

Glyceria maxima

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]: **0.8-2.5**

Growth form: **clonal herb**

Life form: **hemicryptophyte (hydrophyte)**

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

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

Life strategy (Pierce method, C-score): **57.8 %**

Life strategy (Pierce method, S-score): **23 %**

Life strategy (Pierce method, R-score): **19.2 %**

Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **summer green**

Leaf anatomy: **helomorphic, hydromorphic**

Flower

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



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

Flower colour: **green**

Perianth type: **reduced**

Perianth fusion: **reduced**

Inflorescence type: **panicula e spiculis composita**

Dicliny: **synoecious**

Pollination syndrome: **wind-pollination**

Fruit, seed and dispersal

Fruit type: **dry fruit - caryopsis**

Fruit colour: **brown**

Reproduction type: **mostly vegetatively, rarely by seed/spores**

Dispersal unit (diaspore): **fruit, infrutescence or its part, shoot fragment**

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

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

Belowground organs and clonality

Shoot metamorphosis: **stolon, brood shoot**

Storage organ: **stolon**

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

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

Shoot life span (cyclicality): **dicyclic or polycyclic shoots prevailing**

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

Primary root: **absent**

Persistence of the clonal growth organ [year]: **4**

Number of clonal offspring: **3.5**

Lateral spreading distance by clonal growth [m]: **0.13**

Clonal index: **4**

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**

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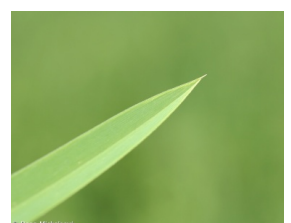
Depth of the belowground bud bank (root buds included) [cm]: **4**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**



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: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

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: **8 - pronounced nutrient indicator**

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: **-0.77**

Herb layer disturbance frequency indicator value: **-0.68**

Whole-community disturbance severity indicator value: **0.19**

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

Whole-community structure based disturbance indicator value: **0.51**

Herb layer structure-based disturbance indicator value: **0.51**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

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

3B Macrophytic vegetation of water streams: **1 - rare occurrence**

3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

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: **2 - optimum**

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

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

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

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

4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**

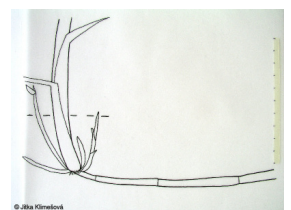
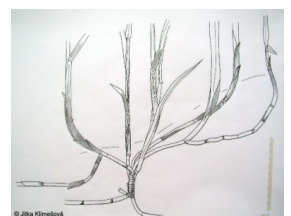
4I Vegetation of nitrophilous annual hygrophilous herbs: **2 - optimum**

4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**

5 Vegetation of springs and mires

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

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**



6 Meadows and mesic pastures

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

6E Wet Cirsium meadows: **1 - rare occurrence**

6G Vegetation of wet disturbed soils: **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: **3 - dominant**

12B Alluvial forests: **1 - rare occurrence**

12U Plantations of broad-leaved non-native trees: **2 - optimum**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Diagnostic taxon

Diagnostic taxon of alliances: [MCA Phragmition australis](#)

Diagnostic taxon of associations: [MCA05 Glycerietum maximae](#)

Constant taxon

Constant taxon of associations: [MCA05 Glycerietum maximae](#)

Dominant taxon

Dominant taxon of associations: [LAA02 Carici elongatae-Alnetum glutinosae](#), [MCA05 Glycerietum maximae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.6**

Ecological specialization index for non-forest vegetation: **3.6**

Ecological specialization index for forest vegetation: **5.3**

Colonization ability

Index of colonization success (ICS): **5**

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **8.5**

Distribution and frequency

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

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **7**

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

Expansive taxon in the region: **Bohemian Thermophyticum, Bohemian Moravian Mesophyticum, Pannonian Thermophyticum, Carpathian Mesophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **593**

taxon.data.freq_in_quad: **1647**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **48.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **37.9 %**

Occurrence frequency in vegetation plots with a cover above 50%: **36.3 %**

Mean percentage cover in vegetation plots: **32.7 %**

Maximum percentage cover in vegetation plots: **99 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **23**

Number of narrow habitats in which the taxon has its optimum: **6**

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

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

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**