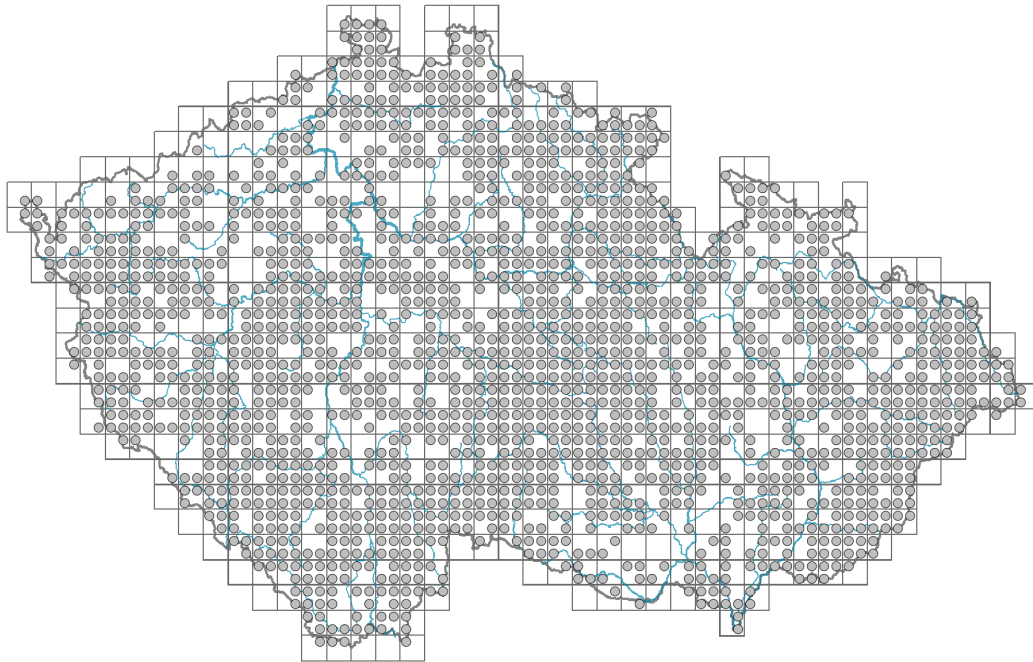


# Mentha arvensis

## 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]: **0.2-0.6**

Growth form: **clonal herb**

Life form: **geophyte (hemicryptophyte)**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **22.2 %**

Life strategy (Pierce method, S-score): **5.6 %**

Life strategy (Pierce method, R-score): **72.2 %**



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## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic, helomorphic**

## Flower

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

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **pink, pink-violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

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

Calyx fusion: **synsepalous**

Inflorescence type: **pseudospica e verticillastris composita**

Dicliny: **gynomonoecious, gynodioecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination**

Pollinator spectrum: **honeybee, hoverflies, flies s. l., meat flies s. l. (bumblebees, other Diptera, butterflies, beetles, other pollinators)**

## Fruit, seed and dispersal

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

Fruit colour: **brown**

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

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

Dispersal strategy: **Allium (mainly autochory)**

Myrmecochory: **probably myrmecochorous**

## Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

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

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

Shoot life span (cyclicity): **monocyclic shoots prevailing**

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

Primary root: **absent**

Persistence of the clonal growth organ [year]: **2.5**

Number of clonal offspring:

Lateral spreading distance by clonal growth [m]: **0.13**

Clonal index: **5**

## 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]:

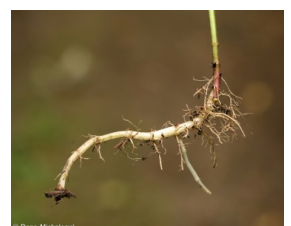
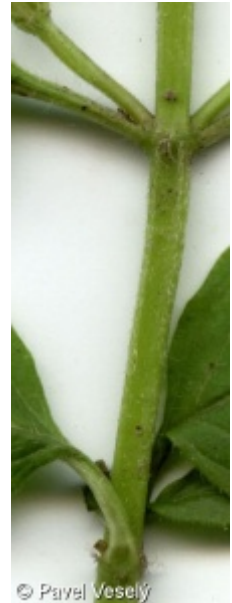
Number of buds per shoot at the soil surface (root buds included):

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): **72**

Ploidy level (x): **6**

2C genome size [Mbp]: **2045.39**

1Cx monoploid genome size [Mbp]: **340.9**

Genomic GC content: **39.6 %**

## 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: **5x - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**

Moisture indicator value: **7 - humidity indicator, focus on well moistened, but not wet soils**

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

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: **-0.56**

Herb layer disturbance frequency indicator value: **-0.27**

Whole-community disturbance severity indicator value: **0.59**

Herb layer disturbance severity indicator value: **0.61**

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

Herb layer structure-based disturbance indicator value: **0.71**

## Habitat and sociology

### Occurrence in habitats

#### 3 Aquatic vegetation

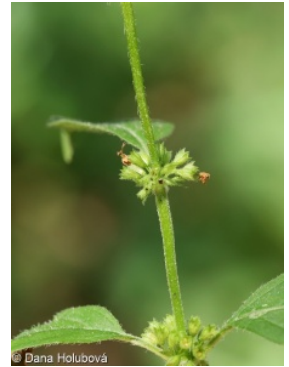
3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

#### 4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 - rare occurrence**

4B Halophilous reed and sedge beds: **1 - rare occurrence**

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



- 4D Riverine reed vegetation: **1 - rare occurrence**
- 4E Reed vegetation of brooks: **1 - rare occurrence**
- 4F Mesotrophic vegetation of muddy substrata: **1 - rare occurrence**
- 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**
- 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**
- 5D Calcareous fens: **1 - rare occurrence**
- 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**
- 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**

## 11 Heathlands and scrub

- 11I Willow carrs: **1 - rare occurrence**
- 11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**
- 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

## 12 Forests

- 12A Alder carrs: **1 - rare occurrence**
- 12B Alluvial forests: **1 - rare occurrence**
- 12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

## 13 Anthropogenic vegetation

- 13B Annual vegetation of arable land: **2 - optimum**
- 13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**
- 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: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Constant taxon

Constant taxon of associations: [MAB01 Centunculo minimi-Anthocerotum punctati](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.2**

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

Ecological specialization index for forest vegetation: **5.5**

## Colonization ability

Index of colonization success (ICS): **6**

Index of colonization potential (ICP): **3**

Optimum successional age [years]: **12**

## Distribution and frequency

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

Floristic region: **Asia, Americas, circumpolar**

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: **630**

taxon.data.freq\_in\_quad: **1796**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **8.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.1 %**

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

Mean percentage cover in vegetation plots: **3.4 %**

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: **37**

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

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

Number of broad habitats in which the taxon has its optimum: **3**

## 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**