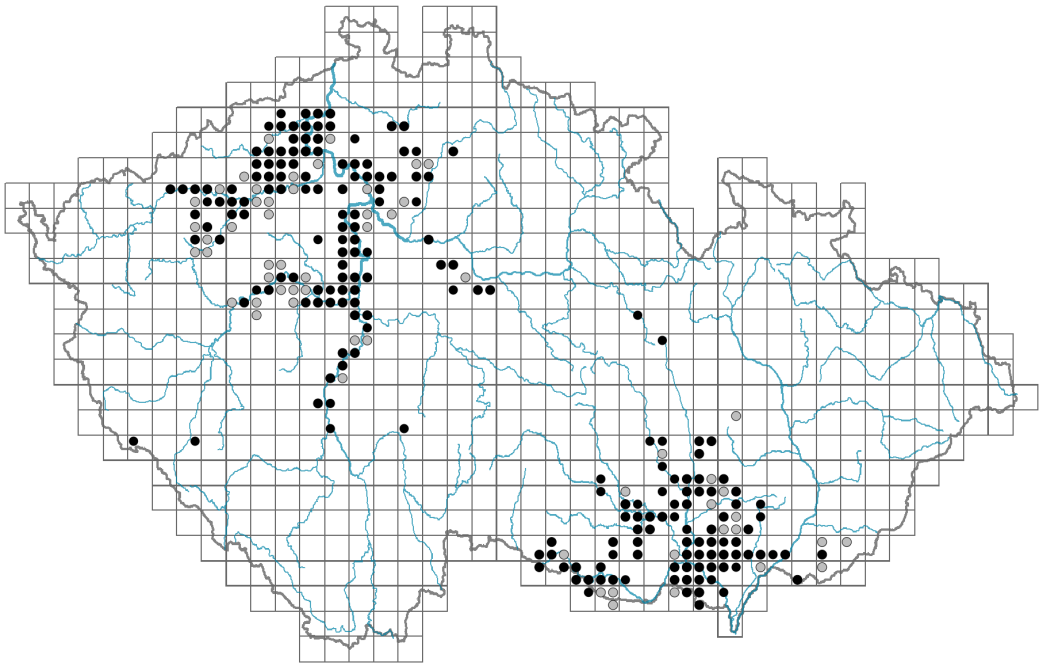
Stipa pennata

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]: **0.3–0.5**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy (Pierce method based on leaf traits): **S/CS**
Life strategy (Pierce method, C-score): **16.5 %**
Life strategy (Pierce method, S-score): **83.5 %**
Life strategy (Pierce method, R-score): **0 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **simple – entire**
Stipules: **absent**
Petiole: **absent**

Flower

Flowering period [month]: **May–June**
Flower colour: **green**
Perianth type: **reduced**
Perianth fusion: **reduced**

Inflorescence type: **spica e spiculis composita**
Generative reproduction type: **facultative autogamy**

Fruit, seed and dispersal

Fruit type: **dry fruit – caryopsis**
Fruit colour: **white, brown**
Dispersal unit (diaspore): **fruit, infrutescence or its part**
Dispersal strategy: **Bidens (mainly autochory and epizoochory)**
Myrmecochory: **non-myrmecochorous (b)**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

Karyology

Chromosome number (2n): **44**
Ploidy level (x): **4**
2C genome size [Mbp]: **2193.48**
1Cx monoploid genome size [Mbp]: **548.37**
Genomic GC content: **46.3 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

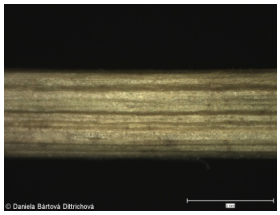
Ellenberg-type indicator values

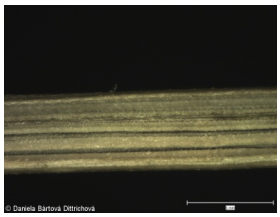
Light indicator value: **8 – light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**
Temperature indicator value: **7 – heat indicator, occurring in relatively warm lowlands**
Moisture indicator value: **2 – transition between values 1 and 3**
Reaction indicator value: **7 – indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**
Nutrient indicator value: **2 – transition between values 1 and 3**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

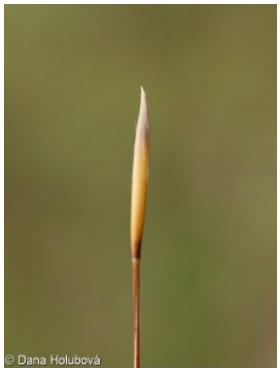
Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.63**
Herb layer disturbance frequency indicator value: **-0.35**
Whole-community disturbance severity indicator value: **0.23**
Herb layer disturbance severity indicator value: **0.26**
Whole-community structure based disturbance indicator value: **0.43**
Herb layer structure-based disturbance indicator value: **0.48**

Habitat and sociology







Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1D Mobile calcareous screes: **1 – rare occurrence**

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 – optimum**
8B Submediterranean dry grasslands on rock outcrops: **1 – rare occurrence**
8C Narrow-leaved sub-continental steppes: **3 – dominant**
8D Broad-leaved dry grasslands: **1 – rare occurrence**
8F Thermophilous forest fringe vegetation: **1 – rare occurrence**

9 Sand grasslands and rock-outcrop vegetation

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

11 Heathlands and scrub

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

12 Forests

12H Peri-Alpidic basiphilous thermophilous oak forests: **1 – rare occurrence**
12O Peri-Alpidic pine forests: **1 – rare occurrence**
12T Robinia pseudacacia plantations: **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 alliances: **THD *Festucion valesiacae***
Diagnostic taxon of associations: **THD04 *Koelerio macranthae-Stipetum joannis***, **THD06 *Astragalo exscapi-Crambetum tatariae***, **THH02 *Geranio sanguinei-Dictamnetum albae***

Constant taxon

Constant taxon of associations: **THD04 *Koelerio macranthae-Stipetum joannis***

Dominant taxon

Dominant taxon of associations: **THD04 *Koelerio macranthae-Stipetum joannis***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.8**
Ecological specialization index for non-forest vegetation: **4.9**
Ecological specialization index for forest vegetation: **4.5**

Colonization ability

Index of colonization success (ICS): **4**
Index of colonization potential (ICP): **4**
Optimum successional age [years]: **75**

Distribution and frequency

Continentality degree: **7**
Distribution range extension along the continentality gradient: **5**

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: 123
taxon.data.freq_in_quad: 256

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.5 %**
Occurrence frequency in vegetation plots with a cover above 5%: **29.4 %**
Occurrence frequency in vegetation plots with a cover above 25%: **18.4 %**
Occurrence frequency in vegetation plots with a cover above 50%: **2.9 %**
Mean percentage cover in vegetation plots: **10.8 %**
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: **12**
Number of narrow habitats in which the taxon has its optimum: **2**
Number of broad habitats in which the taxon occurs: **5**
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: **vulnerable taxon**