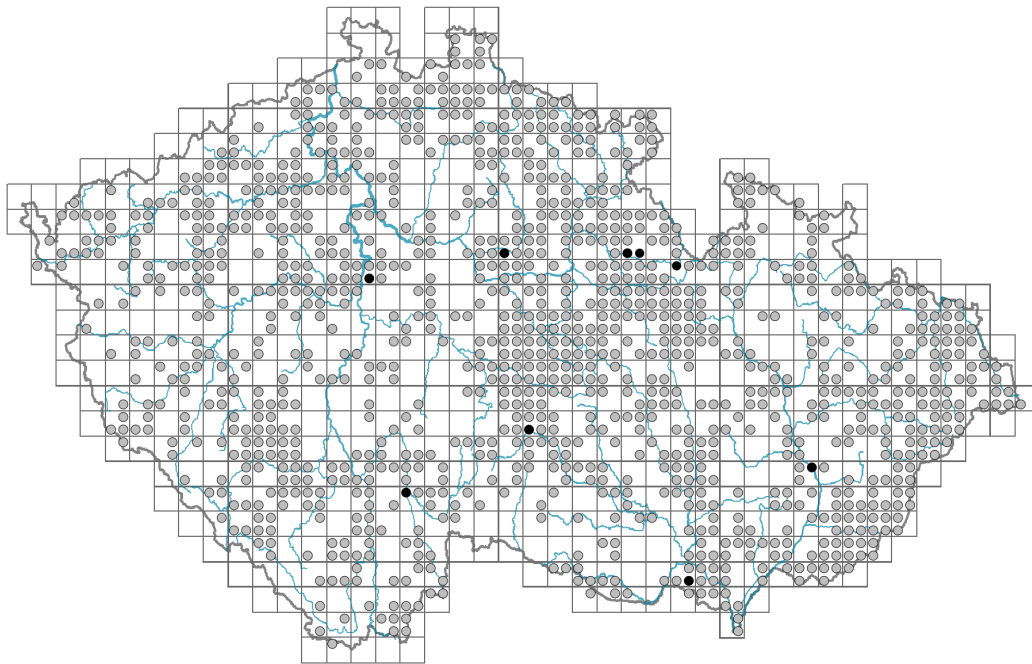


Agrostis gigantea

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]: **0.3-1.3**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **14.7 %**

Life strategy (Pierce method, S-score): **41.1 %**

Life strategy (Pierce method, R-score): **44.2 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic, helomorphic**

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: **synoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **wind-pollination**



Fruit, seed and dispersal

Fruit type: **dry fruit - caryopsis**

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**

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

Freely dispersible organs of clonal growth: **absent**

Shoot life span (cyclicality): **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: **4.8**

Lateral spreading distance by clonal growth [m]: **0.09**

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**

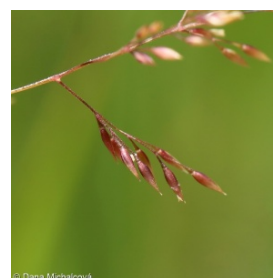
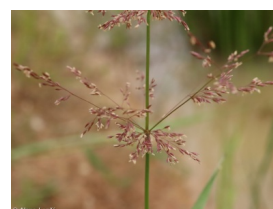
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Size of the belowground bud bank (root buds included): **20**

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 (28)**

Ploidy level (x): **6 (4)**

2C genome size [Mbp]: **8152.84**

1Cx monoploid genome size [Mbp]: **1358.81**

Genomic GC content: **46.4 %**

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

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

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: **-0.88**

Herb layer disturbance frequency indicator value: **-0.29**

Whole-community disturbance severity indicator value: **0.49**

Herb layer disturbance severity indicator value: **0.5**

Whole-community structure based disturbance indicator value: **0.51**

Herb layer structure-based disturbance indicator value: **0.56**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4B Halophilous reed and sedge beds: **2 - optimum**

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

4I Vegetation of nitrophilous annual hygrophilous herbs: **2 - optimum**

6 Meadows and mesic pastures

6C Pastures and park grasslands: **1 - rare occurrence**

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

6E Wet Cirsium meadows: **1 - rare occurrence**

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

8 Dry grasslands

8D Broad-leaved dry grasslands: **1 - rare occurrence**

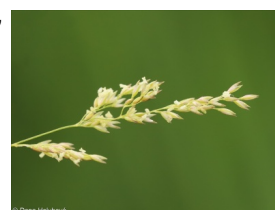
9 Sand grasslands and rock-outcrop vegetation



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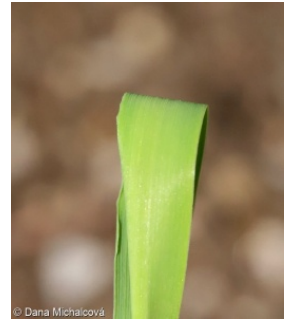


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- 9B Open vegetation of acidic sands: **1 - rare occurrence**
- 9C Festuca grasslands on acidic sands: **1 - rare occurrence**
- 10 Saline vegetation
- 10I Inland saline meadows: **2 - optimum**
- 10J Saline steppes: **3 - dominant**
- 11 Heathlands and scrub
- 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**
- 12 Forests
- 12B Alluvial forests: **1 - rare occurrence**
- 12K Acidophilous oak forests: **1 - rare occurrence**
- 12W Pine and larch plantations: **1 - rare occurrence**
- 13 Anthropogenic vegetation
- 13B Annual vegetation of arable land: **1 - rare occurrence**
- 13C Annual vegetation of trampled habitats: **1 - rare occurrence**
- 13D Perennial thermophilous ruderal vegetation: **2 - optimum**
- 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: [MCB *Meliloto dentati-Bolboschoenion maritimi*](#)
- Diagnostic taxon of associations: [MCB01 *Astero pannonici-Bolboschoenetum compacti*](#), [TCB03 *Agrostio stoloniferae-Juncetum ranarii*](#), [THE04 *Plantagini maritimae-Caricetum flacca*](#)
- Constant taxon
- Constant taxon of associations: [THE04 *Plantagini maritimae-Caricetum flacca*](#)
- Dominant taxon
- Dominant taxon of associations: [THE04 *Plantagini maritimae-Caricetum flacca*](#)
- Ecological specialization indices
- Ecological specialization index for all vegetation types: **3.5**
- Ecological specialization index for non-forest vegetation: **3.7**
- Ecological specialization index for forest vegetation: **4.7**
- Colonization ability
- Index of colonization success (ICS): **6**
- Index of colonization potential (ICP): **8**
- Optimum successional age [years]: **10**



Distribution and frequency

- Floristic zone: **northern temperate, southern temperate, submeridional**
- Floristic region: **Europe, Western Asia**
- 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: 522

taxon.data.freq_in_quad: 1141

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **21.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **3.8 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.9 %**

Mean percentage cover in vegetation plots: **5.7 %**

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: **21**

Number of narrow habitats in which the taxon has its optimum: **7**

Number of broad habitats in which the taxon occurs: **8**

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**