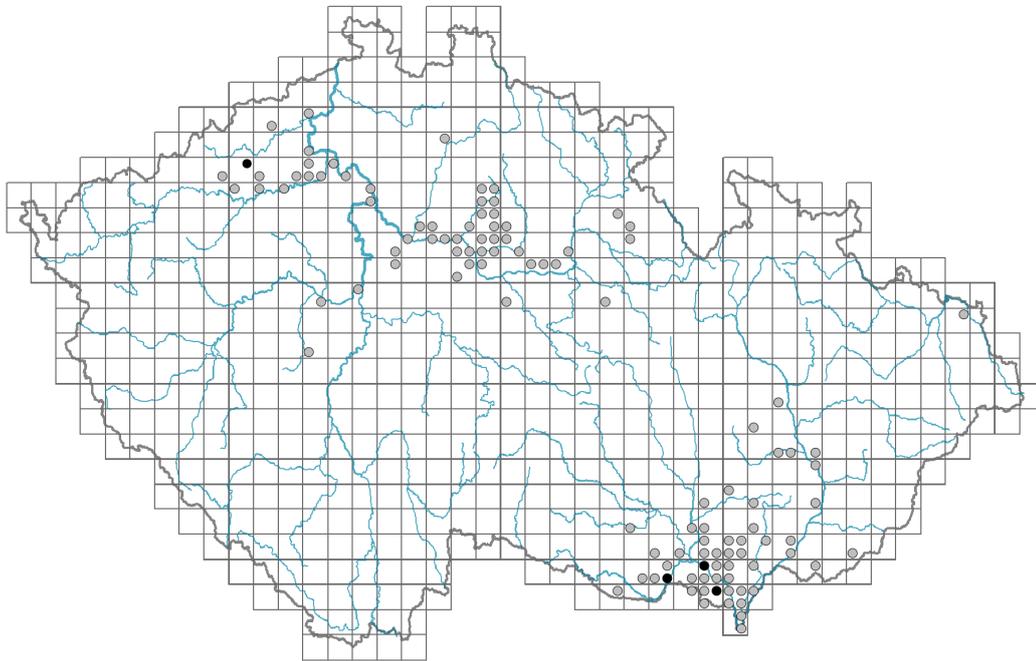


# Veronica catenata

## 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]: **0.15-0.7**

Growth form: **annual herb**

Life form: **hemicryptophyte (hydrophyte)**

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

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

Life strategy (Pierce method, C-score): **20.3 %**

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

Life strategy (Pierce method, R-score): **79.7 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf anatomy: **helomorphic**

## Flower

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

Flower colour: **pink**  
 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**  
 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**  
 Dispersal strategy: **Sparganium (mainly autochory and hydrochory)**



### Belowground organs and clonality

Shoot metamorphosis: **stolon**  
 Storage organ: **stolon**  
 Shoot life span (cyclicality): **monocyclic shoots prevailing**  
 Primary root: **present**

#### 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): **36**  
 Ploidy level (x): **4**  
 2C genome size [Mbp]: **2042.4**  
 1Cx monoploid genome size [Mbp]: **510.6**  
 Genomic GC content: **39.6 %**

## 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: **7 - heat indicator, occurring in relatively warm lowlands**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.49**

Herb layer disturbance frequency indicator value: **-0.49**

Whole-community disturbance severity indicator value: **0.33**

Herb layer disturbance severity indicator value: **0.36**

Whole-community structure based disturbance indicator value: **0.5**

Herb layer structure-based disturbance indicator value: **0.53**

## 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**

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

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

4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**

4I Vegetation of nitrophilous annual hygrophilous herbs: **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**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Diagnostic taxon

Diagnostic taxon of alliances: [MAC \*Verbenion supinae\*](#)

Diagnostic taxon of associations: [MAC01 \*Veronico anagalloidis-Lythretum hyssopifoliae\*](#), [VBD04 \*Batrachietum rionii\*](#)

## Constant taxon

Constant taxon of alliances: [MAC Verbenion supinae](#)

Constant taxon of associations: [MAC01 Veronico anagalloidis-Lythretum hyssopifoliae](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.1**

Ecological specialization index for non-forest vegetation: **4.1**

## Colonization ability

Index of colonization success (ICS): **1**

## Distribution and frequency

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

Floristic region: **Europe, Asia, Americas**

Distribution range extension along the continentality gradient: **6**

Elevational belt in the Czech Republic: **lowlands**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **74**

taxon.data.freq\_in\_quad: **111**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **26.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.6 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **5.2 %**

Maximum percentage cover in vegetation plots: **38 %**

## Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **9**

Number of narrow habitats in which the taxon has its optimum: **1**

Number of broad habitats in which the taxon occurs: **3**

Number of broad habitats in which the taxon has its optimum: **1**

## Threats and protection

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

Red List 2017 (IUCN categories): **VU - vulnerable**

Legal protection: **not protected by law**