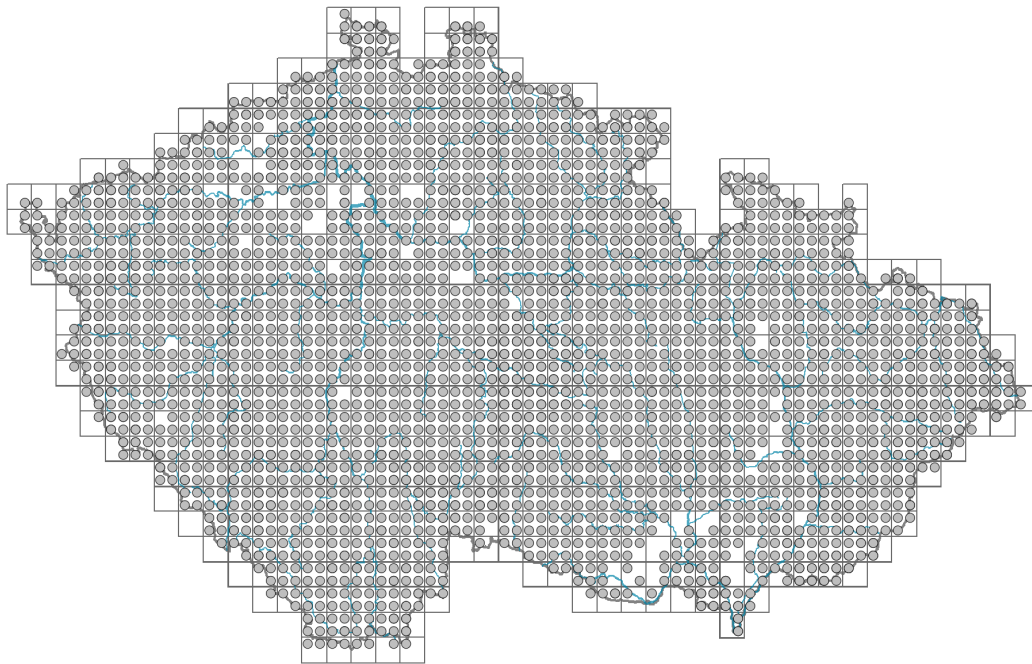


# Ranunculus acris

## Distribution



© Pavel Veselý

### Map info

● revised records

○ unrevised records

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



© Jan Lukavský (flora.upol.cz)

## Habitus and growth type

Height [m]: **0.3-1.2**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

Life strategy (Pierce method based on leaf traits): **R/CSR**

Life strategy (Pierce method, C-score): **26.9 %**

Life strategy (Pierce method, S-score): **21.8 %**

Life strategy (Pierce method, R-score): **51.3 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate, rosulate**

Leaf shape: **simple - palmately divided**

Stipules: **absent**

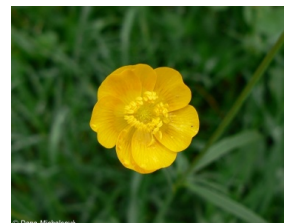
Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**



© Pavel Veselý



© Dana Moháčková

## 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, gynomonoecious**

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

Pollination syndrome: **insect-pollination**

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

### Fruit, seed and dispersal

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

Fruit colour: **brown**

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

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

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

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

### 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]: **2.8**

Number of clonal offspring: **2.1**

Lateral spreading distance by clonal growth [m]: **0.02**

Clonal index: **3**

### Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **6**

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

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): **16**

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

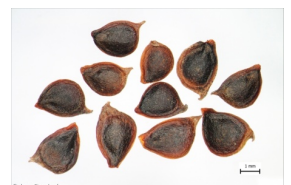
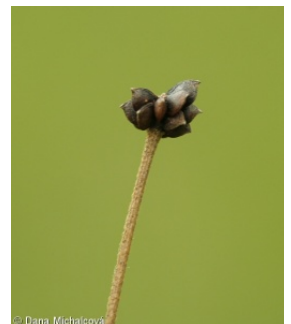
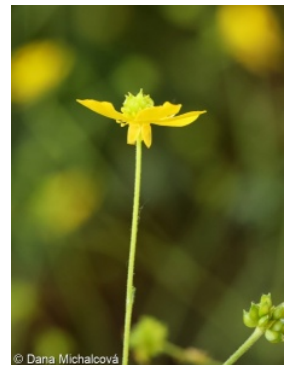
Number of buds per shoot at the soil surface (root buds included): **6**

