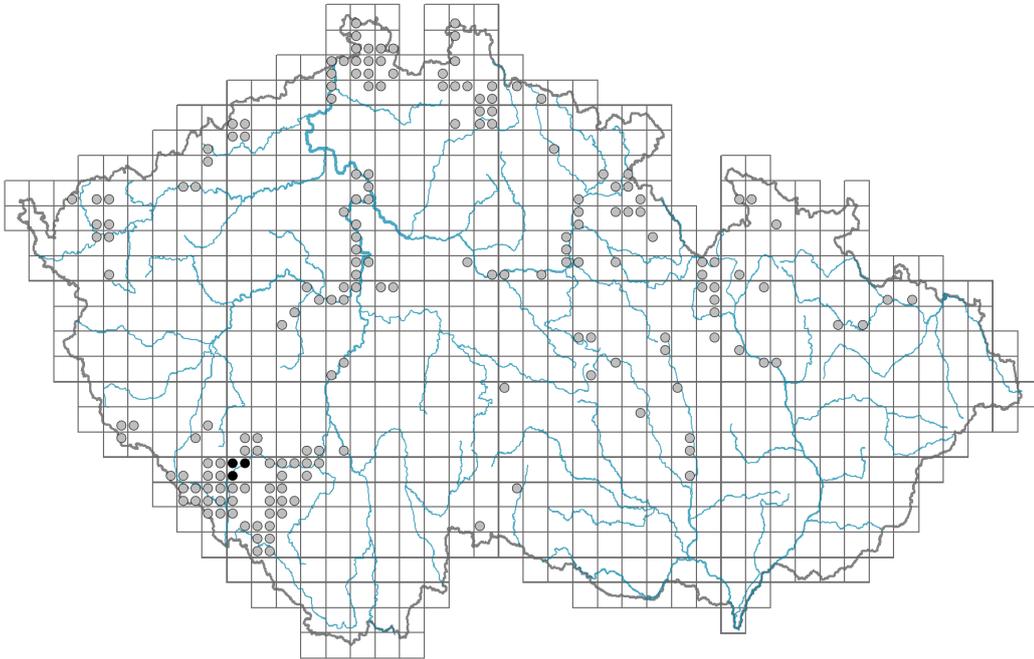


Mimulus guttatus

Distribution



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**



Map info

● revised records

○ unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



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 (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]: **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 excluded) [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**

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**

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: **116**

taxon.data.freq_in_quad: **188**

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**