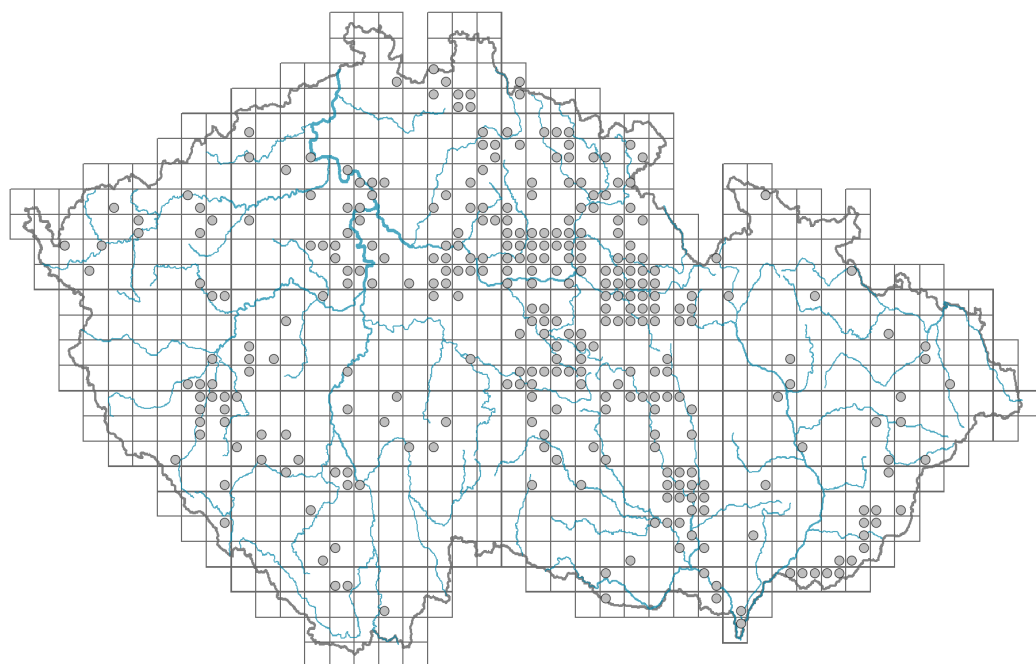


# *Calendula officinalis*

## Distribution

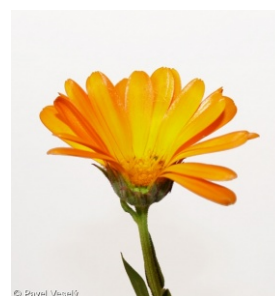


### Map info

● 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: **annual herb**

Life form: **therophyte**

Life strategy: **CR - competitor/ruderal**

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

Life strategy (Pierce method, C-score): **42 %**

Life strategy (Pierce method, S-score): **0 %**

Life strategy (Pierce method, R-score): **58 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **evergreen**

Leaf anatomy: **mesomorphic**

## Flower

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

Flower colour: **yellow, orange**

Flower symmetry: **actinomorphic, zygomorphic**

Perianth type: **calyx absent, corolla present**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **ligulate, tubular**

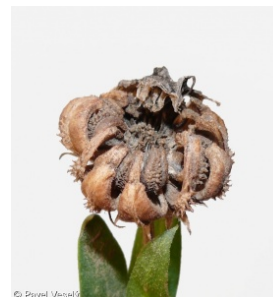
Calyx fusion: **pappus**

Inflorescence type: **anthodium solitarium**

Dicliny: **monoecious**

Generative reproduction type: **allogamy self-incompatibility**

Pollination syndrome: **insect-pollination**



© Pavel Veselý

## Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**

Fruit colour: **brown**

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

Dispersal unit (diaspore): **fruit, infrutescence or its part**

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

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



© Vladimír Motýla

## Belowground organs and clonality

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

Primary root: **present**

### 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):

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

Size of the belowground bud bank (root buds excluded):

Depth of the belowground bud bank (root buds excluded) [cm]:

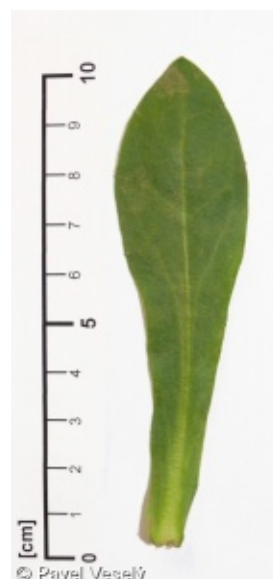
Number of buds per shoot at the soil surface (root buds included):

Number of buds per shoot at a depth of 0–10 cm (root buds included):

Number of buds per shoot at a depth greater than 10 cm (root buds included):

Size of the belowground bud bank (root buds included):

Depth of the belowground bud bank (root buds included) [cm]:



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## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Taxon origin

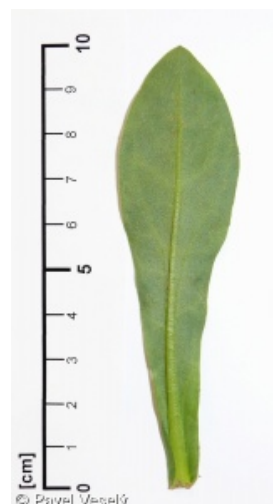
Origin in the Czech Republic: **archaeophyte/neophyte**

Invasion status: **casual**

Geographic origin: **anecophyte**

Year of the first record in the wild: **1872**

Period of introduction: **Late Middle Ages and Early Modern Period (merged)**



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category, 1200-1800)

Introduction pathway: **intentional - ornamental**

## 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: **6 - transition between values 5 and 7**

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: **7 - occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites**

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

## Habitat and sociology

Occurrence in habitats

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

13B Annual vegetation of arable land: **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**

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.1**

Ecological specialization index for non-forest vegetation: **5.2**

## Distribution and frequency

Floristic zone: **meridional**

Floristic region: **Europe**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 213

taxon.data.freq\_in\_quad: 324

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**

Occurrence frequency in vegetation plots with a cover above 5%: **11.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0 %**

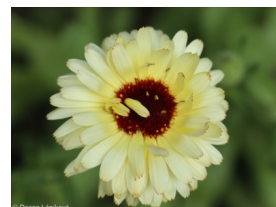
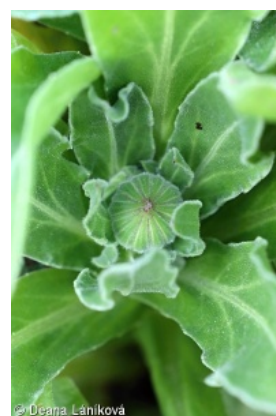
Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **2.3 %**

Maximum percentage cover in vegetation plots: **8 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **2**



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): **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**