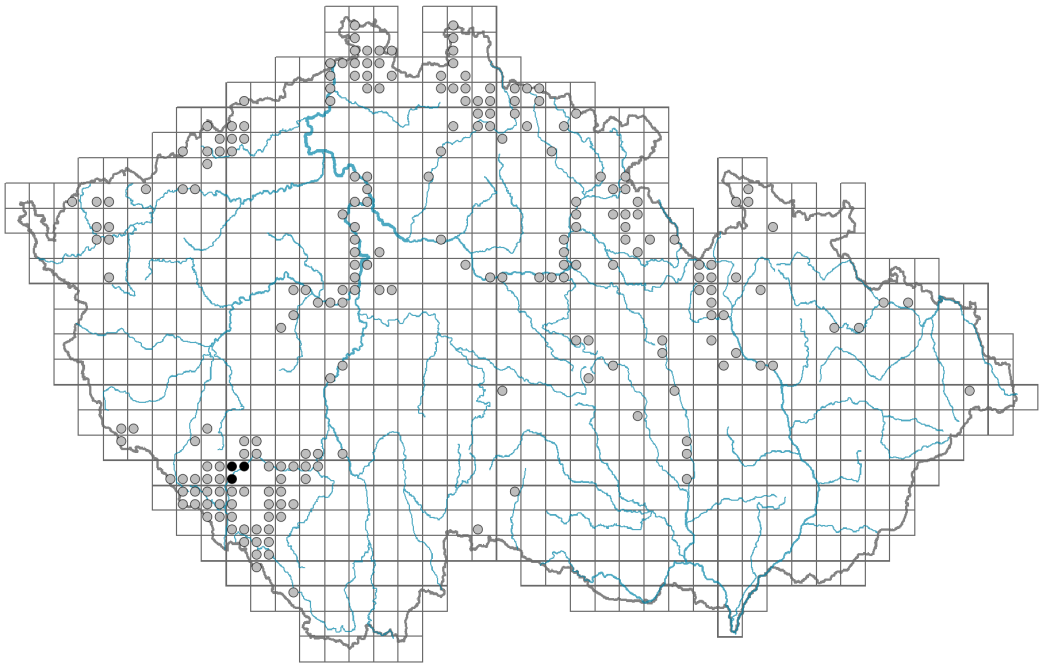
Mimulus guttatus

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]: **0.25–0.5**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **CS – competitor/stress-tolerator**
Life strategy (Pierce method based on leaf traits): **R/CR**
Life strategy (Pierce method, C-score): **37 %**
Life strategy (Pierce method, S-score): **0 %**
Life strategy (Pierce method, R-score): **63 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **opposite**
Leaf shape: **simple – entire**
Stipules: **absent**
Petiole: **both present and absent**
Leaf life span: **evergreen**
Leaf anatomy: **helomorphic**

Flower

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

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Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**
Flower colour: **yellow**
Flower symmetry: **zygomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **fused**
Shape of the sympetalous corolla or syntepalous perianth: **bilabiate**
Calyx fusion: **synsepalous**
Inflorescence type: **racemus**
Dicliny: **synoecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **insect-pollination, selfing**

Fruit, seed and dispersal

Fruit type: **dry fruit – capsule**
Fruit colour: **green**
Reproduction type: **by seed/spores and vegetatively**
Dispersal unit (diaspore): **seed, shoot fragment**
Dispersal strategy: **Sparganium (mainly autochory and hydrochory)**
Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Shoot metamorphosis: **stolon**
Storage organ: **stolon**
Type of clonal growth organ: **stolon**
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]: **2**
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): **0**
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): **5**
Depth of the belowground bud bank (root buds exluded) [cm]: **1**
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): **0**
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): **5**
Depth of the belowground bud bank (root buds included) [cm]: **1**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

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Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

Karyology

Chromosome number (2n): **28 (16, 32, 45, 48, 56)**
Ploidy level (x): **4 (2, 6, 7)**
2C genome size [Mbp]: **754.97**
1Cx monoploid genome size [Mbp]: **188.74**
Genomic GC content: **39.3 %**

Taxon origin

Origin in the Czech Republic: **neophyte**
Invasion status: **naturalized**
Geographic origin: **North America**
Year of the first record in the wild: **1853**
Period of introduction: **Late Modern Period (1800–1950)**
Introduction pathway: **intentional – ornamental**

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: **9 – wetness indicator, focus on often soaked, poorly aerated soils**
Reaction indicator value: **6x – transition between values 5 and 7 (generalist)**
Nutrient indicator value: **6 – transition between values 5 and 7**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4D Riverine reed vegetation: **2 – optimum**
4E Reed vegetation of brooks: **2 – optimum**
4I Vegetation of nitrophilous annual hygrophilous herbs: **2 – optimum**

5 Vegetation of springs and mires

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

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**

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.7**

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Ecological specialization index for non-forest vegetation: **4.8**

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional**
Floristic region: **Western America**
Continentality degree: **4**
Distribution range extension along the continentality gradient: **4**
Elevational belt in the Czech Republic: **colline belt, submontane belt (montane belt)**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 138
taxon.data.freq_in_quad: 227

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%: **10.5 %**
Occurrence frequency in vegetation plots with a cover above 25%: **0 %**
Occurrence frequency in vegetation plots with a cover above 50%: **0 %**
Mean percentage cover in vegetation plots: **3.1 %**
Maximum percentage cover in vegetation plots: **13 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **4**
Number of narrow habitats in which the taxon has its optimum: **3**
Number of broad habitats in which the taxon occurs: **2**
Number of broad habitats in which the taxon has its optimum: **1**

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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