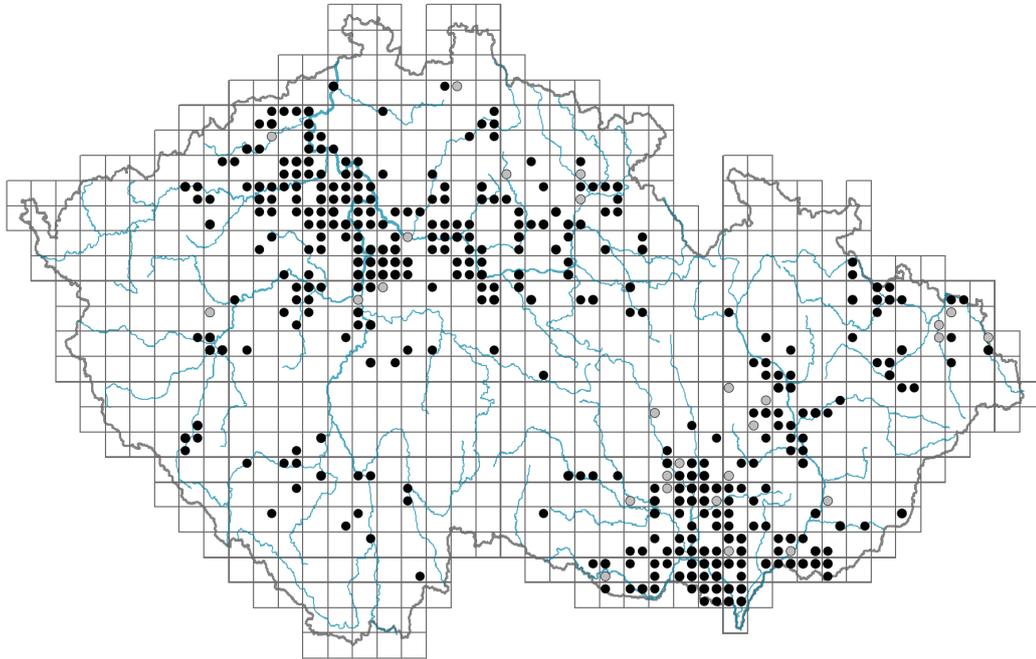


# *Setaria verticillata*

## 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]: **0.2-0.6**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **CR - competitor/ruderal**

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

Life strategy (Pierce method, C-score): **25.2 %**

Life strategy (Pierce method, S-score): **33.2 %**

Life strategy (Pierce method, R-score): **41.6 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **summer green**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

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

Flower colour: **green**  
 Perianth type: **reduced**  
 Perianth fusion: **reduced**  
 Inflorescence type: **pseudospica e spiculis composita**  
 Dicliny: **synoecious**  
 Generative reproduction type: **autogamy**  
 Pollination syndrome: **selfing**

### Fruit, seed and dispersal

Fruit type: **dry fruit - caryopsis**  
 Fruit colour: **brown**  
 Reproduction type: **mostly by seed/spores, rarely vegetatively**  
 Dispersal unit (diaspore): **fruit, infrutescence or its part**  
 Dispersal strategy: **Bidens (mainly autochory and epizoochory)**  
 Myrmecochory: **probably non-myrmecochorous**

### Belowground organs and clonality

Shoot life span (cyclicality): **monocyclic shoots prevailing**  
 Primary root: **absent**

#### 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): **36**  
 Ploidy level (x): **4**  
 2C genome size [Mbp]: **1624.89**  
 1Cx monoploid genome size [Mbp]: **406.22**  
 Genomic GC content: **45.8 %**



## Taxon origin

Origin in the Czech Republic: **archaeophyte**

Invasion status: **invasive**

Geographic origin: **Mediterranean**

Period of introduction: **Early Middle Ages (550-1200)**

Introduction pathway: **unintentional - agriculture, unintentional - industry**



## 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: **7 - heat indicator, occurring in relatively warm lowlands**

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

Reaction indicator value: **6x - transition between values 5 and 7 (generalist)**

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: **0.37**

Herb layer disturbance frequency indicator value: **0.37**

Whole-community disturbance severity indicator value: **0.97**

Herb layer disturbance severity indicator value: **0.97**

Whole-community structure based disturbance indicator value: **0.72**

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

## Habitat and sociology

Occurrence in habitats

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **2 - optimum**

13B Annual vegetation of arable land: **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: [XBK \*Eragrostion cilianensi-minoris\*](#)

Diagnostic taxon of associations: [XBK01 \*Digitario sanguinalis-Eragrostietum minoris\*](#), [XBK03 \*Eragrostio poaeoidis-Panicetum capillaris\*](#)

Constant taxon

Constant taxon of associations: [XBK01 \*Digitario sanguinalis-Eragrostietum minoris\*](#), [XBK03 \*Eragrostio poaeoidis-Panicetum capillaris\*](#)

Dominant taxon

Dominant taxon of associations: **[XBF01 Setario pumilae-Echinochloëtum cruris-galli](#)**, **[XBK01 Digitario sanguinalis-Eragrostietum minoris](#)**

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.6**

Ecological specialization index for non-forest vegetation: **5.6**

Colonization ability

Index of colonization success (ICS): **1**

## Distribution and frequency

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

Floristic region: **Europe, Asia, Americas**

Continentality degree: **6**

Distribution range extension along the continentality gradient: **6**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 210

taxon.data.freq\_in\_quad: 396

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **13.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **9.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **9.1 %**

Mean percentage cover in vegetation plots: **8.7 %**

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: **2**

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

Number of broad habitats in which the taxon occurs: **1**

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

## 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**