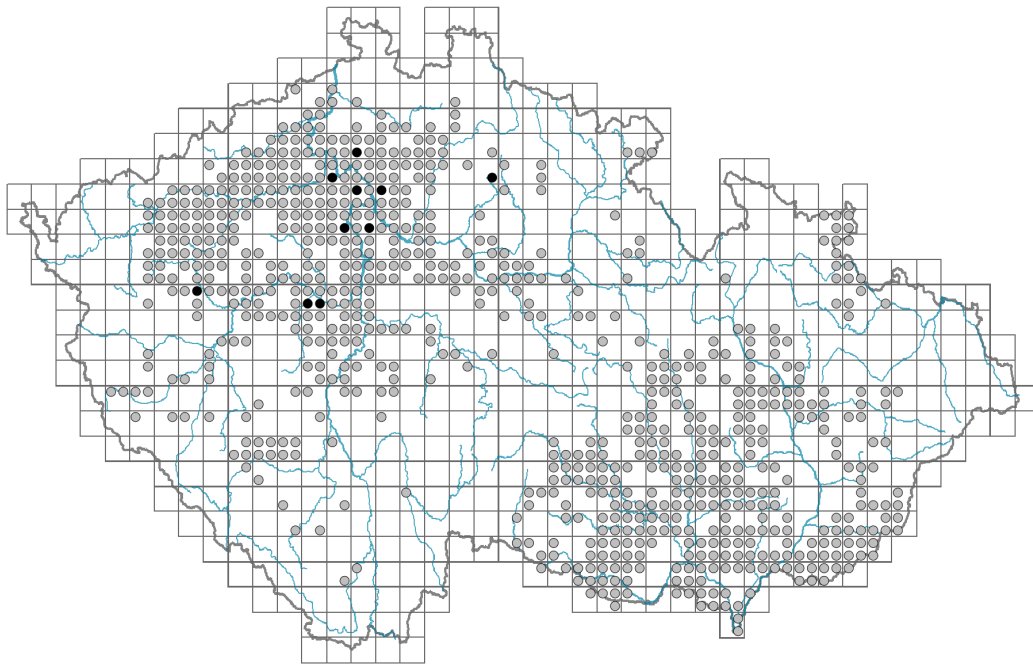


Koeleria macrantha

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]: **0.2-0.6**

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): **18.6 %**

Life strategy (Pierce method, S-score): **71.8 %**

Life strategy (Pierce method, R-score): **9.7 %**



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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, mesomorphic**



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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: **pseudospica 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: **only by seed/spores**

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: **3.5**

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

Clonal index: **4**

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): **12**

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): **17**

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): **12**

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): **17**

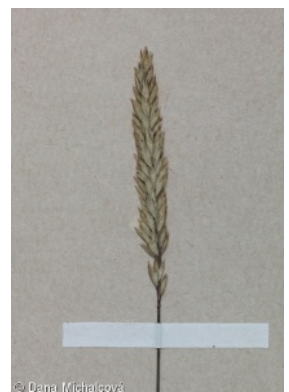
Depth of the belowground bud bank (root buds included) [cm]: **4**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



Karyology

Chromosome number (2n): **14**

Ploidy level (x): **2**

2C genome size [Mbp]: **3967.03**

1Cx monoploid genome size [Mbp]: **1983.51**

Genomic GC content: **45.2 %**

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: **8 - transition between values 7 and 9, occurring mostly in calcium-rich 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: **-0.53**

Herb layer disturbance frequency indicator value: **-0.23**

Whole-community disturbance severity indicator value: **0.22**

Herb layer disturbance severity indicator value: **0.26**

Whole-community structure based disturbance indicator value: **0.56**

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

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: **1 - rare occurrence**

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

9D Pannonian sand steppes: **1 - rare occurrence**

9E Acidophilous vegetation of spring therophytes and succulents: **2 - optimum**

9F Basiphilous vegetation of spring therophytes and succulents: **2 - optimum**

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: **1 - rare occurrence**

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**

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: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Diagnostic taxon

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

Diagnostic taxon of alliances: [THD Festucion valesiaca](#), [THG Koelerio-Phleion phleoidis](#)

Diagnostic taxon of associations: [THA04 Helichryso arenarii-Festucetum pallentis](#), [THD01 Festuco valesiaca-Stipetum capillatae](#), [THD02 Erysimo crepidifolii-Festucetum valesiaca](#), [THD03 Festuco rupicola-Caricetum humilis](#), [THD06 Astragalo exscapi-Crambetum tatariae](#), [THG01 Potentillo heptaphyllae-Festucetum rupicola](#), [THG02 Avenulo pratensis-Festucetum valesiaca](#)

Constant taxon

Constant taxon of alliances: [TEE Euphorbio cyparissiae-Callunion vulgaris](#), [THB Bromo pannonici-Festucion pallentis](#), [THD Festucion valesiaca](#), [THG Koelerio-Phleion phleoidis](#)

Constant taxon of associations: [TEE01 Euphorbio cyparissiae-Callunetum vulgaris](#), [THA02 Seselio ossei-Festucetum pallentis](#), [THA04 Helichryso arenarii-Festucetum pallentis](#), [THB01 Poo badensis-Festucetum pallentis](#), [THC02 Minuartio setaceae-Seslerietum caeruleae](#), [THD01 Festuco valesiaca-Stipetum capillatae](#), [THD02 Erysimo crepidifolii-Festucetum valesiaca](#), [THD03 Festuco rupicola-Caricetum humilis](#), [THD04 Koelerio macranthae-Stipetum joannis](#), [THD05 Stipetum tirsae](#), [THD06 Astragalo exscapi-Crambetum tatariae](#), [THE03 Polygalo majoris-Brachypodietum pinnati](#), [THG01 Potentillo heptaphyllae-Festucetum rupicola](#), [THG02 Avenulo pratensis-Festucetum valesiaca](#)

Dominant taxon

Dominant taxon of associations: [THD01 Festuco valesiaca-Stipetum capillatae](#), [THD02 Erysimo crepidifolii-Festucetum valesiaca](#)

Ecological specialization indices



Ecological specialization index for all vegetation types: **4.7**
 Ecological specialization index for non-forest vegetation: **4.8**
 Ecological specialization index for forest vegetation: **4.9**
 Colonization ability
 Index of colonization success (ICS): **6**
 Index of colonization potential (ICP): **4**
 Optimum successional age [years]: **35**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional, subtropical, tropical, austral or antarctic**
 Floristic region: **Americas, circumpolar**
 Distribution range extension along the continentality gradient: **8**
 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: 318
 taxon.data.freq_in_quad: 748
 Commonness in vegetation plots from the Czech Republic
 Occurrence frequency in vegetation plots: **2.2 %**
 Occurrence frequency in vegetation plots with a cover above 5%: **16.3 %**
 Occurrence frequency in vegetation plots with a cover above 25%: **3.3 %**
 Occurrence frequency in vegetation plots with a cover above 50%: **0.2 %**
 Mean percentage cover in vegetation plots: **4.9 %**
 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: **25**
 Number of narrow habitats in which the taxon has its optimum: **8**
 Number of broad habitats in which the taxon occurs: **6**
 Number of broad habitats in which the taxon has its optimum: **2**

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**

