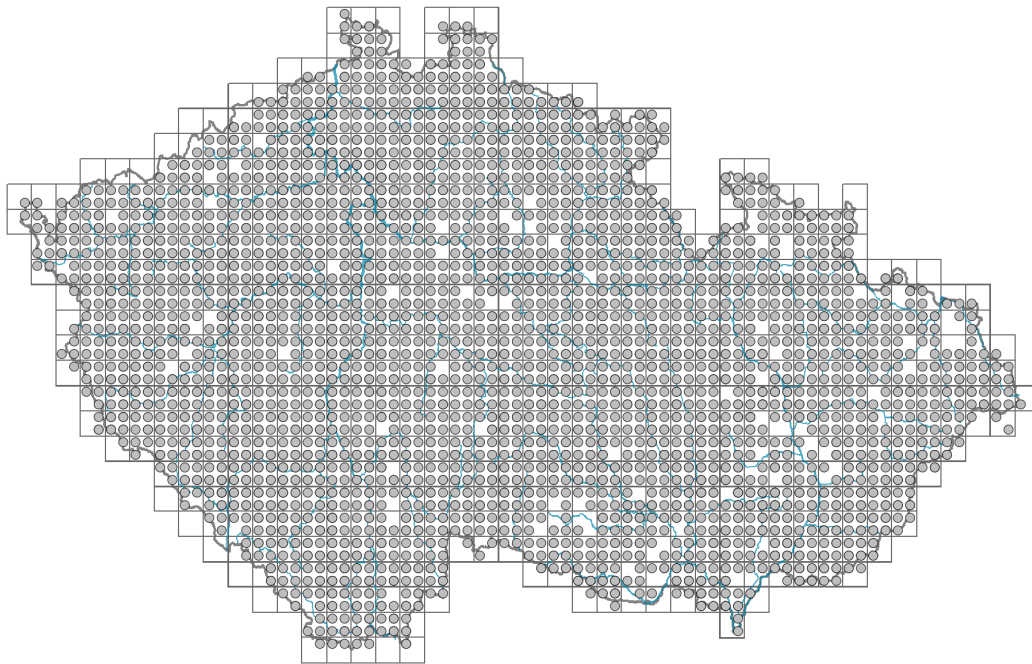


Pimpinella saxifraga

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]: **0.3-0.9**

Growth form: **polycarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

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

Life strategy (Pierce method, C-score): **39.1 %**

Life strategy (Pierce method, S-score): **42.8 %**

Life strategy (Pierce method, R-score): **18.2 %**

Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

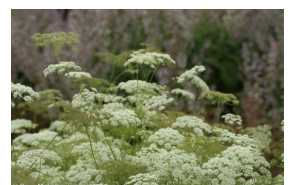
Leaf shape: **compound - imparipinnate**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **scleromorphic, mesomorphic**



Flower

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

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx absent, corolla present**

Perianth fusion: **free**

Inflorescence type: **umbrella composita**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination**

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

Fruit, seed and dispersal

Fruit type: **dry fruit - cremocarp**

Fruit colour: **brown, grey**

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 life span (cyclicality): **dicyclic or polycyclic shoots prevailing**

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

Primary root: **present**

Position of root buds: **primary root**

Role of root buds in life-history of a plant: **regenerative**

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): **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): **15**

Depth of the belowground bud bank (root buds excluded) [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): **15**

Size of the belowground bud bank (root buds included): **33**

Depth of the belowground bud bank (root buds included) [cm]: **9**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

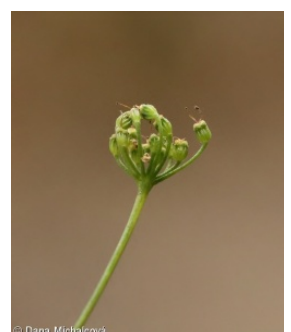
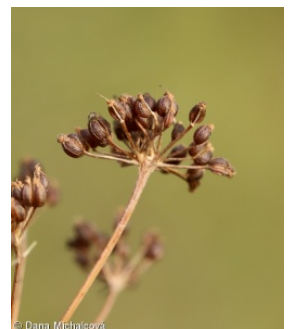
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

Karyology

Chromosome number (2n): **20 (40)**

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

2C genome size [Mbp]: **3477.01**



1Cx monoploid genome size [Mbp]: **1738.51**

Genomic GC content: **38 %**

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: **3 - missing on damp soil**

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

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

Salinity indicator value: **1 - salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.86**

Herb layer disturbance frequency indicator value: **-0.31**

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

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

Whole-community structure based disturbance indicator value: **0.49**

Herb layer structure-based disturbance indicator value: **0.6**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

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

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

1C Walls: **1 - rare occurrence**

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

2 Alpine and subalpine grasslands

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

5 Vegetation of springs and mires

5D Calcareous fens: **1 - rare occurrence**

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **2 - optimum**

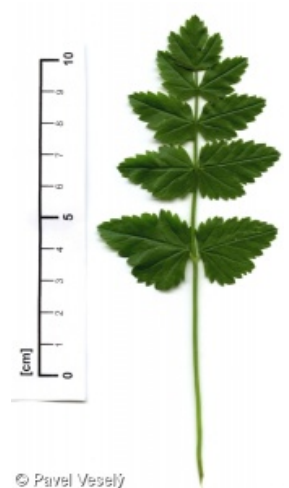
6B Montane mesic meadows: **1 - rare occurrence**

