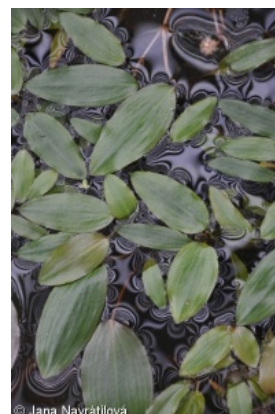
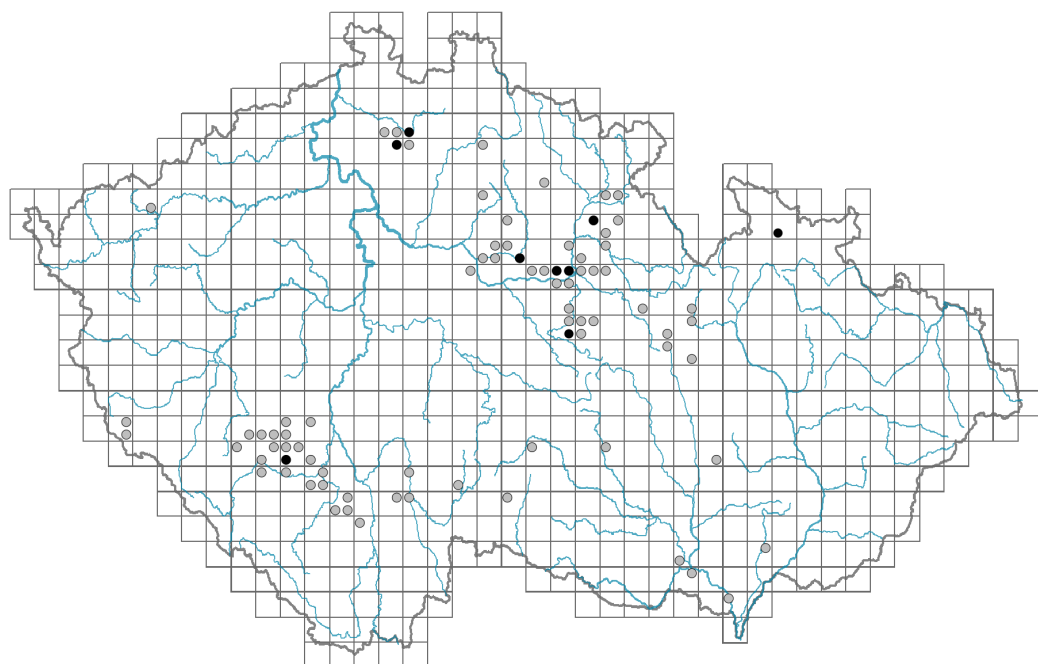


# Potamogeton gramineus

## 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: **hydrophyte**

Life strategy (Pierce method based on leaf traits): **R/CR**

Life strategy (Pierce method, C-score): **19.2 %**

Life strategy (Pierce method, S-score): **12.7 %**

Life strategy (Pierce method, R-score): **68.2 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **hydromorphic**

## Flower

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

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

Flower colour: **green**  
Flower symmetry: **actinomorphic**  
Perianth type: **homochlamydeous**  
Perianth fusion: **free**  
Inflorescence type: **spica**  
Dicliny: **synoecious**  
Generative reproduction type: **facultative autogamy**  
Pollination syndrome: **wind-pollination, water-pollination**

### **Fruit, seed and dispersal**

Fruit type: **dry fruit - achene/cypsela/samara**  
Fruit colour: **green**  
Reproduction type: **by seed/spores and vegetatively**  
Dispersal unit (diaspore): **fruit, infrutescence or its part, turion, shoot fragment**  
Dispersal strategy: **Wolffia (mainly hydrochory)**  
Myrmecochory: **non-myrmecochorous (b)**

### **Belowground organs and clonality**

Shoot metamorphosis: **stolon, turion**  
Storage organ: **stolon, turion**  
Type of clonal growth organ: **hypogeogenous rhizome**  
Freely dispersible organs of clonal growth: **present**  
Shoot life span (cyclicity): **monocyclic shoots prevailing**  
Branching type of stem-derived organs of clonal growth: **sympodial**  
Primary root: **absent**  
Persistence of the clonal growth organ [year]: **1.3**  
Number of clonal offspring: **6.7**  
Lateral spreading distance by clonal growth [m]: **0.13**  
Clonal index: **7**

### **Bud bank**

Number of buds per shoot at the soil surface (root buds excluded):  
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **13**  
Number of buds per shoot at a depth greater than 10 cm (root buds excluded):  
Size of the belowground bud bank (root buds excluded): **23**  
Depth of the belowground bud bank (root buds excluded) [cm]: **5**  
Number of buds per shoot at the soil surface (root buds included):  
Number of buds per shoot at a depth of 0–10 cm (root buds included): **13**  
Number of buds per shoot at a depth greater than 10 cm (root buds included):  
Size of the belowground bud bank (root buds included): **23**  
Depth of the belowground bud bank (root buds included) [cm]: **5**

### **Trophic mode**

Parasitism and mycoheterotrophy: **autotrophic**  
Carnivory: **non-carnivorous**  
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **52**

Ploidy level (x): **4**

2C genome size [Mbp]: **1317.57**

1Cx monoploid genome size [Mbp]: **329.39**

Genomic GC content: **40.1 %**

## 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: **12 - permanently or almost permanently submerged aquatic plant**

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

Nutrient indicator value: **5 - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.52**

Herb layer disturbance frequency indicator value: **-0.52**

Whole-community disturbance severity indicator value: **0.14**

Herb layer disturbance severity indicator value: **0.18**

Whole-community structure based disturbance indicator value: **0.56**

Herb layer structure-based disturbance indicator value: **0.53**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **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 associations: [VBB02 \*Potametum graminei\*](#), [VBB13 \*Potametum zizii\*](#), [VBB22 \*Potametum acutifolii\*](#)

Constant taxon

Constant taxon of associations: [VBB02 \*Potametum graminei\*](#), [VBB13 \*Potametum\*](#)

## [zizii](#)

### Dominant taxon

Dominant taxon of associations: [VBB02 Potametum graminei](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.9**

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

### Distribution and frequency

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

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **8**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **60**

taxon.data.freq\_in\_quad: **84**

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **53.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **34.9 %**

Occurrence frequency in vegetation plots with a cover above 50%: **27.9 %**

Mean percentage cover in vegetation plots: **26.2 %**

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: **1**

Number of narrow habitats in which the taxon has its optimum: **1**

Number of broad habitats in which the taxon occurs: **1**

Number of broad habitats in which the taxon has its optimum: **1**

### Threats and protection

Red List 2017 (national categories): **C1t - critically threatened taxon, declining**

Red List 2017 (IUCN categories): **CR - critically endangered**

Legal protection: **not protected by law**