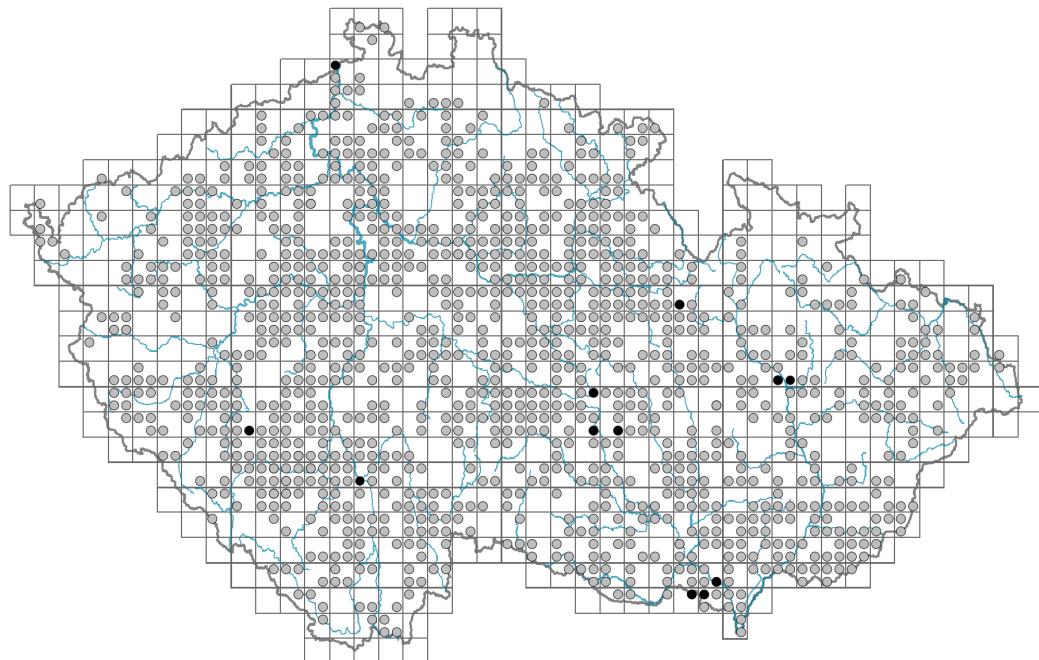


# *Veronica anagallis-aquatica*

## 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]: **0.2-0.7**

Growth form: **annual herb**

Life form: **hemicryptophyte (hydrophyte, therophyte)**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

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

Life strategy (Pierce method, C-score): **44.3 %**

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

Life strategy (Pierce method, R-score): **55.7 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **mainly absent**

Leaf life span: **evergreen**

Leaf anatomy: **helomorphic**

## Flower

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

Flowering phase: 7 **Ligustrum vulgare-Stachys sylvatica** (end of early summer)

Flower colour: **blue, blue-violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

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

Calyx fusion: **fused at the base**

Inflorescence type: **racemus**

Dicliny: **synoecious**

Generative reproduction type: **autogamy**

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



## 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: **Sparganium (mainly autochory and hydrochory)**

Myrmecochory: **non-myrmecochorous (a)**



## Belowground organs and clonality

Shoot metamorphosis: **stolon, rhizome**

Storage organ: **stolon, rhizome**



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **36 (18)**

Ploidy level (x): **4 (2)**

2C genome size [Mbp]: **1967.52**

1Cx monoploid genome size [Mbp]: **491.88**

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

Moisture indicator value: **9 - wetness indicator, focus on often soaked, poorly aerated soils**

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

Nutrient indicator value: **7 - occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites**

Salinity indicator value: **2 - oligohaline, often on soils with very low salt content**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.41**

Herb layer disturbance frequency indicator value: **-0.38**

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

Herb layer disturbance severity indicator value: **0.49**

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

Herb layer structure-based disturbance indicator value: **0.64**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3B Macrophytic vegetation of water streams: **1 - rare occurrence**

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**

4B Halophilous reed and sedge beds: **2 - optimum**

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

4D Riverine reed vegetation: **1 - rare occurrence**

4E Reed vegetation of brooks: **2 - optimum**

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**

5 Vegetation of springs and mires

5A Hard-water springs with tufa formation: **2 - optimum**

5B Lowland to montane soft-water springs: **1 - rare occurrence**

5D Calcareous fens: **1 - rare occurrence**

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**

6 Meadows and mesic pastures

6G Vegetation of wet disturbed soils: **1 - rare occurrence**

10 Saline vegetation

10G Continental vegetation of annual halophilous grasses: **1 - rare occurrence**

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: **1 - rare occurrence**

12B Alluvial forests: **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 classes: [\*\*MA Isoëto-Nano-Juncetea\*\*](#)

Diagnostic taxon of alliances: [\*\*MAA Eleocharition ovatae\*\*](#)

Diagnostic taxon of associations: [\*\*MAA02 Cyperetum micheliani\*\*](#), [\*\*MBA04 Polygono brittingeri-Chenopodietum rubri\*\*](#), [\*\*TCB03 Agrostio stoloniferae-Juncetum ranarii\*\*](#)

Constant taxon

Constant taxon of associations: [\*\*MBA04 Polygono brittingeri-Chenopodietum rubri\*\*](#),  
[\*\*MBB04 Chenopodio chenopodioidis-Atriplicetum prostratae\*\*](#)

Dominant taxon

Dominant taxon of associations: [\*\*MBA04 Polygono brittingeri-Chenopodietum rubri\*\*](#),  
[\*\*MCC04 Eleocharito palustris-Hippuridetum vulgaris\*\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.3**

Ecological specialization index for non-forest vegetation: **4.3**

Ecological specialization index for forest vegetation: **4.7**

Colonization ability

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

Index of colonization potential (ICP): **1**

Optimum successional age [years]: **13**

## **Distribution and frequency**

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

Floristic region: **Europe, Asia, Africa, Americas, Australia, New Zealand**

Distribution range extension along the continentality gradient: **8**

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: 503

taxon.data.freq\_in\_quad: 1135

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.8 %**

Occurrence frequency in vegetation plots with a cover above 5%: **13.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **3.6 %**

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: **23**

Number of narrow habitats in which the taxon has its optimum: **5**

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

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

### **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**