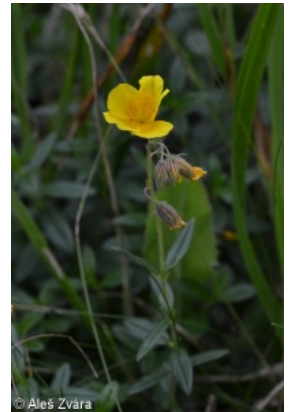
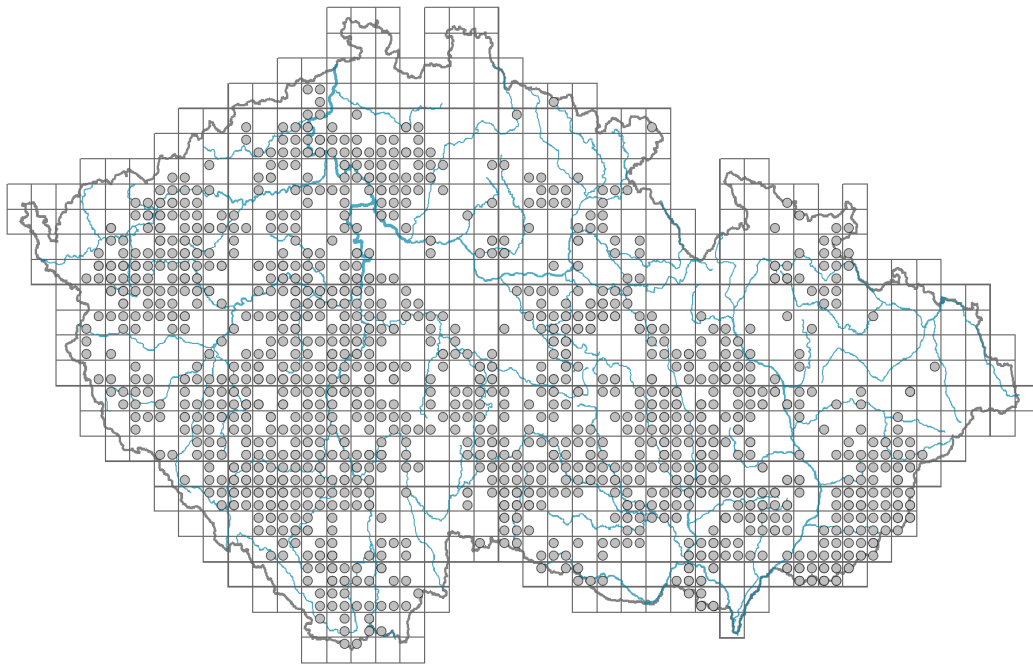


# *Helianthemum grandiflorum*

## Distribution

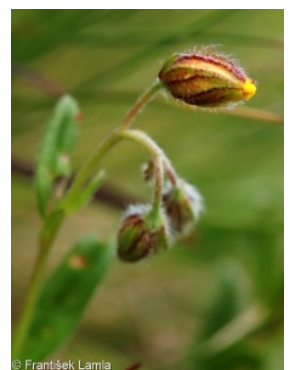


### Map info

● 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]: **0.1-0.4**

Growth form: **dwarf shrub**

Life form: **chamaephyte**

Life strategy (Pierce method based on leaf traits): **S/SR**

Life strategy (Pierce method, C-score): **11.8 %**

Life strategy (Pierce method, S-score): **68.9 %**

Life strategy (Pierce method, R-score): **19.4 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **present**

Leaf deciduousness in woody plants: **evergreen, winter deciduous**

Functional leaf type in woody plants: **broad deciduous or semi-deciduous, sclerophyllous**

## Flower

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

Flower colour: **yellow**  
 Flower symmetry: **actinomorphic**  
 Perianth type: **calyx and corolla**  
 Perianth fusion: **free**  
 Calyx fusion: **aposepalous**  
 Inflorescence type: **cincinnus**  
 Generative reproduction type: **facultative allogamy**

## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**  
 Fruit colour: **brown**  
 Dispersal unit (diaspore): **seed**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **non-myrmecochorous (b)**