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

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): **16**

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): **16 (32)**

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

2C genome size [Mbp]: **8092.43**

1Cx monoploid genome size [Mbp]: **4046.21**

Genomic GC content: **43 %**



## 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: **5x - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**

Moisture indicator value: **6 - transition between values 5 and 7**

Reaction indicator value: **6x - transition between values 5 and 7 (generalist)**

Nutrient indicator value: **5x - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites (generalist)**

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

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.35**

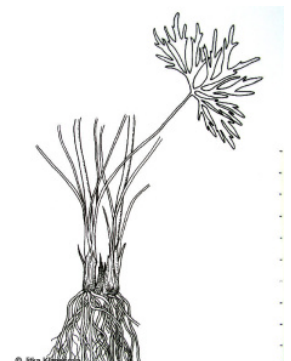
Herb layer disturbance frequency indicator value: **-0.25**

Whole-community disturbance severity indicator value: **0.29**

Herb layer disturbance severity indicator value: **0.32**

Whole-community structure based disturbance indicator value: **0.61**

Herb layer structure-based disturbance indicator value: **0.76**



## Habitat and sociology

### Occurrence in habitats

2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **1 - rare occurrence**

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

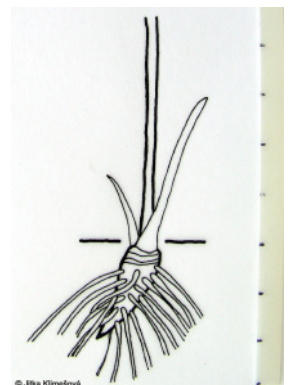
4 Wetland and riverine herbaceous vegetation

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

4B Halophilous reed and sedge beds: **1 - rare occurrence**

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

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



- 4G Tall-sedge beds: **1 - rare occurrence**
- 4K Petasites fringes of montane brooks: **1 - rare occurrence**
- 4L Nitrophilous herbaceous fringes of lowland rivers: **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: **2 - optimum**
- 5E Acidic moss-rich fens and peatland meadows: **2 - optimum**
- 5F Transitional mires: **1 - rare occurrence**
- 5H Wet peat soils and bog hollows: **1 - rare occurrence**
- 6 Meadows and mesic pastures
- 6A Mesic Arrhenatherum meadows: **2 - optimum**
- 6B Montane mesic meadows: **2 - optimum**
- 6C Pastures and park grasslands: **2 - optimum**
- 6D Alluvial meadows of lowland rivers: **2 - optimum**
- 6E Wet Cirsium meadows: **2 - optimum**
- 6F Intermittently wet Molinia meadows: **2 - optimum**
- 6G Vegetation of wet disturbed soils: **1 - rare occurrence**
- 7 Acidophilous grasslands
- 7A Subalpine and montane acidophilous grasslands: **2 - optimum**
- 7B Submontane Nardus grasslands: **2 - optimum**
- 8 Dry grasslands
- 8D Broad-leaved dry grasslands: **1 - rare occurrence**
- 8E Acidophilous dry grasslands: **1 - rare occurrence**
- 8F Thermophilous forest fringe vegetation: **1 - rare occurrence**
- 9 Sand grasslands and rock-outcrop vegetation
- 9C Festuca grasslands on acidic sands: **1 - rare occurrence**
- 9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**
- 10 Saline vegetation
- 10I Inland saline meadows: **1 - rare occurrence**
- 11 Heathlands and scrub
- 11A Dry lowland to subalpine heathlands: **1 - rare occurrence**
- 11D Subalpine acidophilous Pinus mugo scrub: **1 - rare occurrence**
- 11H Subalpine deciduous scrub: **1 - rare occurrence**
- 11I Willow carrs: **1 - rare occurrence**
- 11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**
- 11L Tall mesic and xeric shrub: **1 - rare occurrence**
- 11N Low xeric scrub: **1 - rare occurrence**
- 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**
- 12 Forests
- 12A Alder carrs: **1 - rare occurrence**
- 12B Alluvial forests: **1 - rare occurrence**
- 12U Plantations of broad-leaved non-native trees: **2 - optimum**
- 13 Anthropogenic vegetation
- 13C Annual vegetation of trampled habitats: **1 - rare occurrence**
- 13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Diagnostic taxon

