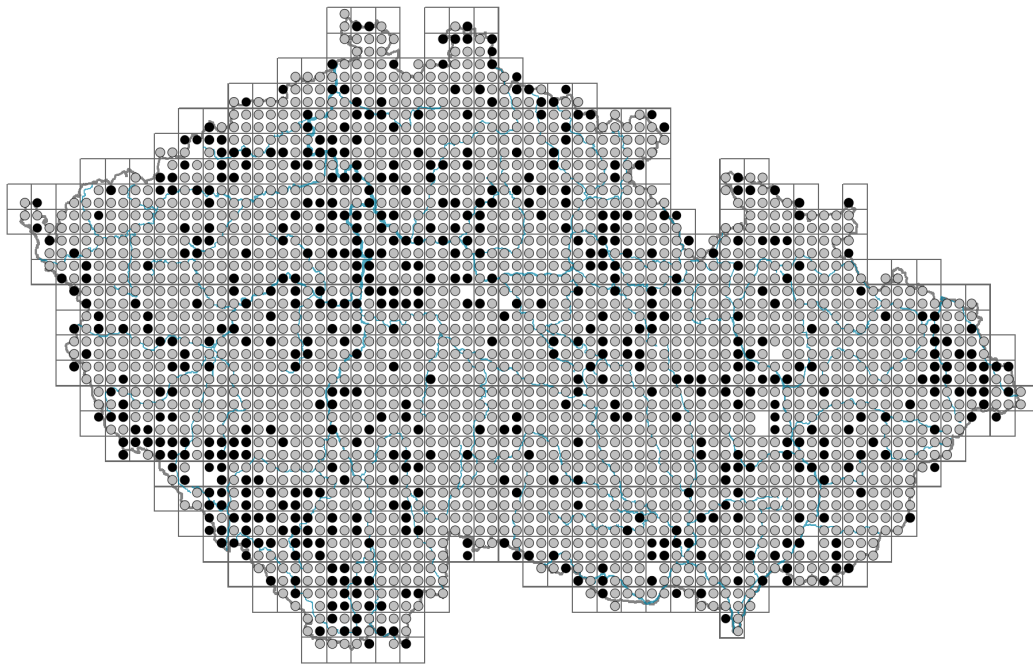


# *Calamagrostis epigejos*

## 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]: **0.6-1.5**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

Life strategy (Pierce method based on leaf traits): **CS**

Life strategy (Pierce method, C-score): **40.8 %**

Life strategy (Pierce method, S-score): **51.2 %**

Life strategy (Pierce method, R-score): **8 %**



## 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**

## Flower

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



Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **green**

Perianth type: **reduced**

Perianth fusion: **reduced**

Inflorescence type: **panicula e spiculis composita**

Dicliny: **synoecious**

Generative reproduction type: **allogamy self-incompatibility**

Pollination syndrome: **wind-pollination**

### 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: **Epilobium (mainly anemochory and 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: **1.8**

Lateral spreading distance by clonal growth [m]: **0.07**

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): **15**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **5**

Size of the belowground bud bank (root buds excluded): **25**

Depth of the belowground bud bank (root buds excluded) [cm]: **6**

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): **15**

Number of buds per shoot at a depth greater than 10 cm (root buds included): **5**

Size of the belowground bud bank (root buds included): **25**

Depth of the belowground bud bank (root buds included) [cm]: **6**

### Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



## Karyology

Chromosome number (2n): **28**

Ploidy level (x): **4**

2C genome size [Mbp]: **6579.4**

1Cx monoploid genome size [Mbp]: **1644.85**

Genomic GC content: **47.3 %**



## 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: **5x - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out (generalist)**

Reaction indicator value: **6x - transition between values 5 and 7 (generalist)**

Nutrient indicator value: **6x - transition between values 5 and 7 (generalist)**

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: **-1.23**

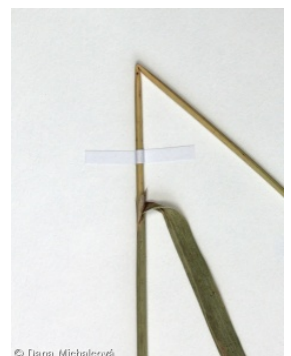
Herb layer disturbance frequency indicator value: **-0.63**

Whole-community disturbance severity indicator value: **0.43**

Herb layer disturbance severity indicator value: **0.41**

Whole-community structure based disturbance indicator value: **0.32**

Herb layer structure-based disturbance indicator value: **0.37**



## 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**

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

3 Aquatic vegetation

3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

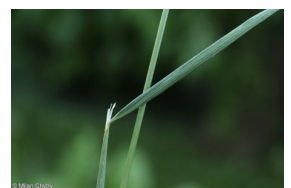
4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 - rare occurrence**

