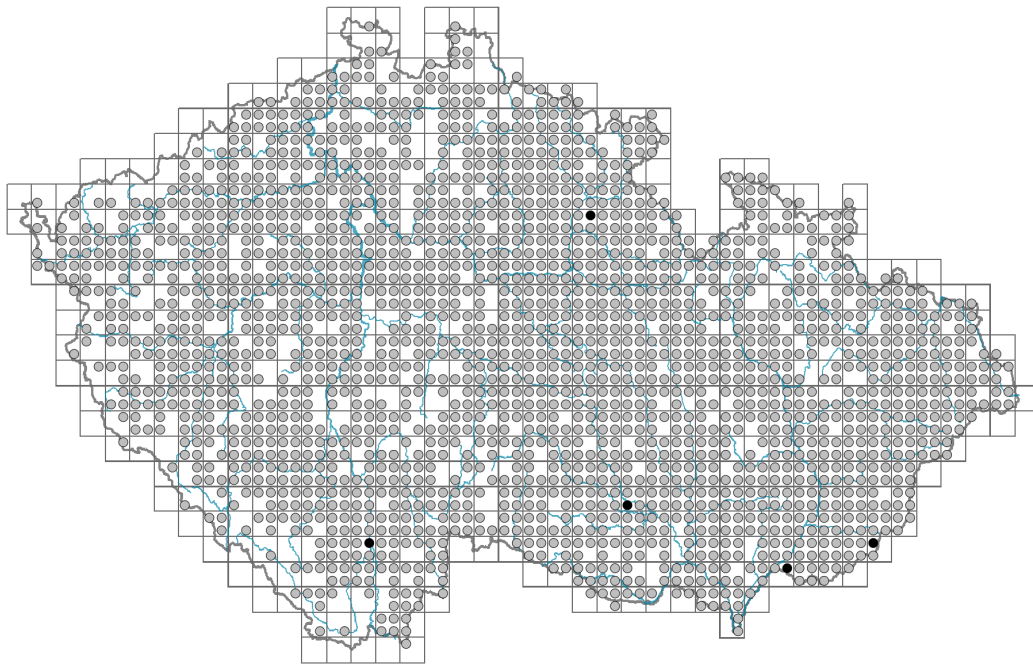


# *Thlaspi arvense*

## 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]: **0.1-0.4**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **R - ruderal**

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

Life strategy (Pierce method, C-score): **42.3 %**

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

Life strategy (Pierce method, R-score): **57.7 %**

## 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: **overwintering green**

Leaf anatomy: **mesomorphic**

## Flower

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



Flowering phase: **1 Corylus avellana-Leucojum vernum (pre-spring)**  
 Flower colour: **white**  
 Flower symmetry: **actinomorphic**  
 Perianth type: **calyx and corolla**  
 Perianth fusion: **free**  
 Calyx fusion: **aposepalous**  
 Inflorescence type: **racemus**  
 Dicliny: **synoecious**  
 Generative reproduction type: **autogamy**  
 Pollination syndrome: **insect-pollination, selfing, cleistogamy**

### Fruit, seed and dispersal

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

### Belowground organs and clonality

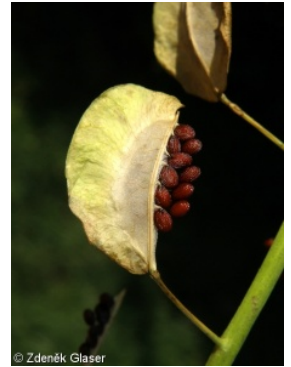
Shoot life span (cyclicality): **monocyclic shoots prevailing**  
 Primary root: **present**  
 Bud bank  
 Number of buds per shoot at the soil surface (root buds excluded): **5**  
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **0**  
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **0**  
 Size of the belowground bud bank (root buds excluded): **5**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **1**  
 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): **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): **5**  
 Depth of the belowground bud bank (root buds included) [cm]: **1**

