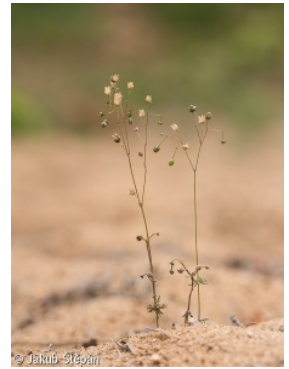
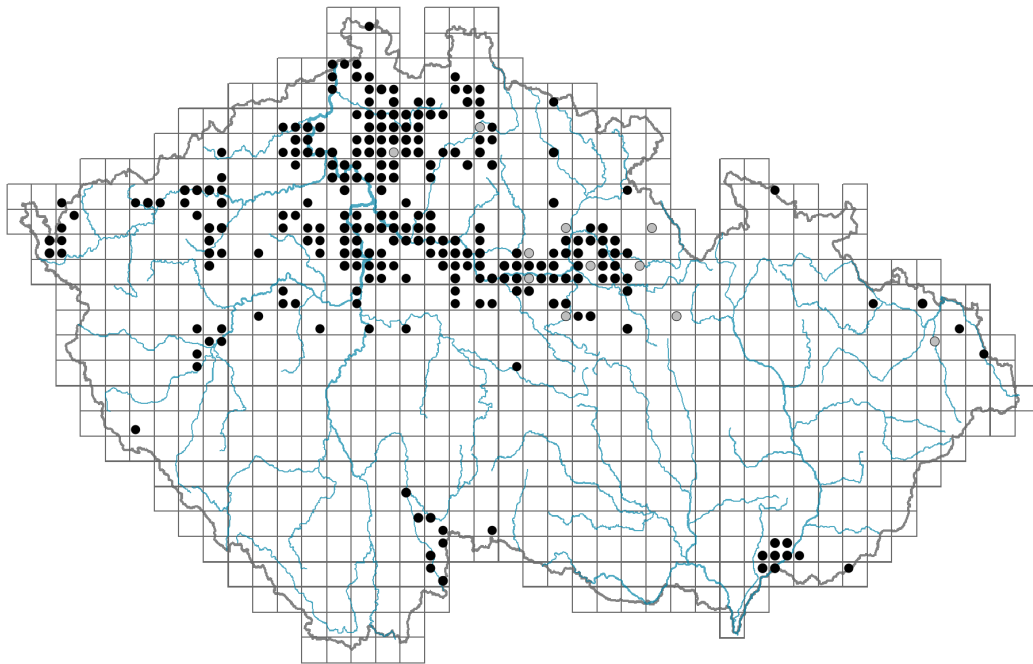


# *Spergula morisonii*

## 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]: **0.1-0.25**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **SR - stress-tolerator/ruderal**

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

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

Life strategy (Pierce method, S-score): **95.8 %**

Life strategy (Pierce method, R-score): **4.2 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **verticillate**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **absent**

