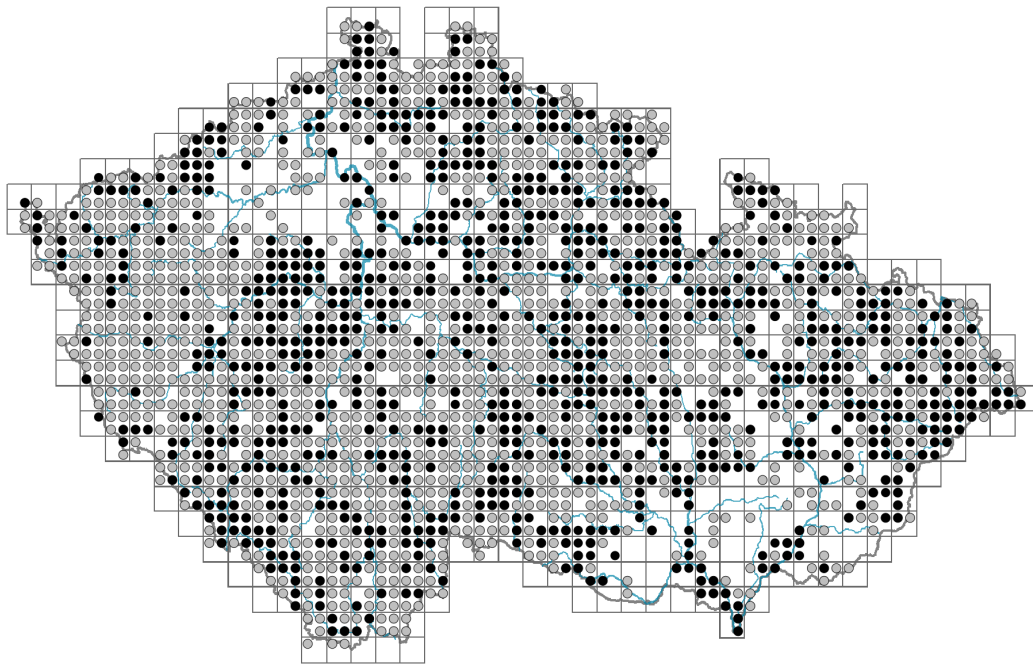


# *Glyceria fluitans*

## 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]: **0.3-1.3**

Growth form: **clonal herb**

Life form: **hemicryptophyte (hydrophyte)**

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

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

Life strategy (Pierce method, C-score): **21.4 %**

Life strategy (Pierce method, S-score): **36 %**

Life strategy (Pierce method, R-score): **42.6 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf anatomy: **helomorphic, hydromorphic**



## Flower

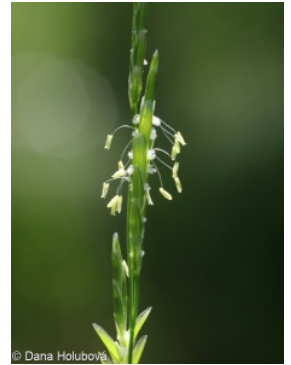
Flowering period [month]: **June-August**

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**  
 Flower colour: **green**  
 Perianth type: **reduced**  
 Perianth fusion: **reduced**  
 Inflorescence type: **panicula e spiculis composita**  
 Dicliny: **synoecious**  
 Generative reproduction type: **allogamy self-incompatibility, facultative allogamy**  
 Pollination syndrome: **wind-pollination**



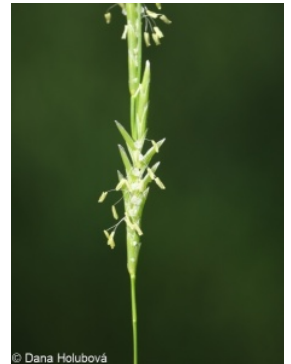
## Fruit, seed and dispersal

Fruit type: **dry fruit - caryopsis**  
 Fruit colour: **brown**  
 Reproduction type: **by seed/spores and vegetatively**  
 Dispersal unit (diaspore): **fruit, infrutescence or its part, shoot fragment**  
 Dispersal strategy: **Sparganium (mainly autochory and hydrochory)**  
 Myrmecochory: **non-myrmecochorous (b)**