## Belowground organs and clonality

Shoot life span (cyclicality): **monocyclic shoots prevailing**  
 Branching type of stem-derived organs of clonal growth: **sympodial**  
 Primary root: **present**  
 Bud bank  
 Number of buds per shoot at the soil surface (root buds excluded): **13**  
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **5**  
 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): **18**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **2**  
 Number of buds per shoot at the soil surface (root buds included): **13**  
 Number of buds per shoot at a depth of 0–10 cm (root buds included): **5**  
 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): **18**  
 Depth of the belowground bud bank (root buds included) [cm]: **2**

## Trophic mode

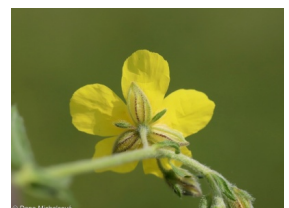
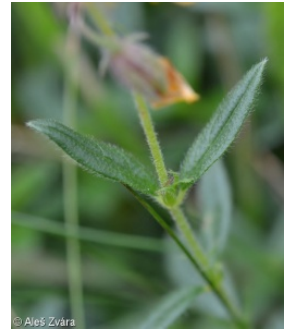
Parasitism and mycoheterotrophy: **autotrophic**  
 Carnivory: **non-carnivorous**  
 Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **20**  
 Ploidy level (x): **2**  
 2C genome size [Mbp]: **5589.31**  
 1Cx monoploid genome size [Mbp]: **2794.66**

## 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: **3 - missing on damp soil**

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: **-0.7**

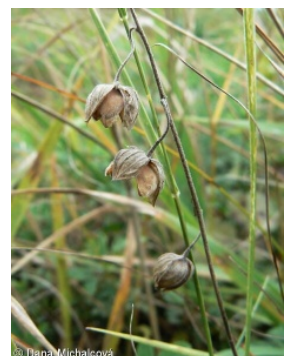
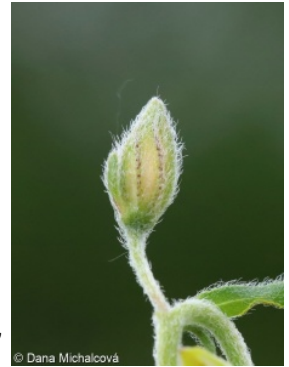
Herb layer disturbance frequency indicator value: **-0.36**

Whole-community disturbance severity indicator value: **0.21**

Herb layer disturbance severity indicator value: **0.24**

Whole-community structure based disturbance indicator value: **0.5**

Herb layer structure-based disturbance indicator value: **0.61**



## Habitat and sociology

### Occurrence in habitats

#### 1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **1 - rare occurrence**

#### 6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

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

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

#### 7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 - rare occurrence**

7B Submontane Nardus grasslands: **2 - optimum**

#### 8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**

8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

8C Narrow-leaved sub-continental steppes: **2 - optimum**

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

8E Acidophilous dry grasslands: **2 - optimum**

8F Thermophilous forest fringe vegetation: **2 - optimum**

#### 9 Sand grasslands and rock-outcrop vegetation

9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

#### 11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 - rare occurrence**

11L Tall mesic and xeric shrub: **1 - rare occurrence**

11N Low xeric scrub: **1 - rare occurrence**



## 12 Forests

12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**

12I Sub-continental thermophilous oak forests: **1 - rare occurrence**

12J Acidophilous thermophilous oak forests: **1 - rare occurrence**

12L Boreo-continental pine forests: **1 - rare occurrence**

12O Peri-Alpidic pine forests: **1 - rare occurrence**

12W Pine and larch plantations: **1 - rare occurrence**

### Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

### Ecological specialization indices

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

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

Ecological specialization index for forest vegetation: **5.1**

### Colonization ability

Index of colonization success (ICS): **5**

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **30**

## Distribution and frequency

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **421**

taxon.data.freq\_in\_quad: **1036**

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.4 %**

Occurrence frequency in vegetation plots with a cover above 5%: **15.9 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **4.4 %**

Maximum percentage cover in vegetation plots: **38 %**

### Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **23**

Number of narrow habitats in which the taxon has its optimum: **7**

Number of broad habitats in which the taxon occurs: **7**

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

