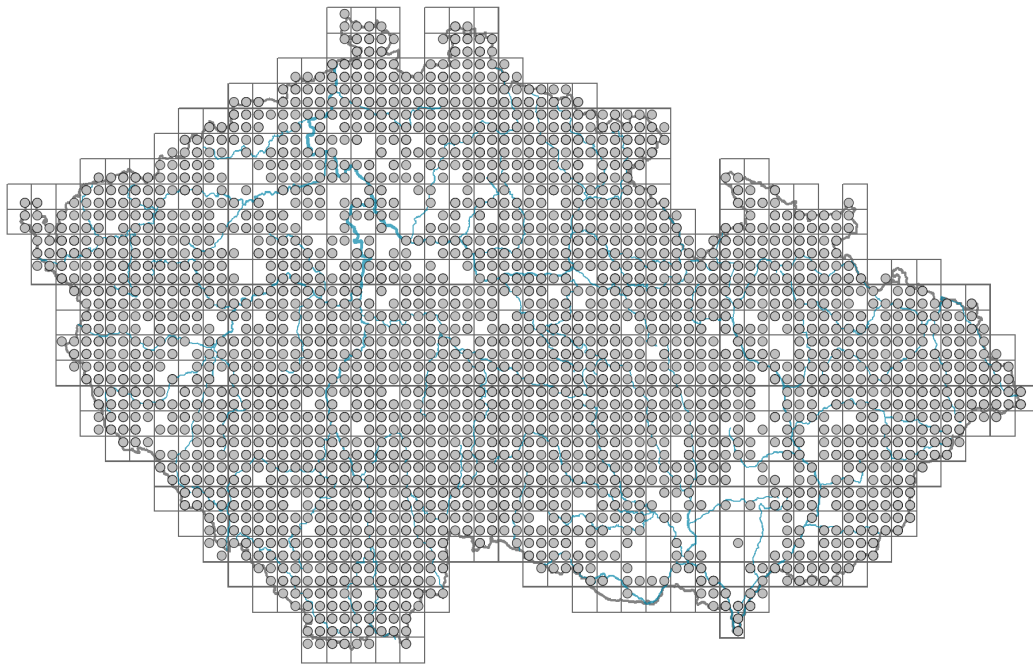


# *Myosotis palustris* agg.

## Distribution

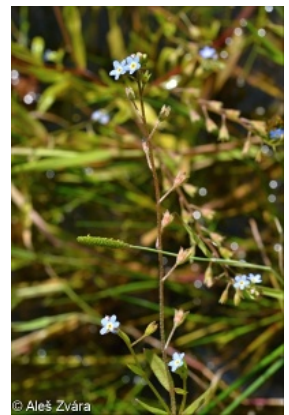


### Map info

● 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**

Growth form: **monocarpic perennial non-clonal herb, polycarpic perennial non-clonal herb, clonal herb**

Life form: **hemicryptophyte, therophyte**

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

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

Life strategy (Pierce method, C-score): **13.5 %**

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

Life strategy (Pierce method, R-score): **86.5 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate, rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf anatomy: **hygromorphic, helomorphic**

## Flower

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

Flower colour: **blue**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

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

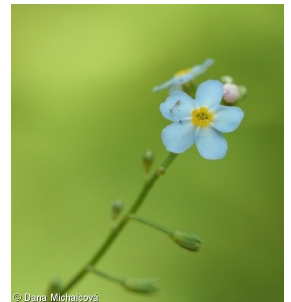
Calyx fusion: **synsepalous**

Inflorescence type: **cincinnus**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

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



## Fruit, seed and dispersal

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

Fruit colour: **black**

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

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

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

Myrmecochory: **myrmecochorous, myrmecochorous nv**



## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

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

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

Shoot life span (cyclicity): **monocyclic shoots prevailing, dicyclic or polycyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **sympodial**

Primary root: **present**

Persistence of the clonal growth organ [year]: **2**

Number of clonal offspring: **3.5**

Lateral spreading distance by clonal growth [m]: **0.07**

### Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **6**

Number of buds per shoot at a depth of 0-10 cm (root buds excluded): **10**

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): **15**

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

Number of buds per shoot at the soil surface (root buds included): **6**

Number of buds per shoot at a depth of 0-10 cm (root buds included): **10**

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): **15**

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): **22, 44, 64, 66, 88**

Ploidy level (x): **2, 4, 6, 8**

2C genome size [Mbp]: **1693.29**

1Cx monoploid genome size [Mbp]: **323.68**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **7x - 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 (generalist)**

Temperature indicator value: **6x - transition between values 5 and 7 (generalist)**

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

Reaction indicator value: **5x - indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions (generalist)**

