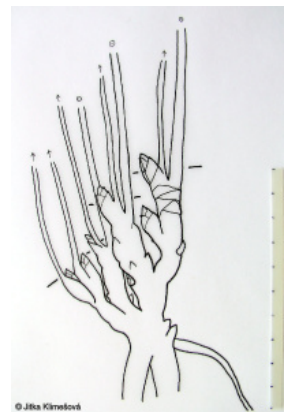
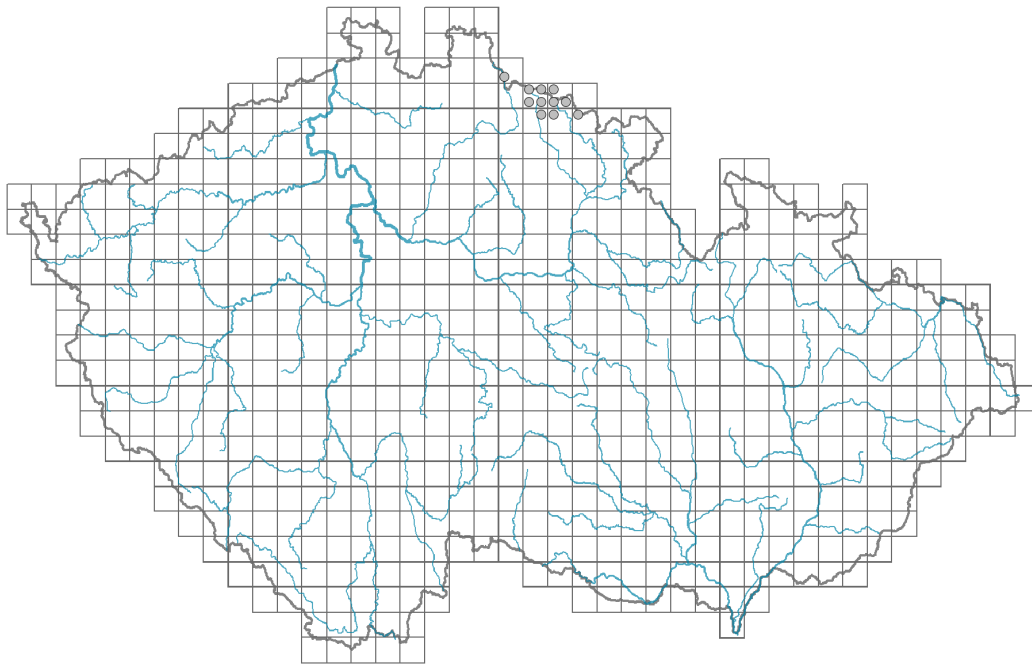


# *Pulsatilla alpina* subsp. *alba*

## 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]: **0.02-0.35**

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

Life form: **hemicryptophyte**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

## Leaf

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

Leaf arrangement (phyllotaxis): **rosulate**

Leaf shape: **compound - bipinnate**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**

## Flower

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **homochlamydeous**

Perianth fusion: **free**

Inflorescence type: **flores solitarii**



Dicliny: **synoecious, andromonoecious, androdioecious**

Generative reproduction type: **facultative allogamy**

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

## 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: **Epilobium (mainly anemochory and autochory)**

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

## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

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): **15**

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): **20**

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): **15**

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): **20**

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**

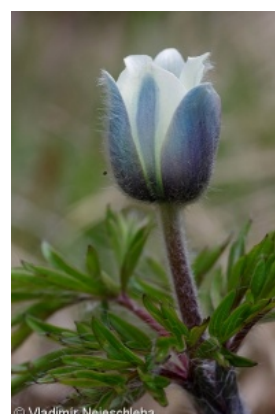
2C genome size [Mbp]: **7571.81**

1Cx monoploid genome size [Mbp]: **3785.91**

Genomic GC content: **41.9 %**

## 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: **2 - transition between values 1 and 3**

Moisture indicator value: **5 - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**

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

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: **-0.88**

Herb layer disturbance frequency indicator value: **-0.88**

Whole-community disturbance severity indicator value: **0.18**

Herb layer disturbance severity indicator value: **0.23**

Whole-community structure based disturbance indicator value: **0.47**

Herb layer structure-based disturbance indicator value: **0.45**

## Habitat and sociology

### Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **2 - optimum**

2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **2 - optimum**

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

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **2 - optimum**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 - rare occurrence**

11D Subalpine acidophilous *Pinus mugo* 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: [AB \*Juncetea trifidi\*](#), [AC \*Elyno-Seslerietea\*](#)

Diagnostic taxon of alliances: [ABA \*Juncion trifidi\*](#), [ACA \*Agrostion alpinae\*](#), [ADC \*Salicion silesiaca\*](#), [TEA \*Nardion strictae\*](#)

Diagnostic taxon of associations: [AAA01 \*Avenello flexuosae-Callunetum vulgaris\*](#), [ABA01 \*Cetrario-Festucetum supinae\*](#), [ACA01 \*Saxifraga oppositifoliae-Festucetum versicoloris\*](#), [TEA01 \*Festuco supinae-Nardetum strictae\*](#), [TEA02 \*Thesio alpini-Nardetum strictae\*](#)

### Constant taxon

Constant taxon of associations: [ACA01 \*Saxifraga oppositifoliae-Festucetum\*](#)

## ***versicoloris***

### Ecological specialization indices

Ecological specialization index for all vegetation types: **6.5**

Ecological specialization index for non-forest vegetation: **6.5**

### **Distribution and frequency**

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

Floristic region: **Europe**

Continentality degree: **4**

Distribution range extension along the continentality gradient: **2**

Elevational belt in the Czech Republic: **montane belt, subalpine belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **6**

taxon.data.freq\_in\_quad: **11**

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **10 %**

Occurrence frequency in vegetation plots with a cover above 25%: **3.3 %**

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

Mean percentage cover in vegetation plots: **4.2 %**

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: **6**

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

Number of broad habitats in which the taxon occurs: **4**

Number of broad habitats in which the taxon has its optimum: **3**

### **Threats and protection**

Red List 2017 (national categories): **C2r - endangered taxon, rare**

Red List 2017 (IUCN categories): **EN - endangered**

Legal protection: **vulnerable taxon**