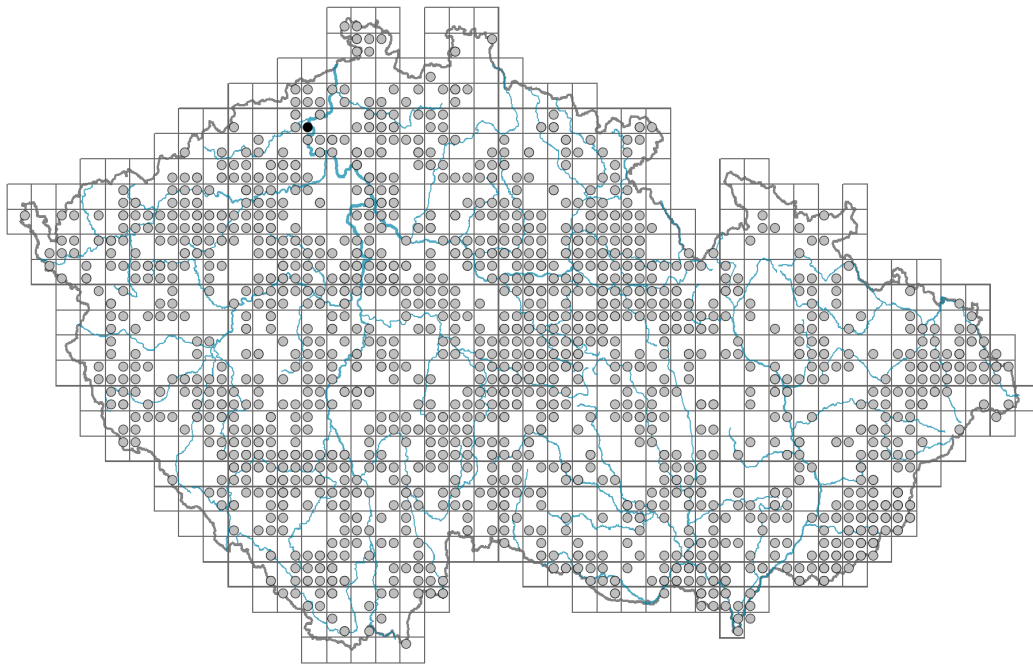


# Odontites vernus

## Distribution

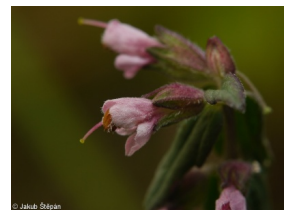


### Map info

● 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]: **0.1-0.8**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy (Pierce method based on leaf traits): **R/CSR**

Life strategy (Pierce method, C-score): **12.9 %**

Life strategy (Pierce method, S-score): **32.9 %**

Life strategy (Pierce method, R-score): **54.2 %**

## 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: **mesomorphic**

## Flower

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

Flower colour: **red-violet**

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**  
Generative reproduction type: **facultative allogamy**  
Pollination syndrome: **insect-pollination, selfing**  
Pollinator spectrum: **bumblebees (honeybee, solitary bees, hoverflies, other pollinators)**



### 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**



### 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, 40**  
Ploidy level (x): **2, 4**  
2C genome size [Mbp]: **916.29**  
1Cx monoploid genome size [Mbp]: **458.15**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**

Temperature indicator value: **6 - transition between values 5 and 7**

Moisture indicator value: **6 - transition between values 5 and 7**

Reaction indicator value: **6 - transition between values 5 and 7**

Nutrient indicator value: **5 - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites**

Salinity indicator value: **1 - salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **0.01**

Herb layer disturbance frequency indicator value: **0.02**

Whole-community disturbance severity indicator value: **0.65**

Herb layer disturbance severity indicator value: **0.67**

Whole-community structure based disturbance indicator value: **0.66**

Herb layer structure-based disturbance indicator value: **0.78**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4B Halophilous reed and sedge beds: **1 - rare occurrence**

4E Reed vegetation of brooks: **1 - rare occurrence**

4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**

5 Vegetation of springs and mires

5D Calcareous fens: **1 - rare occurrence**

6 Meadows and mesic pastures

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

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

6D Alluvial meadows of lowland rivers: **2 - optimum**

6G Vegetation of wet disturbed soils: **2 - optimum**

8 Dry grasslands

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

10 Saline vegetation

10I Inland saline meadows: **2 - optimum**

10J Saline steppes: **1 - rare occurrence**

13 Anthropogenic vegetation

13B Annual vegetation of arable land: **2 - optimum**

13D Perennial thermophilous ruderal vegetation: **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 classes: [TC Festuco-Puccinellietea](#)

Diagnostic taxon of alliances: [TCB Juncion gerardii](#)

Diagnostic taxon of associations: [TCB01 Scorzonero parviflorae-Juncetum gerardii](#), [TCB02 Loto tenuis-Potentilletum anserinae](#), [TDE03 Lathyro palustris-Gratioletum officinalis](#)

Constant taxon

Constant taxon of classes: [TC Festuco-Puccinellietea](#)

Constant taxon of alliances: [TCB Juncion gerardii](#)

Constant taxon of associations: [KAB03 Salici purpureae-Myricarietum germanicae](#), [TCB01 Scorzonero parviflorae-Juncetum gerardii](#), [TCB02 Loto tenuis-Potentilletum anserinae](#), [TDE03 Lathyro palustris-Gratioletum officinalis](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.1**

Ecological specialization index for non-forest vegetation: **4.2**

Colonization ability

Index of colonization success (ICS): **4**

Index of colonization potential (ICP): **5**

Optimum successional age [years]: **10**

## Distribution and frequency

Continental degree: **3**

Distribution range extension along the continentality gradient: **3**

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: **527**

taxon.data.freq\_in\_quad: **1224**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **4.6 %**

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: **2.6 %**

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: **14**

Number of narrow habitats in which the taxon has its optimum: **4**

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

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

## **Threats and protection**

Legal protection: **not protected by law**