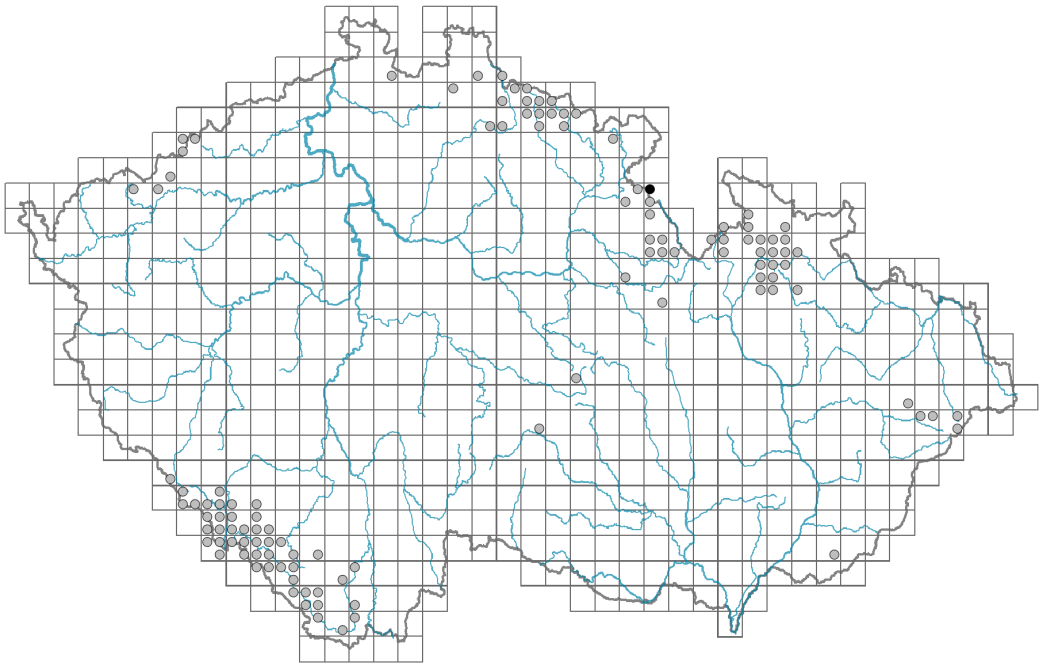
Aconitum plicatum

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]: **0.3–1.5**
Growth form: **clonal herb**
Life form: **hemicryptophyte (geophyte)**
Life strategy: **C – competitor**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **simple – palmately divided**
Stipules: **absent**
Petiole: **present**
Leaf life span: **summer green**
Leaf anatomy: **mesomorphic**

Flower

Flowering period [month]: **July–September**
Flower colour: **blue-violet**
Flower symmetry: **zygomorphic**
Perianth type: **homochlamydeous**
Perianth fusion: **free**

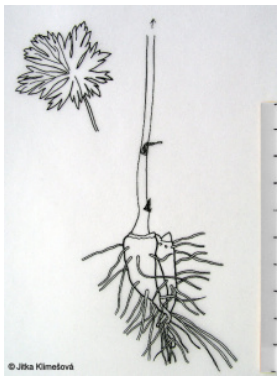
Inflorescence type: **racemus**
Dicliny: **synoecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **insect-pollination**

Fruit, seed and dispersal

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

Belowground organs and clonality

Root metamorphosis: **secondary storage root**
Storage organ: **secondary storage root**
Type of clonal growth organ: **root tuber**
Freely dispersible organs of clonal growth: **absent**
Shoot life span (cyclicity): **monocyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **sympodial**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **1**
Number of clonal offspring: **1**
Lateral spreading distance by clonal growth [m]: **0.01**
Clonal index: **3**



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): **5**
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): **10**
Depth of the belowground bud bank (root buds exluded) [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): **5**
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): **10**
Depth of the belowground bud bank (root buds included) [cm]: **3**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

Karyology

Chromosome number (2n): **32**
Ploidy level (x): **4**

2C genome size [Mbp]: **18573.67**
1Cx monoploid genome size [Mbp]: **4643.42**
Genomic GC content: **43 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 – transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**
Temperature indicator value: **3 – cool indicator, occurring mainly in subalpine areas**
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: **-1.41**
Herb layer disturbance frequency indicator value: **-0.63**
Whole-community disturbance severity indicator value: **0.2**
Herb layer disturbance severity indicator value: **0.2**
Whole-community structure based disturbance indicator value: **0.4**
Herb layer structure-based disturbance indicator value: **0.41**

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: **1 – rare occurrence**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 – rare occurrence**
5C Alpine and subalpine soft-water springs: **2 – optimum**

6 Meadows and mesic pastures

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

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 – rare occurrence**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 – rare occurrence**
11D Subalpine acidophilous Pinus mugo scrub: **2 – optimum**
11H Subalpine deciduous scrub: **2 – optimum**

12 Forests

12B Alluvial forests: **2 – optimum**

12E Herb-rich beech forests: **1 – rare occurrence**

12S Basiphilous spruce forests: **2 – optimum**

13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **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**

Diagnostic taxon

Diagnostic taxon of classes: **AD *Mulgedio-Aconitetea***

Diagnostic taxon of alliances: **ADB *Calamagrostion arundinaceae*, ADD *Adenostylion alliariae*, RAD *Swertio perennis-Dichodontion palustris***

Diagnostic taxon of associations: **ADA03 *Violo sudeticae-Deschampsietum cespitosae*, ADB01 *Bupleuro longifoliae-Calamagrostietum arundinaceae*, ADC01 *Salici silesiacae-Betuletum carpaticae*, ADD01 *Ranunculo platanifolii-Adenostyletum alliariae*, ADD02 *Salicetum lapponum*, ADD03 *Trollio altissimi-Geranietum sylvatici*, ADD04 *Laserpitio archangelicae-Dactylidetum glomeratae*, LBA01 *Alnetum incanae*, LBC04 *Athyrio distentifolii-Fagetum sylvaticae*, RAD01 *Crepido paludosae-Philonotidetum seriatae*, RAD02 *Swertietum perennis*, RAD03 *Cardaminetum opicii***

Constant taxon

Constant taxon of alliances: **ADB *Calamagrostion arundinaceae*, RAD *Swertio perennis-Dichodontion palustris***

Constant taxon of associations: **ADB01 *Bupleuro longifoliae-Calamagrostietum arundinaceae*, ADD03 *Trollio altissimi-Geranietum sylvatici*, ADD04 *Laserpitio archangelicae-Dactylidetum glomeratae*, RAD02 *Swertietum perennis*, RAD03 *Cardaminetum opicii***

Dominant taxon

Dominant taxon of associations: **RAD02 *Swertietum perennis*, RAD03 *Cardaminetum opicii***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.5**

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

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

Colonization ability

Index of colonization success (ICS): **1**

Index of colonization potential (ICP): **1**

Distribution and frequency

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

Floristic region: **Europe**

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: 66

taxon.data.freq_in_quad: 117

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **9.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.3 %**
Occurrence frequency in vegetation plots with a cover above 50%: **0 %**
Mean percentage cover in vegetation plots: **3.7 %**
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: **13**
Number of narrow habitats in which the taxon has its optimum: **6**
Number of broad habitats in which the taxon occurs: **8**
Number of broad habitats in which the taxon has its optimum: **4**

Threats and protection

Red List 2017 (national categories): **C3 – vulnerable taxon**
Red List 2017 (IUCN categories): **LC – least concern**
Legal protection: **vulnerable taxon**