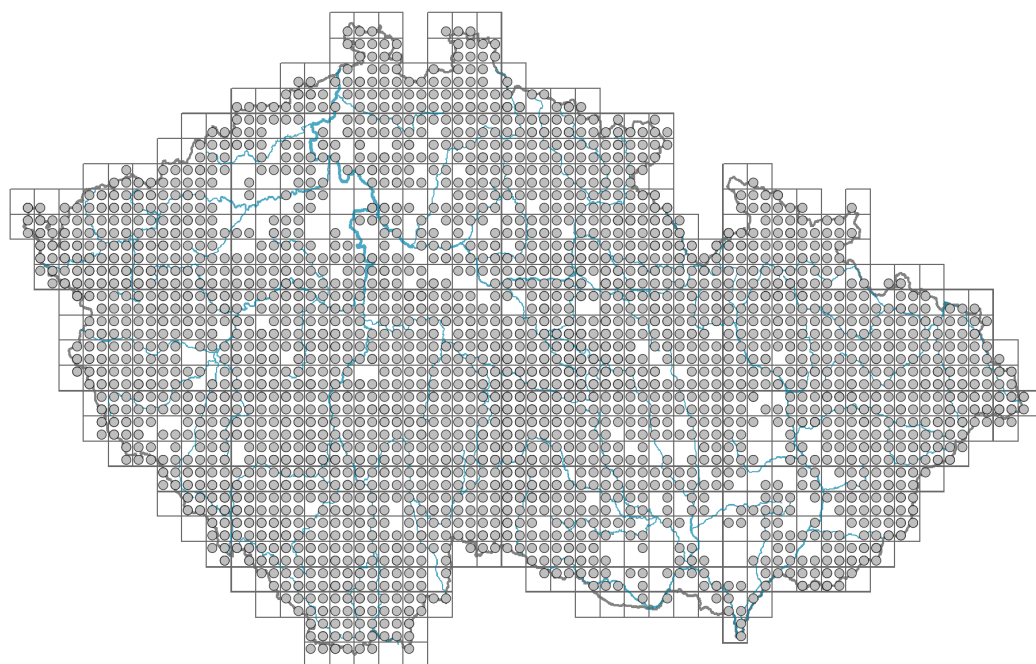


Caltha palustris

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]: **0.2-0.7**

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**

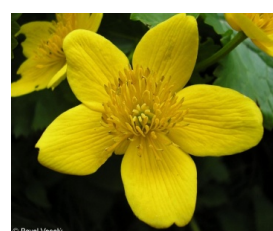
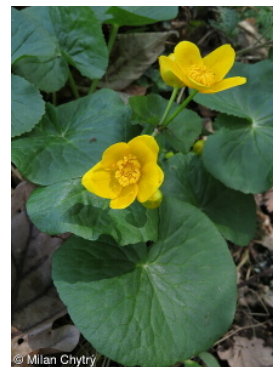
Leaf anatomy: **hygromorphic, helomorphic**

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]:
 Number of clonal offspring:
 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):
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded):
 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):
 Number of buds per shoot at a depth greater than 10 cm (root buds included):
 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

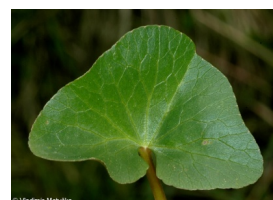
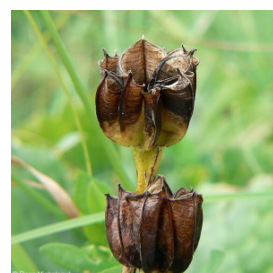
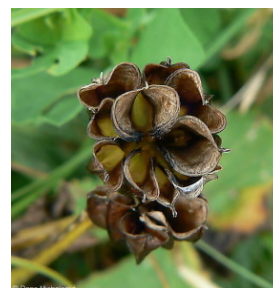
Diagnostic taxon of classes: [LA Alnetea glutinosae](#)

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](#)

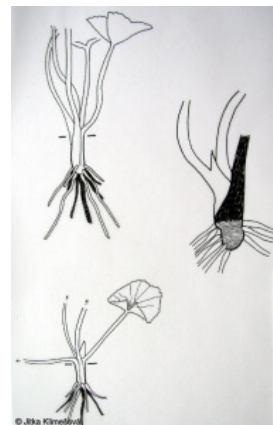
Constant taxon

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: **653**

taxon.data.freq_in_quad: **2195**

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**