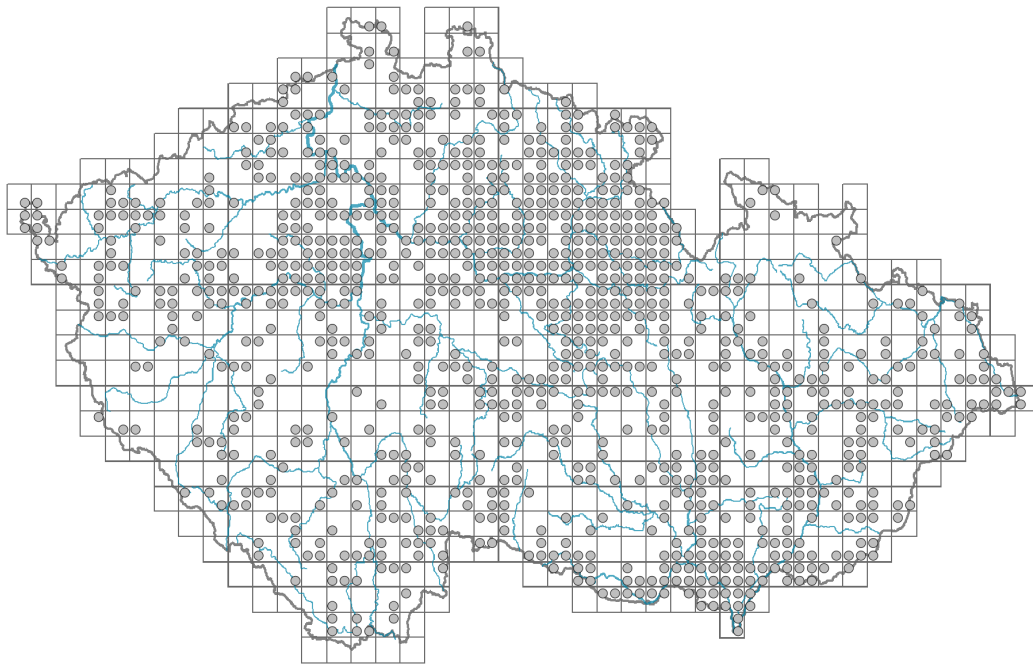


Mentha aquatica

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]: **0.45-1.5**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CS - competitor/stress-tolerator**

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

Life strategy (Pierce method, C-score): **39.1 %**

Life strategy (Pierce method, S-score): **8 %**

Life strategy (Pierce method, R-score): **52.9 %**



Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **hygromorphic, helomorphic**



Flower

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

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

Flower colour: **pink, pink-violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **tubular**

Calyx fusion: **synsepalous**

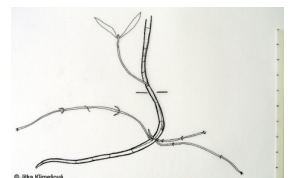
Inflorescence type: **capitulum e verticillastris compositum**

Dicliny: **gynomonoecious, gynodioecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination**

Pollinator spectrum: **hoverflies, flies s. l., other Diptera (honeybee, bumblebees, solitary bees, other Hymenoptera, meat flies s. l., butterflies, beetles, nitidulids, thrips, other pollinators)**



Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of four one-seeded nutlets**

Fruit colour: **brown**

Reproduction type: **by seed/spores and vegetatively**

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

Dispersal strategy: **Sparganium (mainly autochory and hydrochory)**

Myrmecochory: **probably myrmecochorous**

Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

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

Freely dispersible organs of clonal growth: **absent**

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]: **1.7**

Number of clonal offspring: **6**

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): **0**

Size of the belowground bud bank (root buds excluded): **20**

Depth of the belowground bud bank (root buds excluded) [cm]: **3**

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): **0**

Size of the belowground bud bank (root buds included): **20**

Depth of the belowground bud bank (root buds included) [cm]: **3**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

Karyology

Chromosome number (2n): **96**

Ploidy level (x): **8**

2C genome size [Mbp]: **2567.24**

1Cx monoploid genome size [Mbp]: **320.9**

Genomic GC content: **39.1 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **7 - half-light plant, mostly occurring at full light, but also in the shade up to about 30% 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: **9 - wetness indicator, focus on often soaked, poorly aerated soils**

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: **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: **-0.75**

Herb layer disturbance frequency indicator value: **-0.63**

Whole-community disturbance severity indicator value: **0.22**

Herb layer disturbance severity indicator value: **0.26**

Whole-community structure based disturbance indicator value: **0.58**

Herb layer structure-based disturbance indicator value: **0.62**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

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: **1 - rare occurrence**
4D Riverine reed vegetation: **2 - optimum**
4E Reed vegetation of brooks: **2 - optimum**
4G Tall-sedge beds: **2 - optimum**
4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**
4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**
4J River gravel banks: **1 - rare occurrence**
4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**

5 Vegetation of springs and mires

- 5A Hard-water springs with tufa formation: **1 - rare occurrence**
5B Lowland to montane soft-water springs: **1 - rare occurrence**
5D Calcareous fens: **2 - optimum**
5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**
5F Transitional mires: **1 - rare occurrence**
5H Wet peat soils and bog hollows: **1 - rare occurrence**

6 Meadows and mesic pastures

- 6C Pastures and park grasslands: **1 - rare occurrence**
6D Alluvial meadows of lowland rivers: **1 - rare occurrence**
6E Wet Cirsium meadows: **1 - rare occurrence**
6F Intermittently wet Molinia meadows: **1 - rare occurrence**
6G Vegetation of wet disturbed soils: **1 - rare occurrence**

10 Saline vegetation

- 10I Inland saline meadows: **1 - rare occurrence**
11 Heathlands and scrub
11I Willow carrs: **1 - rare occurrence**
11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**

12 Forests

- 12A Alder carrs: **2 - optimum**
12B Alluvial forests: **1 - rare occurrence**
12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Dominant taxon

Dominant taxon of associations: [MCB02 Schoenoplectetum tabernaemontani](#)

Ecological specialization indices

- Ecological specialization index for all vegetation types: **3.6**
Ecological specialization index for non-forest vegetation: **3.6**
Ecological specialization index for forest vegetation: **5.2**

Colonization ability

- Index of colonization success (ICS): **2**
Index of colonization potential (ICP): **1**
Optimum successional age [years]: **7**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional, austral or antarctic**

Floristic region: **Europe, Western Siberia, Eastern America, circumpolar**

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: **489**

taxon.data.freq_in_quad: **1009**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.9 %**

Occurrence frequency in vegetation plots with a cover above 5%: **12.4 %**

Occurrence frequency in vegetation plots with a cover above 25%: **3.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.4 %**

Mean percentage cover in vegetation plots: **4.5 %**

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: **28**

Number of narrow habitats in which the taxon has its optimum: **6**

Number of broad habitats in which the taxon occurs: **7**

Number of broad habitats in which the taxon has its optimum: **3**

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**