4B Halophilous reed and sedge beds: **1 - rare occurrence**

4D Riverine reed vegetation: **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**
- 4J River gravel banks: **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
- 5D Calcareous fens: **1 - rare occurrence**
- 5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**
- 5F Transitional mires: **1 - rare occurrence**
- 6 Meadows and mesic pastures
- 6A Mesic Arrhenatherum meadows: **1 - rare occurrence**
- 6B Montane mesic meadows: **1 - rare occurrence**
- 6C Pastures and park grasslands: **1 - rare occurrence**
- 6D Alluvial meadows of lowland rivers: **1 - rare occurrence**
- 6E Wet Cirsium meadows: **1 - rare occurrence**
- 6F Intermittently wet Molinia meadows: **2 - optimum**
- 6G Vegetation of wet disturbed soils: **2 - optimum**
- 7 Acidophilous grasslands
- 7B Submontane Nardus grasslands: **1 - rare occurrence**
- 8 Dry grasslands
- 8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**
- 8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**
- 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**
- 9D Pannonian sand steppes: **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
- 10I Inland saline meadows: **1 - rare occurrence**
- 11 Heathlands and scrub
- 11A Dry lowland to subalpine heathlands: **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**
- 11N Low xeric scrub: **1 - rare occurrence**
- 11R Scrub and pioneer woodland of forests clearings: **4 - constant dominant**
- 12 Forests
- 12A Alder carrs: **1 - rare occurrence**
- 12B Alluvial forests: **1 - rare occurrence**
- 12C Oak-hornbeam forests: **1 - rare occurrence**



- 12D Ravine forests: **1 - rare occurrence**  
 12E Herb-rich beech forests: **1 - rare occurrence**  
 12F Limestone beech forests: **1 - rare occurrence**  
 12G Acidophilous beech forests: **1 - rare occurrence**  
 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**  
 12K Acidophilous oak forests: **2 - optimum**  
 12L Boreo-continental pine forests: **1 - rare occurrence**  
 12O Peri-Alpidic pine forests: **1 - rare occurrence**  
 12Q Peatland birch forests: **1 - rare occurrence**  
 12T Robinia pseudacacia plantations: **3 - dominant**  
 12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**  
 12V Spruce plantations: **2 - optimum**  
 12W Pine and larch plantations: **2 - optimum**
- 13 Anthropogenic vegetation
- 13A Annual vegetation of ruderal habitats: **1 - rare occurrence**  
 13C Annual vegetation of trampled habitats: **1 - rare occurrence**  
 13D Perennial thermophilous ruderal vegetation: **3 - dominant**  
 13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**  
 13F Herbaceous vegetation of forests clearings and Rubus scrub: **4 - constant dominant**

#### 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: [XE \*Epilobietea angustifolii\*](#)

Diagnostic taxon of alliances: [XEA \*Fragarion vescae\*](#)

Diagnostic taxon of associations: [KBC02 \*Rubetum idaei\*](#), [XEA01 \*Senecioni-Epilobietum angustifolii\*](#), [XEA02 \*Digitali purpureae-Epilobietum angustifolii\*](#), [XEA03 \*Rubo idaei-Calamagrostietum arundinaceae\*](#), [XEA05 \*Digitali-Senecionetum ovati\*](#)

#### Constant taxon

Constant taxon of classes: [XE \*Epilobietea angustifolii\*](#)

Constant taxon of alliances: [KBF \*Balloto nigrae-Robinion pseudoacaciae\*](#), [XEA \*Fragarion vescae\*](#)

Constant taxon of associations: [KAB03 \*Salici purpureae-Myricarietum germanicae\*](#), [KBC02 \*Rubetum idaei\*](#), [KBC03 \*Senecioni fuchsii-Sambucetum racemosae\*](#), [KBF01 \*Arrhenathero elatioris-Robinetum pseudoacaciae\*](#), [TDE04 \*Cnidio dubii-Deschampsietum cespitosae\*](#), [XBG12 \*Ivaetum xanthiifoliae\*](#), [XBJ02 \*Bromo tectorum-Corispermetum leptopteri\*](#), [XCB11 \*Asclepiadetum syriacae\*](#), [XEA01 \*Senecioni-Epilobietum angustifolii\*](#), [XEA02 \*Digitali purpureae-Epilobietum angustifolii\*](#), [XEA03 \*Rubo idaei-Calamagrostietum arundinaceae\*](#), [XEA05 \*Digitali-Senecionetum ovati\*](#)

#### Dominant taxon

Dominant taxon of associations: [KBF01 \*Arrhenathero elatioris-Robinetum\*](#)

[pseudoacaciae](#), [XEA01 Senecioni-Epilobietum angustifolii](#), [XEA03 Rubo idaei-Calamagrostietum arundinaceae](#), [XEA04 Junco effusi-Calamagrostietum villosae](#), [XEA05 Digitali-Senecionetum ovati](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **2.8**

Ecological specialization index for non-forest vegetation: **2.9**

Ecological specialization index for forest vegetation: **4**

Colonization ability

Index of colonization success (ICS): **9**

Index of colonization potential (ICP): **8**

Optimum successional age [years]: **16**

## Distribution and frequency

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

Floristic region: **Europe, Asia**

Continental degree: **7**

Distribution range extension along the continentality gradient: **7**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane 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: **666**

taxon.data.freq\_in\_quad: **2463**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **16.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **5.5 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1.9 %**

Mean percentage cover in vegetation plots: **6 %**

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: **66**

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

Number of broad habitats in which the taxon occurs: **13**

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**