

Acorus calamus

Distribution



© Pavel Veselý

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]: **0.5-1.2**

Growth form: **clonal herb**

Life form: **hydrophyte**

Life strategy: **CS - competitor/stress-tolerator**

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

Life strategy (Pierce method, C-score): **54.6 %**

Life strategy (Pierce method, S-score): **21.1 %**

Life strategy (Pierce method, R-score): **24.3 %**

Leaf

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

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

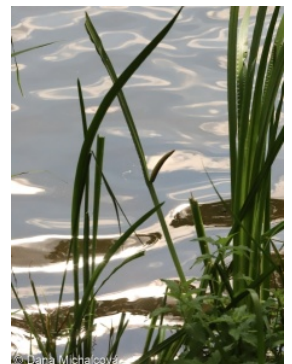
Leaf life span: **summer green**

Leaf anatomy: **helomorphic**

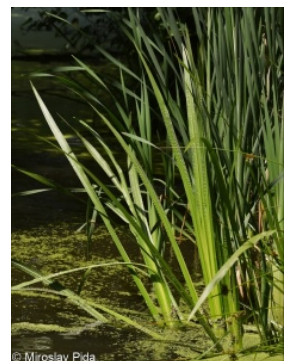
Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**



© Dana Michalová



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Flower colour: **yellow-green**
 Flower symmetry: **actinomorphic**
 Perianth type: **homochlamydeous**
 Perianth fusion: **free**
 Inflorescence type: **spadix**
 Dicliny: **synoecious**

Fruit, seed and dispersal

Fruit type: **fleshy fruit - berry**
 Fruit colour: **green, yellow, brown**
 Reproduction type: **only vegetatively**
 Dispersal strategy: **Zea (no dispersal)**
 Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Shoot metamorphosis: **rhizome**
 Storage organ: **rhizome**
 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]: **3**
 Number of clonal offspring: **3.3**
 Lateral spreading distance by clonal growth [m]: **0.13**
 Clonal index: **5**

Bud bank

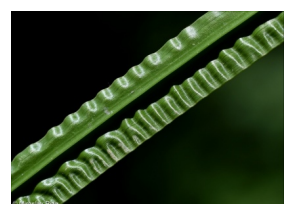
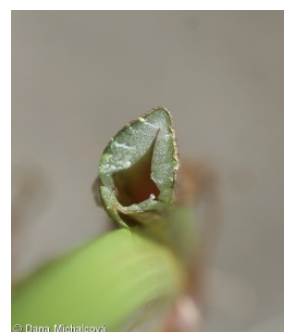
Number of buds per shoot at the soil surface (root buds excluded): **5**
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **15**
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **0**
 Size of the belowground bud bank (root buds excluded): **20**
 Depth 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): **36**



Ploidy level (x): **3**
 2C genome size [Mbp]: **1064.53**
 1Cx monoploid genome size [Mbp]: **354.84**
 Genomic GC content: **39.3 %**

Taxon origin

Origin in the Czech Republic: **neophyte**
 Invasion status: **naturalized**
 Geographic origin: **Asia**
 Year of the first record in the wild: **1679**
 Period of introduction: **Early Modern Period (1500-1800)**
 Introduction pathway: **intentional - collections, intentional - other**

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: **6 - transition between values 5 and 7**

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: **-0.69**

Whole-community disturbance severity indicator value: **0.17**

Herb layer disturbance severity indicator value: **0.22**

Whole-community structure based disturbance indicator value: **0.57**

Herb layer structure-based disturbance indicator value: **0.55**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **3 - dominant**

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

4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**

4D Riverine reed vegetation: **1 - rare occurrence**

4F Mesotrophic vegetation of muddy substrata: **1 - rare occurrence**

4G Tall-sedge beds: **2 - optimum**

5 Vegetation of springs and mires

5E Acidic moss-rich fens and peatland 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**

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: [MCA07 *Acoretum calami*](#)

Constant taxon

Constant taxon of associations: [MCA07 *Acoretum calami*](#)

Dominant taxon

Dominant taxon of associations: [MCA07 *Acoretum calami*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.8**

Ecological specialization index for non-forest vegetation: **3.8**

Distribution and frequency

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

Floristic region: **Europe, Asia, Americas**

Continental degree: **5**

Distribution range extension along the continentality gradient: **4**

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: **520**

taxon.data.freq_in_quad: **1280**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **70 %**

Occurrence frequency in vegetation plots with a cover above 25%: **64.5 %**

Occurrence frequency in vegetation plots with a cover above 50%: **51.6 %**

Mean percentage cover in vegetation plots: **47.5 %**

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: **9**

Number of narrow habitats in which the taxon has its optimum: **2**

Number of broad habitats in which the taxon occurs: **3**

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**