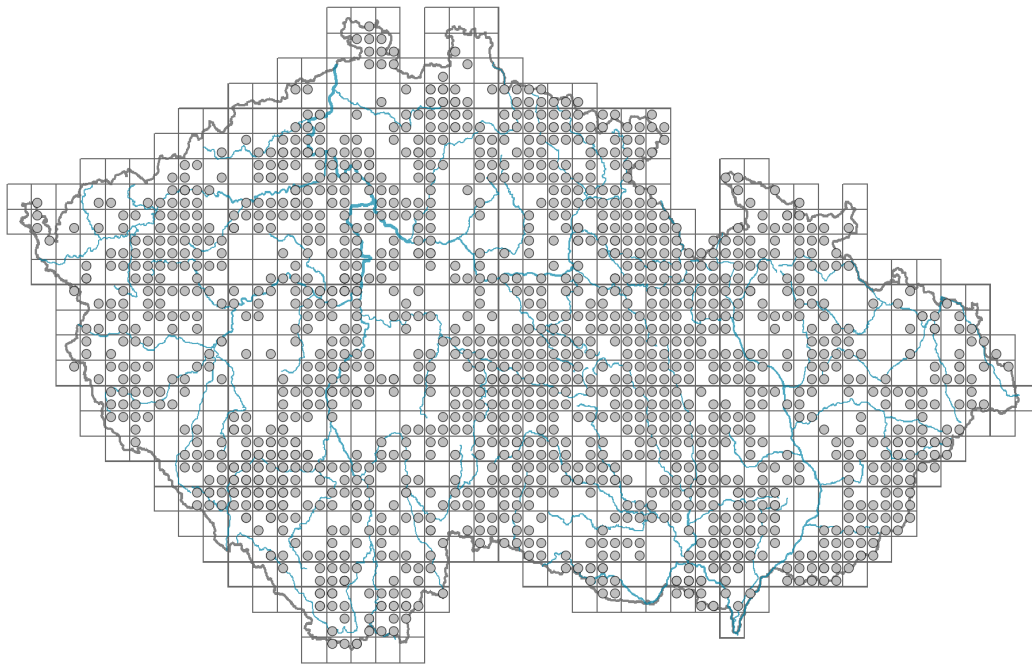


# *Anthyllis vulneraria*

## 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.

## Habitus and growth type

Height [m]: **0.15-0.5**

Growth form: **polycarpic perennial non-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): **51.6 %**

Life strategy (Pierce method, S-score): **4.6 %**

Life strategy (Pierce method, R-score): **43.8 %**

## Leaf

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

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

Leaf shape: **compound - imparipinnate**

Stipules: **present**

Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **mesomorphic**

## Flower

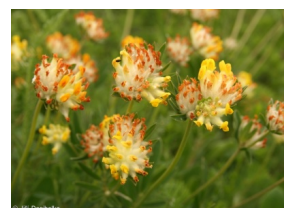
Flowering period [month]: **June-July**



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© Petr Hrbáč



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

Flower colour: **white, yellow, pink**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **synsepalous**

Inflorescence type: **capitulum**

Dicliny: **synoecious, gynodioecious**

Generative reproduction type: **mixed mating**

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

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



## Fruit, seed and dispersal

Fruit type: **dry fruit - legume**

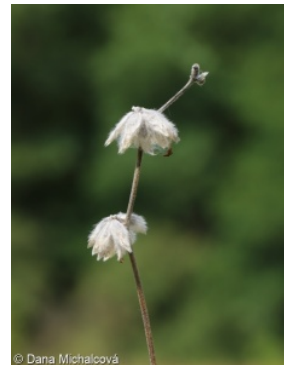
Fruit colour: **brown**

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

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

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

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



## Belowground organs and clonality

Shoot metamorphosis: **pleiocorm**

Storage organ: **pleiocorm**

Shoot life span (cyclicality): **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): **6**

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): **11**

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): **6**

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): **11**

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



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **symbiosis with rhizobia**



## Karyology

Chromosome number (2n): **12**

Ploidy level (x): **2**

2C genome size [Mbp]: **785.12**

1Cx monoploid genome size [Mbp]: **392.56**

Genomic GC content: **41.1 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

### Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% 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: **4 - transition between values 3 and 5**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic 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: **-0.43**

Herb layer disturbance frequency indicator value: **-0.13**

Whole-community disturbance severity indicator value: **0.26**

Herb layer disturbance severity indicator value: **0.29**

Whole-community structure based disturbance indicator value: **0.55**

Herb layer structure-based disturbance indicator value: **0.65**

## Habitat and sociology

### Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

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

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

6C Pastures and park grasslands: **2 - optimum**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **1 - rare occurrence**

8 Dry grasslands

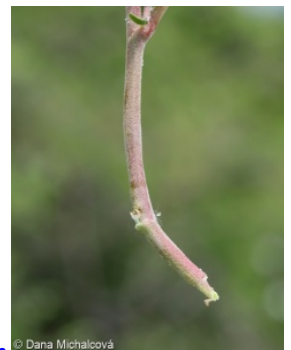
8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**

8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**



- 8D Broad-leaved dry grasslands: **2 - optimum**  
 8E Acidophilous dry grasslands: **2 - optimum**  
 8F Thermophilous forest fringe vegetation: **1 - rare occurrence**  
 9 Sand grasslands and rock-outcrop vegetation  
 9B Open vegetation of acidic sands: **1 - rare occurrence**  
 9C Festuca grasslands on acidic sands: **1 - rare occurrence**  
 9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**  
 9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**  
 11 Heathlands and scrub  
 11A Dry lowland to subalpine heathlands: **1 - rare occurrence**  
 11L Tall mesic and xeric shrub: **1 - rare occurrence**  
 11N Low xeric scrub: **1 - rare occurrence**



- 12 Forests  
 12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**  
 12O Peri-Alpidic pine forests: **1 - rare occurrence**  
 12W Pine and larch plantations: **1 - rare occurrence**  
 13 Anthropogenic vegetation  
 13D Perennial thermophilous ruderal vegetation: **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 alliances: [THF \*Bromion erecti\*](#)

Diagnostic taxon of associations: [SCA03 \*Teucrio botryos-Melicetum ciliatae\*](#), [TDC02 \*Anthoxantho odorati-Agrostietum tenuis\*](#), [THC02 \*Minuartio setaceae-Seslerietum caeruleae\*](#), [THF01 \*Carlino acaulis-Brometum erecti\*](#)

#### Constant taxon

Constant taxon of associations: [SCA03 \*Teucrio botryos-Melicetum ciliatae\*](#), [THC02 \*Minuartio setaceae-Seslerietum caeruleae\*](#), [THF01 \*Carlino acaulis-Brometum erecti\*](#)

#### Ecological specialization indices

Ecological specialization index for all vegetation types: **5.2**

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

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

#### Colonization ability

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

Index of colonization potential (ICP): **7**

Optimum successional age [years]: **18**

#### Distribution and frequency

Floristic zone: **boreal, meridional**

Floristic region: **Europe**

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

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: 554

taxon.data.freq\_in\_quad: 1378

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.9 %**

Occurrence frequency in vegetation plots with a cover above 5%: **8.9 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.8 %**

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

Mean percentage cover in vegetation plots: **3.5 %**

Maximum percentage cover in vegetation plots: **38 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **23**

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

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

Number of broad habitats in which the taxon has its optimum: **2**

### **Threats and protection**

Legal protection: **not protected by law**