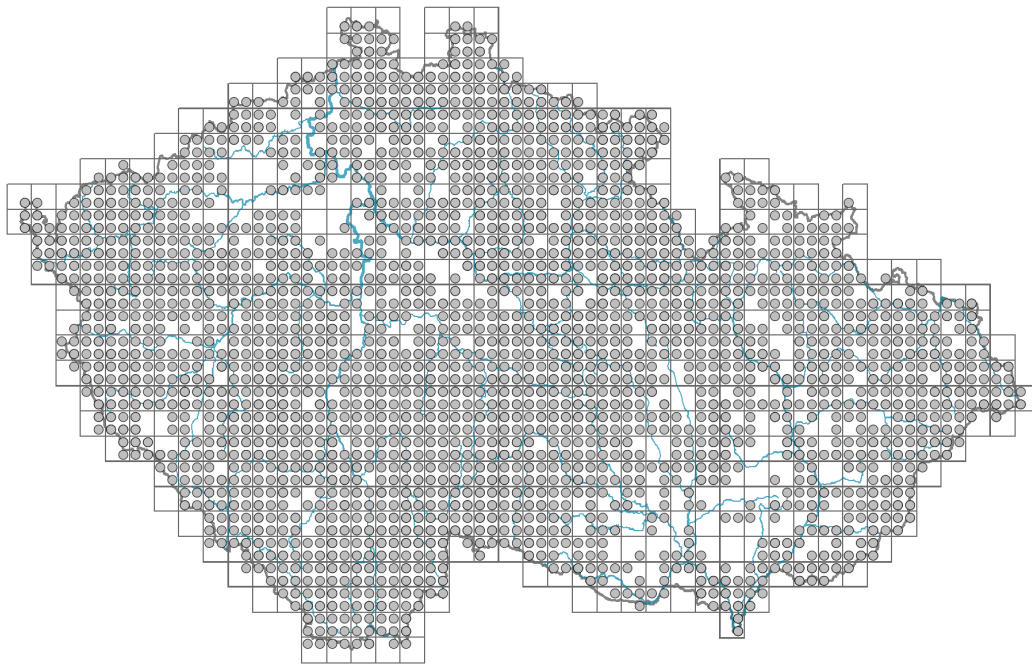


# *Galium palustre* agg.

## 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]: **0.2-1.2**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CS - competitor/stress-tolerator**

## Leaf

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

Leaf arrangement (phyllotaxis): **verticillate**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf anatomy: **hygromorphic, helomorphic**

## Flower

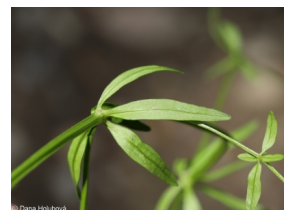
Flowering period [month]: **June-July**

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx absent, corolla present**



Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **rotate**

Inflorescence type: **panicula e dichasiis composita**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

Pollination syndrome: **insect-pollination, selfing**

### Fruit, seed and dispersal

Fruit type: **dry fruit - pair of nutlets**

Fruit colour: **black**

Reproduction type: **by seed/spores and vegetatively**

Dispersal unit (diaspore): **fruit, infructescence 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): **monocyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **sympodial**

Primary root: **absent**

Persistence of the clonal growth organ [year]: **1**

Number of clonal offspring: **1**

Lateral spreading distance by clonal growth [m]: **0.13**

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): **8**

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): **13**

Depth of the belowground bud bank (root buds excluded) [cm]: **3**

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): **8**

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): **13**

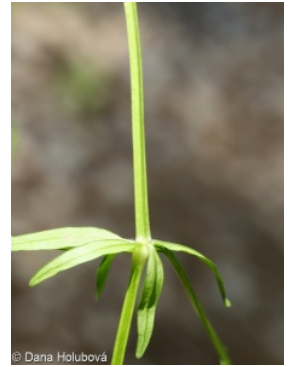
Depth of the belowground bud bank (root buds included) [cm]: **3**

### Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



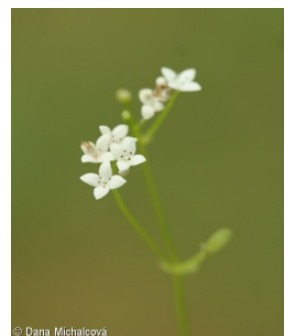
© Dana Holubová



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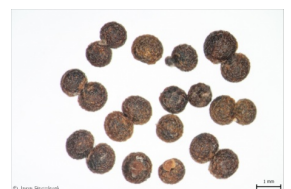
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## Karyology

Chromosome number (2n): **24**

Ploidy level (x): **2**

2C genome size [Mbp]: **1180.03**

1Cx monoploid genome size [Mbp]: **590.01**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% 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: **9 - wetness indicator, focus on often soaked, poorly aerated soils**

Reaction indicator value: **5x - indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions (generalist)**

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: **-0.92**

Herb layer disturbance frequency indicator value: **-0.61**

Whole-community disturbance severity indicator value: **0.22**

Herb layer disturbance severity indicator value: **0.25**

Whole-community structure based disturbance indicator value: **0.49**

Herb layer structure-based disturbance indicator value: **0.55**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3C Macrophytic vegetation of oligotrophic lakes and pools: **2 - optimum**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **2 - optimum**

