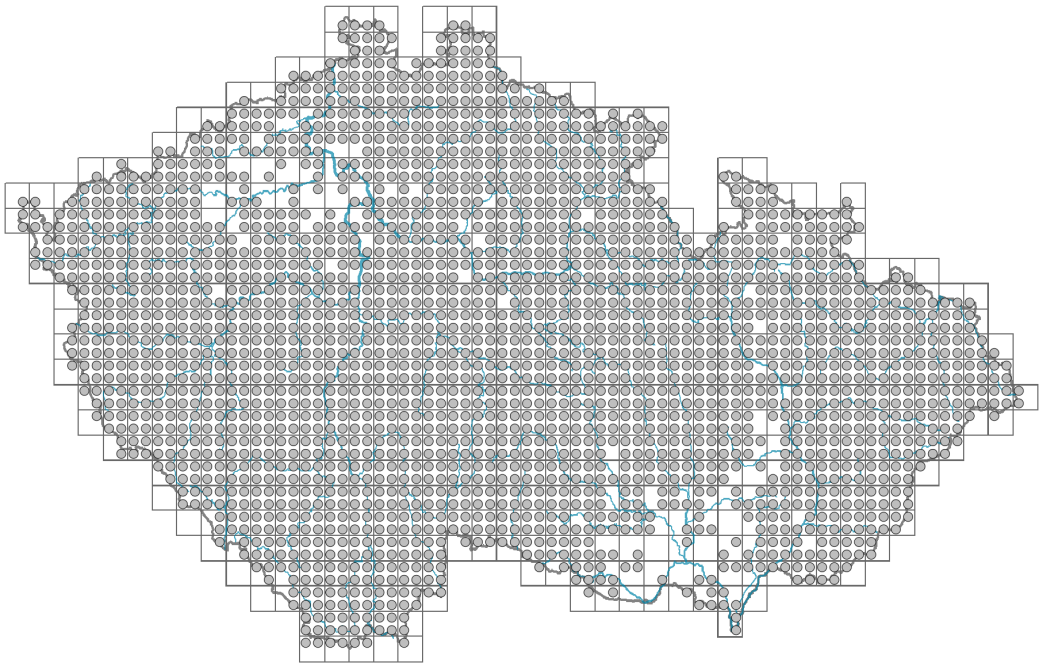
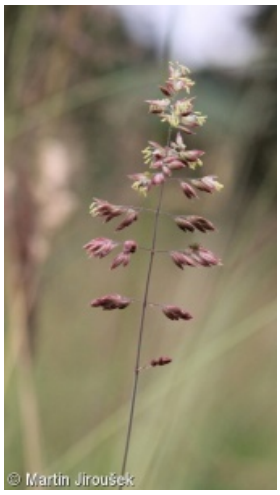
Holcus lanatus

Distribution



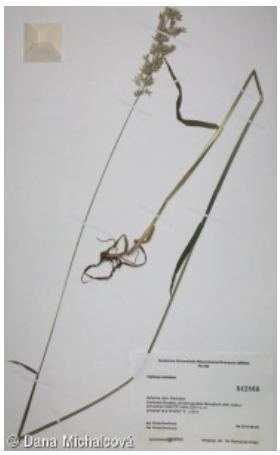


Map info

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]: **0.3–1**
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): **23.5 %**
Life strategy (Pierce method, S-score): **27.3 %**
Life strategy (Pierce method, R-score): **49.2 %**

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, hygromorphic**

Flower

Flowering period [month]: **June–August**

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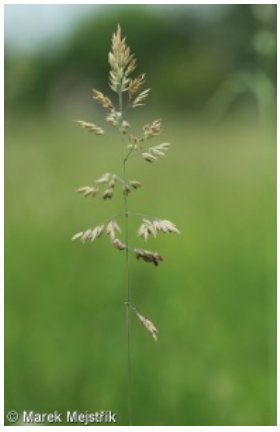
Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**
Flower colour: **green**
Perianth type: **reduced**
Perianth fusion: **reduced**
Inflorescence type: **panicula e spiculis composita**
Dicliny: **andromonoecious**
Generative reproduction type: **allogamy self-incompatibility,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

Fruit, seed and dispersal

Fruit type: **dry fruit – caryopsis**
Fruit colour: **brown**
Reproduction type: **by seed/spores and vegetatively**
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: **5.9**
Lateral spreading distance by clonal growth [m]: **0.05**
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): **11**
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 exluded) [cm]: **4**
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): **11**
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**

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

Karyology

Chromosome number (2n): **14**
Ploidy level (x): **2**
2C genome size [Mbp]: **2928.04**
1Cx monoploid genome size [Mbp]: **1464.02**
Genomic GC content: **47.4 %**

