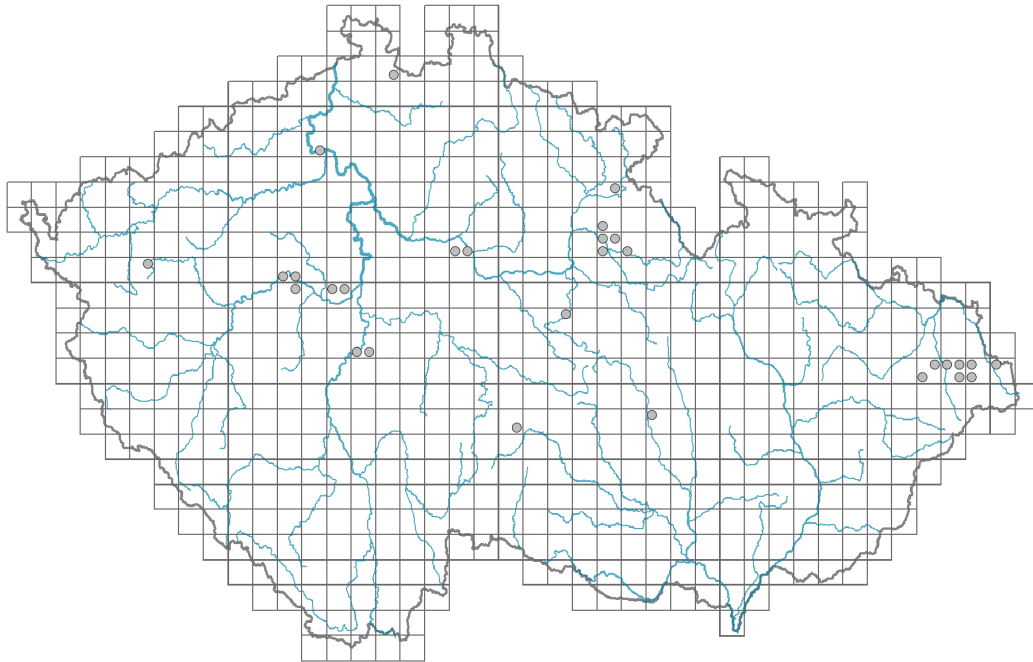


# *Myosotis arvensis* subsp. *arvensis*

## Distribution



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### 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]: **0.15-0.6**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **R - ruderal**

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

Life strategy (Pierce method, C-score): **31.7 %**

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

Life strategy (Pierce method, R-score): **68.3 %**

## 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: **overwintering green**

Leaf anatomy: **mesomorphic**



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## Flower

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

Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**  
 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 autogamy**  
 Pollination syndrome: **insect-pollination, selfing**  
 Pollinator spectrum: **honeybee, solitary bees, hoverflies, flies s. l., other Diptera, beetles, thrips**



## Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of four one-seeded nutlets**  
 Fruit colour: **black**  
 Reproduction type: **only by seed/spores**  
 Dispersal unit (diaspore): **fruit, infrutescence or its part**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **myrmecochorous**

## Belowground organs and clonality

Shoot life span (cyclicity): **monocyclic shoots prevailing**  
 Primary root: **present**  
 Bud bank  
 Number of buds per shoot at the soil surface (root buds excluded): **3**  
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **2**  
 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): **5**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **2**  
 Number of buds per shoot at the soil surface (root buds included): **3**  
 Number of buds per shoot at a depth of 0–10 cm (root buds included): **2**  
 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): **5**  
 Depth of the belowground bud bank (root buds included) [cm]: **2**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**  
 Carnivory: **non-carnivorous**  
 Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **56**  
 Ploidy level (x): **6**

2C genome size [Mbp]: **1464.61**  
1Cx monoploid genome size [Mbp]: **244.1**  
Genomic GC content: **39.2 %**

## Taxon origin

Origin in the Czech Republic: **native**  
Geographic origin: **Mediterranean**

## 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: **5 - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**

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: **0 - not salt tolerant, glycophyte**

