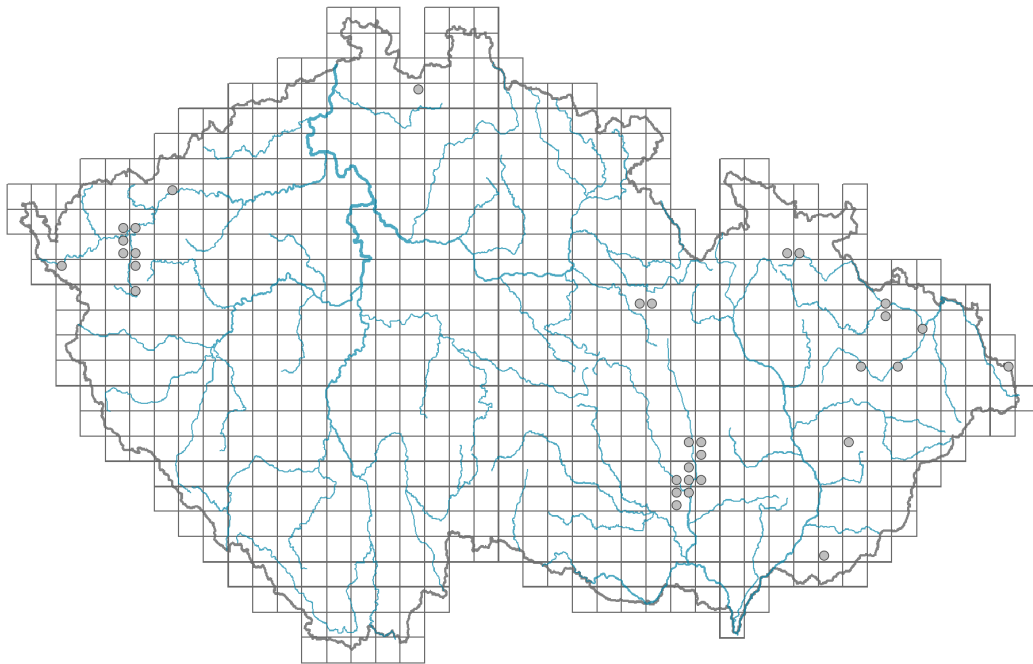


# Scrophularia vernalis

## Distribution

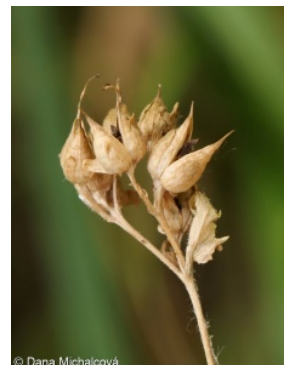


### Map info

● 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]: **0.15-0.6**

Growth form: **monocarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **53.5 %**

Life strategy (Pierce method, S-score): **7.3 %**

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

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic, hygromorphic**

## Flower

Flowering period [month]: **April-July**

Flowering phase: **3 Prunus avium-Ranunculus auricomus (end of early spring)**  
 Flower colour: **yellow-green, yellow**  
 Flower symmetry: **actinomorphic**  
 Perianth type: **calyx and corolla**  
 Perianth fusion: **fused**  
 Shape of the sympetalous corolla or syntepalous perianth: **urceolate**  
 Calyx fusion: **synsepalous**  
 Inflorescence type: **panicula e dichasiis composita**  
 Dicliny: **synoecious**  
 Generative reproduction type: **mixed mating**  
 Pollination syndrome: **insect-pollination, selfing**



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**  
 Fruit colour: **brown, grey**  
 Reproduction type: **only by seed/spores**  
 Dispersal unit (diaspore): **seed**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **non-myrmecochorous (b)**

## Belowground organs and clonality

Shoot metamorphosis: **rhizome**  
 Storage organ: **rhizome**  
 Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**  
 Primary root: **present**  
 Bud bank  
 Number of buds per shoot at the soil surface (root buds excluded): **5**  
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **10**  
 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): **15**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **4**  
 Number of buds per shoot at the soil surface (root buds included): **5**  
 Number of buds per shoot at a depth of 0–10 cm (root buds included): **10**  
 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): **15**  
 Depth of the belowground bud bank (root buds included) [cm]: **4**

## Trophic mode

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

## Karyology

Chromosome number (2n): **40 (28)**  
 Ploidy level (x): **2**

2C genome size [Mbp]: **744.72**

1Cx monoploid genome size [Mbp]: **372.36**

Genomic GC content: **40.2 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **5 - semi-shade plant, only exceptionally occurring in full light, but usually at more than 10% of the 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: **6 - transition between values 5 and 7**

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

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

1C Walls: **1 - rare occurrence**

12 Forests

12C Oak-hornbeam forests: **2 - optimum**

12D Ravine forests: **2 - optimum**

12E Herb-rich beech forests: **2 - optimum**

13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **1.1 - taxon occurring mainly in the closed forest**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.1 - taxon occurring mainly in the closed forest**

Diagnostic taxon

Diagnostic taxon of associations: [XDC05 \*Urtico dioicae\*-\*Parietarietum officinalis\*](#)

Colonization ability

Index of colonization success (ICS): **1**

## Distribution and frequency

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

Floristic region: **Europe**

Continentality degree: **4**

Distribution range extension along the continentality gradient: **2**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **26**

taxon.data.freq\_in\_quad: **32**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **6**

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

Number of broad habitats in which the taxon occurs: **3**

Number of broad habitats in which the taxon has its optimum: **1**

## Threats and protection

Red List 2017 (national categories): **C2r - endangered taxon, rare**

Red List 2017 (IUCN categories): **EN - endangered**

Legal protection: **critically threatened taxon**