Diagnostic taxon of classes: [TD \*Molinio-Arrhenatheretea\*](#)

Diagnostic taxon of alliances: [TDD \*Molinion caeruleae\*](#)

Constant taxon

Constant taxon of classes: [TD \*Molinio-Arrhenatheretea\*](#)

Constant taxon of alliances: [RBA \*Caricion davallianae\*](#), [TDA \*Arrhenatherion elatioris\*](#), [TDB \*Polygono bistortae-Trisetion flavescens\*](#), [TDD \*Molinion caeruleae\*](#), [TDE \*Deschampsion cespitosae\*](#), [TDF \*Calthion palustris\*](#), [TEB \*Nardo strictae-Agrostion tenuis\*](#), [TEC \*Violion caninae\*](#)

Constant taxon of associations: [ADA03 \*Violo sudeticae-Deschampsietum cespitosae\*](#), [ADD03 \*Trollio altissimi-Geranium sylvatici\*](#), [KAB02 \*Salicetum purpureae\*](#), [RBA01 \*Valeriano dioicae-Caricetum davallianae\*](#), [RBA02 \*Carici flavae-Cratoneuretum filicini\*](#), [RBA03 \*Valeriano simplicifoliae-Caricetum flavae\*](#), [RBB01 \*Sphagno warnstorffii-Eriophoretum latifolii\*](#), [TDA01 \*Pastinaco sativae-Arrhenatheretum elatioris\*](#), [TDA02 \*Ranunculo bulbosi-Arrhenatheretum elatioris\*](#), [TDA03 \*Poo-Trisetetum flavescens\*](#), [TDA04 \*Potentillo albae-Festucetum rubrae\*](#), [TDB01 \*Geranio sylvatici-Trisetetum flavescens\*](#), [TDB02 \*Melandrio rubri-Phleetum alpini\*](#), [TDB03 \*Meo athamantici-Festucetum rubrae\*](#), [TDC01 \*Lolio perennis-Cynosuretum cristati\*](#), [TDC05 \*Alchemillo hybridae-Poëtum supinae\*](#), [TDD01 \*Molinietum caeruleae\*](#), [TDD02 \*Junco effusi-Molinietum caeruleae\*](#), [TDE01 \*Poo trivialis-Alopecuretum pratensis\*](#), [TDE02 \*Holcetum lanati\*](#), [TDE04 \*Cnidio dubii-Deschampsietum cespitosae\*](#), [TDE05 \*Scutellario hastifoliae-Veronicetum longifoliae\*](#), [TDF01 \*Angelico sylvestris-Cirsietum oleracei\*](#), [TDF02 \*Cirsietum rivularis\*](#), [TDF03 \*Angelico sylvestris-Cirsietum palustris\*](#), [TDF04 \*Crepido paludosae-Juncetum acutiflori\*](#), [TDF05 \*Polygono bistortae-Cirsietum heterophylli\*](#), [TDF06 \*Chaerophyllo hirsuti-Calthetum palustris\*](#), [TDF07 \*Scirpo sylvatici-Cirsietum cani\*](#), [TDF08 \*Scirpetum sylvatici\*](#), [TDF09 \*Caricetum cespitosae\*](#), [TDF10 \*Scirpo sylvatici-Caricetum brizoidis\*](#), [TEB01 \*Sileno vulgaris-Nardetum strictae\*](#), [TEC01 \*Festuco capillatae-Nardetum strictae\*](#), [TEC02 \*Campanulo rotundifoliae-Dianthetum deltoidis\*](#)

Dominant taxon

Dominant taxon of associations: [TDF03 \*Angelico sylvestris-Cirsietum palustris\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.4**

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

Ecological specialization index for forest vegetation: **4.3**

Colonization ability

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

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

Optimum successional age [years]: **33**

## Distribution and frequency

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

Floristic region: **Europe, Western Siberia**

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

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: **668**

taxon.data.freq\_in\_quad: **2424**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **9.4 %**

Occurrence frequency in vegetation plots with a cover above 5%: **11.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **3.9 %**

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: **45**

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

Number of broad habitats in which the taxon occurs: **11**

Number of broad habitats in which the taxon has its optimum: **4**

## 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**