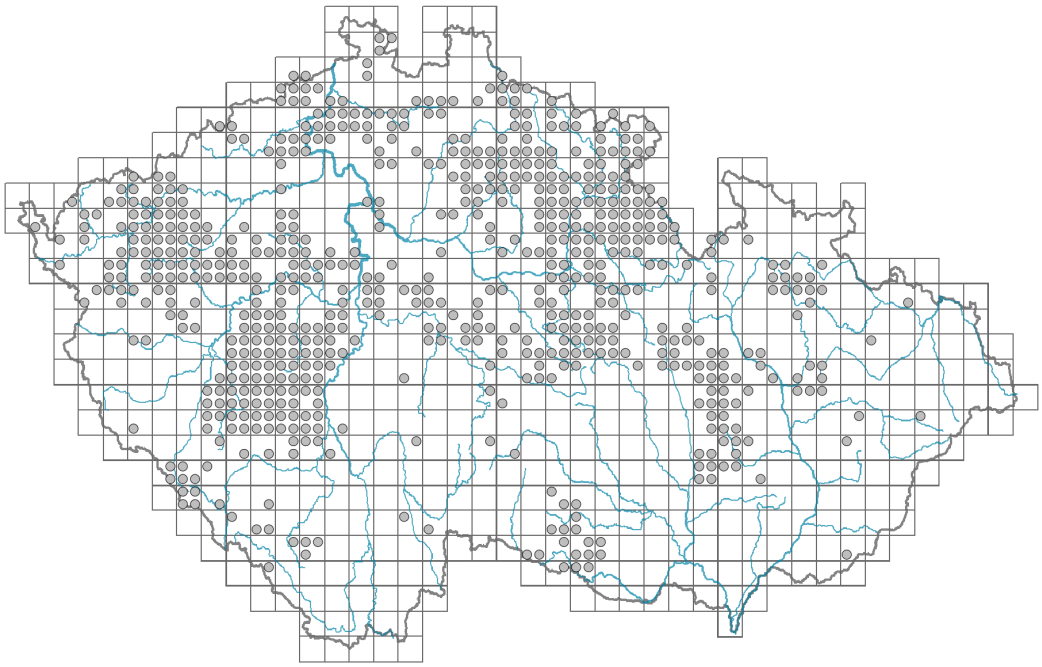
Trollius altissimus

Distribution



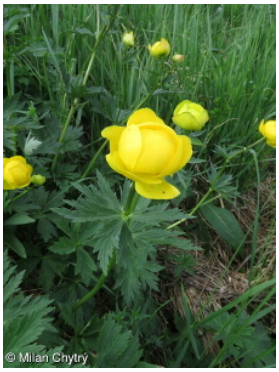


Map info

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]: **0.3–0.7**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **C/CSR**
Life strategy (Pierce method, C-score): **57.1 %**
Life strategy (Pierce method, S-score): **11.9 %**
Life strategy (Pierce method, R-score): **31.1 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate, rosulate**
Leaf shape: **simple – palmately divided**
Stipules: **absent**
Petiole: **present**
Leaf life span: **summer green**
Leaf anatomy: **mesomorphic**

Flower

Flowering period [month]: **May–June**

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Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**
Flower colour: **yellow**
Flower symmetry: **actinomorphic**
Perianth type: **homochlamydeous**
Perianth fusion: **free**
Inflorescence type: **flores solitarii**
Dicliny: **synoecious**
Generative reproduction type: **allogamy self-incompatibility**
Pollination syndrome: **insect-pollination**
Pollinator spectrum: **flies s. l., beetles (other Hymenoptera, hoverflies, other Diptera, nitidulids)**





Fruit, seed and dispersal

Fruit type: **dry fruit – cluster of follicles**
Fruit colour: **brown**
Reproduction type: **by seed/spores and vegetatively**
Dispersal unit (diaspore): **seed**
Dispersal strategy: **Allium (mainly autochory)**
Myrmecochory: **probably 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 (cyclicity): **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]: **3.3**
Number of clonal offspring: **1.8**
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): **5**
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **13**
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): **18**
Depth of the belowground bud bank (root buds exluded) [cm]: **4**
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): **13**
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): **18**
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): **16**
Ploidy level (x): **2**
2C genome size [Mbp]: **8053.58**
1Cx monoploid genome size [Mbp]: **4026.79**
Genomic GC content: **41.8 %**



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: **4 – transition between values 3 and 5**
Moisture indicator value: **7 – humidity indicator, focus on well moistened, but not wet soils**
Reaction indicator value: **6 – transition between values 5 and 7**
Nutrient indicator value: **5 – occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites**
Salinity indicator value: **0 – not salt tolerant, glycophyte**



Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.55**
Herb layer disturbance frequency indicator value: **-0.31**
Whole-community disturbance severity indicator value: **0.26**
Herb layer disturbance severity indicator value: **0.29**
Whole-community structure based disturbance indicator value: **0.52**
Herb layer structure-based disturbance indicator value: **0.67**



Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **2 – optimum**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 – rare occurrence**
5C Alpine and subalpine soft-water springs: **2 – optimum**
5D Calcareous fens: **2 – optimum**
5E Acidic moss-rich fens and peatland meadows: **1 – rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 – rare occurrence**
6B Montane mesic meadows: **1 – rare occurrence**



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6D Alluvial meadows of lowland rivers: **1 – rare occurrence**
6E Wet Cirsium meadows: **2 – optimum**
6F Intermittently wet Molinia meadows: **2 – optimum**

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 – rare occurrence**
7B Submontane Nardus grasslands: **1 – rare occurrence**

11 Heathlands and scrub

11H Subalpine deciduous scrub: **1 – rare occurrence**
11I Willow carrs: **1 – rare occurrence**

12 Forests

12A Alder carrs: **1 – rare occurrence**
12B Alluvial 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 associations: **ADD03 *Trollio altissimi-Geranietum sylvatici***, **ADD04 *Laserpitio archangelicae-Dactylidetum glomeratae***, **RAD02 *Swertietum perennis***

Constant taxon

Constant taxon of associations: **ADD03 *Trollio altissimi-Geranietum sylvatici***, **ADD04 *Laserpitio archangelicae-Dactylidetum glomeratae***

Ecological specialization indices



Ecological specialization index for all vegetation types: **6.1**
Ecological specialization index for non-forest vegetation: **6.2**
Ecological specialization index for forest vegetation: **5.5**

Colonization ability

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

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional**
Floristic region: **Europe**
Continentality degree: **5**
Distribution range extension along the continentality gradient: **4**
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: 294
taxon.data.freq_in_quad: 657

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.7 %**
Occurrence frequency in vegetation plots with a cover above 5%: **20.5 %**
Occurrence frequency in vegetation plots with a cover above 25%: **7 %**

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Occurrence frequency in vegetation plots with a cover above 50%: **2.3 %**
Mean percentage cover in vegetation plots: **6.8 %**
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: **16**
Number of narrow habitats in which the taxon has its optimum: **5**
Number of broad habitats in which the taxon occurs: **6**
Number of broad habitats in which the taxon has its optimum: **3**

Threats and protection

Red List 2017 (national categories): **C3 – vulnerable taxon**
Red List 2017 (IUCN categories): **VU – vulnerable**
Legal protection: **vulnerable taxon**

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