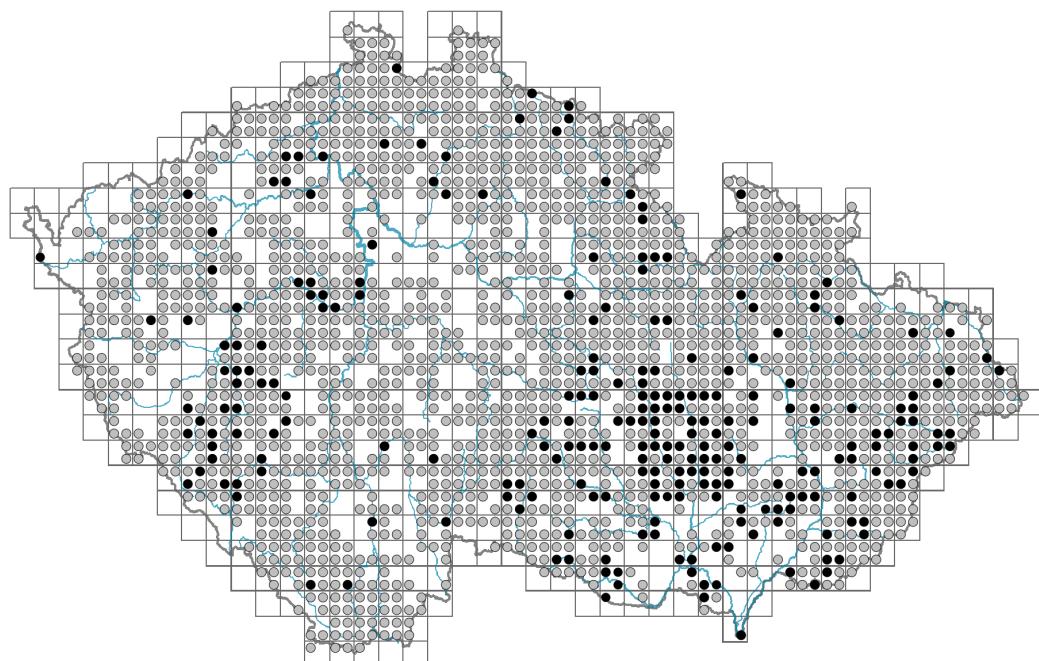


# *Mercurialis perennis*

## 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]: **0.15-0.35**

Growth form: **clonal herb**

Life form: **hemicryptophyte (geophyte)**

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

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

Life strategy (Pierce method, C-score): **35.2 %**

Life strategy (Pierce method, S-score): **25.8 %**

Life strategy (Pierce method, R-score): **39 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **hygromorphic**



## Flower

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

Flowering phase: **2 Acer platanoides-Anemone nemorosa (start of early spring)**

Flower colour: **yellow-green**

Perianth type: **reduced**

Perianth fusion: **reduced**

Inflorescence type: **spica e floribus masculis composita, flores solitarii feminei, fasciculus e floribus femineis compositus**

Dicliny: **dioecious**

Generative reproduction type: **allogamy**

Pollination syndrome: **wind-pollination**



© Mária Končiná

## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

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



© Pavol Veselý

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

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

Myrmecochory: **myrmecochorous**



© Pavol Veselý

## Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**



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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]:

Number of clonal offspring: **2.4**

Lateral spreading distance by clonal growth [m]: **0.17**

Clonal index: **4**



© Dana Michalcová

### 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 exluded) [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]:



© Karel Fajmon

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **80 (42, 64, 78, 79, 81)**

Ploidy level (x): **10 (6, 8)**

2C genome size [Mbp]: **6298.39**

1Cx monoploid genome size [Mbp]: **629.84**

Genomic GC content: **37.5 %**



## Taxon origin

Origin in the Czech Republic: **native**



## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **3 - shade plant, usually occurring where the incident radiation is less than 5% of that in an open area, but also at sunnier sites**

Temperature indicator value: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

Moisture indicator value: **5x - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out (generalist)**

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



Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.97**

Herb layer disturbance frequency indicator value: **-0.72**

Whole-community disturbance severity indicator value: **0.24**

Herb layer disturbance severity indicator value: **0.07**

Whole-community structure based disturbance indicator value: **0.08**

Herb layer structure-based disturbance indicator value: **0.17**



## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

1D Mobile calcareous screes: **1 - rare occurrence**

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4K Petasites fringes of montane brooks: **1 - rare occurrence**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 - rare occurrence**

