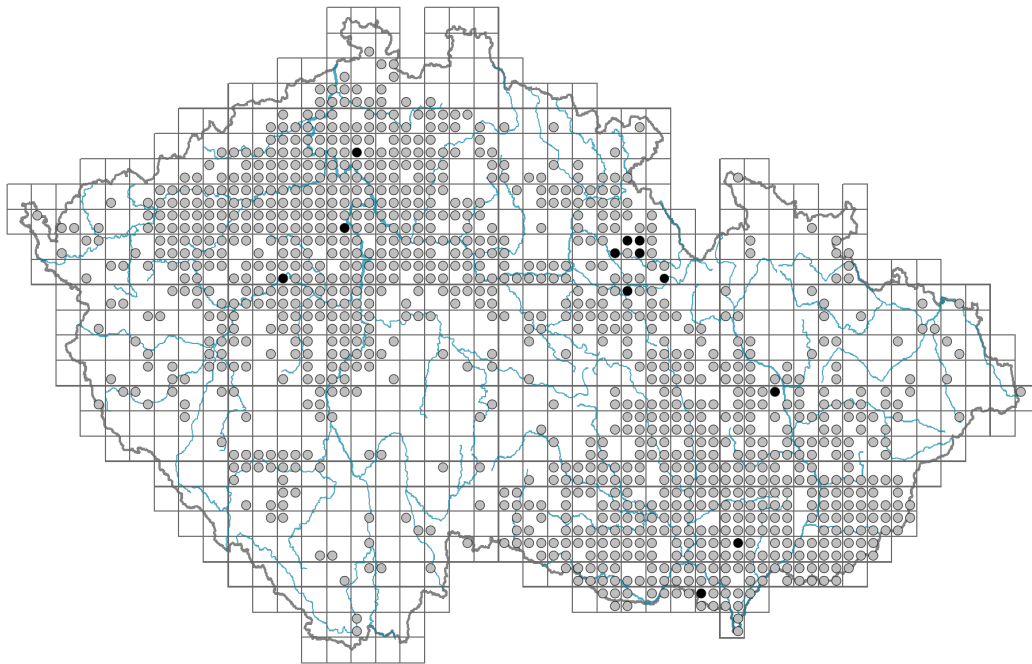


# *Festuca rupicola*

## 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]: **0.2-0.7**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **7.2 %**

Life strategy (Pierce method, S-score): **78.5 %**

Life strategy (Pierce method, R-score): **14.4 %**



© Dana Michalová

## 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**



© Miroslava Táborská

## 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**

Pollination syndrome: **wind-pollination**

## 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

Storage organ: **tuft**

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

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

Shoot life span (cyclicality): **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]:

Number of clonal offspring: **3.5**

Lateral spreading distance by clonal growth [m]: **0.01**

Clonal index: **4**

## Bud bank

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

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

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

Size of the belowground bud bank (root buds excluded):

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

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

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

Number of buds per shoot at a depth greater than 10 cm (root buds included):

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

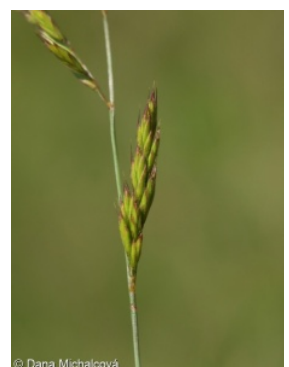
Depth of the belowground bud bank (root buds included) [cm]:

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**



## Karyology

Chromosome number (2n): **42**

Ploidy level (x): **6**

2C genome size [Mbp]: **12331.29**

1Cx monoploid genome size [Mbp]: **2055.21**

Genomic GC content: **47.1 %**

## 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: **8x - transition between values 7 and 9, occurring mostly in calcium-rich conditions (generalist)**

Nutrient indicator value: **3 - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.71**

Herb layer disturbance frequency indicator value: **-0.35**

Whole-community disturbance severity indicator value: **0.25**

Herb layer disturbance severity indicator value: **0.28**

Whole-community structure based disturbance indicator value: **0.49**

Herb layer structure-based disturbance indicator value: **0.57**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

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

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

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **2 - optimum**

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

6D Alluvial meadows of lowland rivers: **1 - rare occurrence**

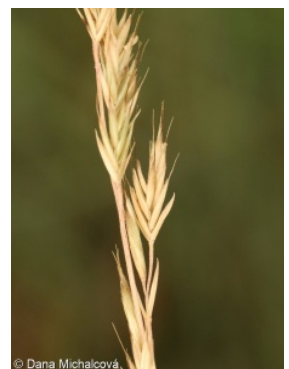
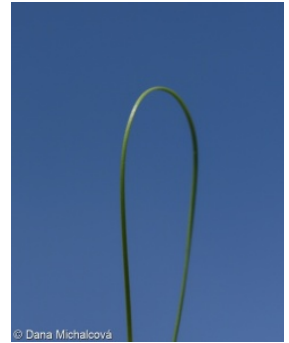
6F Intermittently wet Molinia meadows: **1 - rare occurrence**

