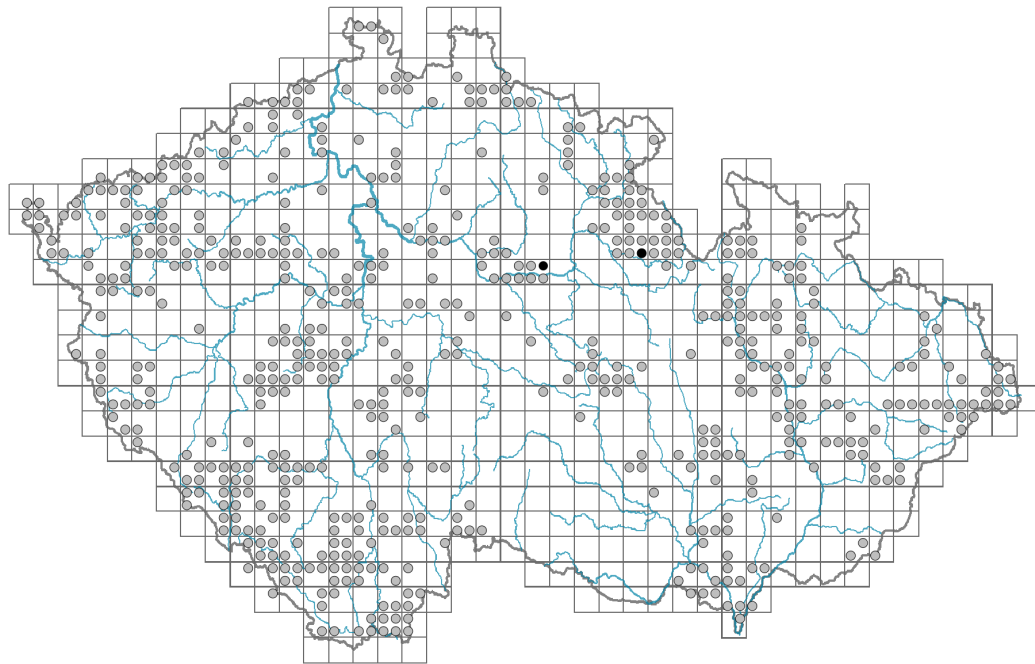


# *Festuca rubra* subsp. *rubra*

## 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]: **0.2-1**

Life form: **hemicryptophyte**

## 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-July**

Flower colour: **green**

Perianth type: **reduced**

Perianth fusion: **reduced**

Inflorescence type: **panicula e spiculis composita**

## Fruit, seed and dispersal

Fruit type: **dry fruit - caryopsis**

Dispersal unit (diaspore): **fruit, infrutescence or its part**

Dispersal strategy: **Allium (mainly autochory)**

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

## Belowground organs and clonality

Type of clonal growth organ: **hypogeogenous 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: **3.8**

Lateral spreading distance by clonal growth [m]: **0.07**

Clonal index: **5**

### 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): **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): **20**

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

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): **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): **20**

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): **42**

Ploidy level (x): **6**

2C genome size [Mbp]: **11804.22**

1Cx monoploid genome size [Mbp]: **1967.37**

Genomic GC content: **47 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

### Ellenberg-type indicator values

Light indicator value: **7 - half-light plant, mostly occurring at full light, but also in the shade up to about 30% of diffuse radiation incident in an open area**

Temperature indicator value: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

Moisture indicator value: **5 - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**

Reaction indicator value: **5x - indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions (generalist)**

Nutrient indicator value: **5x - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites (generalist)**

Salinity indicator value: **1 - salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**

## **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**

#### **2 Alpine and subalpine grasslands**

2A Alpine grasslands on siliceous bedrock: **1 - rare occurrence**

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

#### **3 Aquatic vegetation**

3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

#### **4 Wetland and riverine herbaceous vegetation**

4A Reed-beds of eutrophic still waters: **1 - rare occurrence**

4B Halophilous reed and sedge beds: **1 - rare occurrence**

4D Riverine reed vegetation: **1 - rare occurrence**

4E Reed vegetation of brooks: **1 - rare occurrence**

4G Tall-sedge beds: **1 - rare occurrence**

4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**

4J River gravel banks: **1 - rare occurrence**

4K Petasites fringes of montane brooks: **1 - rare occurrence**

4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**

#### **5 Vegetation of springs and mires**

5A Hard-water springs with tufa formation: **1 - rare occurrence**

5B Lowland to montane soft-water springs: **1 - rare occurrence**

5C Alpine and subalpine soft-water springs: **1 - rare occurrence**

5D Calcareous fens: **1 - rare occurrence**

5E Acidic moss-rich fens and peatland meadows: **2 - optimum**

5F Transitional mires: **1 - rare occurrence**

5G Raised bogs: **1 - rare occurrence**

#### **6 Meadows and mesic pastures**

6A Mesic Arrhenatherum meadows: **3 - dominant**

6B Montane mesic meadows: **3 - dominant**

6C Pastures and park grasslands: **2 - optimum**

6D Alluvial meadows of lowland rivers: **2 - optimum**

- 6E Wet Cirsium meadows: **2 - optimum**  
6F Intermittently wet Molinia meadows: **3 - dominant**  
6G Vegetation of wet disturbed soils: **1 - rare occurrence**
- 7 Acidophilous grasslands  
7A Subalpine and montane acidophilous grasslands: **2 - optimum**  
7B Submontane Nardus grasslands: **2 - optimum**
- 8 Dry grasslands  
8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**  
8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**  
8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**  
8D Broad-leaved dry grasslands: **1 - rare occurrence**  
8E Acidophilous dry grasslands: **1 - rare occurrence**  
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: **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: **1 - rare occurrence**
- 10 Saline vegetation  
10I Inland saline meadows: **1 - rare occurrence**  
10J Saline steppes: **1 - rare occurrence**
- 11 Heathlands and scrub  
11A Dry lowland to subalpine heathlands: **1 - rare occurrence**  
11D Subalpine acidophilous Pinus mugo scrub: **1 - rare occurrence**  
11H Subalpine deciduous scrub: **1 - rare occurrence**  
11I Willow carrs: **1 - rare occurrence**  
11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**  
11L Tall mesic and xeric shrub: **1 - rare occurrence**  
11N Low xeric scrub: **1 - rare occurrence**  
11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**
- 12 Forests  
12A Alder carrs: **1 - rare occurrence**  
12B Alluvial forests: **1 - rare occurrence**  
12C Oak-hornbeam forests: **1 - rare occurrence**  
12D Ravine forests: **1 - rare occurrence**  
12E Herb-rich beech forests: **1 - rare occurrence**  
12F Limestone beech forests: **1 - rare occurrence**  
12G Acidophilous beech forests: **1 - rare occurrence**  
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: **1 - rare occurrence**  
12R Acidophilous spruce forests: **1 - rare occurrence**  
12S Basiphilous spruce forests: **1 - rare occurrence**

12T Robinia pseudacacia plantations: **1 - rare occurrence**

12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

12V Spruce plantations: **1 - rare occurrence**

12W Pine and larch plantations: **1 - rare occurrence**

### 13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

13B Annual vegetation of arable land: **1 - rare occurrence**

13C Annual vegetation of trampled habitats: **1 - rare occurrence**

13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

## Distribution and frequency

Distribution range extension along the continentality gradient: **7**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **314**

taxon.data.freq\_in\_quad: **565**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **78**

Number of narrow habitats in which the taxon has its optimum: **10**

Number of broad habitats in which the taxon occurs: **13**

Number of broad habitats in which the taxon has its optimum: **4**

## 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**