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

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: **-1.03**

Herb layer disturbance frequency indicator value: **-0.46**

Whole-community disturbance severity indicator value: **0.27**

Herb layer disturbance severity indicator value: **0.29**

Whole-community structure based disturbance indicator value: **0.46**

Herb layer structure-based disturbance indicator value: **0.56**

## Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **2 - optimum**

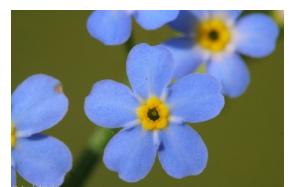
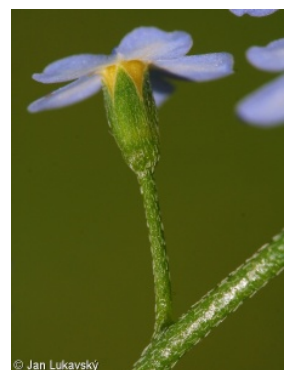
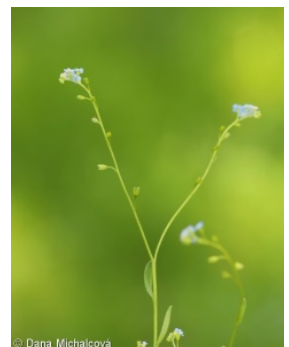
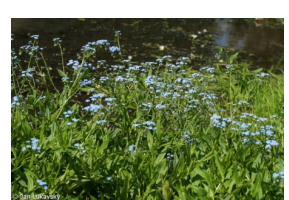
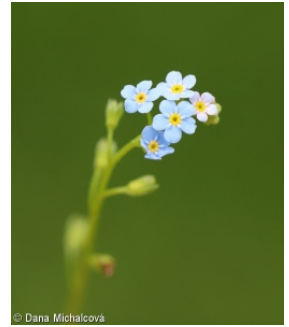
3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **1 - rare occurrence**

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

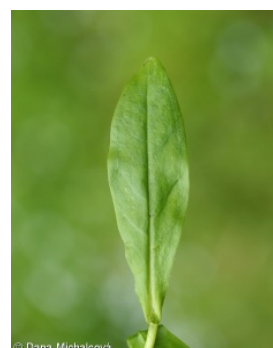
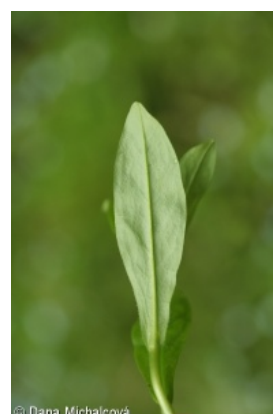
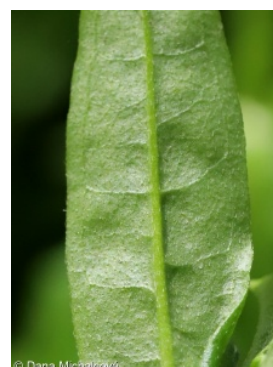
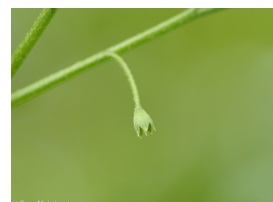
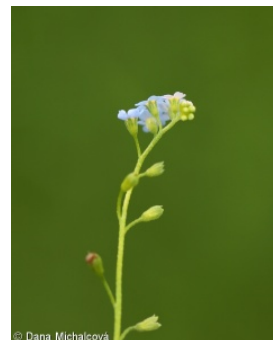
3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation





- 4A Reed-beds of eutrophic still waters: **1 - rare occurrence**  
 4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**  
 4D Riverine reed vegetation: **2 - optimum**  
 4E Reed vegetation of brooks: **2 - optimum**  
 4F Mesotrophic vegetation of muddy substrata: **1 - rare occurrence**  
 4G Tall-sedge beds: **2 - optimum**  
 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: **2 - optimum**  
 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: **2 - optimum**  
 5C Alpine and subalpine soft-water springs: **1 - rare occurrence**  
 5D Calcareous fens: **2 - optimum**  
 5E Acidic moss-rich fens and peatland meadows: **2 - optimum**  
 5F Transitional mires: **2 - optimum**  
 5H Wet peat soils and bog hollows: **1 - rare occurrence**  
 6 Meadows and mesic pastures  
 6A Mesic Arrhenatherum meadows: **1 - rare occurrence**  
 6B Montane mesic meadows: **2 - optimum**  
 6C Pastures and park grasslands: **1 - rare occurrence**  
 6D Alluvial meadows of lowland rivers: **2 - optimum**  
 6E Wet Cirsium meadows: **2 - optimum**  
 6F Intermittently wet Molinia meadows: **2 - optimum**  
 6G Vegetation of wet disturbed soils: **1 - rare occurrence**  
 7 Acidophilous grasslands  
 7A Subalpine and montane acidophilous grasslands: **1 - rare occurrence**  
 7B Submontane Nardus grasslands: **1 - rare occurrence**  
 10 Saline vegetation  
 10I Inland saline meadows: **1 - rare occurrence**  
 10J Saline steppes: **1 - rare occurrence**  
 11 Heathlands and scrub  
 11D Subalpine acidophilous Pinus mugo scrub: **1 - rare occurrence**  
 11H Subalpine deciduous scrub: **2 - optimum**  
 11I Willow carrs: **2 - optimum**  
 11J Willow galleries of loamy and sandy river banks: **2 - optimum**  
 11L Tall mesic and xeric shrub: **1 - rare occurrence**  
 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**  
 12 Forests  
 12A Alder carrs: **2 - optimum**  
 12B Alluvial forests: **2 - optimum**  
 12E Herb-rich beech forests: **1 - rare occurrence**  
 12F Limestone beech forests: **1 - rare occurrence**  
 12G Acidophilous beech forests: **1 - rare occurrence**  
 12Q Peatland birch forests: **1 - rare occurrence**