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

6D Alluvial meadows of lowland rivers: **1 - rare occurrence**

6E Wet Cirsium meadows: **1 - rare occurrence**

6F Intermittently wet Molinia meadows: **2 - optimum**



© Pavel Veselý



© Pavel Veselý



© Dana Michalcová



© Dana Michalcová

- 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: **2 - optimum**
- 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: **2 - optimum**
- 8D Broad-leaved dry grasslands: **2 - optimum**
- 8E Acidophilous dry grasslands: **2 - optimum**
- 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: **2 - optimum**
- 9D Pannonian sand steppes: **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**
- 10 Saline vegetation
- 10I Inland saline meadows: **1 - rare occurrence**
- 11 Heathlands and scrub
- 11A Dry lowland to subalpine heathlands: **1 - rare occurrence**
- 11H Subalpine deciduous scrub: **1 - rare occurrence**
- 11L Tall mesic and xeric shrub: **1 - rare occurrence**
- 11N Low xeric scrub: **1 - rare occurrence**
- 12 Forests
- 12C Oak-hornbeam forests: **1 - rare occurrence**
- 12D Ravine forests: **1 - rare occurrence**
- 12F Limestone beech forests: **1 - rare occurrence**
- 12G Acidophilous beech forests: **1 - rare occurrence**
- 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: **2 - optimum**
- 12T Robinia pseudacacia plantations: **1 - rare occurrence**
- 12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**
- 12V Spruce plantations: **1 - rare occurrence**
- 12W Pine and larch plantations: **1 - rare occurrence**
- 13 Anthropogenic vegetation
- 13A Annual vegetation of ruderal habitats: **1 - rare occurrence**
- 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: [LE *Erico-Pinetea*](#)

Diagnostic taxon of alliances: [LEA *Erico carneae-Pinion*](#), [THE *Cirsio-Brachypodium pinnati*](#), [THG *Koelerio-Phleion phleoidis*](#)

Diagnostic taxon of associations: [LEA01 *Thlaspio montani-Pinetum sylvestris*](#), [SCA03 *Teucrio botryos-Melicetum ciliatae*](#), [TDA02 *Ranunculo bulbosi-Arrhenatheretum elatioris*](#), [TDC02 *Anthoxantho odorati-Agrostietum tenuis*](#), [THA04 *Helichryso arenarii-Festucetum pallentis*](#), [THC04 *Asplenio cuneifolii-Seslerietum caeruleae*](#)

Constant taxon

Constant taxon of classes: [LE *Erico-Pinetea*](#)

Constant taxon of alliances: [LEA *Erico carneae-Pinion*](#), [TEC *Violion caninae*](#), [TEE *Euphorbio cyparissiae-Callunion vulgaris*](#), [THE *Cirsio-Brachypodium pinnati*](#), [THF *Bromion erecti*](#), [THG *Koelerio-Phleion phleoidis*](#)

Constant taxon of associations: [ACA02 *Saxifrago paniculatae-Agrostietum alpinae*](#), [LCB02 *Carici fritschii-Quercetum roboris*](#), [LEA01 *Thlaspio montani-Pinetum sylvestris*](#), [SCA03 *Teucrio botryos-Melicetum ciliatae*](#), [TDA02 *Ranunculo bulbosi-Arrhenatheretum elatioris*](#), [TDA04 *Potentillo albae-Festucetum rubrae*](#), [TDC02 *Anthoxantho odorati-Agrostietum tenuis*](#), [TEC02 *Campanulo rotundifoliae-Dianthetum deltoidis*](#), [TEE01 *Euphorbio cyparissiae-Callunetum vulgaris*](#), [THA04 *Helichryso arenarii-Festucetum pallentis*](#), [THC04 *Asplenio cuneifolii-Seslerietum caeruleae*](#), [THE01 *Scabioso ochroleucae-Brachypodietum pinnati*](#), [THE02 *Cirsio pannonici-Seslerietum caeruleae*](#), [THE03 *Polygalo majoris-Brachypodietum pinnati*](#), [THF01 *Carlino acaulis-Brometum erecti*](#), [THG01 *Potentillo heptaphyllae-Festucetum rupicola*](#), [THG02 *Avenulo pratensis-Festucetum valesiaca*](#), [THG03 *Viscario vulgaris-Avenuletum pratensis*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.6**

Ecological specialization index for non-forest vegetation: **4.8**

Ecological specialization index for forest vegetation: **4.5**

Colonization ability

Index of colonization success (ICS): **7**

Index of colonization potential (ICP): **4**

Optimum successional age [years]: **32.5**

Distribution and frequency

Distribution range extension along the continentality gradient: **6**

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: 658

taxon.data.freq_in_quad: 2359

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **5.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **2.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0 %**

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

Mean percentage cover in vegetation plots: **2.4 %**

Maximum percentage cover in vegetation plots: **23 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **51**

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: **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**