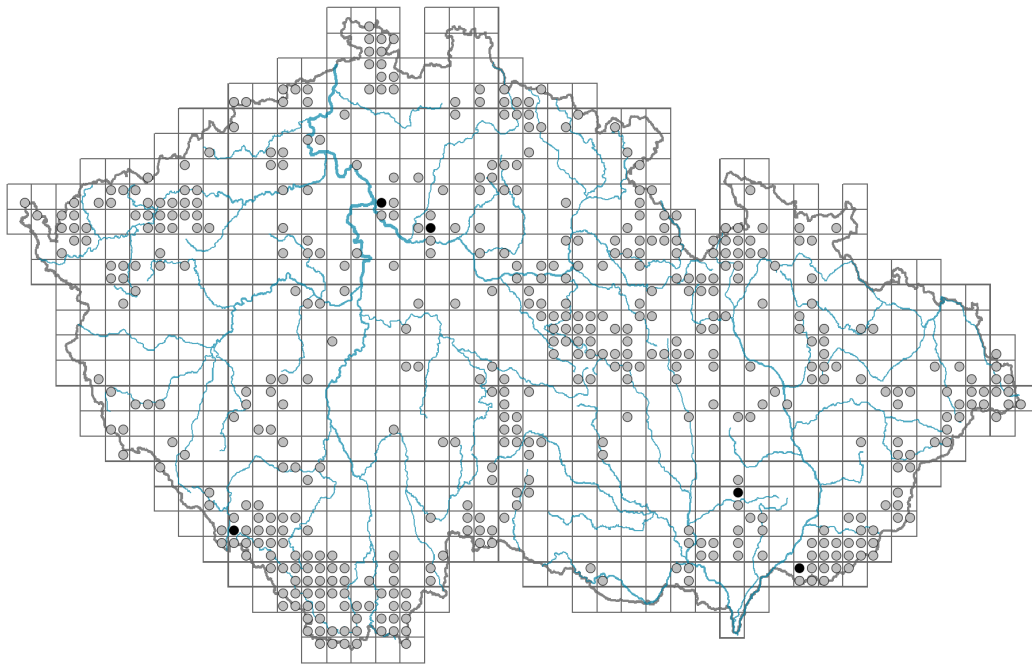


# Rhinanthus major

## 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]: **0.05-1.2**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **summer green**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

Flowering period [month]: **May-September**

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: **mixed mating**

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

## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Fruit colour: **brown, black**

Reproduction type: **only by seed/spores**

Dispersal unit (diaspore): **seed**

Dispersal strategy: **Allium (mainly autochory)**

Myrmecochory: **non-myrmecochorous (b)**

## Belowground organs and clonality

Shoot life span (cyclicality): **monocyclic shoots prevailing**

Primary root: **present**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **0**

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): **0**

Number of buds per shoot at the soil surface (root buds included): **0**

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): **0**

## Trophic mode

Parasitism and mycoheterotrophy: **root hemiparasite**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **14**

Ploidy level (x): **2**

2C genome size [Mbp]: **2312.86**

1Cx monoploid genome size [Mbp]: **1156.43**

Genomic GC content: **43 %**

## 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: **5** - **moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

Moisture indicator value: **5** - **indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**

Reaction indicator value: **7** - **indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **3** - **occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**

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

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.32**

Herb layer disturbance frequency indicator value: **-0.32**

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

Herb layer disturbance severity indicator value: **0.26**

Whole-community structure based disturbance indicator value: **0.53**

Herb layer structure-based disturbance indicator value: **0.69**

## Habitat and sociology

### Occurrence in habitats

5 Vegetation of springs and mires

5D Calcareous fens: **2 - optimum**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **2 - optimum**

6B Montane mesic meadows: **1 - rare occurrence**

6C Pastures and park grasslands: **1 - rare occurrence**

6F Intermittently wet Molinia meadows: **1 - rare occurrence**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **1 - rare occurrence**

8 Dry grasslands

8D Broad-leaved dry grasslands: **2 - optimum**

8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

11 Heathlands and scrub

11L Tall mesic and xeric shrub: **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: **4.9**

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



## Colonization ability

Index of colonization success (ICS): **4**  
Index of colonization potential (ICP): **7**  
Optimum successional age [years]: **4**

## Distribution and frequency

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

Floristic region: **Europe, Siberia**

Continentality degree: **6**

Distribution range extension along the continentality gradient: **6**

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: **291**

taxon.data.freq\_in\_quad: **506**

### 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%: **5.6 %**

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: **2.9 %**

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: **9**

Number of narrow habitats in which the taxon has its optimum: **3**

Number of broad habitats in which the taxon occurs: **5**

Number of broad habitats in which the taxon has its optimum: **3**

## 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**