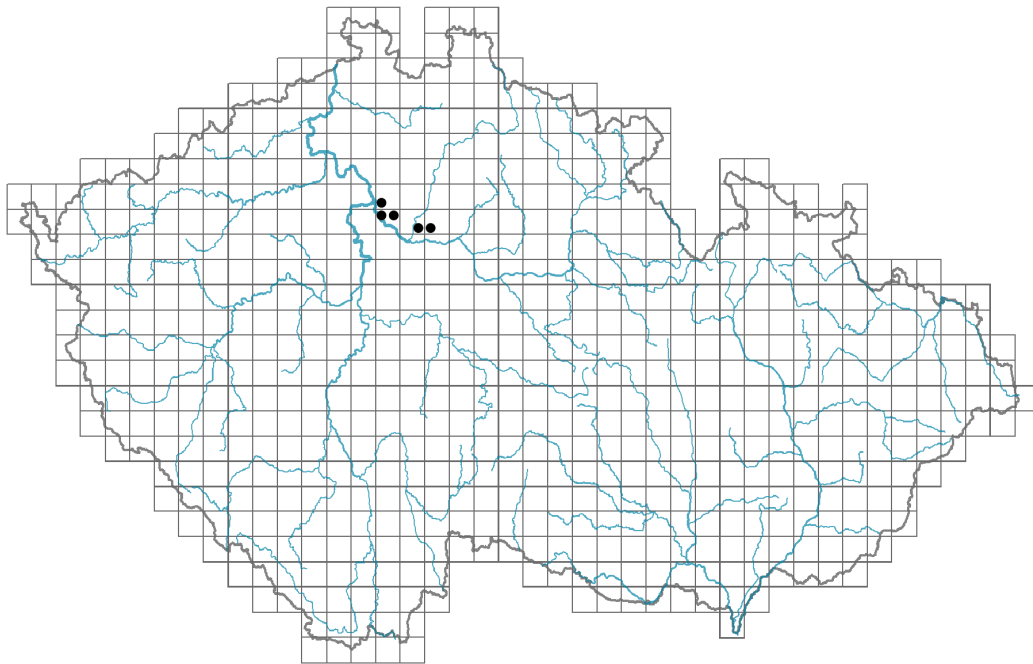


# *Cladium mariscus*

## Distribution



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### 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**

Growth form: **clonal herb**

Life form: **geophyte**

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

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

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

Life strategy (Pierce method, S-score): **45.4 %**

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

## 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: **scleromorphic, helomorphic**

## Flower

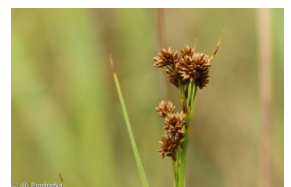
Flowering period [month]: **June-July**



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Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

Flower colour: **brown**

Perianth type: **flower achlamydeous**

Inflorescence type: **panicula e spiculis composita**

Dicliny: **andromonoecious**

Generative reproduction type: **mixed mating**

Pollination syndrome: **wind-pollination**

## Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**

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

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

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

Myrmecochory: **myrmecochorous**

## Belowground organs and clonality

Shoot metamorphosis: **stolon-like rhizome**

Storage organ: **stolon-like rhizome**

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

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

Shoot life span (cyclicity): **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: **2.7**

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): **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 (39, 60)**

Ploidy level (x): **2**

2C genome size [Mbp]: **510.28**

1Cx monoploid genome size [Mbp]: **255.14**

Genomic GC content: **36.9 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **9 - full light plant, occurring only in fully irradiated places, not at less than 50% 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: **9 - base and lime indicator, always occurring in calcium-rich conditions**

Nutrient indicator value: **4 - transition between values 3 and 5**

Salinity indicator value: **2 - oligohaline, often on soils with very low salt content**

## Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 - rare occurrence**

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

5 Vegetation of springs and mires

5D Calcareous fens: **2 - optimum**

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: [\*\*MCG08 Cladietum marisci\*\*](#)

Constant taxon

Constant taxon of associations: [\*\*MCG08 Cladietum marisci\*\*](#)

Dominant taxon

Dominant taxon of associations: [\*\*MCG08 Cladietum marisci\*\*](#)

Ecological specialization indices

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

Ecological specialization index for non-forest vegetation: **4.7**

Colonization ability

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

## Distribution and frequency

Floristic zone: **northern temperate, southern temperate, meridional, subtropical, tropical, austral or antarctic**

Floristic region: **Europe, circumpolar**

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

Elevational belt in the Czech Republic: **lowlands**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **4**

taxon.data.freq\_in\_quad: **5**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**

Occurrence frequency in vegetation plots with a cover above 5%: **81.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **72.7 %**

Occurrence frequency in vegetation plots with a cover above 50%: **45.5 %**

Mean percentage cover in vegetation plots: **49.7 %**

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: **3**

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

Number of broad habitats in which the taxon occurs: **2**

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

## Threats and protection

Red List 2017 (national categories): **C1r - critically threatened taxon, rare**

Red List 2017 (IUCN categories): **EN - endangered**

Legal protection: **critically threatened taxon**