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.31**

Herb layer disturbance frequency indicator value: **0.2**

Whole-community disturbance severity indicator value: **0.9**

Herb layer disturbance severity indicator value: **0.9**

Whole-community structure based disturbance indicator value: **0.69**

Herb layer structure-based disturbance indicator value: **0.76**

## Habitat and sociology

### Occurrence in habitats

#### 1 Vegetation of cliffs, screes and walls

1C Walls: **1 - rare occurrence**

#### 3 Aquatic vegetation

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

#### 4 Wetland and riverine herbaceous vegetation

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

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

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

6F Intermittently wet Molinia meadows: **1 - rare occurrence**

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

#### 8 Dry grasslands

- 8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**  
 8D Broad-leaved dry grasslands: **1 - rare occurrence**  
 8E Acidophilous dry grasslands: **1 - rare occurrence**  
 8F Thermophilous forest fringe vegetation: **1 - rare occurrence**  
 9 Sand grasslands and rock-outcrop vegetation  
 9B Open vegetation of acidic sands: **1 - rare occurrence**  
 9C Festuca grasslands on acidic sands: **1 - rare occurrence**  
 9D Pannonian sand steppes: **1 - rare occurrence**  
 9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**  
 9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**  
 10 Saline vegetation  
 10I Inland saline meadows: **1 - rare occurrence**  
 11 Heathlands and scrub  
 11A Dry lowland to subalpine heathlands: **1 - rare occurrence**  
 11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**  
 11L Tall mesic and xeric shrub: **1 - rare occurrence**  
 11N Low xeric scrub: **1 - rare occurrence**  
 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**  
 12 Forests  
 12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**  
 12I Sub-continental thermophilous oak forests: **1 - rare occurrence**  
 12J Acidophilous thermophilous oak forests: **1 - rare occurrence**  
 12K Acidophilous oak forests: **1 - rare occurrence**  
 12T Robinia pseudacacia plantations: **1 - rare occurrence**  
 13 Anthropogenic vegetation  
 13A Annual vegetation of ruderal habitats: **1 - rare occurrence**  
 13B Annual vegetation of arable land: **2 - optimum**  
 13D Perennial thermophilous ruderal vegetation: **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: **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: [XB Stellarietea mediae](#)  
 Diagnostic taxon of alliances: [XBC Scleranthion annui](#)  
 Diagnostic taxon of associations: [XBC01 Aphano arvensis-Matricarietum chamomillae](#), [XBC02 Spergulo arvensis-Scleranthetum annui](#), [XBC03 Erophilo verna-Arabidopsietum thalianae](#)  
 Constant taxon  
 Constant taxon of alliances: [XBC Scleranthion annui](#), [XBE Oxalidion fontanae](#)  
 Constant taxon of associations: [XBA03 Euphorbio exiguae-Melandrietum noctiflori](#), [XBC01 Aphano arvensis-Matricarietum chamomillae](#), [XBC02 Spergulo arvensis-Scleranthetum annui](#), [XBC03 Erophilo verna-Arabidopsietum thalianae](#), [XBE01 Echinochloo cruris-galli-Chenopodietum polyspermi](#)  
 Ecological specialization indices

Ecological specialization index for all vegetation types: **5.2**  
Ecological specialization index for non-forest vegetation: **5.3**  
Ecological specialization index for forest vegetation: **4.8**  
Colonization ability  
Index of colonization success (ICS): **6**  
Index of colonization potential (ICP): **5**  
Optimum successional age [years]: **25**

## Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional**  
Floristic region: **Europe, Western Asia**  
Distribution range extension along the continentality gradient: **6**  
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: 632  
taxon.data.freq\_in\_quad: 1984  
Commonness in vegetation plots from the Czech Republic  
Occurrence frequency in vegetation plots: **3.6 %**  
Occurrence frequency in vegetation plots with a cover above 5%: **8.4 %**  
Occurrence frequency in vegetation plots with a cover above 25%: **0.5 %**  
Occurrence frequency in vegetation plots with a cover above 50%: **0 %**  
Mean percentage cover in vegetation plots: **3.3 %**  
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: **35**  
Number of narrow habitats in which the taxon has its optimum: **1**  
Number of broad habitats in which the taxon occurs: **10**  
Number of broad habitats in which the taxon has its optimum: **1**

## 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**