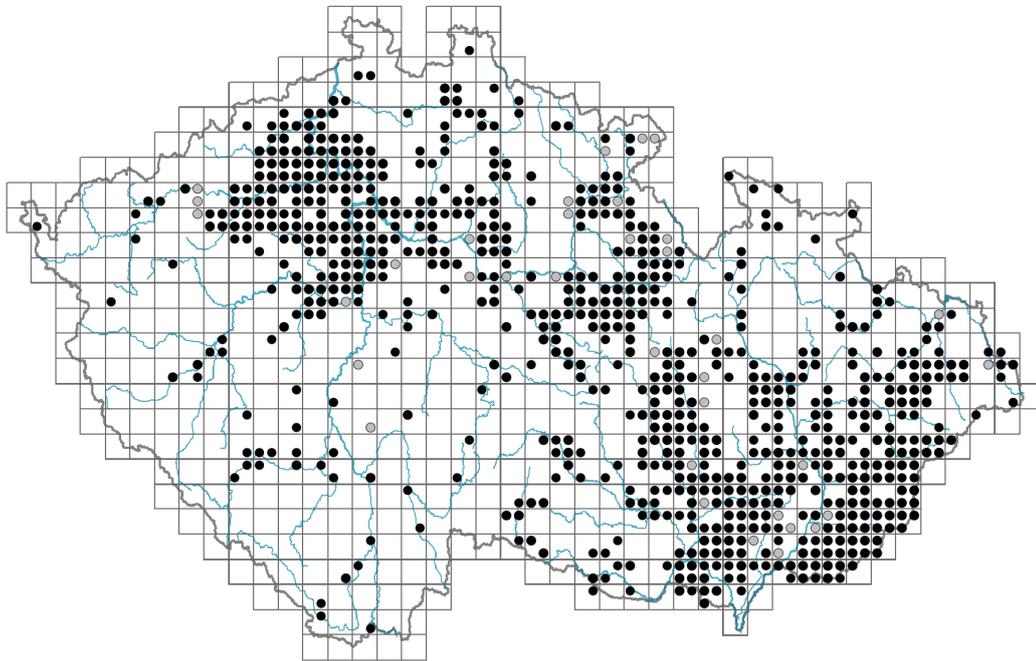


# Salvia verticillata

## 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]: **0.2-1**Growth form: **polycarpic perennial non-clonal herb**Life form: **hemicryptophyte**Life strategy: **CSR - competitor/stress-tolerator/ruderal**Life strategy (Pierce method based on leaf traits): **C/CSR**Life strategy (Pierce method, C-score): **47.5 %**Life strategy (Pierce method, S-score): **31.7 %**Life strategy (Pierce method, R-score): **20.8 %**

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## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**Leaf arrangement (phyllotaxis): **opposite, rosulate**Leaf shape: **simple - entire**Stipules: **absent**Petiole: **mainly present**Leaf life span: **summer green**Leaf anatomy: **mesomorphic**

© Dana Michalčová

## Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**

Flower colour: **pink, violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **bilabiate**

Calyx fusion: **synsepalous**

Inflorescence type: **pseudospica e verticillastris composita**

Dicliny: **gynomonoecious, gynodioecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination**

Pollinator spectrum: **honeybee, bumblebees (solitary bees, hoverflies, other Diptera)**

### Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of four one-seeded nutlets**

Fruit colour: **brown**

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

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

Dispersal strategy: **Allium (mainly autochory)**

Myrmecochory: **probably myrmecochorous**

### Belowground organs and clonality

Shoot metamorphosis: **rhizome-like pleiocorm**

Root metamorphosis: **primary storage root**

Storage organ: **rhizome-like pleiocorm, primary storage root**

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

Branching type of stem-derived organs of clonal growth: **sympodial**

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): **12**

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): **17**

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): **12**

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Size of the belowground bud bank (root buds included): **17**

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): **16 (32)**

Ploidy level (x): **2 (4)**

2C genome size [Mbp]: **1190.46**

1Cx monoploid genome size [Mbp]: **595.23**

Genomic GC content: **39.7 %**



## 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: **4 - transition between values 3 and 5**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **5 - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.4**

Herb layer disturbance frequency indicator value: **-0.31**

Whole-community disturbance severity indicator value: **0.31**

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

Whole-community structure based disturbance indicator value: **0.56**

Herb layer structure-based disturbance indicator value: **0.67**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1D Mobile calcareous screes: **2 - optimum**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

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

8 Dry grasslands

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

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**

8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**

8D Broad-leaved dry grasslands: **2 - optimum**

8F Thermophilous forest fringe vegetation: **2 - optimum**

9 Sand grasslands and rock-outcrop vegetation

9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

## 11 Heathlands and scrub

11L Tall mesic and xeric shrub: **1 - rare occurrence**

11N Low xeric scrub: **1 - rare occurrence**

11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

## 12 Forests

12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**

## 13 Anthropogenic vegetation

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

13B Annual vegetation of arable land: **1 - rare occurrence**

13D Perennial thermophilous ruderal vegetation: **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 alliances: [THE \*Cirsio-Brachypodium pinnati\*](#)

Diagnostic taxon of associations: [THE02 \*Cirsio pannonici-Seslerietum caeruleae\*](#)

## Constant taxon

Constant taxon of associations: [THE02 \*Cirsio pannonici-Seslerietum caeruleae\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **5.1**

Ecological specialization index for non-forest vegetation: **5.1**

## Colonization ability

Index of colonization success (ICS): **6**

Index of colonization potential (ICP): **7**

Optimum successional age [years]: **35**

## Distribution and frequency

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

Floristic region: **Europe, Western Asia**

Continental degree: **5**

Distribution range extension along the continentality gradient: **4**

Elevational belt in the Czech Republic: **lowlands, colline belt (submontane belt)**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **351**

taxon.data.freq\_in\_quad: **772**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **12.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.6 %**

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

Mean percentage cover in vegetation plots: **4 %**

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

Number of habitats with taxon occurrence in the Czech Republic



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Number of narrow habitats in which the taxon occurs: **16**

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

Number of broad habitats in which the taxon occurs: **7**

Number of broad habitats in which the taxon has its optimum: **3**

### 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**

