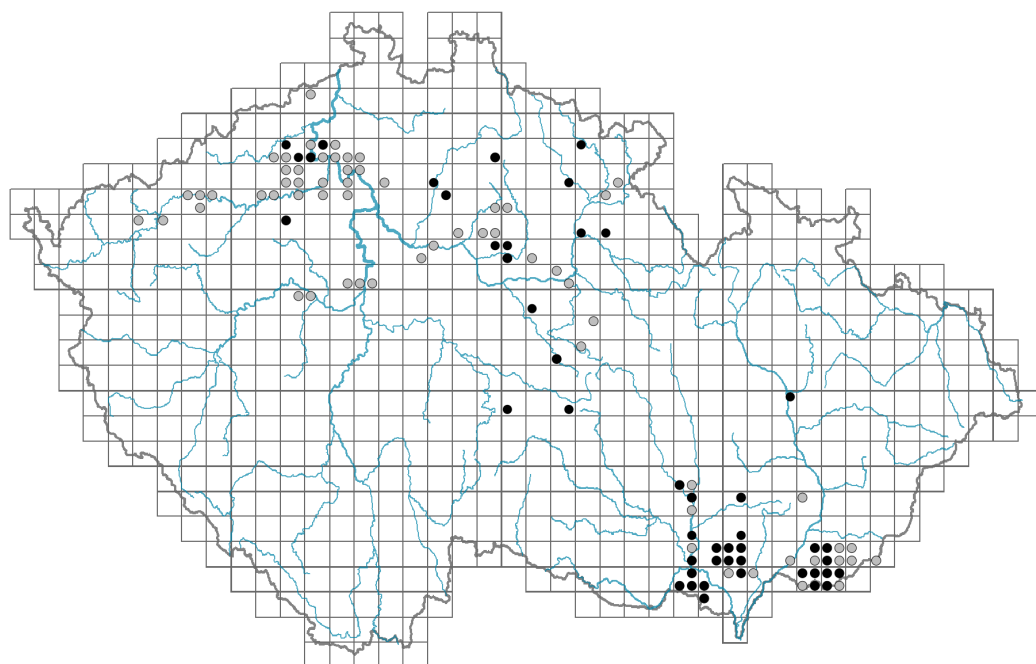


# Scorzonera hispanica

## Distribution

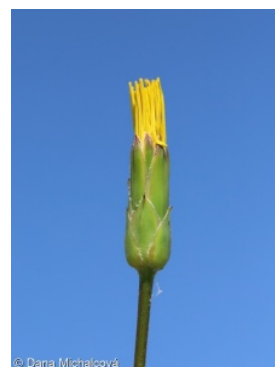


### Map info

● 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]: **0.3-1**

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

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **53.6 %**

Life strategy (Pierce method, S-score): **28.5 %**

Life strategy (Pierce method, R-score): **17.9 %**

## 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: **summer green**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**

Flower colour: **yellow**

Flower symmetry: **zygomorphic**

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

Perianth fusion: **fused**

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

Calyx fusion: **pappus**

Inflorescence type: **corymbus ex anthodiis compositus**

Dicliny: **synoecious**

Generative reproduction type: **allogamy**

Pollination syndrome: **insect-pollination, geitonogamy**



## Fruit, seed and dispersal

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

Fruit colour: **yellow, brown**

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

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

Dispersal strategy: **Epilobium (mainly anemochory and autochory)**

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



## Belowground organs and clonality

Root metamorphosis: **primary storage root**

Storage organ: **primary storage root**

Primary root: **present**

Position of root buds: **primary root**

Role of root buds in life-history of a plant: **regenerative**

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): **15**

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): **20**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

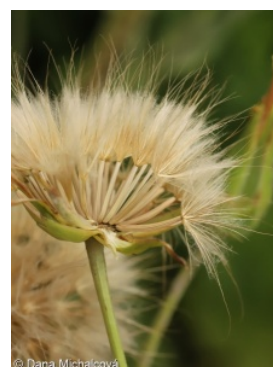
Number of buds per shoot at the soil surface (root buds included): **5**

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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): **20**

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): **14**

Ploidy level (x): **2**  
 2C genome size [Mbp]: **4369.09**  
 1Cx monoploid genome size [Mbp]: **2184.55**  
 Genomic GC content: **39.3 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

### Ellenberg-type indicator values

Light indicator value: **7 - half-light plant, mostly occurring at full light, but also in the shade up to about 30% of diffuse radiation incident in an open area**

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

Moisture indicator value: **4 - transition between values 3 and 5**

Reaction indicator value: **8 - transition between values 7 and 9, occurring mostly in calcium-rich 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: **-0.93**

Herb layer disturbance frequency indicator value: **-0.33**

Whole-community disturbance severity indicator value: **0.19**

Herb layer disturbance severity indicator value: **0.21**

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

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

## Habitat and sociology

### Occurrence in habitats

#### 8 Dry grasslands

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

8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**

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

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

#### 11 Heathlands and scrub

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

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

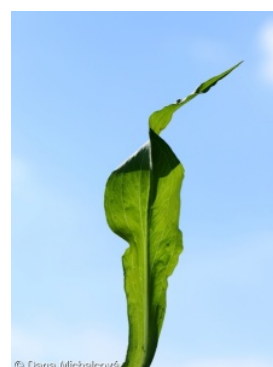
#### 12 Forests

12H Peri-Alpidic basiphilous thermophilous oak forests: **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: [THF02 \*Brachypodio pinnati-Molinietum arundinaceae\*](#)

## Ecological specialization indices

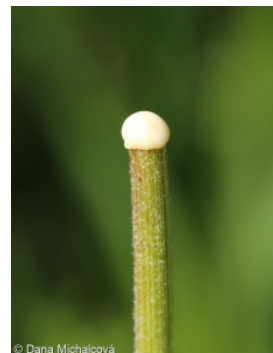
Ecological specialization index for all vegetation types: **5.8**

Ecological specialization index for non-forest vegetation: **5.9**

## Colonization ability

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

Index of colonization potential (ICP): **1**



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## Distribution and frequency

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

Floristic region: **Europe, Western Siberia**

Continentality degree: **8**

Distribution range extension along the continentality gradient: **4**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **72**

taxon.data.freq\_in\_quad: **111**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **2.2 %**

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: **2.2 %**

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: **7**

Number of narrow habitats in which the taxon has its optimum: **2**

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): **C3 - vulnerable taxon**

Red List 2017 (IUCN categories): **NT - near threatened**

Legal protection: **not protected by law**