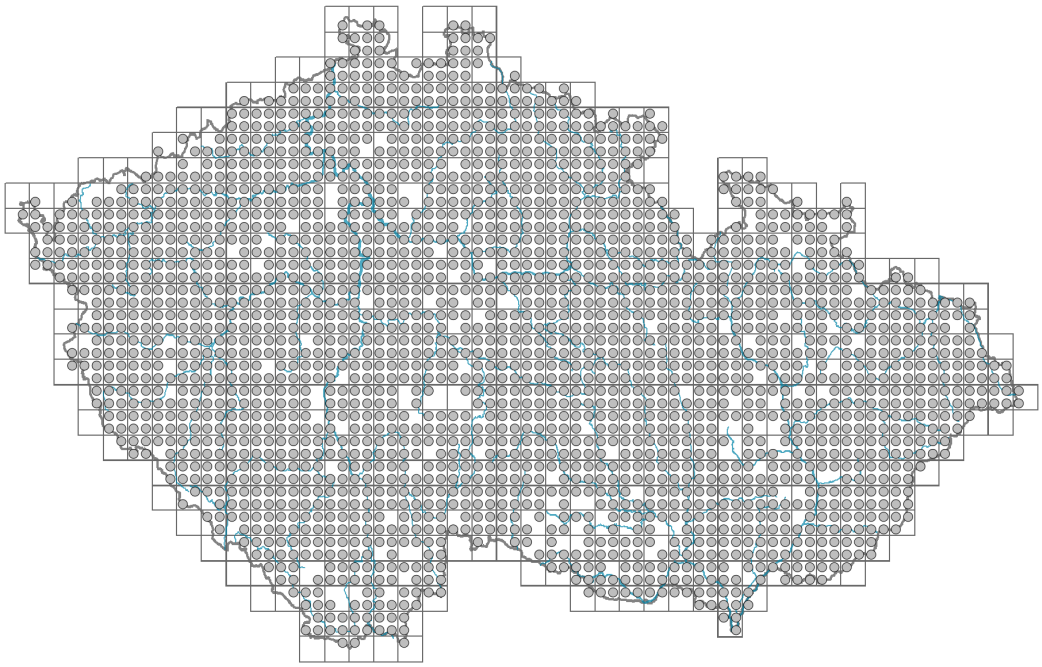
Lolium perenne

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

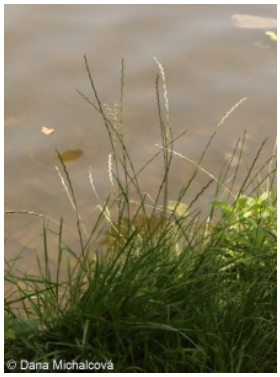
Height [m]: **0.1–0.6**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **R/CSR**
Life strategy (Pierce method, C-score): **18.5 %**
Life strategy (Pierce method, S-score): **29.3 %**
Life strategy (Pierce 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: **allogamy self-incompatibility, facultative allogamy**
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): **0**
Size of the belowground bud bank (root buds excluded): **14**
Depth of the belowground bud bank (root buds exluded) [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): **0**
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

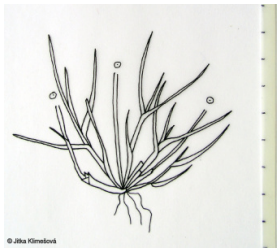
1C Walls: **1 – rare occurrence**

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 *Lolio perennis-Cynosuretum cristati***, **TDC03 *Lolietum perennis***, **XAA01 *Polygonetum arenastri***, **XAA02 *Sclerochloo durae-Polygonetum arenastri***, **XAB05 *Lolio 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 *Lolio 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**

Expansive taxon in the region: **Bohemian Thermophyticum, Bohemian Moravian Mesophyticum, Bohemian Moravian Oreophyticum, Pannonian Thermophyticum, Carpathian Mesophyticum, Carpathian Oreophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 653

taxon.data.freq_in_quad: 2283

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**