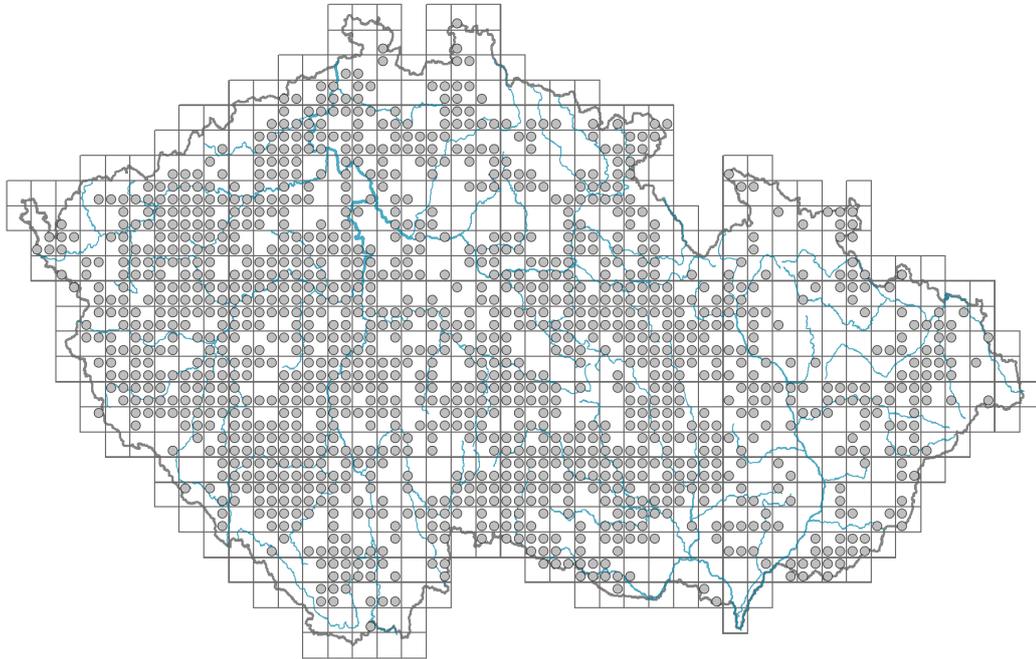


# Potentilla verna

## 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]: **0.02-0.2**

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): **S/CS**

Life strategy (Pierce method, C-score): **14.4 %**

Life strategy (Pierce method, S-score): **72.2 %**

Life strategy (Pierce method, R-score): **13.4 %**

## Leaf

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

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

Leaf shape: **compound - palmate (5-foliate), compound - palmate (7-foliate)**

Stipules: **present**

Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

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



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© Dana Michalčová



© Dana Michalčová

Flowering phase: **3 Prunus avium-Ranunculus auricomus (end of early 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: **apomixis**

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

Pollinator spectrum: **solitary bees, hoverflies (other Hymenoptera)**

### 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: **myrmecochorous**

### Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

Primary root: **present**

Bud bank

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

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

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

Size of the belowground bud bank (root buds excluded):

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

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

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

Number of buds per shoot at a depth greater than 10 cm (root buds included):

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

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

### Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

### Karyology

Chromosome number (2n): **42 (35)**

Ploidy level (x): **6 (5)**

2C genome size [Mbp]: **1589.54**



1Cx monoploid genome size [Mbp]: **264.92**

Genomic GC content: **41.7 %**

## 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: **6 - transition between values 5 and 7**

Moisture indicator value: **3 - missing on damp soil**

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

Nutrient indicator value: **2 - transition between values 1 and 3**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.46**

Herb layer disturbance frequency indicator value: **-0.38**

Whole-community disturbance severity indicator value: **0.27**

Herb layer disturbance severity indicator value: **0.3**

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

Herb layer structure-based disturbance indicator value: **0.68**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

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

7 Acidophilous grasslands

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

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**

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

8C Narrow-leaved sub-continental steppes: **2 - optimum**

8D Broad-leaved dry grasslands: **2 - optimum**

8E Acidophilous dry grasslands: **3 - dominant**

8F Thermophilous forest fringe vegetation: **2 - optimum**

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: **3 - dominant**

9F Basiphilous vegetation of spring therophytes and succulents: **2 - optimum**

## 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**

12I Sub-continental thermophilous oak forests: **1 - rare occurrence**

12J Acidophilous thermophilous oak forests: **1 - rare occurrence**

12K Acidophilous oak forests: **1 - rare occurrence**

12L Boreo-continental pine forests: **1 - rare occurrence**

12O Peri-Alpidic pine forests: **1 - rare occurrence**

12W Pine and larch plantations: **1 - rare occurrence**

## 13 Anthropogenic vegetation

13C Annual vegetation of trampled habitats: **1 - rare occurrence**

13D Perennial thermophilous ruderal vegetation: **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: [TFD \*Hyperico perforati-Scleranthion perennis\*](#), [THF \*Bromion erecti\*](#)

Diagnostic taxon of associations: [TFD01 \*Polytricho piliferi-Scleranthetum perennis\*](#), [THF01 \*Carlino acaulis-Brometum erecti\*](#), [THG03 \*Viscario vulgaris-Avenuletum pratensis\*](#)

### Constant taxon

Constant taxon of alliances: [THF \*Bromion erecti\*](#)

Constant taxon of associations: [TFD01 \*Polytricho piliferi-Scleranthetum perennis\*](#), [THF01 \*Carlino acaulis-Brometum erecti\*](#), [THG03 \*Viscario vulgaris-Avenuletum pratensis\*](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.8**

Ecological specialization index for non-forest vegetation: **4.9**

Ecological specialization index for forest vegetation: **5**

### Colonization ability

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

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

Optimum successional age [years]: **30**

## Distribution and frequency

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

Floristic region: **Europe**

Continental degree: **5**

Distribution range extension along the continentality gradient: **3**

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: 521

taxon.data.freq\_in\_quad: 1311

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **12.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.3 %**

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: **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: **2**

### **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**