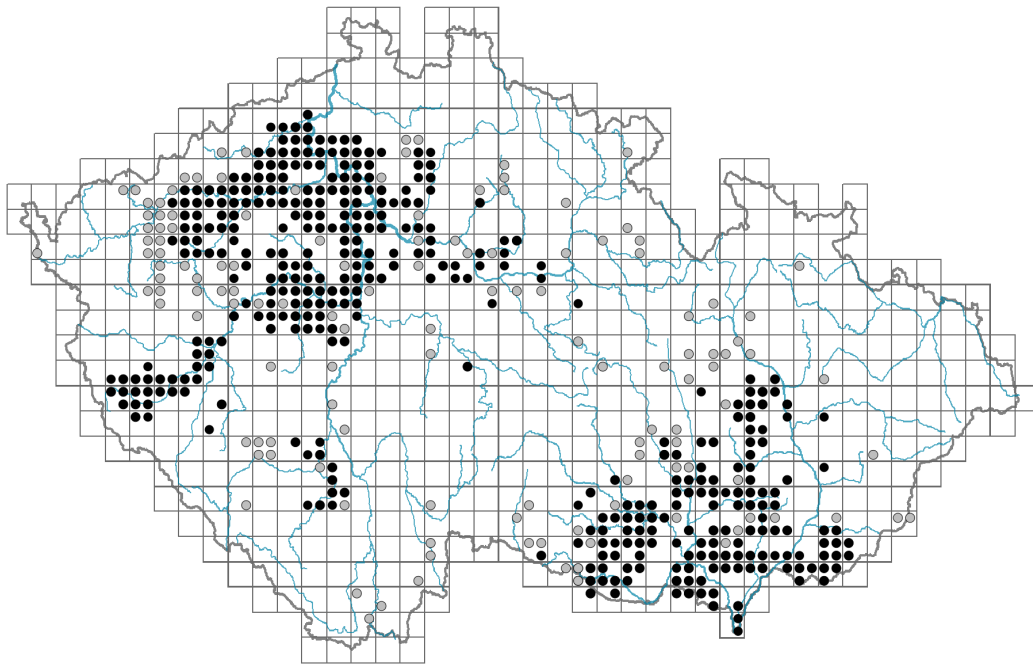


# *Helictotrichon pratense*

## 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]: **0.3-0.8**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CS - competitor/stress-tolerator**

Life strategy (Pierce method based on leaf traits): **S/CS**

Life strategy (Pierce method, C-score): **28.9 %**

Life strategy (Pierce method, S-score): **69.9 %**

Life strategy (Pierce method, R-score): **1.3 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf anatomy: **scleromorphic**



## Flower

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

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

Flower colour: **green**

Perianth type: **reduced**

Perianth fusion: **reduced**

Inflorescence type: **panicula e spiculis composita**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **wind-pollination, 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: **Allium (mainly autochory)**

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

## Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon, tuft**

Type of clonal growth organ: **epigeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**

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

Primary root: **absent**

Persistence of the clonal growth organ [year]: **4**

Number of clonal offspring: **1**

Lateral spreading distance by clonal growth [m]: **0.06**

Clonal index: **3**

## Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **8**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **15**

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): **23**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

Number of buds per shoot at the soil surface (root buds included): **8**

Number of buds per shoot at a depth of 0–10 cm (root buds included): **15**

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): **23**

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): **126**

Ploidy level (x): **18**

2C genome size [Mbp]: **32491.08**

1Cx monoploid genome size [Mbp]: **1805.06**

Genomic GC content: **47.8 %**

## 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: **6 - transition between values 5 and 7**

Moisture indicator value: **3 - missing on damp soil**

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

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: **-0.68**

Herb layer disturbance frequency indicator value: **-0.2**

Whole-community disturbance severity indicator value: **0.2**

Herb layer disturbance severity indicator value: **0.24**

Whole-community structure based disturbance indicator value: **0.55**

Herb layer structure-based disturbance indicator value: **0.64**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **1 - rare occurrence**

6 Meadows and mesic pastures

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

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

7 Acidophilous grasslands

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

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**

8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

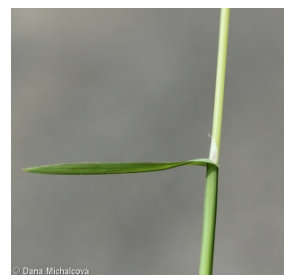
8C Narrow-leaved sub-continental steppes: **2 - optimum**

