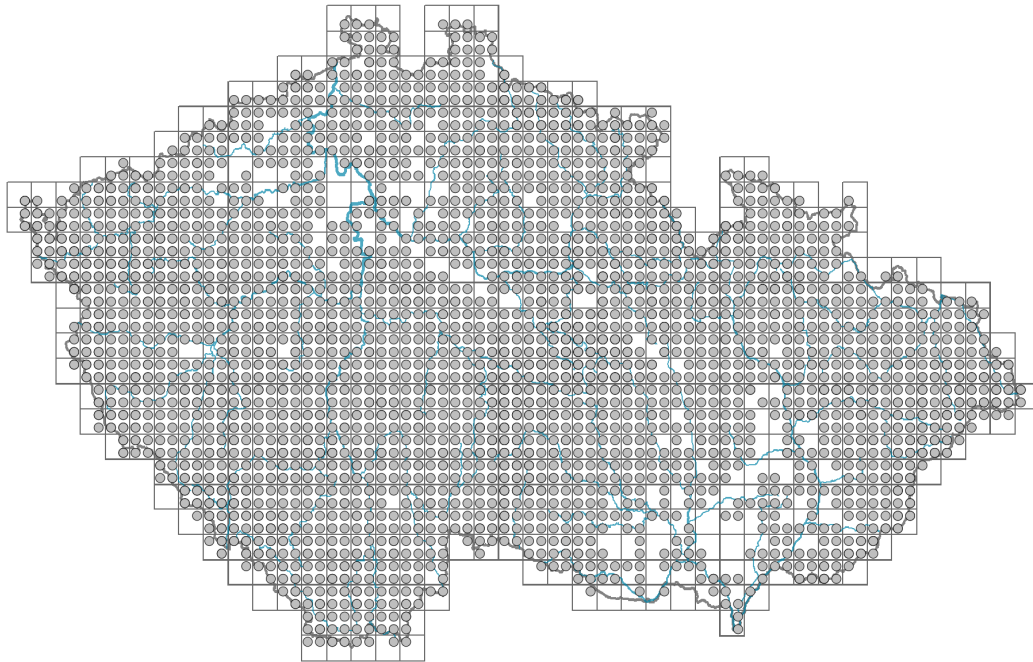


Caltha palustris

Distribution



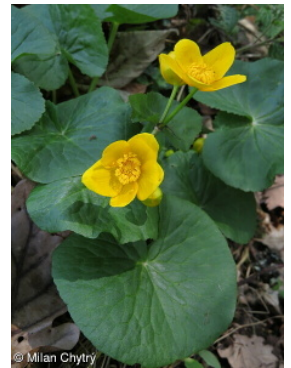
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Map info

● revised records

○ unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



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Habitus and growth type

Height [m]: **0.2-0.7**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **74.6 %**

Life strategy (Pierce method, S-score): **0.1 %**

Life strategy (Pierce method, R-score): **25.3 %**

Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **hygromorphic, helomorphic**

Flower

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

Flowering phase: **3 Prunus avium-Ranunculus auricomus (end of early spring)**

Flower colour: **yellow**

Flower symmetry: **actinomorphic**

Perianth type: **homochlamydeous**

Perianth fusion: **free**

Inflorescence type: **flores solitarii**

Dicliny: **synoecious, andromonoecious, androdioecious**

Generative reproduction type: **alogamy self-incompatibility**

Pollination syndrome: **insect-pollination**

Pollinator spectrum: **flies s. l. (honeybee, other Hymenoptera, hoverflies, meat flies s. l., other Diptera, beetles, nitidulids)**



Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of follicles**

Fruit colour: **green, brown**

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

Dispersal unit (diaspore): **seed, shoot fragment**

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 (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]: **2**

Number of clonal offspring: **2**

Lateral spreading distance by clonal growth [m]: **0.01**

Clonal index: **3**

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): **11**

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): **15**

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): **11**

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): **15**

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): **32 (56)**

Ploidy level (x): **2 (4)**

2C genome size [Mbp]: **17704.15**

1Cx monoploid genome size [Mbp]: **8852.07**

Genomic GC content: **43.6 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% 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: **9 - wetness indicator, focus on often soaked, poorly aerated 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: **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: **-1.1**

Herb layer disturbance frequency indicator value: **-0.46**

Whole-community disturbance severity indicator value: **0.26**

Herb layer disturbance severity indicator value: **0.27**

Whole-community structure based disturbance indicator value: **0.44**

Herb layer structure-based disturbance indicator value: **0.54**

Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

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

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**

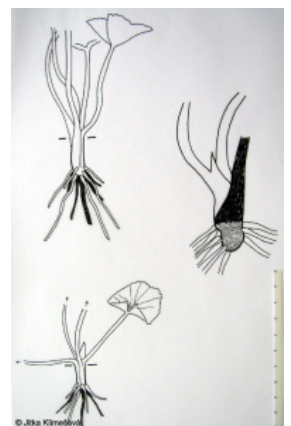
4D Riverine reed vegetation: **1 - rare occurrence**

