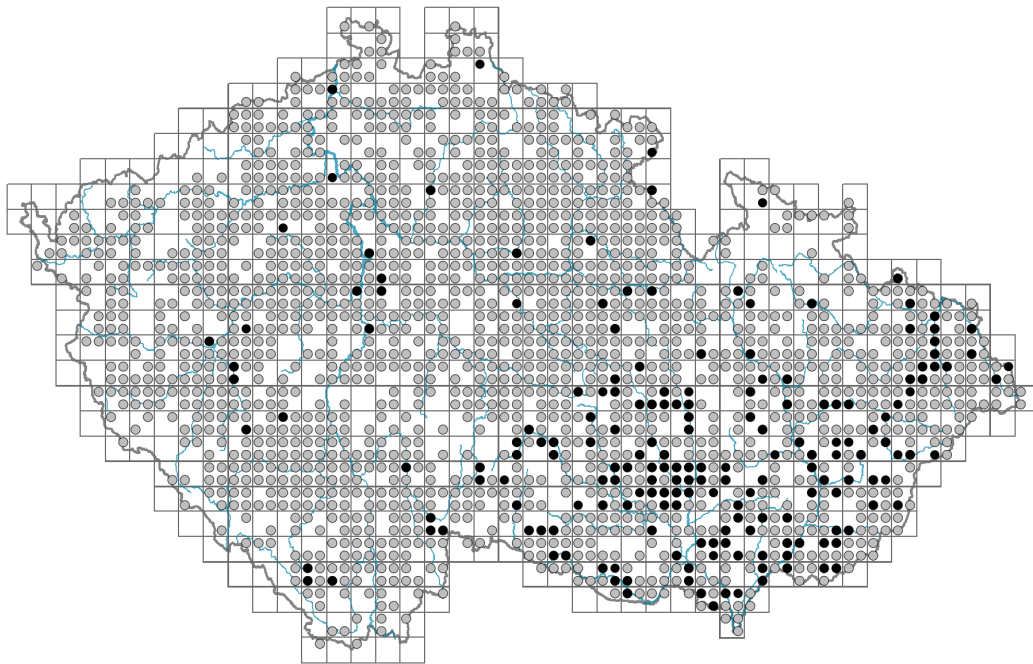


# *Myosoton aquaticum*

## Distribution

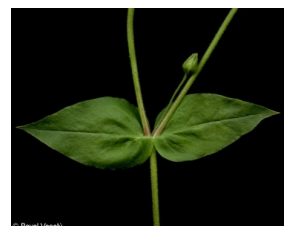
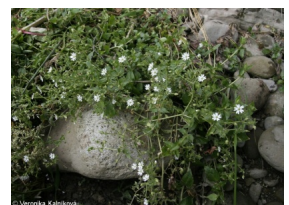


### Map info

● 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]: **0.2-1.2**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **25.6 %**

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

Life strategy (Pierce method, R-score): **74.4 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **evergreen**

Leaf anatomy: **hygromorphic, helomorphic**

## Flower

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

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

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

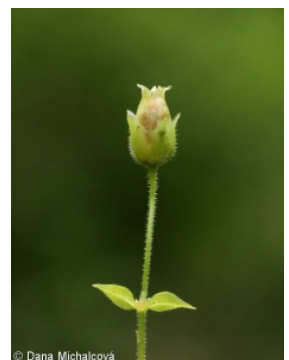
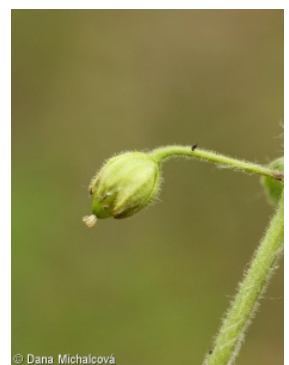
Calyx fusion: **aposepalous**

Inflorescence type: **dichasium**

Dicliny: **synoecious, gynomonoecious, gynodioecious**

Pollination syndrome: **insect-pollination, selfing**

Pollinator spectrum: **solitary bees, hoverflies, other Diptera, thrips (honeybee, bumblebees, other Hymenoptera, beetles, nitidulids, other pollinators)**