### 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]: **947.56**  
 1Cx monoploid genome size [Mbp]: **473.78**  
 Genomic GC content: **42.4 %**



## Taxon origin

Origin in the Czech Republic: **archaeophyte**  
 Invasion status: **naturalized**  
 Geographic origin: **Mediterranean**  
 Period of introduction: **Neolithic (5600-4200 BCE)**  
 Introduction pathway: **unintentional - agriculture**

## 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: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

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**

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **0.4**

Herb layer disturbance frequency indicator value: **0.4**

Whole-community disturbance severity indicator value: **0.97**

Herb layer disturbance severity indicator value: **0.98**

Whole-community structure based disturbance indicator value: **0.79**

Herb layer structure-based disturbance indicator value: **0.85**

## Habitat and sociology

### Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

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

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**

6 Meadows and mesic pastures

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

6D Alluvial meadows of lowland rivers: **1 - rare occurrence**

6G Vegetation of wet disturbed soils: **1 - rare occurrence**

9 Sand grasslands and rock-outcrop vegetation

9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

10 Saline vegetation

10I Inland saline meadows: **1 - rare occurrence**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **2 - optimum**

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

13C Annual vegetation of trampled habitats: **1 - rare occurrence**



© Pavel Veselý



© Dana Michalová



© Pavel Veselý

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: [XB \*Stellarietea mediae\*](#)

Diagnostic taxon of alliances: [XBA \*Caucalidion\*](#), [XBB \*Veronico-Euphorbion\*](#), [XBC \*Scleranthion annui\*](#)

Diagnostic taxon of associations: [XBA01 \*Caucalido platycarpi-Conringietum orientalis\*](#), [XBA03 \*Euphorbio exiguae-Melandrietum noctiflori\*](#), [XBA05 \*Veronicetum hederifolio-triphylli\*](#), [XBC03 \*Erophilo vernae-Arabidopsietum thalianae\*](#)

Constant taxon

Constant taxon of alliances: [XBA \*Caucalidion\*](#), [XBC \*Scleranthion annui\*](#)

Constant taxon of associations: [XBA01 \*Caucalido platycarpi-Conringietum orientalis\*](#), [XBA02 \*Lathyro tuberosi-Adonidetum aestivalis\*](#), [XBA03 \*Euphorbio exiguae-Melandrietum noctiflori\*](#), [XBA05 \*Veronicetum hederifolio-triphylli\*](#), [XBB02 \*Veronico-Lamietum hybridi\*](#), [XBC01 \*Aphano arvensis-Matricarietum chamomillae\*](#), [XBC02 \*Spergulo arvensis-Scleranthetum annui\*](#), [XBC03 \*Erophilo vernae-Arabidopsietum thalianae\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: 5.7

Ecological specialization index for non-forest vegetation: 5.7

Colonization ability

Index of colonization success (ICS): **5**

Index of colonization potential (ICP): **3**

Optimum successional age [years]: **2**

## Distribution and frequency

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

Floristic region: **circumpolar**

Distribution range extension along the continentality gradient: **8**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 629

taxon.data.freq\_in\_quad: 2000

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **16.7 %**

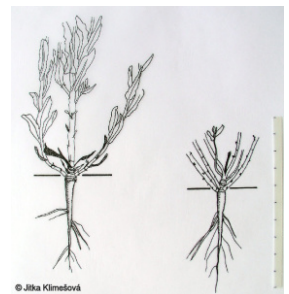
Occurrence frequency in vegetation plots with a cover above 25%: **1.1 %**

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

Mean percentage cover in vegetation plots: **4.5 %**

Maximum percentage cover in vegetation plots: **38 %**

Number of habitats with taxon occurrence in the Czech Republic



Number of narrow habitats in which the taxon occurs: **11**

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

Number of broad habitats in which the taxon occurs: **5**

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**