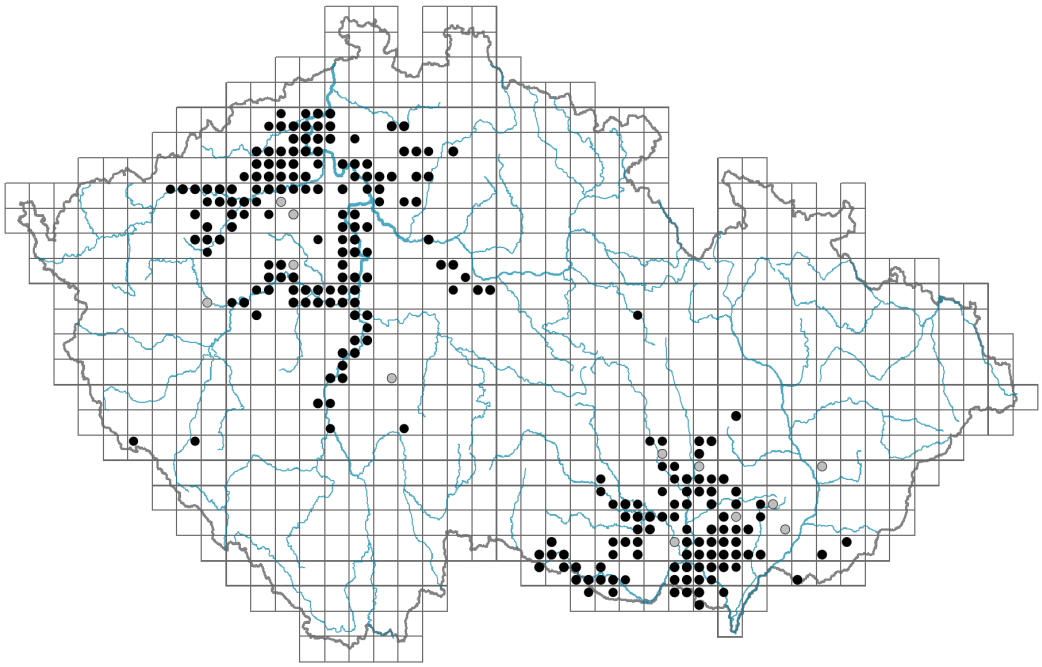
Stipa pennata

Distribution

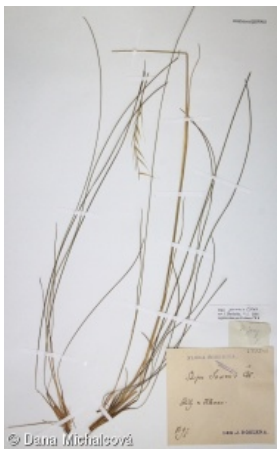


Map info

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**

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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**

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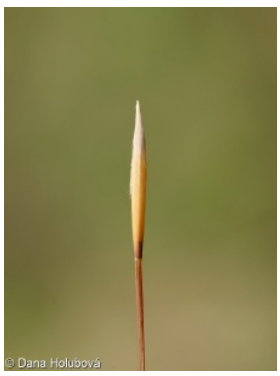
Habitat and sociology



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**

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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: 129
taxon.data.freq_in_quad: 263

Commonness in vegetation plots from the Czech Republic

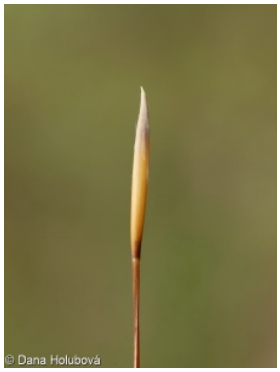
Occurrence frequency in vegetation plots: **0.5 %**
Occurrence frequency in vegetation plots with a cover above 5%: **29.4 %**
Occurrence frequency in vegetation plots with a cover above 25%: **18.4 %**
Occurrence frequency in vegetation plots with a cover above 50%: **2.9 %**
Mean percentage cover in vegetation plots: **10.8 %**
Maximum percentage cover in vegetation plots: **88 %**

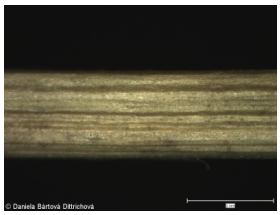
Number of habitats with taxon occurrence in the Czech Republic

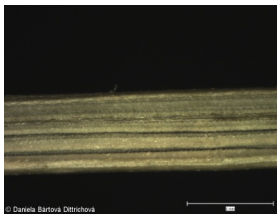
Number of narrow habitats in which the taxon occurs: **12**
Number of narrow habitats in which the taxon has its optimum: **2**
Number of broad habitats in which the taxon occurs: **5**
Number of broad habitats in which the taxon has its optimum: **1**

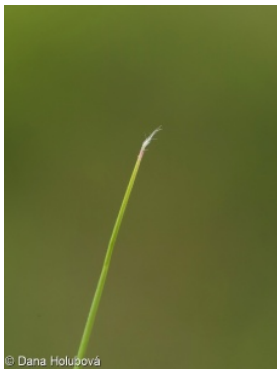
Threats and protection

Red List 2017 (national categories): **C3 – vulnerable taxon**
Red List 2017 (IUCN categories): **NT – near threatened**
Legal protection: **vulnerable taxon**









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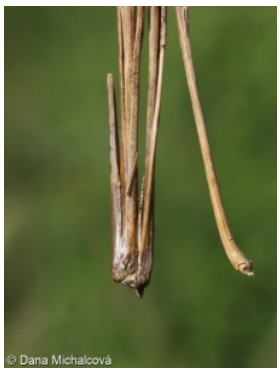

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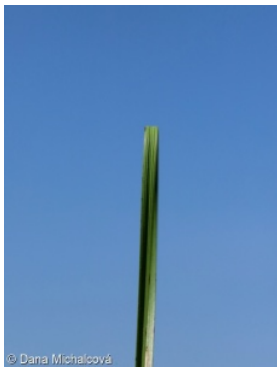

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