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: **5x – moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**
Moisture indicator value: **6 – transition between values 5 and 7**
Reaction indicator value: **6x – transition between values 5 and 7 (generalist)**
Nutrient indicator value: **5 – occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites**
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: **-0.42**
Herb layer disturbance frequency indicator value: **-0.27**
Whole-community disturbance severity indicator value: **0.3**
Herb layer disturbance severity indicator value: **0.33**
Whole-community structure based disturbance indicator value: **0.59**
Herb layer structure-based disturbance indicator value: **0.73**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 – rare occurrence**
4C Eutrophic vegetation of muddy substrata: **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**
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

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

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5D Calcareous fens: **2 – optimum**
5E Acidic moss-rich fens and peatland meadows: **2 – optimum**
5F Transitional mires: **1 – rare occurrence**
5H Wet peat soils and bog hollows: **1 – rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **2 – optimum**
6B Montane mesic meadows: **1 – rare occurrence**
6C Pastures and park grasslands: **2 – optimum**
6D Alluvial meadows of lowland rivers: **3 – dominant**
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: **1 – rare occurrence**
7B Submontane Nardus grasslands: **2 – optimum**

8 Dry grasslands

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**

10 Saline vegetation

10I Inland saline meadows: **1 – rare occurrence**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **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**
11R Scrub and pioneer woodland of forests clearings: **1 – rare occurrence**

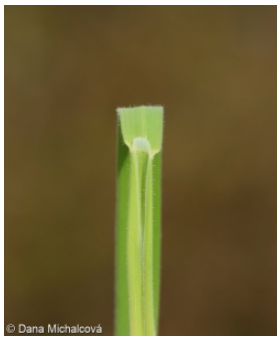
12 Forests

12A Alder carrs: **1 – rare occurrence**
12B Alluvial forests: **1 – rare occurrence**
12K Acidophilous oak forests: **1 – rare occurrence**
12L Boreo-continental pine forests: **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

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**

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 alliances: **TDD *Molinion caeruleae***

Diagnostic taxon of associations: **TDD02 *Junco effusi-Molinietum caeruleae***, **TDE02 *Holcetum lanati***

Constant taxon

Constant taxon of classes: **TD *Molinio-Arrhenatheretea***

Constant taxon of alliances: **TDA *Arrhenatherion elatioris***, **TDD *Molinion caeruleae***, **TDE *Deschampsion cespitosae***, **TDF *Calthion palustris***

Constant taxon of associations: **KAB03 *Salici purpureae-Myricarietum germanicae***, **RBA03 *Valeriano simplicifoliae-Caricetum flavae***, **RBB01 *Sphagno warnstorfii-Eriophoretum latifolii***, **TDA02 *Ranunculo bulbosi-Arrhenatheretum elatioris***, **TDA03 *Poo-Trisetetum flavescentis***, **TDA04 *Potentillo albae-Festucetum rubrae***, **TDC01 *Lolio perennis-Cynosuretum cristati***, **TDD01 *Molinietum caeruleae***, **TDD02 *Junco effusi-Molinietum caeruleae***, **TDE02 *Holcetum lanati***, **TDF01 *Angelico sylvestris-Cirsietum oleracei***, **TDF02 *Cirsietum rivularis***, **TDF03 *Angelico sylvestris-Cirsietum palustris***, **TDF04 *Crepido paludosae-Juncetum acutiflori***, **TDF07 *Scirpo sylvatici-Cirsietum cani***, **TDF09 *Caricetum cespitosae***, **TDF10 *Scirpo sylvatici-Caricetum brizoidis***, **TEC01 *Festuco capillatae-Nardetum strictae***

Dominant taxon

Dominant taxon of associations: **TDE02 *Holcetum lanati***, **TDF01 *Angelico sylvestris-Cirsietum oleracei***

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.5**

Ecological specialization index for non-forest vegetation: **5.6**

Ecological specialization index for forest vegetation: **4.4**

Colonization ability

Index of colonization success (ICS): **7**

Index of colonization potential (ICP): **4**

Optimum successional age [years]: **20**

Distribution and frequency

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

Floristic region: **Europe**

Continentality degree: **4**

Distribution range extension along the continentality gradient: **4**

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

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 655

taxon.data.freq_in_quad: 2317

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Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **7.2 %**
Occurrence frequency in vegetation plots with a cover above 5%: **23.2 %**
Occurrence frequency in vegetation plots with a cover above 25%: **8.6 %**
Occurrence frequency in vegetation plots with a cover above 50%: **1.3 %**
Mean percentage cover in vegetation plots: **7.2 %**
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: **46**
Number of narrow habitats in which the taxon has its optimum: **8**
Number of broad habitats in which the taxon occurs: **10**
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**

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