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

4C Eutrophic vegetation of muddy substrata: **2 - optimum**

4D Riverine reed vegetation: **2 - optimum**

4E Reed vegetation of brooks: **2 - optimum**

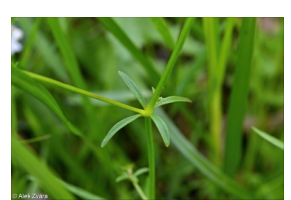
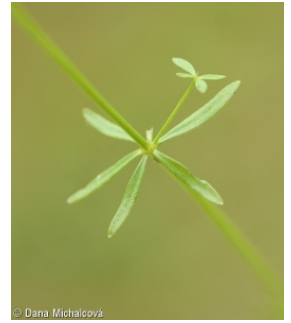
4F Mesotrophic vegetation of muddy substrata: **2 - optimum**

4G Tall-sedge beds: **2 - optimum**

4H Vegetation of low annual hygrophilous herbs: **2 - optimum**

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
- 5B Lowland to montane soft-water springs: **2 - optimum**
- 5D Calcareous fens: **2 - optimum**
- 5E Acidic moss-rich fens and peatland meadows: **2 - optimum**
- 5F Transitional mires: **2 - optimum**
- 5G Raised bogs: **1 - rare occurrence**
- 5H Wet peat soils and bog hollows: **1 - rare occurrence**
- 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: **2 - optimum**
- 6F Intermittently wet *Molinia* meadows: **2 - optimum**
- 6G Vegetation of wet disturbed soils: **1 - rare occurrence**
- 7 Acidophilous grasslands
- 7B Submontane *Nardus* grasslands: **1 - rare occurrence**
- 10 Saline vegetation
- 10I Inland saline meadows: **1 - rare occurrence**
- 10J Saline steppes: **1 - rare occurrence**
- 11 Heathlands and scrub
- 11I Willow carrs: **2 - optimum**
- 11J Willow galleries of loamy and sandy river banks: **2 - optimum**
- 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**
- 12 Forests
- 12A Alder carrs: **2 - optimum**
- 12B Alluvial forests: **1 - rare occurrence**
- 12G Acidophilous beech forests: **1 - rare occurrence**
- 12I Sub-continental thermophilous oak forests: **1 - rare occurrence**
- 12K Acidophilous oak forests: **1 - rare occurrence**
- 12Q Peatland birch forests: **1 - rare occurrence**
- 12R Acidophilous spruce forests: **1 - rare occurrence**
- 12V Spruce plantations: **1 - rare occurrence**
- 12W Pine and larch plantations: **1 - rare occurrence**
- Diagnostic taxon
- Diagnostic taxon of classes: [LA \*Alnetea glutinosae\*](#)
- Diagnostic taxon of alliances: [LAA \*Alnion glutinosae\*](#), [LAB \*Salicion cinereae\*](#)
- Diagnostic taxon of associations: [LAA02 \*Carici elongatae-Alnetum glutinosae\*](#), [LAA03 \*Carici acutiformis-Alnetum glutinosae\*](#), [MCG04 \*Comaro palustris-Caricetum cespitosae\*](#), [MCG06 \*Caricetum appropinquatae\*](#), [MCH01 \*Caricetum acutiformi-paniculatae\*](#), [TDE03 \*Lathyro palustris-Gratioletum officinalis\*](#)
- Constant taxon
- Constant taxon of classes: [LA \*Alnetea glutinosae\*](#)
- Constant taxon of alliances: [LAA \*Alnion glutinosae\*](#), [LAB \*Salicion cinereae\*](#), [MCG \*Magno-Caricion elatae\*](#), [MCH \*Magno-Caricion gracilis\*](#), [RAC \*Epilobio nutantis-Montion fontanae\*](#)
- Constant taxon of associations: [LAA01 \*Thelypterido palustris-Alnetum glutinosae\*](#),

[LAA02 Carici elongatae-Alnetum glutinosae](#), [LAA03 Carici acutiformis-Alnetum glutinosae](#), [LAB01 Salicetum auritae](#), [LAB02 Salicetum pentandro-auritae](#), [MCF02 Thelypterido palustris-Phragmitetum australis](#), [MCG01 Caricetum elatae](#), [MCG04 Comaro palustris-Caricetum cespitosae](#), [MCG05 Caricetum diandrae](#), [MCG06 Caricetum appropinquatae](#), [MCG07 Carici elatae-Calamagrostietum canescentis](#), [MCH01 Caricetum acutiformi-paniculatae](#), [MCH03 Caricetum gracilis](#), [MCH04 Caricetum vesicariae](#), [MCH05 Caricetum distichae](#), [MCH07 Caricetum vulpinae](#), [MCH08 Phalaridetum arundinaceae](#), [RAA03 Pellio epiphyllae-Chrysosplenietum oppositifolii](#), [RAC01 Philonotido fontanae-Montietum rivularis](#), [RBA04 Campylio stellati-Caricetum lasiocarpae](#), [RBB03 Menyantho trifoliatae-Sphagnetum teretis](#), [RBC03 Agrostio caninae-Caricetum diandrae](#), [TDE03 Lathyro palustris-Gratioletum officinalis](#), [TDF03 Angelico sylvestris-Cirsietum palustris](#), [TDF04 Crepido paludosae-Juncetum acutiflori](#), [TDF06 Chaerophyllo hirsuti-Calthetum palustris](#), [TDF08 Scirpetum sylvatici](#), [TDF13 Lysimachio vulgaris-Filipenduletum ulmariae](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.3**

Ecological specialization index for non-forest vegetation: **4.5**

Ecological specialization index for forest vegetation: **4.9**

### Distribution and frequency

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

Floristic region: **Europe, Siberia, Americas**

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: 646

taxon.data.freq\_in\_quad: 2153

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **7.8 %**

Occurrence frequency in vegetation plots with a cover above 5%: **8.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.2 %**

Mean percentage cover in vegetation plots: **3.4 %**

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: **39**

Number of narrow habitats in which the taxon has its optimum: **19**

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

Number of broad habitats in which the taxon has its optimum: **6**