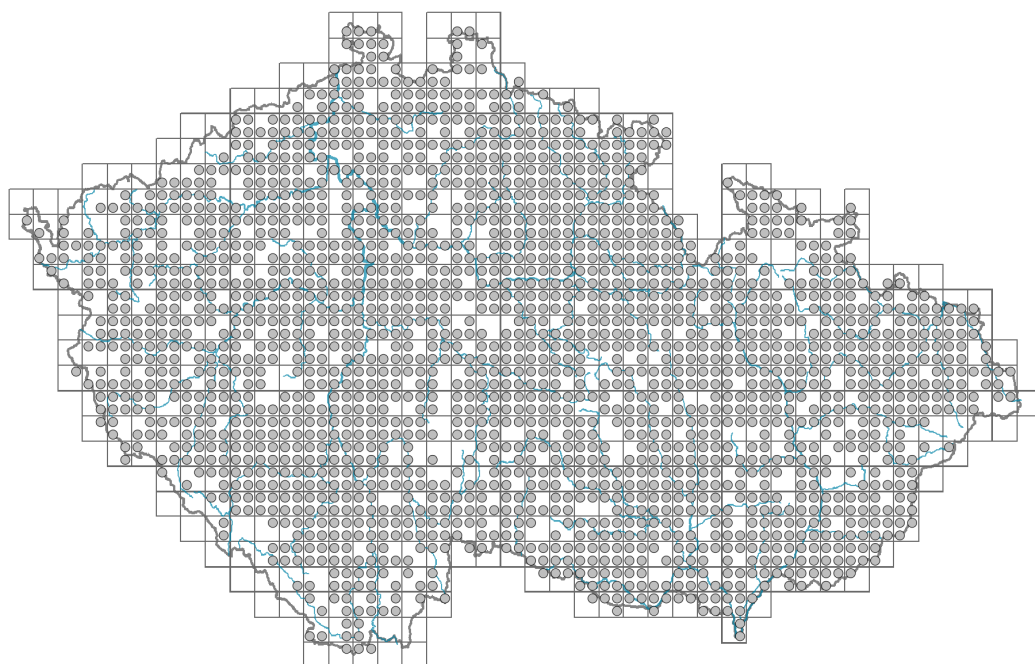


# *Chelidonium majus*

## 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.



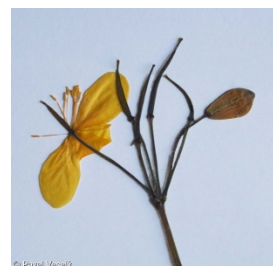
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## Habitus and growth type

Height [m]: **0.3-0.9**

Growth form: **polycarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CR - competitor/ruderal**

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

Life strategy (Pierce method, C-score): **54.7 %**

Life strategy (Pierce method, S-score): **6.6 %**

Life strategy (Pierce method, R-score): **38.8 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **compound - imparipinnate, compound - interruptedly pinnate**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **hygromorphic**

## Flower

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

Flowering phase: **4 Fagus sylvatica-Galeobdolon (start of mid-spring)**

Flower colour: **yellow**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

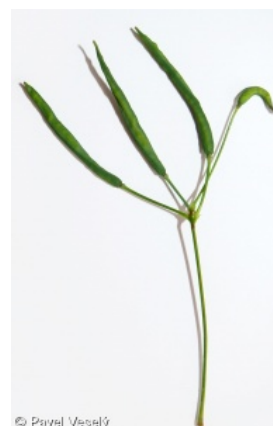
Calyx fusion: **aposepalous**

Inflorescence type: **umbella**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

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



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

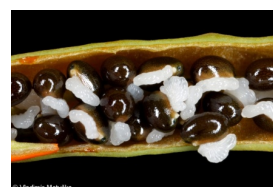
Fruit colour: **brown**

Reproduction type: **only by seed/spores**

Dispersal unit (diaspore): **seed**

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

Myrmecochory: **myrmecochorous**



## Belowground organs and clonality

Shoot metamorphosis: **pleiocorm**

Root metamorphosis: **primary storage root**

Storage organ: **pleiocorm, primary storage root**

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

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

Primary root: **present**

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): **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): **20**

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

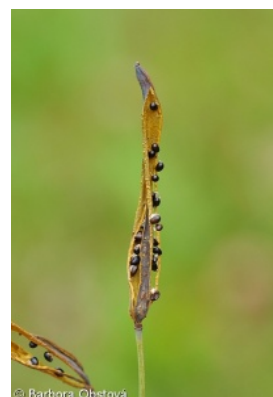
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Size of the belowground bud bank (root buds included): **20**

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): **12**

Ploidy level (x): **2**

2C genome size [Mbp]: **1967.35**

1Cx monoploid genome size [Mbp]: **983.67**

Genomic GC content: **40.2 %**

## Taxon origin

Origin in the Czech Republic: **native**

Geographic origin: **Europe, Mediterranean, Asia**

## 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: **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: **7x - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions (generalist)**