8 Dry grasslands

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**

8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

11 Heathlands and scrub

11D Subalpine acidophilous Pinus mugo scrub: **1 - rare occurrence**

11H Subalpine deciduous scrub: **1 - rare occurrence**

11L Tall mesic and xeric shrub: **2 - optimum**

11N Low xeric scrub: **1 - rare occurrence**

11R Scrub and pioneer woodland of forests clearings: **2 - optimum**

12 Forests

12B Alluvial forests: **2 - optimum**

12C Oak-hornbeam forests: **2 - optimum**

12D Ravine forests: **4 - constant dominant**

12E Herb-rich beech forests: **4 - constant dominant**

12F Limestone beech forests: **2 - optimum**

12G Acidophilous beech forests: **1 - rare occurrence**

12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**

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**

12U Plantations of broad-leaved non-native trees: **2 - optimum**

12V Spruce plantations: **2 - optimum**

12W Pine and larch 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: **1.1 - taxon occurring mainly in the closed forest**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.1 - taxon occurring mainly in the closed forest**

Diagnostic taxon

Diagnostic taxon of classes: [\*\*LB Carpino-Fagetea\*\*](#)

Diagnostic taxon of alliances: [\*\*LBC Fagion sylvaticae\*\*](#), [\*\*LBD Sorbo-Fagion sylvaticae\*\*](#), [\*\*LBF Tilio platyphylli-Acerion\*\*](#)

Diagnostic taxon of associations: [\*\*KBC04 Senecioni fuchsii-Coryletum avellanae\*\*](#), [\*\*LBC02 Mercuriali perennis-Fagetum sylvaticae\*\*](#), [\*\*LBD01 Cephalanthero damasonii-Fagetum sylvaticae\*\*](#), [\*\*LBF01 Aceri-Tiliatum\*\*](#), [\*\*LBF02 Mercuriali perennis-Fraxinetum excelsioris\*\*](#), [\*\*LBF03 Arunco dioici-Aceretum pseudoplatani\*\*](#)

Constant taxon

Constant taxon of classes: [\*\*LB Carpino-Fagetea\*\*](#)

Constant taxon of alliances: [\*\*LBC Fagion sylvaticae\*\*](#), [\*\*LBD Sorbo-Fagion sylvaticae\*\*](#), [\*\*LBF Tilio platyphylli-Acerion\*\*](#)

Constant taxon of associations: [\*\*KBC04 Senecioni fuchsii-Coryletum avellanae\*\*](#), [\*\*LBA04 Stellario nemorum-Alnetum glutinosae\*\*](#), [\*\*LBB02 Stellario holostaeae-Carpinetum betuli\*\*](#), [\*\*LBC02 Mercuriali perennis-Fagetum sylvaticae\*\*](#), [\*\*LBC05 Galio rotundifolii-Abietetum albae\*\*](#), [\*\*LBD01 Cephalanthero damasonii-Fagetum sylvaticae\*\*](#), [\*\*LBF01 Aceri-Tiliatum\*\*](#), [\*\*LBF02 Mercuriali perennis-Fraxinetum excelsioris\*\*](#), [\*\*LBF03 Arunco dioici-Aceretum pseudoplatani\*\*](#)

## Dominant taxon

Dominant taxon of associations: [\*\*ADD03 Trollio altissimi-Geranietum sylvatici\*\*](#),  
[\*\*KBC04 Senecioni fuchsii-Coryletum avellanae\*\*](#), [\*\*LBA04 Stellario nemorum-Alnetum glutinosae\*\*](#), [\*\*LBA05 Pruno padi-Fraxinetum excelsioris\*\*](#), [\*\*LBB02 Stellario holosteae-Carpinetum betuli\*\*](#), [\*\*LBC02 Mercuriali perennis-Fagetum sylvaticae\*\*](#),  
[\*\*LBC05 Galio rotundifolii-Abietetum albae\*\*](#), [\*\*LBF01 Aceri-Tilieturn\*\*](#), [\*\*LBF02 Mercuriali perennis-Fraxinetum excelsioris\*\*](#), [\*\*LBF03 Arunco dioici-Aceretum pseudoplatani\*\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **5.3**

Ecological specialization index for non-forest vegetation: **4**

Ecological specialization index for forest vegetation: **5.4**

## Colonization ability

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

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

Optimum successional age [years]: **39.5**

## Distribution and frequency

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

Floristic region: **Europe**

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: 609

taxon.data.freq\_in\_quad: 1883

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **4.9 %**

Occurrence frequency in vegetation plots with a cover above 5%: **40 %**

Occurrence frequency in vegetation plots with a cover above 25%: **13.6 %**

Occurrence frequency in vegetation plots with a cover above 50%: **2.7 %**

Mean percentage cover in vegetation plots: **10.7 %**

Maximum percentage cover in vegetation plots: **88 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **28**

Number of narrow habitats in which the taxon has its optimum: **10**

Number of broad habitats in which the taxon occurs: **8**

Number of broad habitats in which the taxon has its optimum: **2**

## 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**