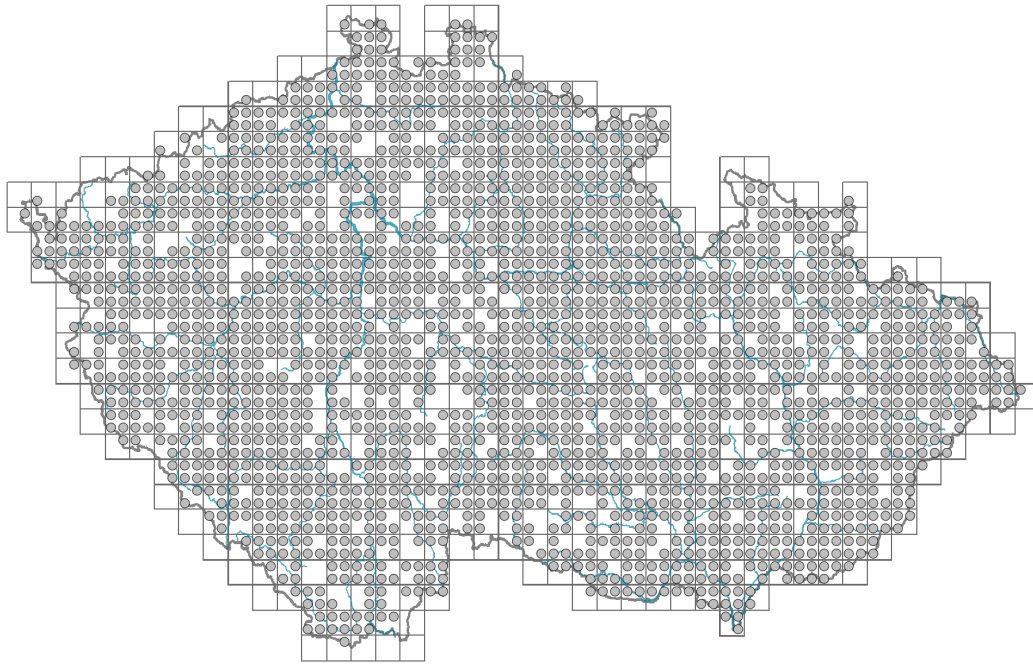


Lolium perenne

Distribution

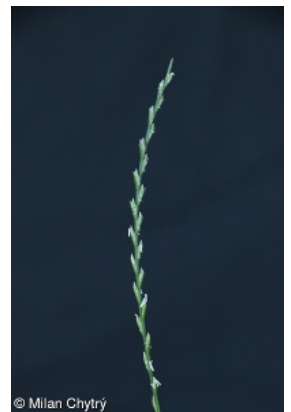


Map info

● 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]: **0.1-0.6**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

Life strategy (Pierce method based on leaf traits): **R/CSR**

Life strategy (Pierce method, C-score): **18.5 %**

Life strategy (Pierce method, S-score): **29.3 %**

Life strategy (Pierce method, R-score): **52.3 %**

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: **mesomorphic**

Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**
 Flower colour: **green**
 Perianth type: **reduced**
 Perianth fusion: **reduced**
 Inflorescence type: **spica e spiculis composita**
 Dicliny: **synoecious**
 Generative reproduction type: **alogamy self-incompatibility, facultative alogamy**
 Pollination syndrome: **wind-pollination**
 Pollinator spectrum: **hoverflies, flies s. l., meat flies s. l., other Diptera (honeybee, other Hymenoptera, butterflies, beetles, nitidulids)**

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

Storage organ: **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]: **3.7**
 Number of clonal offspring: **4.3**
 Lateral spreading distance by clonal growth [m]: **0.04**
 Clonal index: **4**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **6**
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **7**
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded):
 Size of the belowground bud bank (root buds excluded): **14**
 Depth of the belowground bud bank (root buds excluded) [cm]: **3**
 Number of buds per shoot at the soil surface (root buds included): **6**
 Number of buds per shoot at a depth of 0–10 cm (root buds included): **7**
 Number of buds per shoot at a depth greater than 10 cm (root buds included):
 Size of the belowground bud bank (root buds included): **14**
 Depth of the belowground bud bank (root buds included) [cm]: **3**

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]: **4754.08**

1Cx monoploid genome size [Mbp]: **2377.04**

Genomic GC content: **46.4 %**

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: **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: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **6 - transition between values 5 and 7**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0**

