspore): **seed, 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: **stolon**  
 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: **3.5**  
 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):  
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded):  
 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]:  
 Number of buds per shoot at the soil surface (root buds included):  
 Number of buds per shoot at a depth of 0–10 cm (root buds included):  
 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]:



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**  
 Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **20**

Ploidy level (x): **2**

2C genome size [Mbp]: **1530.26**

1Cx monoploid genome size [Mbp]: **765.13**

Genomic GC content: **37.7 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

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

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

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

Salinity indicator value: **0 - not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.75**

Herb layer disturbance frequency indicator value: **-0.57**

Whole-community disturbance severity indicator value: **0.15**

Herb layer disturbance severity indicator value: **0.18**

Whole-community structure based disturbance indicator value: **0.56**

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

4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**

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

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

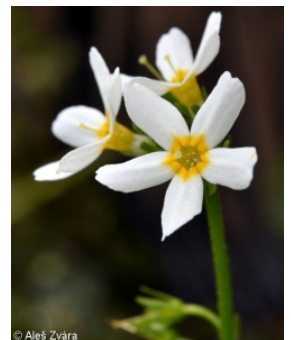
4G Tall-sedge beds: **1 - rare occurrence**

11 Heathlands and scrub

11I Willow carrs: **1 - rare occurrence**

12 Forests

12A Alder carrs: **2 - optimum**



## Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

## Diagnostic taxon

Diagnostic taxon of alliances: [VBD \*Ranunculion aquatilis\*](#)

Diagnostic taxon of associations: [VBD06 \*Hottonietum palustris\*](#)

## Constant taxon

Constant taxon of associations: [VBD06 \*Hottonietum palustris\*](#)

## Dominant taxon

Dominant taxon of associations: [VBD06 \*Hottonietum palustris\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.2**

Ecological specialization index for non-forest vegetation: **4.4**

## Colonization ability

Index of colonization success (ICS): **2**

Index of colonization potential (ICP): **6**

Optimum successional age [years]: **35**

## Distribution and frequency

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

Floristic region: **Europe**

Continentality degree: **5**

Distribution range extension along the continentality gradient: **3**

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: **156**

taxon.data.freq\_in\_quad: **273**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **59.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **48.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **29.9 %**

Mean percentage cover in vegetation plots: **31.4 %**

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: **7**

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

Number of broad habitats in which the taxon occurs: **4**

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

## Threats and protection

Red List 2017 (national categories): **C3 - vulnerable taxon**

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

Legal protection: **vulnerable taxon**