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

8E Acidophilous dry grasslands: **2 - optimum**

8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

9 Sand grasslands and rock-outcrop vegetation

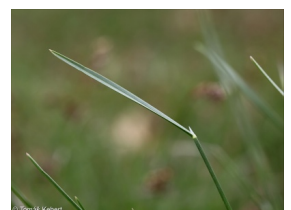
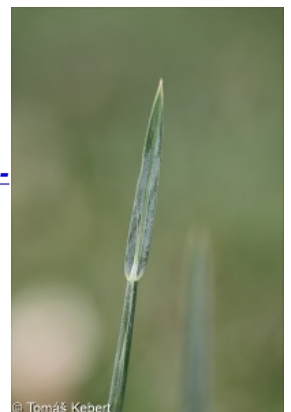
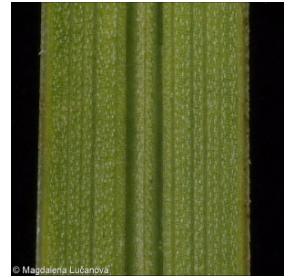




- 9B Open vegetation of acidic sands: **1 - rare occurrence**  
 9C Festuca grasslands on acidic sands: **1 - rare occurrence**  
 9D Pannonian sand steppes: **1 - rare occurrence**  
 9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**  
 11 Heathlands and scrub  
 11A Dry lowland to subalpine heathlands: **2 - optimum**  
 12 Forests  
 12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**  
 12I Sub-continental thermophilous oak forests: **1 - rare occurrence**  
 12J Acidophilous thermophilous oak forests: **1 - rare occurrence**  
 12K Acidophilous oak forests: **1 - rare occurrence**  
 12L Boreo-continental pine forests: **1 - rare occurrence**  
 12O Peri-Alpidic pine forests: **2 - optimum**  
 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 classes: [LE \*Erico-Pinetea\*](#), [TH \*Festuco-Brometea\*](#)  
 Diagnostic taxon of alliances: [LEA \*Erico carneae-Pinion\*](#), [THG \*Koelerio-Phleion phleoidis\*](#)  
 Diagnostic taxon of associations: [LEA01 \*Thlaspio montani-Pinetum sylvestris\*](#), [THA04 \*Helichryso arenarii-Festucetum pallentis\*](#), [THG01 \*Potentillo heptaphyllae-Festucetum rupicolae\*](#), [THG02 \*Avenulo pratensis-Festucetum valesiacae\*](#)  
 Constant taxon  
 Constant taxon of classes: [LE \*Erico-Pinetea\*](#)  
 Constant taxon of alliances: [LEA \*Erico carneae-Pinion\*](#), [THG \*Koelerio-Phleion phleoidis\*](#)  
 Constant taxon of associations: [LEA01 \*Thlaspio montani-Pinetum sylvestris\*](#), [THA04 \*Helichryso arenarii-Festucetum pallentis\*](#), [THG01 \*Potentillo heptaphyllae-Festucetum rupicolae\*](#), [THG02 \*Avenulo pratensis-Festucetum valesiacae\*](#)  
 Dominant taxon  
 Dominant taxon of associations: [THG01 \*Potentillo heptaphyllae-Festucetum rupicolae\*](#)  
 Ecological specialization indices  
 Ecological specialization index for all vegetation types: **5.1**  
 Ecological specialization index for non-forest vegetation: **5.2**  
 Ecological specialization index for forest vegetation: **4.8**  
 Colonization ability  
 Index of colonization success (ICS): **5**  
 Index of colonization potential (ICP): **3**  
 Optimum successional age [years]: **30**

## Distribution and frequency

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



Floristic region: **Europe**

Continentality degree: **4**

Distribution range extension along the continentality gradient: **2**

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: 298

taxon.data.freq\_in\_quad: 604

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.9 %**

Occurrence frequency in vegetation plots with a cover above 5%: **21.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **5.3 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1.1 %**

Mean percentage cover in vegetation plots: **6.3 %**

Maximum percentage cover in vegetation plots: **63 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **22**

Number of narrow habitats in which the taxon has its optimum: **7**

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): **C4a - near threatened taxon**

Red List 2017 (IUCN categories): **LC - least concern**

Legal protection: **not protected by law**