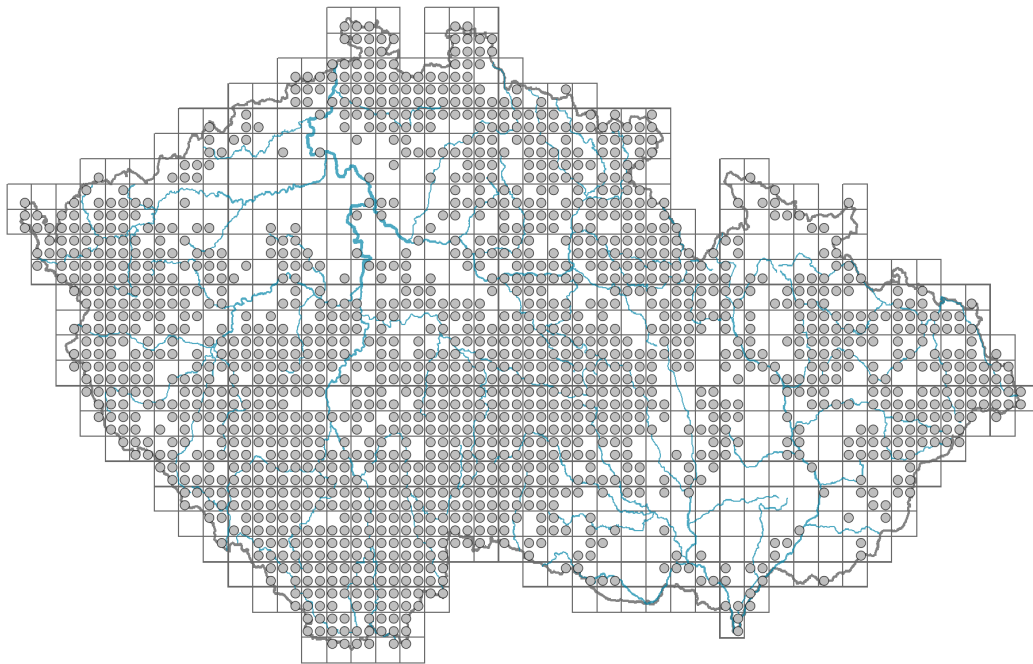


# *Ranunculus flammula*

## 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]: **0.2-0.5**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **41.5 %**

Life strategy (Pierce method, S-score): **9 %**

Life strategy (Pierce method, R-score): **49.5 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

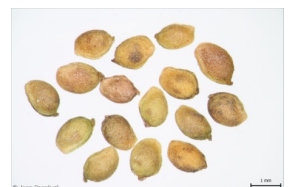
Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **helomorphic**

## Flower

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



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

Flower colour: **yellow**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **aposepalous**

Inflorescence type: **anthella**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

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

Pollinator spectrum: **hoverflies, flies s. l., other Diptera (bumblebees, solitary bees, other Hymenoptera, meat flies s. l., butterflies, beetles, nitidulids, other pollinators)**

### Fruit, seed and dispersal

Fruit type: **dry fruit - head of achenes**

Fruit colour: **brown**

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

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

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

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

### Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

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

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

Shoot life span (cyclicity): **monocyclic shoots prevailing**

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

Primary root: **absent**

Persistence of the clonal growth organ [year]: **1.4**

Number of clonal offspring: **1**

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): **5**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **4**

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): **9**

Depth of the belowground bud bank (root buds excluded) [cm]: **3**

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): **4**

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): **9**

Depth of the belowground bud bank (root buds included) [cm]: **3**



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **32**

Ploidy level (x): **4**

2C genome size [Mbp]: **11089.31**

1Cx monoploid genome size [Mbp]: **2772.33**

Genomic GC content: **43.3 %**

## Taxon origin

Origin in the Czech Republic: **native**



## Ecological indicator values

### Ellenberg-type indicator values

Light indicator value: **7 - half-light plant, mostly occurring at full light, but also in the shade up to about 30% of diffuse radiation incident in an open area**

Temperature indicator value: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

Moisture indicator value: **9 - wetness indicator, focus on often soaked, poorly aerated soils**

Reaction indicator value: **3 - acidity indicator, occurring mainly in acidic conditions, exceptionally in neutral conditions**

Nutrient indicator value: **3 - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**

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

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.83**

Herb layer disturbance frequency indicator value: **-0.61**

Whole-community disturbance severity indicator value: **0.19**

Herb layer disturbance severity indicator value: **0.23**

Whole-community structure based disturbance indicator value: **0.6**

Herb layer structure-based disturbance indicator value: **0.66**

## Habitat and sociology

### Occurrence in habitats

3 Aquatic vegetation

3C Macrophytic vegetation of oligotrophic lakes and pools: **3 - dominant**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 - rare occurrence**

4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**

4E Reed vegetation of brooks: **2 - optimum**

- 4G Tall-sedge beds: **1 - rare occurrence**
- 4H Vegetation of low annual hygrophilous herbs: **2 - optimum**
- 4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**
- 4J River gravel banks: **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: **2 - optimum**
- 5F Transitional mires: **2 - optimum**
- 5H Wet peat soils and bog hollows: **1 - rare occurrence**
- 6 Meadows and mesic pastures
- 6B Montane mesic meadows: **1 - rare occurrence**
- 6C Pastures and park grasslands: **1 - rare occurrence**
- 6D Alluvial meadows of lowland rivers: **2 - optimum**
- 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
- 7A Subalpine and montane acidophilous grasslands: **1 - rare occurrence**
- 7B Submontane *Nardus* grasslands: **1 - rare occurrence**
- 10 Saline vegetation
- 10I Inland saline meadows: **1 - rare occurrence**
- 11 Heathlands and scrub
- 11I Willow carrs: **1 - rare occurrence**
- 12 Forests
- 12A Alder carrs: **2 - optimum**
- 12P Peatland pine forests: **1 - rare occurrence**
- 12Q Peatland birch forests: **1 - rare occurrence**
- Affinity to the forest environment
- Affinity to the forest environment in Thermophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**
- Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**
- Diagnostic taxon
- Diagnostic taxon of classes: [VD \*Littorelletea uniflorae\*](#)
- Diagnostic taxon of alliances: [VDB \*Eleocharition acicularis\*](#)
- Diagnostic taxon of associations: [MCG05 \*Caricetum diandrae\*](#), [VDB02 \*Ranunculo-Juncetum bulbosi\*](#)
- Constant taxon
- Constant taxon of associations: [MCG05 \*Caricetum diandrae\*](#), [VDB02 \*Ranunculo-Juncetum bulbosi\*](#)
- Dominant taxon
- Dominant taxon of associations: [VDB02 \*Ranunculo-Juncetum bulbosi\*](#)
- Ecological specialization indices
- Ecological specialization index for all vegetation types: **4.6**

Ecological specialization index for non-forest vegetation: **4.6**

Ecological specialization index for forest vegetation: **5.2**

### Colonization ability

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

Index of colonization potential (ICP): **3**

Optimum successional age [years]: **10**

### Distribution and frequency

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

Floristic region: **Europe, Western Siberia**

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

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: **561**

taxon.data.freq\_in\_quad: **1585**

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **9.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **3 %**

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

Mean percentage cover in vegetation plots: **4 %**

Maximum percentage cover in vegetation plots: **63 %**

### Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **27**

Number of narrow habitats in which the taxon has its optimum: **8**

Number of broad habitats in which the taxon occurs: **8**

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**