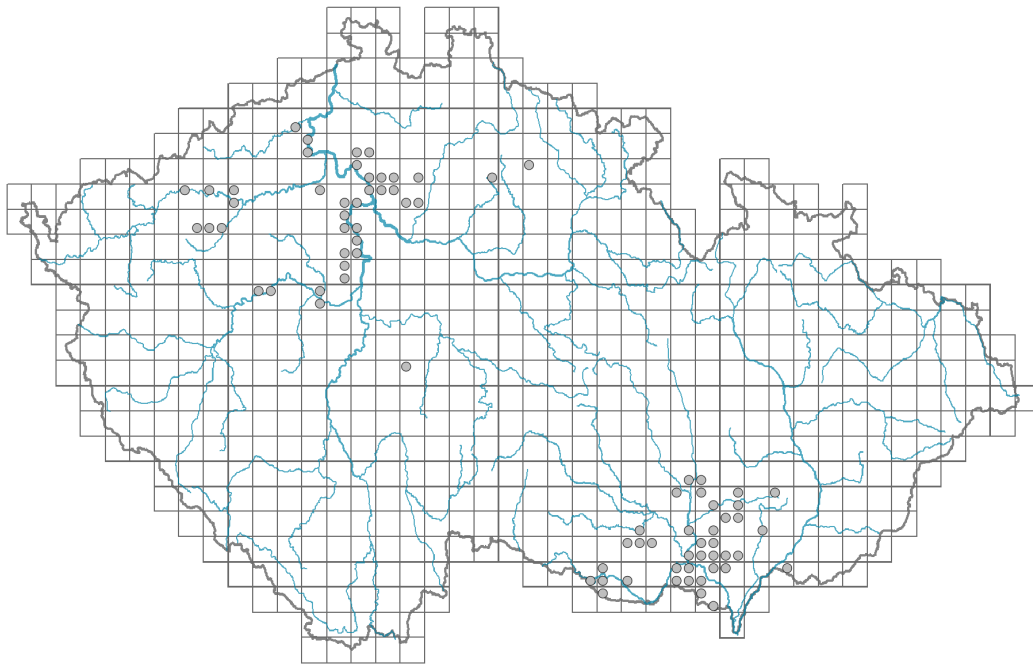


# *Odontites luteus*

## 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]: **0.15-0.4**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **R - ruderal**

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

Life strategy (Pierce method, C-score): **0.4 %**

Life strategy (Pierce method, S-score): **39.3 %**

Life strategy (Pierce method, R-score): **60.3 %**

## 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**

## Flower

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



Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **yellow, orange**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **bilabiate**

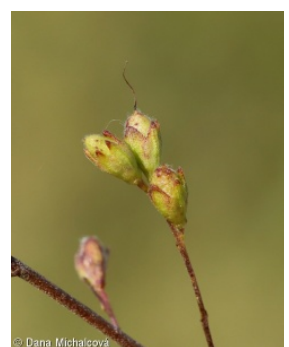
Calyx fusion: **synsepalous**

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**

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

Dispersal unit (diaspore): **seed**

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

Myrmecochory: **myrmecochorous nv**

## 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): **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): **20**

Ploidy level (x): **2**

2C genome size [Mbp]: **1010.06**

1Cx monoploid genome size [Mbp]: **505.03**

Genomic GC content: **38.9 %**

## 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: **7 - heat indicator, occurring in relatively warm lowlands**

Moisture indicator value: **3 - missing on damp soil**

Reaction indicator value: **8 - transition between values 7 and 9, occurring mostly in calcium-rich conditions**

Nutrient indicator value: **2 - transition between values 1 and 3**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **0**

Herb layer disturbance frequency indicator value: **0**

Whole-community disturbance severity indicator value: **0.18**

Herb layer disturbance severity indicator value: **0.23**

Whole-community structure based disturbance indicator value: **0.6**

Herb layer structure-based disturbance indicator value: **0.72**



## Habitat and sociology

Occurrence in habitats

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**

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

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

8E Acidophilous dry grasslands: **1 - rare occurrence**

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

9 Sand grasslands and rock-outcrop vegetation

9F Basiphilous vegetation of spring therophytes and succulents: **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**

Diagnostic taxon

Diagnostic taxon of associations: [\*\*THA04 \*Helichryso arenariae-Festucetum pallentis\*\*\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **6.2**

Ecological specialization index for non-forest vegetation: **6.1**

Colonization ability

Index of colonization success (ICS): **2**

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

Optimum successional age [years]: **15**

## Distribution and frequency

Floristic zone: **southern temperate, submeridional, meridional**

Floristic region: **Europe**

Continentality degree: **6**

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

Elevational belt in the Czech Republic: **colline belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **51**

taxon.data.freq\_in\_quad: **79**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **14.9 %**

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: **3.7 %**

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: **7**

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): **C2b - endangered taxon, rare and declining**

Red List 2017 (IUCN categories): **VU - vulnerable**

Legal protection: **not protected by law**