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Fruit colour: **brown**

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

Dispersal unit (diaspore): **seed**

Dispersal strategy: **Allium (mainly autochory)**

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: **absent**

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]: **2**

Number of clonal offspring: **1**

Lateral spreading distance by clonal growth [m]: **0.13**

Clonal index: **4**

## Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **15**

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): **30**

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

Number of buds per shoot at the soil surface (root buds included): **15**

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): **30**

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): **28**

Ploidy level (x): **2**

2C genome size [Mbp]: **3733.71**

1Cx monoploid genome size [Mbp]: **1866.85**

Genomic GC content: **37 %**

## 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: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

Moisture indicator value: **8 - transition between values 7 and 9**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **8 - pronounced nutrient indicator**

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: **-1**

Herb layer disturbance frequency indicator value: **-0.51**

Whole-community disturbance severity indicator value: **0.47**

Herb layer disturbance severity indicator value: **0.48**

Whole-community structure based disturbance indicator value: **0.42**

Herb layer structure-based disturbance indicator value: **0.43**

## Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 - rare occurrence**

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: **1 - rare occurrence**

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

4H Vegetation of low annual hygrophilous herbs: **2 - optimum**

4I Vegetation of nitrophilous annual hygrophilous herbs: **2 - optimum**

4J River gravel banks: **1 - rare occurrence**

4K Petasites fringes of montane brooks: **1 - rare occurrence**  
 4L Nitrophilous herbaceous fringes of lowland rivers: **2 - optimum**  
 5 Vegetation of springs and mires  
 5B Lowland to montane soft-water springs: **1 - rare occurrence**  
 6 Meadows and mesic pastures  
 6D Alluvial meadows of lowland rivers: **1 - rare occurrence**  
 6E Wet Cirsium meadows: **1 - rare occurrence**  
 6G Vegetation of wet disturbed soils: **2 - optimum**  
 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: **2 - optimum**  
 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**  
 12 Forests  
 12A Alder carrs: **1 - rare occurrence**  
 12B Alluvial forests: **2 - optimum**  
 12T Robinia pseudacacia plantations: **1 - rare occurrence**  
 12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**  
 12V Spruce plantations: **1 - rare occurrence**  
 13 Anthropogenic vegetation  
 13A Annual vegetation of ruderal habitats: **1 - rare occurrence**  
 13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**  
 13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**  
 13F Herbaceous vegetation of forests clearings and Rubus scrub: **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**  
 Diagnostic taxon  
 Diagnostic taxon of classes: [KA Salicetea purpureae](#)  
 Diagnostic taxon of alliances: [MCD Phalaridion arundinaceae](#), [XDA Senecionion fluviatilis](#)  
 Diagnostic taxon of associations: [MBA04 Polygono brittingeri-Chenopodietum rubri](#), [MBA06 Polygonetum hydropiperis](#), [MCD01 Rorippo-Phalaridetum arundinaceae](#), [XDA03 Calystegio sepium-Impatiens glanduliferae](#), [XDA04 Sicyo angulatae-Echinocystietum lobatae](#)  
 Constant taxon  
 Constant taxon of associations: [MBA04 Polygono brittingeri-Chenopodietum rubri](#), [MBB04 Chenopodio chenopodioidis-Atriplicetum prostratae](#), [MCD01 Rorippo-Phalaridetum arundinaceae](#)  
 Ecological specialization indices  
 Ecological specialization index for all vegetation types: **3.8**  
 Ecological specialization index for non-forest vegetation: **3.9**  
 Ecological specialization index for forest vegetation: **5**  
 Colonization ability

Index of colonization success (ICS): **5**  
Index of colonization potential (ICP): **5**  
Optimum successional age [years]: **2**

## Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional**  
Floristic region: **Europe, Asia**  
Distribution range extension along the continentality gradient: **5**  
Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt**  
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **608**  
taxon.data.freq\_in\_quad: **1736**  
Commonness in vegetation plots from the Czech Republic  
Occurrence frequency in vegetation plots: **1.7 %**  
Occurrence frequency in vegetation plots with a cover above 5%: **11.9 %**  
Occurrence frequency in vegetation plots with a cover above 25%: **3 %**  
Occurrence frequency in vegetation plots with a cover above 50%: **0.2 %**  
Mean percentage cover in vegetation plots: **4.1 %**  
Maximum percentage cover in vegetation plots: **63 %**  
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: **8**  
Number of broad habitats in which the taxon occurs: **7**  
Number of broad habitats in which the taxon has its optimum: **5**

## 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**