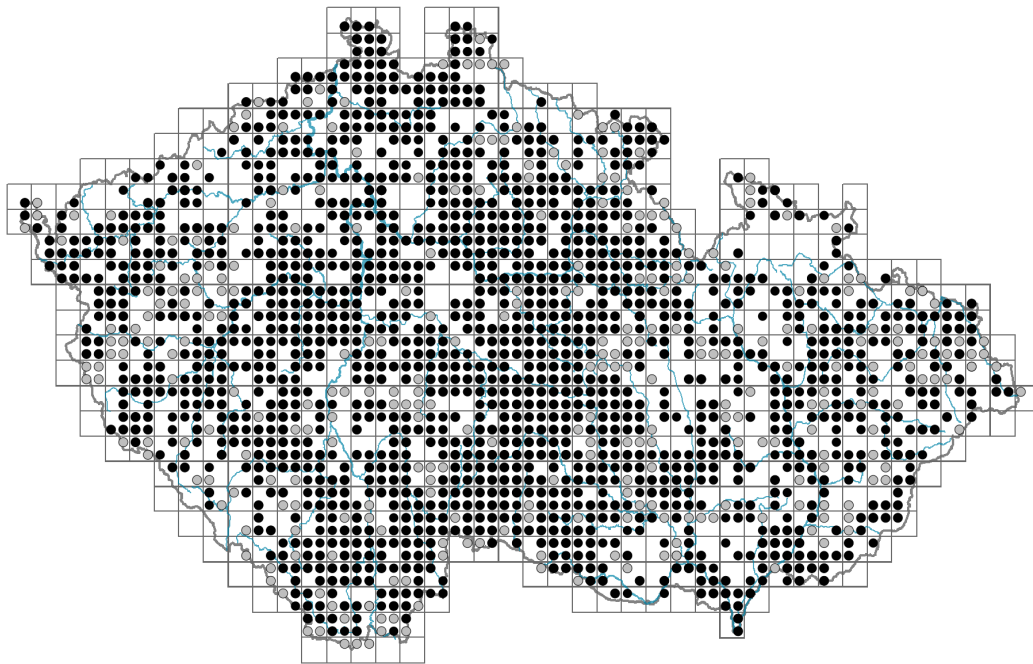


# Sparganium erectum

## 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.



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## Habitus and growth type

Height [m]: **0.3-1.8**Growth form: **clonal herb**Life form: **hydrophyte**Life strategy: **CS - competitor/stress-tolerator**Life strategy (Pierce method based on leaf traits): **C/CR**Life strategy (Pierce method, C-score): **78.6 %**Life strategy (Pierce method, S-score): **0 %**Life strategy (Pierce method, R-score): **21.4 %**

## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**Leaf arrangement (phyllotaxis): **alternate**Leaf shape: **simple - entire**Stipules: **absent**Petiole: **absent**Leaf anatomy: **hydromorphic**

## Flower

Flowering period [month]: **June-August**Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**

Flower colour: **green**  
 Perianth type: **reduced**  
 Perianth fusion: **reduced**  
 Inflorescence type: **panicula e capitulis composita**  
 Dicliny: **monoecious**  
 Generative reproduction type: **facultative allogamy**  
 Pollination syndrome: **wind-pollination, insect-pollination**

### Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**  
 Reproduction type: **mostly vegetatively, rarely by seed/spores**  
 Dispersal unit (diaspore): **fruit, infructescence or its part**  
 Dispersal strategy: **Sparganium (mainly autochory and hydrochory)**  
 Myrmecochory: **non-myrmecochorous (b)**