Nutrient indicator value: **8 - pronounced nutrient indicator**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.4**

Herb layer disturbance frequency indicator value: **-0.93**

Whole-community disturbance severity indicator value: **0.44**

Herb layer disturbance severity indicator value: **0.4**

Whole-community structure based disturbance indicator value: **0.3**

Herb layer structure-based disturbance indicator value: **0.29**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **2 - optimum**

1B Siliceous cliffs and block fields: **1 - rare occurrence**

1C Walls: **2 - optimum**

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

4 Wetland and riverine herbaceous vegetation

4L Nitrophilous herbaceous fringes of lowland rivers: **2 - optimum**

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**

11 Heathlands and scrub

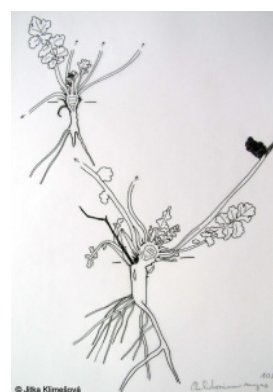
11L Tall mesic and xeric shrub: **2 - optimum**

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

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

12 Forests

12B Alluvial forests: **1 - rare occurrence**





12C Oak-hornbeam forests: **1 - rare occurrence**  
 12D Ravine forests: **2 - optimum**  
 12E Herb-rich beech forests: **1 - rare occurrence**  
 12F Limestone beech forests: **1 - rare occurrence**  
 12G Acidophilous beech forests: **1 - rare occurrence**  
 12H Peri-Alpidic basiphilous 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: **2 - optimum**  
 12U Plantations of broad-leaved non-native trees: **2 - optimum**  
 12V Spruce plantations: **1 - rare occurrence**  
 12W Pine and larch plantations: **1 - rare occurrence**  
**13 Anthropogenic vegetation**  
 13A Annual vegetation of ruderal habitats: **2 - optimum**  
 13D Perennial thermophilous ruderal vegetation: **2 - optimum**  
 13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**  
 13F Herbaceous vegetation of forests clearings and Rubus scrub: **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: [KB Rhamno-Prunetea](#), [SB Cymbalario muralis-Parietarietea judaicae](#)  
 Diagnostic taxon of alliances: [KBD Aegopodio podagrariae-Sambucion nigrae](#), [KBE Chelidonio majoris-Robinion pseudoacaciae](#), [SBA Cymbalario muralis-Asplenion](#), [XDD Geo urbani-Alliarion petiolatae](#)  
 Diagnostic taxon of associations: [KBD01 Sambucetum nigrae](#), [KBE01 Chelidonio majoris-Robinietum pseudoacaciae](#), [SBA01 Cymbalarietum muralis](#), [XDD01 Alliarion petiolatae-Chaerophylletum temuli](#), [XDD03 Anthriscetum trichospermae](#)  
**Constant taxon**  
 Constant taxon of classes: [SB Cymbalario muralis-Parietarietea judaicae](#)  
 Constant taxon of alliances: [KBE Chelidonio majoris-Robinion pseudoacaciae](#), [KBF Balloto nigrae-Robinion pseudoacaciae](#), [SBA Cymbalario muralis-Asplenion](#), [XDD Geo urbani-Alliarion petiolatae](#)  
 Constant taxon of associations: [KBD01 Sambucetum nigrae](#), [KBE01 Chelidonio majoris-Robinietum pseudoacaciae](#), [KBE02 Poo nemoralis-Robinietum pseudoacaciae](#), [KBF01 Arrhenathero elatioris-Robinietum pseudoacaciae](#), [SBA01 Cymbalarietum muralis](#), [XDD01 Alliarion petiolatae-Chaerophylletum temuli](#), [XDD03 Anthriscetum trichospermae](#)  
**Dominant taxon**  
 Dominant taxon of associations: [KBD01 Sambucetum nigrae](#), [KBE01 Chelidonio majoris-Robinietum pseudoacaciae](#), [XDD01 Alliarion petiolatae-Chaerophylletum temuli](#)  
**Ecological specialization indices**  
 Ecological specialization index for all vegetation types: **3.8**  
 Ecological specialization index for non-forest vegetation: **4**



Ecological specialization index for forest vegetation: **4.8**

### Colonization ability

Index of colonization success (ICS): **6**

Index of colonization potential (ICP): **6**

Optimum successional age [years]: **29**

### Distribution and frequency

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

Floristic region: **Europe, Asia**

Distribution range extension along the continentality gradient: **7**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **630**

taxon.data.freq\_in\_quad: **2002**

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **18.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **6.6 %**

Occurrence frequency in vegetation plots with a cover above 50%: **2.1 %**

Mean percentage cover in vegetation plots: **6.2 %**

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: **26**

Number of narrow habitats in which the taxon has its optimum: **11**

Number of broad habitats in which the taxon occurs: **6**

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

### 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**