4E Reed vegetation of brooks: **1 - rare occurrence**

4F Mesotrophic vegetation of muddy substrata: **2 - optimum**



- 4G Tall-sedge beds: **2 - optimum**
- 4J River gravel banks: **1 - rare occurrence**
- 4K Petasites fringes of montane brooks: **2 - optimum**
- 5 Vegetation of springs and mires
- 5A Hard-water springs with tufa formation: **1 - rare occurrence**
- 5B Lowland to montane soft-water springs: **2 - optimum**
- 5C Alpine and subalpine soft-water springs: **1 - rare occurrence**
- 5D Calcareous fens: **2 - optimum**
- 5E Acidic moss-rich fens and peatland meadows: **2 - optimum**
- 5F Transitional mires: **2 - optimum**
- 6 Meadows and mesic pastures
- 6D Alluvial meadows of lowland rivers: **1 - rare occurrence**
- 6E Wet *Cirsium* meadows: **2 - optimum**
- 6F Intermittently wet *Molinia* meadows: **1 - rare occurrence**
- 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**
- 10J Saline steppes: **1 - rare occurrence**
- 11 Heathlands and scrub
- 11H Subalpine deciduous scrub: **1 - rare occurrence**
- 11I Willow carrs: **2 - optimum**
- 11J Willow galleries of loamy and sandy river banks: **2 - optimum**
- 12 Forests
- 12A Alder carrs: **2 - optimum**
- 12B Alluvial forests: **2 - optimum**
- 12E Herb-rich beech forests: **1 - rare occurrence**
- 12Q Peatland birch forests: **1 - rare occurrence**
- 12R Acidophilous spruce forests: **1 - rare occurrence**
- 12S Basiphilous spruce forests: **1 - rare occurrence**
- 13 Anthropogenic vegetation
- 13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**
- Affinity to the forest environment
- Affinity to the forest environment in Thermophyticum: **2.1 - taxon occurring both in the forest and open vegetation**
- Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.1 - taxon occurring both in the forest and open vegetation**
- Diagnostic taxon
- Diagnostic taxon of classes: [LA *Alnetea glutinosae*](#)
- Diagnostic taxon of alliances: [LAA *Alnion glutinosae*](#), [TDF *Calthion palustris*](#)
- Diagnostic taxon of associations: [LAA03 *Carici acutiformis-Alnetum glutinosae*](#), [RBA03 *Valeriano simplicifoliae-Caricetum flavae*](#), [TDF03 *Angelico sylvestris-Cirsietum palustris*](#), [TDF04 *Crepido paludosae-Juncetum acutiflori*](#), [TDF06 *Chaerophyllo hirsuti-Calthetum palustris*](#), [TDF09 *Caricetum cespitosae*](#)
- Constant taxon
- Constant taxon of classes: [LA *Alnetea glutinosae*](#)



Constant taxon of alliances: [LAA Alnion glutinosae](#), [TDF Calthion palustris](#)

Constant taxon of associations: [LAA02 Carici elongatae-Alnetum glutinosae](#), [LAA03 Carici acutiformis-Alnetum glutinosae](#), [LBA01 Alnetum incanae](#), [LBA03 Carici remotae-Fraxinetum excelsioris](#), [LFC03 Equiseto sylvatici-Piceetum abietis](#), [MCG04 Comaro palustris-Caricetum cespitosae](#), [MCG05 Caricetum diandrae](#), [MCG06 Caricetum appropinquatae](#), [RAD01 Crepido paludosae-Philonotidetum seriatae](#), [RBA01 Valeriano dioicae-Caricetum davallianae](#), [RBA03 Valeriano simplicifoliae-Caricetum flavae](#), [RBC03 Agrostio caninae-Caricetum diandrae](#), [TDF01 Angelico sylvestris-Cirsietum oleracei](#), [TDF02 Cirsietum rivularis](#), [TDF03 Angelico sylvestris-Cirsietum palustris](#), [TDF04 Crepido paludosae-Juncetum acutiflori](#), [TDF06 Chaerophyllo hirsuti-Calthetum palustris](#), [TDF07 Scirpo sylvatici-Cirsietum cani](#), [TDF08 Scirpetum sylvatici](#), [TDF09 Caricetum cespitosae](#), [TDF10 Scirpo sylvatici-Caricetum brizoidis](#), [TDF12 Filipendulo ulmariae-Geranium palustris](#), [TDF13 Lysimachio vulgaris-Filipenduletum ulmariae](#), [TDF14 Chaerophyllo hirsuti-Filipenduletum ulmariae](#)

Dominant taxon

Dominant taxon of associations: [MCG06 Caricetum appropinquatae](#), [RAA01 Caricetum remotae](#), [RAA02 Cardamino-Chrysosplenietum alternifolii](#), [RAB01 Brachythecio rivularis-Cratoneuretum](#), [RBA03 Valeriano simplicifoliae-Caricetum flavae](#), [RBA04 Campylio stellati-Caricetum lasiocarpae](#), [TDF01 Angelico sylvestris-Cirsietum oleracei](#), [TDF03 Angelico sylvestris-Cirsietum palustris](#), [TDF04 Crepido paludosae-Juncetum acutiflori](#), [TDF06 Chaerophyllo hirsuti-Calthetum palustris](#), [TDF08 Scirpetum sylvatici](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.9**

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

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

Colonization ability

Index of colonization success (ICS): **2**

Index of colonization potential (ICP): **1**

Optimum successional age [years]: **75**

Distribution and frequency

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

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **8**

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: 663

taxon.data.freq_in_quad: 2302

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **6.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **23.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **6.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1 %**

Mean percentage cover in vegetation plots: **6.5 %**

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: **32**

Number of narrow habitats in which the taxon has its optimum: **12**

Number of broad habitats in which the taxon occurs: **10**

Number of broad habitats in which the taxon has its optimum: **5**

Threats and protection

Legal protection: **not protected by law**