Leaf life span: **overwintering green**

Leaf anatomy: **mesomorphic**

## Flower

Flowering period [month]: **April-May**

Flowering phase: **4 Fagus sylvatica-Galeobdolon (start of mid-spring)**

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

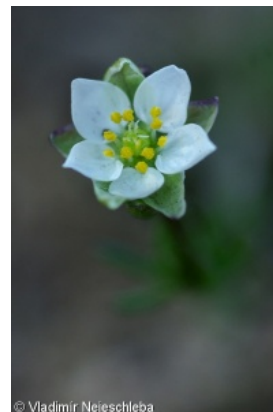
Calyx fusion: **aposepalous**

Inflorescence type: **dichasium**

Dicliny: **gynomonoecious, gynodioecious**

Generative reproduction type: **mixed mating**

Pollination syndrome: **insect-pollination, selfing**



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

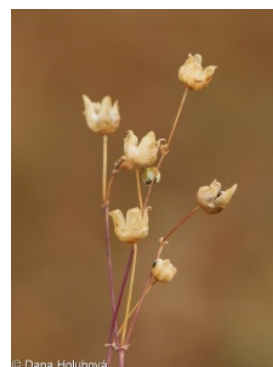
Fruit colour: **brown**

Reproduction type: **only by seed/spores**

Dispersal unit (diaspore): **seed**

Dispersal strategy: **Epilobium (mainly anemochory and autochory)**

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



## Belowground organs and clonality

Shoot life span (cyclicity): **monocyclic shoots prevailing**

Primary root: **present**

### 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): **0**

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): **5**

Depth of the belowground bud bank (root buds excluded) [cm]: **1**

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): **0**

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): **5**

Depth of the belowground bud bank (root buds included) [cm]: **1**

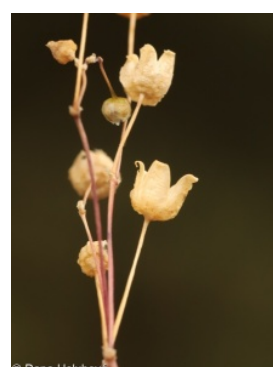


## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



## Karyology

Chromosome number (2n): **18**

Ploidy level (x): **2**

2C genome size [Mbp]: **712.11**

1Cx monoploid genome size [Mbp]: **356.06**

Genomic GC content: **40.3 %**



## 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: **2 - transition between values 1 and 3**

Reaction indicator value: **3x - acidity indicator, occurring mainly in acidic conditions, exceptionally in neutral conditions (generalist)**

Nutrient indicator value: **2 - transition between values 1 and 3**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.15**

Herb layer disturbance frequency indicator value: **-0.15**

Whole-community disturbance severity indicator value: **0.29**

Herb layer disturbance severity indicator value: **0.34**

Whole-community structure based disturbance indicator value: **0.89**

Herb layer structure-based disturbance indicator value: **0.76**

## Habitat and sociology

Occurrence in habitats

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**

8E Acidophilous dry grasslands: **1 - rare occurrence**

9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **2 - optimum**

9C Festuca grasslands on acidic sands: **1 - rare occurrence**

9D Pannonian sand steppes: **2 - optimum**

9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 - rare occurrence**

12 Forests

12L Boreo-continental pine forests: **1 - rare occurrence**

12W Pine and larch plantations: **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 classes: [TF Koelerio-Coryneporetea](#), [TG Festucetea vaginatae](#)

Diagnostic taxon of alliances: [TFA Corynephorion canescentis](#), [TFB Thero-Airion](#), [TGA Festucion vaginatae](#)

Diagnostic taxon of associations: [TFA01 Corniculario aculeatae-Corynephoretum canescentis](#), [TFB01 Airedum praecocis](#), [TGA01 Diantho serotini-Festucetum vaginatae](#)

Constant taxon

Constant taxon of alliances: [TFA Corynephorion canescentis](#)

Constant taxon of associations: [TFA01 Corniculario aculeatae-Corynephoretum canescentis](#), [TFB01 Airedum praecocis](#)

Dominant taxon

Dominant taxon of associations: [TFA01 Corniculario aculeatae-Corynephoretum canescentis](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.3**

Ecological specialization index for non-forest vegetation: **4.3**

Colonization ability

Index of colonization success (ICS): **4**

Index of colonization potential (ICP): **8**

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

## Distribution and frequency

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

Floristic region: **Europe**

Continentality degree: **5**

Distribution range extension along the continentality gradient: **3**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **141**

taxon.data.freq\_in\_quad: **267**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **18.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **4.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **5.2 %**

Maximum percentage cover in vegetation plots: **38 %**

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: **4**

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

## Threats and protection

Red List 2017 (national categories): **C3 - vulnerable taxon**

Red List 2017 (IUCN categories): **NT - near threatened**

Legal protection: **not protected by law**