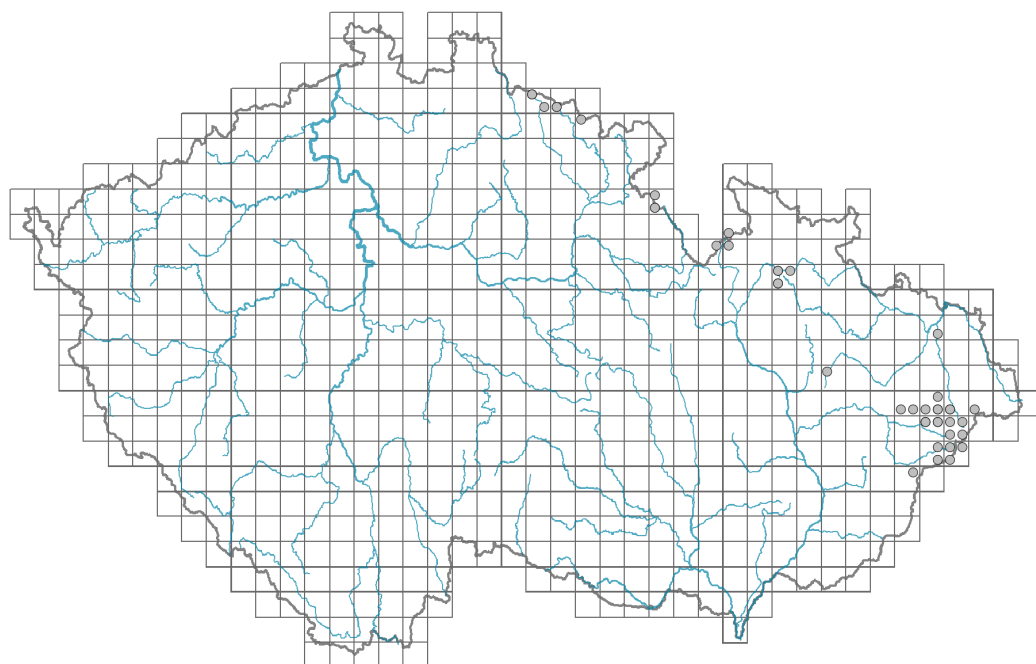


# *Aconitum firmum*

## 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]: **0.4-1.8**

Growth form: **clonal herb**

Life form: **hemicryptophyte (geophyte)**

Life strategy (Pierce method based on leaf traits): **C/CR**

Life strategy (Pierce method, C-score): **66.9 %**

Life strategy (Pierce method, S-score): **3.8 %**

Life strategy (Pierce method, R-score): **29.3 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - palmately divided**

Stipules: **absent**

Petiole: **present**



## Flower

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

Flower colour: **blue-violet**

Flower symmetry: **zygomorphic**

Perianth type: **homochlamydeous**



Perianth fusion: **free**  
 Inflorescence type: **racemus**  
 Generative reproduction type: **facultative allogamy**

## Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of follicles**  
 Fruit colour: **brown**  
 Dispersal unit (diaspore): **seed**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **probably non-myrmecochorous nv**

## 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]: **9585.77**  
 1Cx monoploid genome size [Mbp]: **4792.89**  
 Genomic GC content: **42.6 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

### Ellenberg-type indicator values

Light indicator value: **5 - semi-shade plant, only exceptionally occurring in full light, but usually at more than 10% of the diffuse radiation incident in an open area**

Temperature indicator value: **4 - transition between values 3 and 5**

Moisture indicator value: **7 - humidity indicator, focus on well moistened, but not wet soils**

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

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

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

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.59**

Herb layer disturbance frequency indicator value: **-0.79**

Whole-community disturbance severity indicator value: **0.15**

Herb layer disturbance severity indicator value: **0.11**

Whole-community structure based disturbance indicator value: **0.23**

Herb layer structure-based disturbance indicator value: **0.31**



## Habitat and sociology

### Occurrence in habitats

2 Alpine and subalpine grasslands

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

4 Wetland and riverine herbaceous vegetation

4K Petasites fringes of montane brooks: **2 - optimum**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 - rare occurrence**

11 Heathlands and scrub

11H Subalpine deciduous scrub: **2 - optimum**

12 Forests

12E Herb-rich beech forests: **2 - optimum**

12G Acidophilous beech forests: **1 - rare occurrence**

12R Acidophilous spruce forests: **1 - rare occurrence**

### Affinity to the forest environment

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

### Constant taxon

Constant taxon of associations: [\*\*KCA02 \*Adenostylo alliariae\*-Pinetum mugo\*\*](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **5.9**

Ecological specialization index for non-forest vegetation: **5.7**

Ecological specialization index for forest vegetation: **6.3**



## Distribution and frequency

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 19

taxon.data.freq\_in\_quad: 33

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%: **6.9 %**

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: **2.7 %**

Maximum percentage cover in vegetation plots: **13 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **7**

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

Number of broad habitats in which the taxon occurs: **5**

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

## Threats and protection

Red List 2017 (national categories): **C2b - endangered taxon, rare and declining**

Red List 2017 (IUCN categories): **VU - vulnerable**

Legal protection: **endangered taxon**