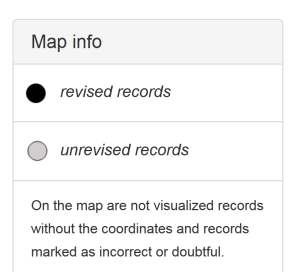
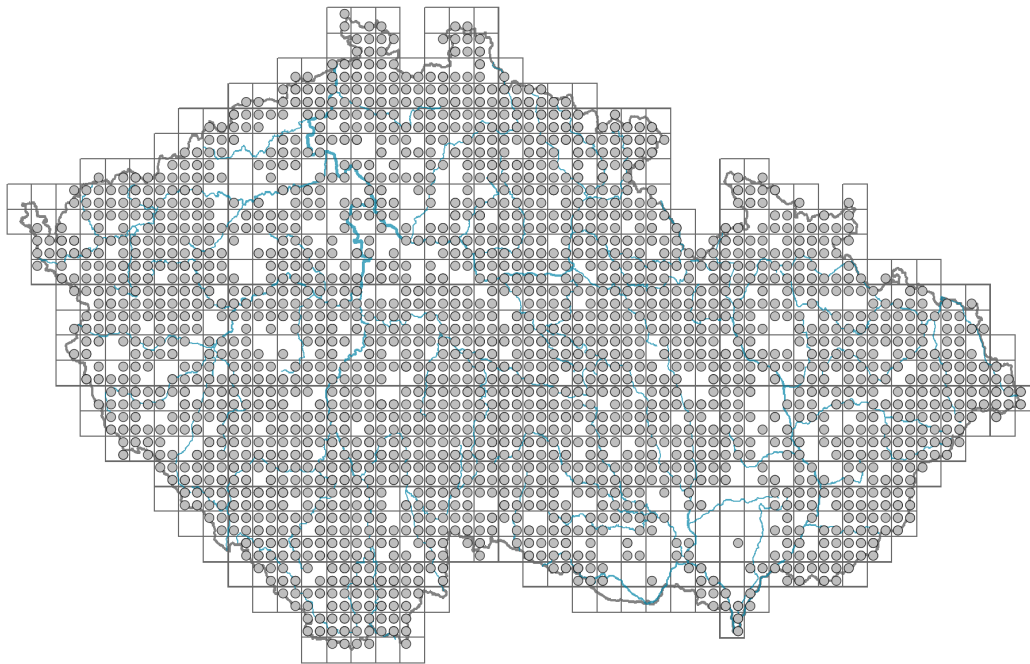


# *Myosotis palustris*

## Distribution



## Habitus and growth type

Height [m]: **0.3-1**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

## Flower

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

Flower colour: **blue**

Flower symmetry: **actinomorphic**

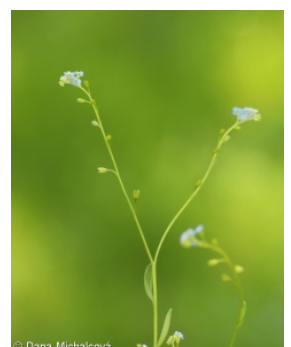
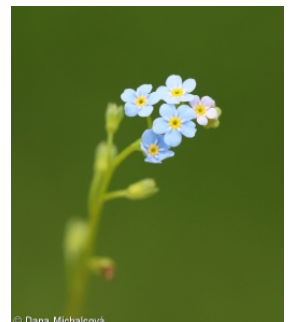
Perianth type: **calyx and corolla**

Perianth fusion: **fused**

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

Calyx fusion: **synsepalous**

Inflorescence type: **cincinnus**



Generative reproduction type: **facultative allogamy**

## Fruit, seed and dispersal

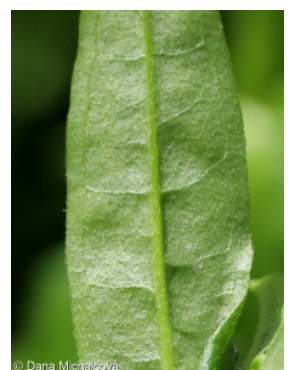
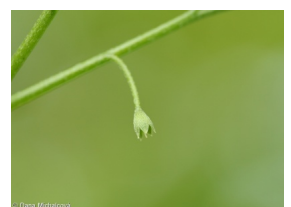
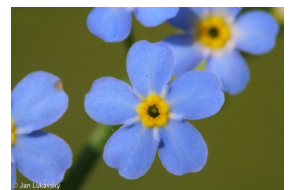
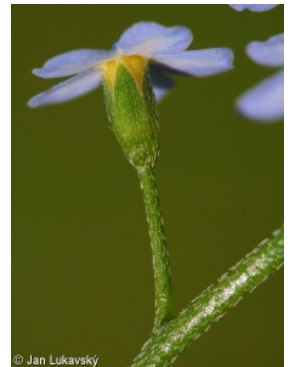
Fruit type: **dry fruit - cluster of four one-seeded nutlets**

Fruit colour: **black**

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

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

Myrmecochory: **myrmecochorous**



## Belowground organs and clonality

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

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: **3.5**

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

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): **9**

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): **16**

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): **9**

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): **16**

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): **64, 66**

Ploidy level (x): **6**

2C genome size [Mbp]: **1922.55**

1Cx monoploid genome size [Mbp]: **320.43**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

### Ellenberg-type indicator values

Light indicator value: **6x - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area (generalist)**

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: **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**

### Habitat and sociology

#### Occurrence in habitats

##### 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: **1 - rare occurrence**

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**

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

4K Petasites fringes of montane brooks: **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**

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

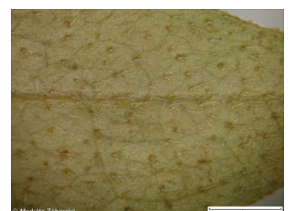
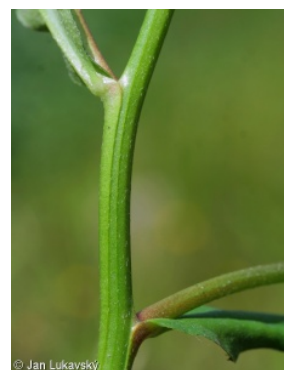
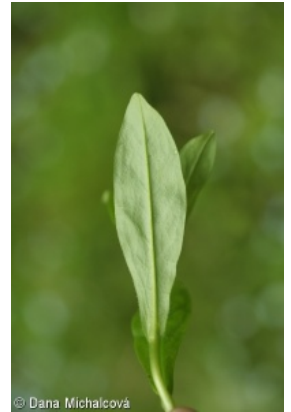
6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

6B Montane mesic meadows: **1 - rare occurrence**

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  
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  
11I Willow carrs: **2 - optimum**  
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: **2 - optimum**  
12B Alluvial forests: **2 - optimum**  
12E Herb-rich beech forests: **1 - rare occurrence**  
12Q Peatland birch 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**  
Affinity to the forest environment  
Affinity to the forest environment in Thermophyticum: **2.1 - taxon occurring both in the forest and open vegetation**  
Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

## Distribution and frequency

Continental degree: **6**  
Distribution range extension along the continentality gradient: **5**  
Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt (montane belt)**  
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **636**  
taxon.data.freq\_in\_quad: 2009  
Number of habitats with taxon occurrence in the Czech Republic  
Number of narrow habitats in which the taxon occurs: **41**  
Number of narrow habitats in which the taxon has its optimum: **13**  
Number of broad habitats in which the taxon occurs: **9**  
Number of broad habitats in which the taxon has its optimum: **5**

## Threats and protection

Legal protection: **not protected by law**