7 Acidophilous grasslands

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

8 Dry grasslands

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



- 8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**  
 8C Narrow-leaved sub-continental steppes: **3 - dominant**  
 8D Broad-leaved dry grasslands: **2 - optimum**  
 8E Acidophilous dry grasslands: **3 - dominant**  
 8F Thermophilous forest fringe vegetation: **2 - optimum**  
 9 Sand grasslands and rock-outcrop vegetation  
 9B Open vegetation of acidic sands: **1 - rare occurrence**  
 9C Festuca grasslands on acidic sands: **2 - optimum**  
 9D Pannonian sand steppes: **1 - rare occurrence**  
 9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**  
 9F Basiphilous vegetation of spring therophytes and succulents: **2 - optimum**  
 10 Saline vegetation  
 10I Inland saline meadows: **1 - rare occurrence**  
 11 Heathlands and scrub  
 11A Dry lowland to subalpine heathlands: **1 - rare occurrence**  
 11L Tall mesic and xeric shrub: **1 - rare occurrence**  
 11N Low xeric scrub: **2 - optimum**  
 12 Forests  
 12C Oak-hornbeam forests: **1 - rare occurrence**  
 12D Ravine forests: **1 - rare occurrence**  
 12F Limestone beech forests: **1 - rare occurrence**  
 12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**  
 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**  
 12T Robinia pseudacacia plantations: **1 - rare occurrence**  
 12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**  
 12W Pine and larch plantations: **1 - rare occurrence**  
 13 Anthropogenic vegetation  
 13C Annual vegetation of trampled habitats: **1 - rare occurrence**  
 13D Perennial thermophilous ruderal vegetation: **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: [\*\*TH Festuco-Brometea\*\*](#)

Diagnostic taxon of alliances: [\*\*THE Cirsio-Brachypodium pinnati\*\*](#), [\*\*THE Bromion erecti\*\*](#)

Diagnostic taxon of associations: [\*\*THD03 Festuco rupicolae-Caricetum humilis\*\*](#), [\*\*THD06 Astragalo exscapi-Crambetum tatariae\*\*](#), [\*\*THE01 Scabioso ochroleucae-Brachypodietum pinnati\*\*](#), [\*\*THE03 Polygalo majoris-Brachypodietum pinnati\*\*](#), [\*\*THE02 Brachypodio pinnati-Molinietum arundinaceae\*\*](#), [\*\*XCA02 Salvia nemorosae-Marrubietum peregrini\*\*](#)

## Constant taxon

Constant taxon of classes: [TH Festuco-Brometea](#)

Constant taxon of alliances: [THD Festucion valesiacae](#), [THE Cirsio-Brachypodion pinnati](#), [THF Bromion erecti](#)

Constant taxon of associations: [LCA02 Lithospermo purpureocaerulei-Quercetum pubescentis](#), [TFC01 Sileno otitae-Festucetum brevipilae](#), [THC04 Asplenio cuneifolii-Seslerietum caeruleae](#), [THD03 Festuco rupicolae-Caricetum humilis](#), [THD04 Koelerio macranthae-Stipetum joannis](#), [THD05 Stipetum tirsae](#), [THD06 Astragalo exscapi-Crambetum tatariae](#), [THE01 Scabioso ochroleucae-Brachypodietum pinnati](#), [THE03 Polygalo majoris-Brachypodietum pinnati](#), [THE04 Plantagini maritimae-Caricetum flaccae](#), [THF01 Carlino acaulis-Brometum erecti](#), [THF02 Brachypodio pinnati-Molinietum arundinaceae](#), [THG01 Potentillo heptaphyllae-Festucetum rupicolae](#), [THH03 Geranio sanguinei-Peucedanetum cervariae](#), [XCA02 Salvia nemorosae-Marrubietum peregrini](#)

## Dominant taxon

Dominant taxon of associations: [KBB04 Pruno spinosae-Ligustretum vulgaris](#), [TDA04 Potentillo albae-Festucetum rubrae](#), [THD01 Festuco valesiacae-Stipetum capillatae](#), [THD03 Festuco rupicolae-Caricetum humilis](#), [THE01 Scabioso ochroleucae-Brachypodietum pinnati](#), [THF01 Carlino acaulis-Brometum erecti](#), [THG01 Potentillo heptaphyllae-Festucetum rupicolae](#), [XCA02 Salvia nemorosae-Marrubietum peregrini](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.6**

Ecological specialization index for non-forest vegetation: **4.6**

Ecological specialization index for forest vegetation: **4.8**

## Colonization ability

Index of colonization success (ICS): **8**

Index of colonization potential (ICP): **5**

Optimum successional age [years]: **32**

## Distribution and frequency

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

Floristic region: **Europe, Western Asia**

Continental degree: **8**

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: **429**

taxon.data.freq\_in\_quad: **1075**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **38 %**

Occurrence frequency in vegetation plots with a cover above 25%: **13.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **3.5 %**

Mean percentage cover in vegetation plots: **10.6 %**

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: **37**

Number of narrow habitats in which the taxon has its optimum: **11**

Number of broad habitats in which the taxon occurs: **9**

Number of broad habitats in which the taxon has its optimum: **5**

### **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**