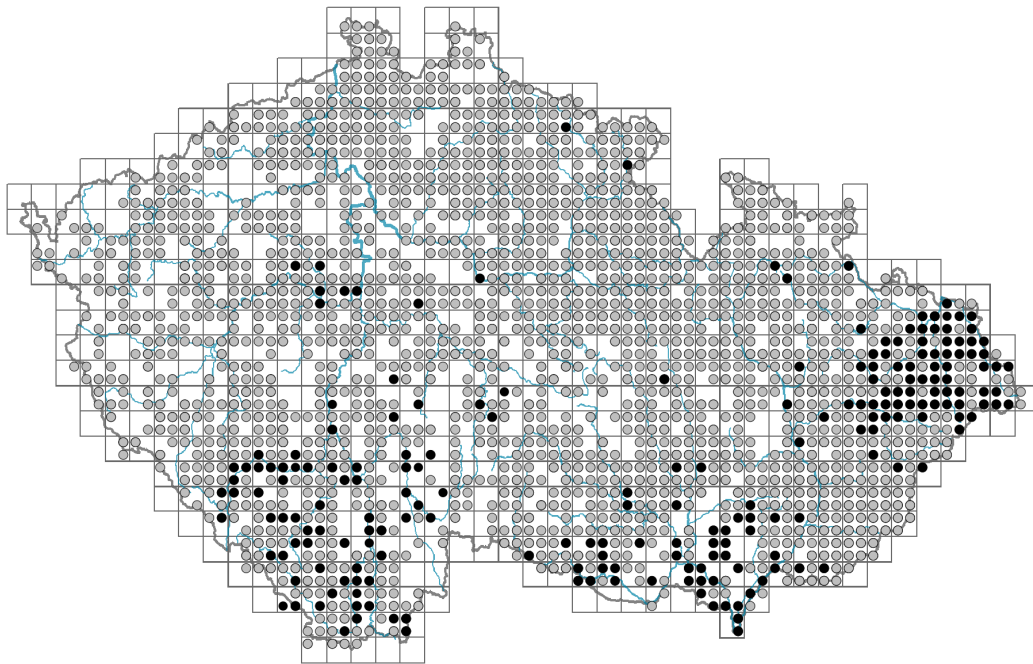


Pulmonaria officinalis agg.

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]: **0.1-0.35**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

Leaf

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

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

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic, hygromorphic**

Flower

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

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

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

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**



Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **funnel-shaped**

Calyx fusion: **synsepalous**

Inflorescence type: **cincinnus**

Dicliny: **synoecious**

Generative reproduction type: **allogamy, facultative allogamy**

Pollination syndrome: **insect-pollination**

Fruit, seed and dispersal

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

Fruit colour: **brown, black**

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

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

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

Myrmecochory: **myrmecochorous**

Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

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

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

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

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

Primary root: **absent**

Persistence of the clonal growth organ [year]: **4**

Number of clonal offspring: **5.2**

Lateral spreading distance by clonal growth [m]: **0.09**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **5**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **13**

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): **18**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

Number of buds per shoot at the soil surface (root buds included): **5**

Number of buds per shoot at a depth of 0–10 cm (root buds included): **13**

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): **18**

Depth of the belowground bud bank (root buds included) [cm]: **4**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



Karyology

Chromosome number (2n): **14, 16**

Ploidy level (x): **2**

2C genome size [Mbp]: **2803.34**

1Cx monoploid genome size [Mbp]: **1401.67**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **4 - transition between values 3 and 5**

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: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

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: **-1.96**

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: **0.09**

Herb layer structure-based disturbance indicator value: **0.2**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

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

1B Siliceous cliffs and block fields: **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**

4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**

5 Vegetation of springs and mires

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

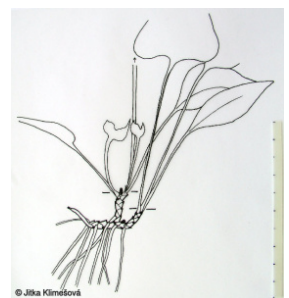
6 Meadows and mesic pastures

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

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

6D Alluvial meadows of lowland rivers: **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

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

11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**

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: **1 - rare occurrence**

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

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

12D Ravine forests: **2 - optimum**

12E Herb-rich beech forests: **2 - optimum**

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: **2 - optimum**

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: **1 - rare occurrence**

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

12W Pine and larch plantations: **1 - rare occurrence**

13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **2 - optimum**

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: [LBA Alnion incanae](#), [LBB Carpinion betuli](#), [LBF Tilio platyphylli-Acerion](#)

Diagnostic taxon of associations: [LBB02 Stellario holosteeae-Carpinetum betuli](#), [LBB03 Carici pilosae-Carpinetum betuli](#), [LBB04 Primulo veris-Carpinetum betuli](#), [LBF01 Aceri-Tilietum](#)

Constant taxon

Constant taxon of alliances: [LBB Carpinion betuli](#), [LBF Tilio platyphylli-Acerion](#)

Constant taxon of associations: [KBB03 Populo tremulae-Coryletum avellanae](#), [KBC04 Senecioni fuchsii-Coryletum avellanae](#), [LBA04 Stellario nemorum-Alnetum glutinosae](#), [LBA05 Pruno padi-Fraxinetum excelsioris](#), [LBB01 Galio sylvatici-Carpinetum betuli](#), [LBB02 Stellario holosteeae-Carpinetum betuli](#), [LBB03 Carici pilosae-Carpinetum betuli](#), [LBB04 Primulo veris-Carpinetum betuli](#), [LBC03 Carici pilosae-Fagetum sylvaticae](#), [LBF01 Aceri-Tilietum](#)

Ecological specialization indices

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



Ecological specialization index for non-forest vegetation: **3.9**

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

Distribution and frequency

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

Floristic region: **Europe**

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: 624

taxon.data.freq_in_quad: 1887

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **4.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **9.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.3 %**

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: **32**

Number of narrow habitats in which the taxon has its optimum: **9**

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

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



