

Maianthemum bifolium

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]: **0.05-0.25**

Growth form: **clonal herb**

Life form: **geophyte**

Life strategy: **S - stress-tolerator**

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

Life strategy (Pierce method, C-score): **28.2 %**

Life strategy (Pierce method, S-score): **28.1 %**

Life strategy (Pierce method, R-score): **43.7 %**

Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **scleromorphic, mesomorphic**

Flower

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



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Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **homochlamydeous**

Perianth fusion: **free**

Inflorescence type: **racemus**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination, selfing**

Fruit, seed and dispersal

Fruit type: **fleshy fruit - berry**

Fruit colour: **red**

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

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

Dispersal strategy: **Cornus (mainly autochory and endozoochory)**

Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Shoot metamorphosis: **stolon-like rhizome**

Storage organ: **stolon-like rhizome**

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

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

Shoot life span (cyclicality): **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: **1.9**

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

Clonal index: **4**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **4**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **15**

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): **19**

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

Number of buds per shoot at the soil surface (root buds included): **4**

Number of buds per shoot at a depth of 0–10 cm (root buds included): **15**

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): **19**

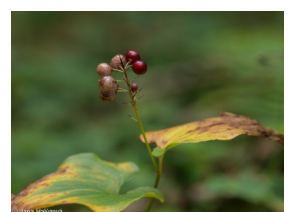
Depth of the belowground bud bank (root buds included) [cm]: **4**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



Karyology

Chromosome number (2n): **36 (38, 42, 54)**

Ploidy level (x): **4**

2C genome size [Mbp]: **25009.71**

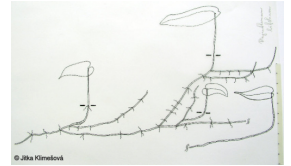
1Cx monoploid genome size [Mbp]: **6252.43**

Genomic GC content: **42 %**



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

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: **4 - transition between values 3 and 5**

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

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: **-0.7**

Whole-community disturbance severity indicator value: **0.25**

Herb layer disturbance severity indicator value: **0.08**

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

Herb layer structure-based disturbance indicator value: **0.16**

Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

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

5 Vegetation of springs and mires

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

5C Alpine and subalpine soft-water springs: **1 - rare occurrence**

5D Calcareous fens: **1 - rare occurrence**

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**

5F Transitional mires: **1 - rare occurrence**

5G Raised bogs: **1 - rare occurrence**

6 Meadows and mesic pastures

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

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 - rare occurrence**

7B Submontane Nardus grasslands: **1 - rare occurrence**

8 Dry grasslands

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

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 - rare occurrence**11H Subalpine deciduous scrub: **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: **2 - optimum**12I Sub-continental thermophilous oak forests: **1 - rare occurrence**12K Acidophilous oak forests: **2 - optimum**12L Boreo-continental pine forests: **1 - rare occurrence**12Q Peatland birch forests: **1 - rare occurrence**12R Acidophilous spruce forests: **2 - optimum**12S Basiphilous spruce forests: **2 - optimum**12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**12V Spruce plantations: **2 - optimum**12W Pine and larch plantations: **1 - rare occurrence**

13 Anthropogenic vegetation

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: [LBB *Carpinion betuli*](#), [LBE *Luzulo-Fagion sylvaticae*](#)Diagnostic taxon of associations: [LBB03 *Carici pilosae-Carpinetum betuli*](#), [LBE02 *Calamagrostio villosae-Fagetum sylvaticae*](#)

Constant taxon

Constant taxon of alliances: [LBB *Carpinion betuli*](#)Constant taxon of associations: [LBB03 *Carici pilosae-Carpinetum betuli*](#), [LBC03 *Carici pilosae-Fagetum sylvaticae*](#), [LBC04 *Athyrio distentifolii-Fagetum sylvaticae*](#), [LBE02 *Calamagrostio villosae-Fagetum sylvaticae*](#), [LBE03 *Luzulo-Abietetum albae*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.9**Ecological specialization index for non-forest vegetation: **3.6**Ecological specialization index for forest vegetation: **5**

Colonization ability

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

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **4**

Distribution and frequency

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

Floristic region: **Europe, Asia**

Continental degree: **6**

Distribution range extension along the continentality gradient: **5**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane belt (subalpine belt)**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **650**

taxon.data.freq_in_quad: **2170**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.8 %**

Occurrence frequency in vegetation plots with a cover above 5%: **5.7 %**

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: **2.8 %**

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: **31**

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: **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**