Herb layer disturbance frequency indicator value: **-0**

Whole-community disturbance severity indicator value: **0.67**

Herb layer disturbance severity indicator value: **0.69**

Whole-community structure based disturbance indicator value: **0.66**

Herb layer structure-based disturbance indicator value: **0.7**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1C Walls: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

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

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

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

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

6 Meadows and mesic pastures

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

6C Pastures and park grasslands: **3 - dominant**

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



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

6G Vegetation of wet disturbed soils: **2 - optimum**

8 Dry grasslands

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: **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

10G Continental vegetation of annual halophilous grasses: **1 - rare occurrence**

10I Inland saline meadows: **2 - optimum**

11 Heathlands and scrub

11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

12 Forests

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: **2 - optimum**

13B Annual vegetation of arable land: **2 - optimum**

13C Annual vegetation of trampled habitats: **2 - optimum**

13D Perennial thermophilous ruderal vegetation: **2 - optimum**

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**

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: [XA *Polygono arenastri-Poëtea annuae*](#)

Diagnostic taxon of alliances: [TDC *Cynosurion cristati*](#), [XAA *Coronopodo-Polygonion arenastri*](#), [XAB *Saginion procumbentis*](#)

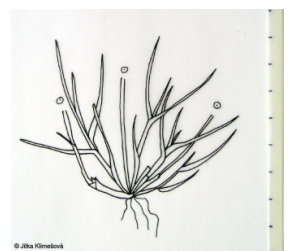
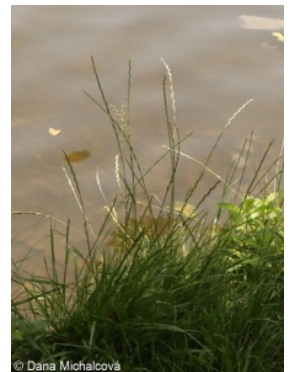
Diagnostic taxon of associations: [TDC01 *Lolium perennis-Cynosuretum cristati*](#), [TDC03 *Lolietum perennis*](#), [XAA01 *Polygonetum arenastri*](#), [XAA02 *Sclerochloa durae-Polygonetum arenastri*](#), [XAB05 *Lolium perennis-Matricarietum discoideae*](#), [XBG12 *Ivaetum xanthiifoliae*](#), [XBK03 *Eragrostio poaeoidis-Panicetum capillaris*](#)

Constant taxon

Constant taxon of classes: [XA *Polygono arenastri-Poëtea annuae*](#)

Constant taxon of alliances: [TDC *Cynosurion cristati*](#), [XAA *Coronopodo-Polygonion arenastri*](#), [XAB *Saginion procumbentis*](#), [XBI *Malvion neglectae*](#)

Constant taxon of associations: [TCB02 *Loto tenuis-Potentilletum anserinae*](#), [TDC01 *Lolium perennis-Cynosuretum cristati*](#), [TDC03 *Lolietum perennis*](#), [TDC04 *Prunello*](#)



[vulgaris-Ranunculetum repentis](#), [XAA01 Polygonetum arenastri](#), [XAA02 Sclerochloo durae-Polygonetum arenastri](#), [XAA03 Poo annuae-Coronopodetum squamati](#), [XAB04 Poëtum annuae](#), [XAB05 Lolio perennis-Matricarietum discoideae](#), [XBG08 Descurainietum sophiae](#), [XBG10 Chamaeplietum officinalis](#), [XBG12 Ivaetum xanthiifoliae](#), [XBH01 Hordeetum murini](#), [XBI01 Hyoscyamo nigri-Malvetum neglectae](#), [XBI02 Malvetum pusillae](#), [XBI04 Malvo neglectae-Chenopodietum vulvariae](#), [XBK03 Eragrostio poaeoidis-Panicetum capillaris](#), [XCB02 Berteroetum incanae](#)

Dominant taxon

Dominant taxon of associations: [MCC12 Tripleurospermo inodori-Bolboschoenetum planiculmis](#), [TCB02 Loto tenuis-Potentilletum anserinae](#), [TDC03 Lolietum perennis](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.1**

Ecological specialization index for non-forest vegetation: **4.1**

Ecological specialization index for forest vegetation: **3.7**

Colonization ability

Index of colonization success (ICS): **6**

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **8**

Distribution and frequency

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

Floristic region: **Europe**

Distribution range extension along the continentality gradient: **5**

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: **637**

taxon.data.freq_in_quad: **2094**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **27.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **14.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **5.5 %**

Mean percentage cover in vegetation plots: **10.5 %**

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: **30**

Number of narrow habitats in which the taxon has its optimum: **9**

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

Number of broad habitats in which the taxon has its optimum: **3**

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**