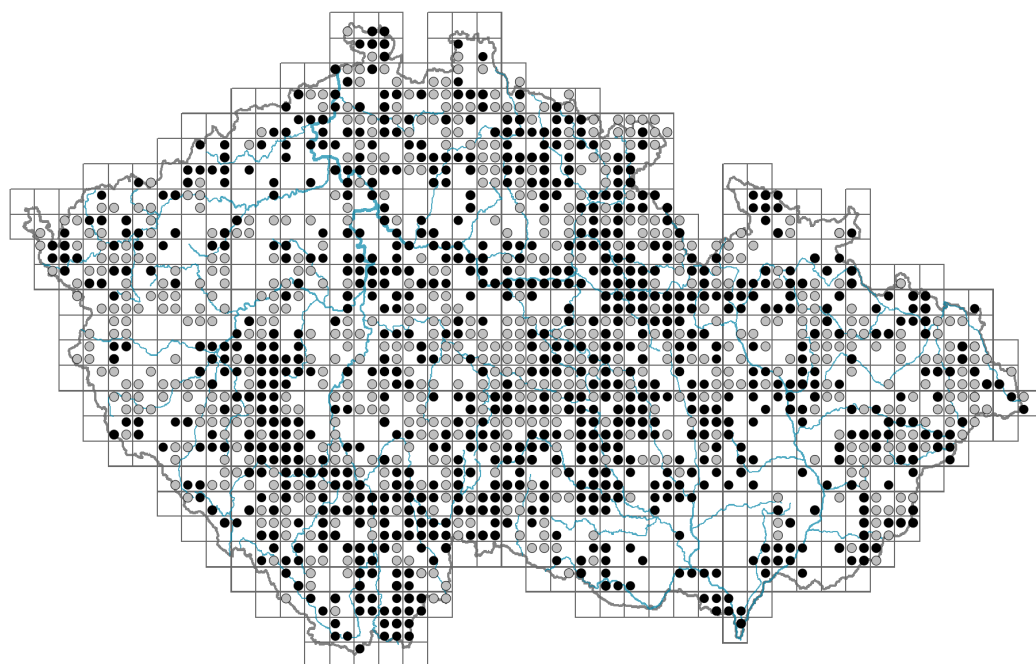


# *Spergula arvensis*

## Distribution

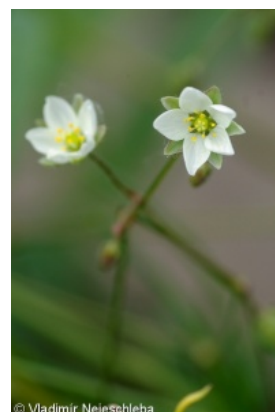


### Map info

● 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]: **0.1-0.5**

Growth form: **annual herb**

Life form: **therophyte**

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

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

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

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

Life strategy (Pierce method, R-score): **100 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **verticillate**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **absent**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**

## Flower

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

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

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: **autogamy**

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



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

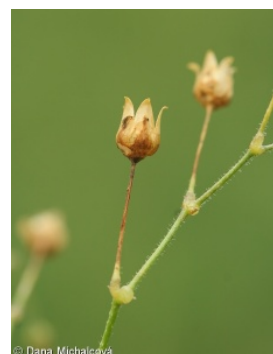
Fruit colour: **brown**

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

Dispersal unit (diaspore): **seed**

Dispersal strategy: **Allium (mainly 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):

Number of buds per shoot at a depth of 0–10 cm (root buds excluded):

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

Size of the belowground bud bank (root buds excluded):

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

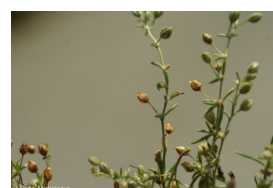
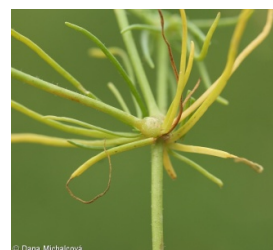
Number of buds per shoot at the soil surface (root buds included):

Number of buds per shoot at a depth of 0–10 cm (root buds included):

Number of buds per shoot at a depth greater than 10 cm (root buds included):

Size of the belowground bud bank (root buds included):

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



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

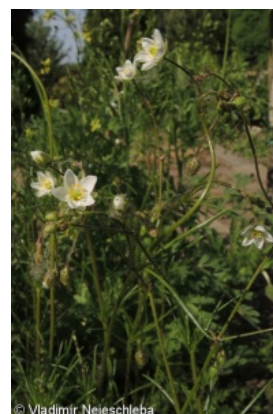
## Karyology

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

Ploidy level (x): **2**

2C genome size [Mbp]: **687.67**

1Cx monoploid genome size [Mbp]: **343.84**



## Taxon origin

Origin in the Czech Republic: **archaeophyte**

Invasion status: **naturalized**

Geographic origin: **Europe, Mediterranean**

Introduction pathway: **intentional - other, unintentional - agriculture**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% 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: **5 - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**

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

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

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **0.49**

Herb layer disturbance frequency indicator value: **0.49**

Whole-community disturbance severity indicator value: **0.99**

Herb layer disturbance severity indicator value: **0.99**

Whole-community structure based disturbance indicator value: **0.78**

Herb layer structure-based disturbance indicator value: **0.87**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

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

4 Wetland and riverine herbaceous vegetation

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

9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **1 - rare occurrence**

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

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

13B Annual vegetation of arable land: **2 - optimum**

13C Annual vegetation of trampled habitats: **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: **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: [XB Stellarietea mediae](#)

Diagnostic taxon of alliances: [XBC Scleranthion annui](#), [XBD Arnoseridion minimae](#)

Diagnostic taxon of associations: [XBC02 Spergulo arvensis-Scleranthetum annui](#),  
[XBD01 Sclerantho annui-Arnoseridetum minimae](#)

Constant taxon

Constant taxon of alliances: [XBC Scleranthion annui](#), [XBD Arnoseridion minimae](#)

Constant taxon of associations: [MAB01 Centunculo minimi-Anthocerotum punctati](#),  
[XBC02 Spergulo arvensis-Scleranthetum annui](#), [XBD01 Sclerantho annui-Arnoseridetum minimae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **6.3**

Ecological specialization index for non-forest vegetation: **6.3**

Colonization ability

Index of colonization success (ICS): **3**

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

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

## Distribution and frequency

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

Floristic region: **Europe, Western Asia**

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: **566**

taxon.data.freq\_in\_quad: **1473**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **22.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.8 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.8 %**

Mean percentage cover in vegetation plots: **6.1 %**

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: **8**

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

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

Legal protection: **not protected by law**