12R Acidophilous spruce forests: **1 - rare occurrence**

12S Basiphilous spruce forests: **1 - rare occurrence**

12V Spruce plantations: **1 - rare occurrence**

13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

Diagnostic taxon

Diagnostic taxon of associations: [TDF03 \*Angelico sylvestris\*-\*Cirsietum palustris\*](#), [TDF04 \*Crepido paludosae\*-\*Juncetum acutiflori\*](#), [TDF05 \*Polygono bistortae\*-\*Cirsietum heterophylli\*](#), [TDF06 \*Chaerophyllo hirsuti\*-\*Calthetum palustris\*](#)

Constant taxon

Constant taxon of classes: [RA \*Montio-Cardaminetea\*](#)

Constant taxon of alliances: [KAB \*Salicion elaeagno-daphnoidis\*](#), [LAA \*Alnion glutinosae\*](#), [RAA \*Caricion remotae\*](#), [RAC \*Epilobio nutantis\*-\*Montion fontanae\*](#), [TDF \*Calthion palustris\*](#)

Constant taxon of associations: [KAB02 \*Salicetum purpureae\*](#), [LAA02 \*Carici elongatae\*-\*Alnetum glutinosae\*](#), [LAA03 \*Carici acutiformis\*-\*Alnetum glutinosae\*](#), [LBA03 \*Carici remotae\*-\*Fraxinetum excelsioris\*](#), [MCD03 \*Tussilaginis farfarae\*-\*Calamagrostietum pseudophragmitae\*](#), [MCE03 \*Beruletum erectae\*](#), [RAA02 \*Cardamino\*-\*Chrysosplenietum alternifolii\*](#), [RAC01 \*Philonotido fontanae\*-\*Montietum rivularis\*](#), [RBA03 \*Valeriano simplicifoliae\*-\*Caricetum flavae\*](#), [TDD02 \*Junco effusi\*-\*Molinietum caeruleae\*](#), [TDF01 \*Angelico sylvestris\*-\*Cirsietum oleracei\*](#), [TDF02 \*Cirsietum rivularis\*](#), [TDF03 \*Angelico sylvestris\*-\*Cirsietum palustris\*](#), [TDF04 \*Crepido paludosae\*-\*Juncetum acutiflori\*](#), [TDF05 \*Polygono bistortae\*-\*Cirsietum heterophylli\*](#), [TDF06 \*Chaerophyllo hirsuti\*-\*Calthetum palustris\*](#), [TDF08 \*Scirpetum sylvatici\*](#), [TDF09 \*Caricetum cespitosae\*](#), [TDF14 \*Chaerophyllo hirsuti\*-\*Filipenduletum ulmariae\*](#)

Dominant taxon

Dominant taxon of associations: [TDF05 \*Polygono bistortae\*-\*Cirsietum heterophylli\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.6**

Ecological specialization index for non-forest vegetation: **4.9**

Ecological specialization index for forest vegetation: **5.3**

Colonization ability

Index of colonization success (ICS): **5**

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

Optimum successional age [years]: **14**

## Distribution and frequency

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

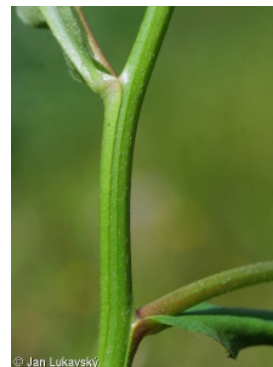
Floristic region: **Europe, Asia**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane belt, subalpine belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 650

taxon.data.freq\_in\_quad: 2209

Commonness in vegetation plots from the Czech Republic



Occurrence frequency in vegetation plots: **8.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **10.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.2 %**

Mean percentage cover in vegetation plots: **3.7 %**

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: **50**

Number of narrow habitats in which the taxon has its optimum: **20**

Number of broad habitats in which the taxon occurs: **10**

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