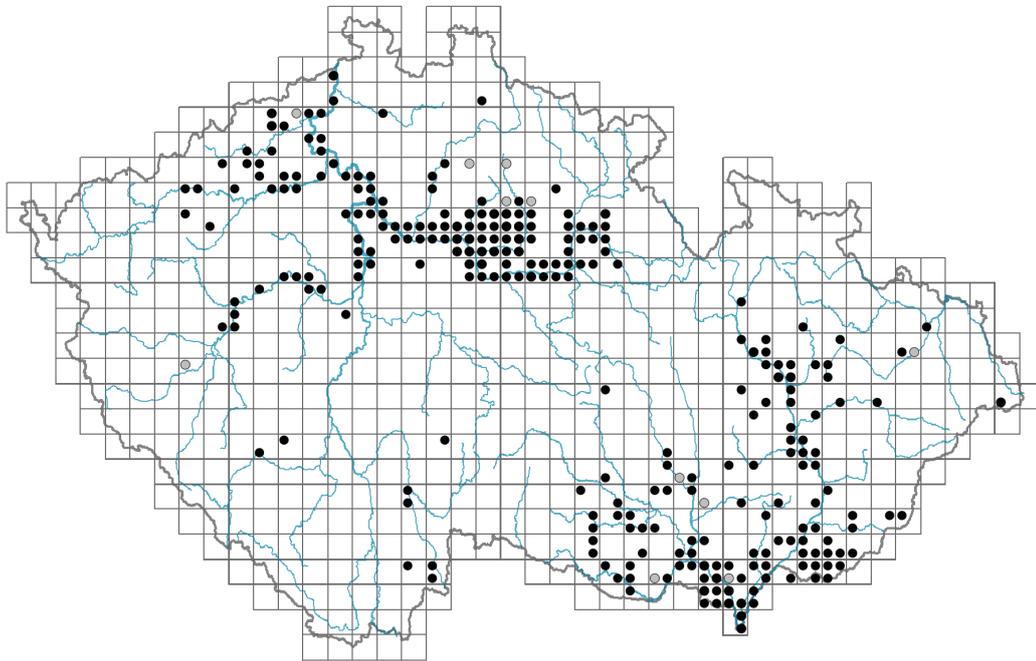


# *Alisma lanceolatum*

## 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]: **0.2-1**

Growth form: **clonal herb**

Life form: **geophyte**

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

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

Life strategy (Pierce method, C-score): **44.2 %**

Life strategy (Pierce method, S-score): **0 %**

Life strategy (Pierce method, R-score): **55.8 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **helomorphic**

## Flower

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

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **pink**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **aposepalous**

Inflorescence type: **panicula**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

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



## Fruit, seed and dispersal

Fruit type: **dry fruit - head of achenes**

Reproduction type: **by seed/spores and vegetatively**

Dispersal unit (diaspore): **seed, fruit, infructescence or its part**

Dispersal strategy: **Sparganium (mainly autochory and hydrochory)**

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



## Belowground organs and clonality

Shoot metamorphosis: **rhizome, turion**

Storage organ: **rhizome, turion**

Type of clonal growth organ: **epigeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

Shoot life span (cyclicality): **monocyclic shoots prevailing**

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

Primary root: **absent**

Persistence of the clonal growth organ [year]: **2**

Number of clonal offspring: **2.3**

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): **12**

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): **17**

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): **12**

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): **17**

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): **26 (28)**

Ploidy level (x): **4**

2C genome size [Mbp]: **38816.72**

1Cx monoploid genome size [Mbp]: **9704.18**

Genomic GC content: **42.8 %**

## 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: **7 - heat indicator, occurring in relatively warm lowlands**

Moisture indicator value: **10 - aquatic plant that survives long periods without soil flooding**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **7 - occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor 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: **-0.74**

Herb layer disturbance frequency indicator value: **-0.61**

Whole-community disturbance severity indicator value: **0.24**

Herb layer disturbance severity indicator value: **0.28**

Whole-community structure based disturbance indicator value: **0.53**

Herb layer structure-based disturbance indicator value: **0.54**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **2 - optimum**

4B Halophilous reed and sedge beds: **1 - rare occurrence**

4C Eutrophic vegetation of muddy substrata: **2 - optimum**

4E Reed vegetation of brooks: **1 - rare occurrence**

4G Tall-sedge beds: **1 - rare occurrence**

4H Vegetation of low annual hygrophilous herbs: **2 - optimum**

4I Vegetation of nitrophilous annual hygrophilous herbs: **2 - optimum**

## 6 Meadows and mesic pastures

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

6G Vegetation of wet disturbed soils: **1 - rare occurrence**

## 10 Saline vegetation

10I Inland saline meadows: **1 - rare occurrence**

## 11 Heathlands and scrub

11I Willow carrs: **1 - rare occurrence**

11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**

## 12 Forests

12A Alder carrs: **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 associations: [MAC03 Pulicario vulgaris-Menthetum pulegii](#), [MCC08 Alismatetum lanceolati](#)

### Constant taxon

Constant taxon of associations: [MCC08 Alismatetum lanceolati](#), [VBD05 Ranunculetum baudotii](#)

### Dominant taxon

Dominant taxon of associations: [MCC08 Alismatetum lanceolati](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.2**

Ecological specialization index for non-forest vegetation: **4.4**

### Colonization ability

Index of colonization success (ICS): **2**

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

Optimum successional age [years]: **25**

## Distribution and frequency

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

Floristic region: **Europe, Western Asia**

Continental degree: **7**

Distribution range extension along the continentality gradient: **8**

Elevational belt in the Czech Republic: **lowlands (colline belt)**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **172**

taxon.data.freq\_in\_quad: **296**

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **15.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **8.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **4.1 %**

Mean percentage cover in vegetation plots: **7.2 %**

Maximum percentage cover in vegetation plots: **88 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **14**

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

Number of broad habitats in which the taxon occurs: **6**

Number of broad habitats in which the taxon has its optimum: **1**

### **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**