

Spergularia rubra

Distribution



Habitus and growth type

Height [m]: **0.03-0.3**

Growth form: **annual herb**

Life form: **hemicycophyte (therophyte)**

Life strategy: **R - 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): **opposite**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf anatomy: **mesomorphic**



Flower

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

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

Flower colour: **pink**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

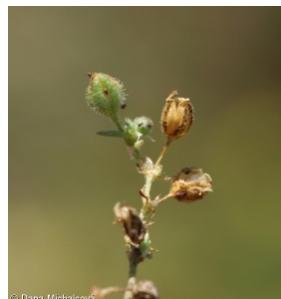
Calyx fusion: **aposepalous**

Inflorescence type: **dichasium**

Dicliny: **synoecious, gynomonoecious, gynodioecious**

Generative reproduction type: **facultative autogamy**

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: **Allium (mainly autochory)**

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



Belowground organs and clonality

Shoot metamorphosis: **pleiocorm**

Storage organ: **pleiocorm**

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

Primary root: **present**

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): **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): **10**

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

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): **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): **10**

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): **36**

Ploidy level (x): **4**

2C genome size [Mbp]: **1028.53**

1Cx monoploid genome size [Mbp]: **257.13**

Genomic GC content: **40.5 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% 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: **4 - transition between values 3 and 5**

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: **0.09**

Herb layer disturbance frequency indicator value: **0.09**

Whole-community disturbance severity indicator value: **0.75**

Herb layer disturbance severity indicator value: **0.75**

Whole-community structure based disturbance indicator value: **0.75**

Herb layer structure-based disturbance indicator value: **0.75**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3C Macrophytic vegetation of oligotrophic lakes and pools: **2 - optimum**

4 Wetland and riverine herbaceous vegetation

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

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**

6 Meadows and mesic pastures

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

6G Vegetation of wet disturbed soils: **1 - rare occurrence**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **1 - rare occurrence**

8 Dry grasslands

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**

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**

13 Anthropogenic vegetation

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

13C Annual vegetation of trampled habitats: **2 - optimum**

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: [**MA Isoëto-Nano-Juncetea**](#)

Diagnostic taxon of alliances: [**MAA Eleocharition ovatae**](#), [**MAB Radiolion linoidis**](#),
[**TFB Thero-Airion**](#), [**XAB Saginion procumbentis**](#), [**XBD Arnoseridion minimae**](#)

Diagnostic taxon of associations: [**MAA03 Stellario uliginosae-Isolepidetum setaceae**](#),
[**MAB02 Junco tenageiae-Radioletum linoidis**](#), [**TFB01 Airetum praecocis**](#), [**TFB02 Vulpietum myri**](#), [**XAB02 Herniarietum glabrae**](#), [**XAB03 Rumici acetosellae-Spergularietum rubrae**](#), [**XBD01 Sclerantho annui-Arnoseridetum minimae**](#)

Constant taxon

Constant taxon of associations: [**MAA03 Stellario uliginosae-Isolepidetum setaceae**](#),
[**XAB03 Rumici acetosellae-Spergularietum rubrae**](#)

Dominant taxon

Dominant taxon of associations: [**XAB03 Rumici acetosellae-Spergularietum rubrae**](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.1**

Ecological specialization index for non-forest vegetation: **4.1**

Colonization ability

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

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

Optimum successional age [years]: **2.5**

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional, austral or antarctic**

Floristic region: **circumpolar**

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: 591

taxon.data.freq_in_quad: 1553

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **23.4 %**

Occurrence frequency in vegetation plots with a cover above 25%: **6.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1.4 %**

Mean percentage cover in vegetation plots: **6.8 %**

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: **16**

Number of narrow habitats in which the taxon has its optimum: **5**

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**