### Belowground organs and clonality

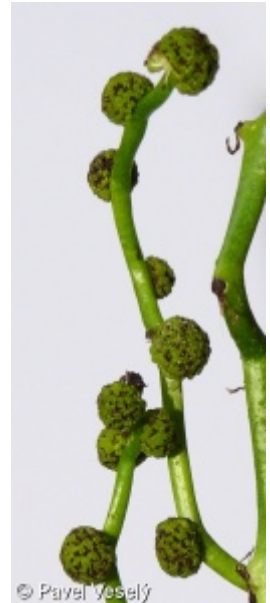
Shoot metamorphosis: **stolon, stolon with tuberous tip**  
 Storage organ: **stolon, stolon with tuberous tip**  
 Type of clonal growth organ: **hypogeogenous rhizome**  
 Freely dispersible organs of clonal growth: **absent**  
 Shoot life span (cyclicality): **dicyclic or polycyclic shoots prevailing**  
 Branching type of stem-derived organs of clonal growth: **sympodial**  
 Primary root: **absent**  
 Persistence of the clonal growth organ [year]: **2**  
 Number of clonal offspring: **3.4**  
 Lateral spreading distance by clonal growth [m]: **0.17**  
 Clonal index: **5**

### Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **7**  
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **13**  
 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): **7**  
 Number of buds per shoot at a depth of 0–10 cm (root buds included): **13**  
 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): **30**

Ploidy level (x): **2**

2C genome size [Mbp]: **879**

1Cx monoploid genome size [Mbp]: **439.5**

Genomic GC content: **42.7 %**

## 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: **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: **-0.69**

Herb layer disturbance frequency indicator value: **-0.66**

Whole-community disturbance severity indicator value: **0.18**

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

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

Herb layer structure-based disturbance indicator value: **0.59**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **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: **2 - optimum**

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

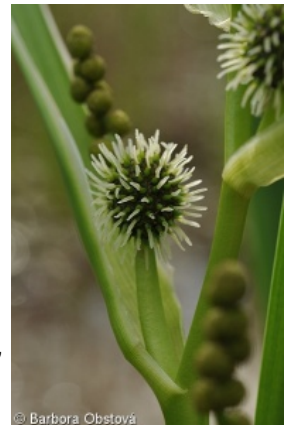
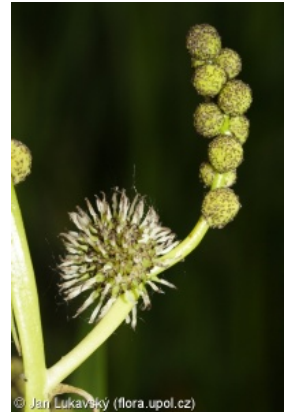
4D Riverine reed vegetation: **1 - rare occurrence**

4E Reed vegetation of brooks: **2 - optimum**

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: **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 alliances: [MCA Phragmition australis](#)

Diagnostic taxon of associations: [MCA06 Glycerio-Sparganietum neglecti](#), [VCB05 Tolypello intricatae-Charetum](#)

Constant taxon

Constant taxon of associations: [MCA06 Glycerio-Sparganietum neglecti](#), [VCB05 Tolypello intricatae-Charetum](#)

Dominant taxon

Dominant taxon of associations: [MCA06 Glycerio-Sparganietum neglecti](#)

Ecological specialization indices

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

Ecological specialization index for non-forest vegetation: **3.9**

Ecological specialization index for forest vegetation: **4.9**

Colonization ability

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

Index of colonization potential (ICP): **1**

Optimum successional age [years]: **3**

## Distribution and frequency

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

Floristic region: **Europe, Asia**

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

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: **626**

taxon.data.freq\_in\_quad: **1792**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **52 %**

Occurrence frequency in vegetation plots with a cover above 25%: **48.1 %**

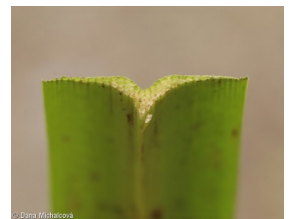
Occurrence frequency in vegetation plots with a cover above 50%: **38.2 %**

Mean percentage cover in vegetation plots: **36 %**

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: **12**



1 mm

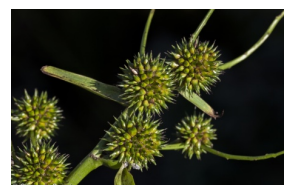


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1 mm



© Soňa Pišová



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

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

Legal protection: **not protected by law**



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