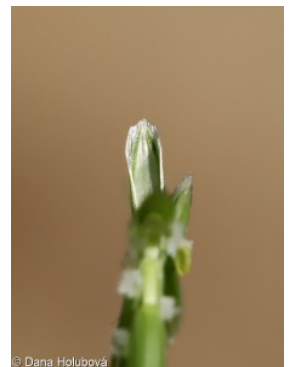
## Belowground organs and clonality

Shoot metamorphosis: **stolon**  
 Storage organ: **stolon**  
 Type of clonal growth organ: **hypogeogenous rhizome**  
 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]: **4**  
 Number of clonal offspring: **1**  
 Lateral spreading distance by clonal growth [m]: **0.09**  
 Clonal index: **4**



## Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **10**  
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **8**  
 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): **18**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **3**  
 Number of buds per shoot at the soil surface (root buds included): **10**  
 Number of buds per shoot at a depth of 0–10 cm (root buds included): **8**  
 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): **18**  
 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): **40**

Ploidy level (x): **4**

2C genome size [Mbp]: **2242.98**

1Cx monoploid genome size [Mbp]: **560.75**

Genomic GC content: **46.7 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6x - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area (generalist)**

Temperature indicator value: **5x - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**

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

Reaction indicator value: **5x - indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions (generalist)**

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

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: **-0.95**

Herb layer disturbance frequency indicator value: **-0.64**

Whole-community disturbance severity indicator value: **0.22**

Herb layer disturbance severity indicator value: **0.25**

Whole-community structure based disturbance indicator value: **0.58**

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

## 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: **2 - optimum**

4 Wetland and riverine herbaceous vegetation

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

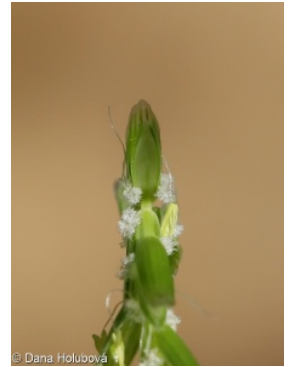
4C Eutrophic vegetation of muddy substrata: **2 - optimum**

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

4E Reed vegetation of brooks: **3 - dominant**

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

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



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

4J River gravel banks: **1 - rare occurrence**

4K Petasites fringes of montane brooks: **1 - rare occurrence**

5 Vegetation of springs and mires

5A Hard-water springs with tufa formation: **1 - rare occurrence**

5B Lowland to montane soft-water springs: **3 - dominant**

5D Calcareous fens: **1 - rare occurrence**

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

6 Meadows and mesic pastures

6C Pastures and park grasslands: **1 - rare occurrence**

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**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **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**

12B Alluvial forests: **2 - optimum**

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

12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

12V Spruce plantations: **1 - rare occurrence**

13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

Affinity to the forest environment

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

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 alliances: [MCE Glycerio-Sparganion](#)

Diagnostic taxon of associations: [MCE01 Glycerietum fluitantis](#)

Constant taxon

Constant taxon of alliances: [MCE Glycerio-Sparganion](#)

Constant taxon of associations: [MCE01 Glycerietum fluitantis](#)

Dominant taxon

Dominant taxon of associations: [MCE01 Glycerietum fluitantis](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.2**

Ecological specialization index for non-forest vegetation: **3.2**

Ecological specialization index for forest vegetation: **5.5**

## Colonization ability

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

Index of colonization potential (ICP): **3**

Optimum successional age [years]: **5**

## Distribution and frequency

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

Floristic region: **Europe, Eastern America**

Distribution range extension along the continentality gradient: **5**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **635**

taxon.data.freq\_in\_quad: **2082**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **41.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **33.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **25.1 %**

Mean percentage cover in vegetation plots: **25.4 %**

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: **31**

Number of narrow habitats in which the taxon has its optimum: **9**

Number of broad habitats in which the taxon occurs: **9**

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

## 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**