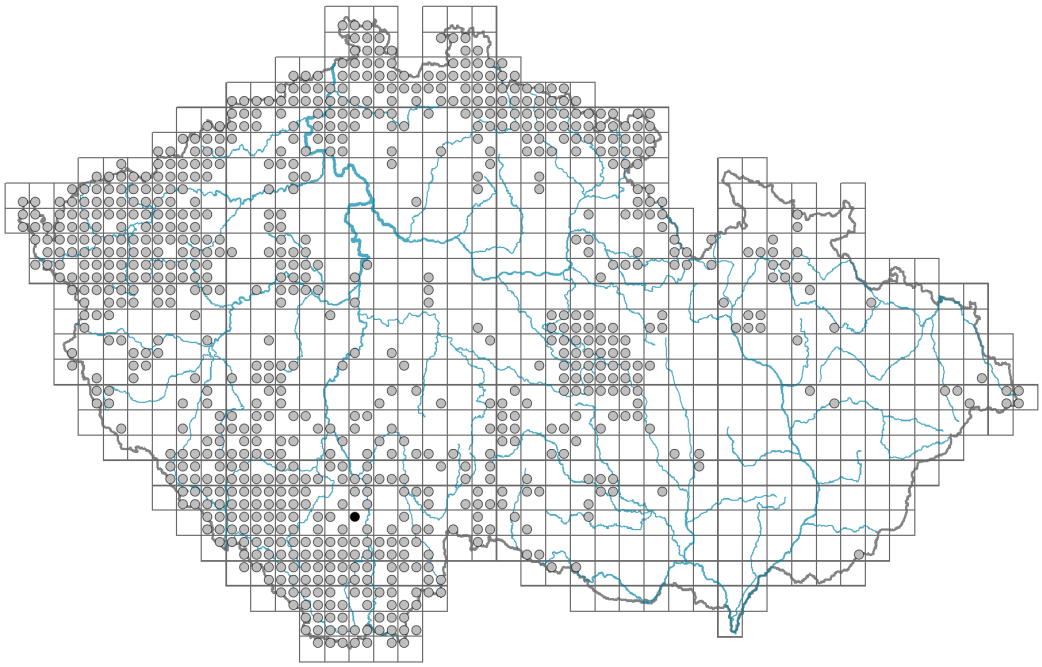
Cirsium heterophyllum

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]: **0.5–1.5**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy (Pierce method based on leaf traits): **C/CR**
Life strategy (Pierce method, C-score): **70.4 %**
Life strategy (Pierce method, S-score): **0 %**
Life strategy (Pierce method, R-score): **29.6 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **simple – entire, simple – pinnately divided**
Stipules: **absent**
Petiole: **both present and absent**

Flower

Flowering period [month]: **June–July**
Flower colour: **red-violet**
Flower symmetry: **actinomorphic**
Perianth type: **calyx reduced, corolla present**

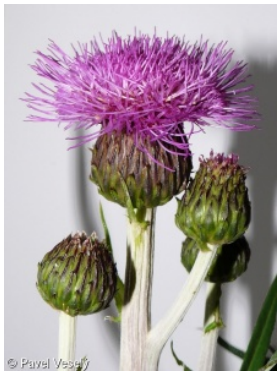
Perianth fusion: **fused**
Shape of the sympetalous corolla or syntepalous perianth: **tubular**
Calyx fusion: **pappus**
Inflorescence type: **racemus ex anthodiis compositus, anthodium solitarium**
Generative reproduction type: **mixed mating**
Pollinator spectrum: **honeybee, bumblebees, flies s. l., other Diptera, thrips (other Hymenoptera, hoverflies, butterflies, beetles, nitidulids, other pollinators)**

Fruit, seed and dispersal

Fruit type: **dry fruit – achene/cypsela/samara**
Dispersal unit (diaspore): **fruit, infrutescence or its part**
Dispersal strategy: **Epilobium (mainly anemochory and autochory)**
Myrmecochory: **myrmecochorous**

Belowground organs and clonality

Type of clonal growth organ: **hypogeogenous rhizome**
Freely dispersible organs of clonal growth: **absent**
Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **sympodial**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **3.5**
Number of clonal offspring: **3.4**
Lateral spreading distance by clonal growth [m]: **0.1**
Clonal index: **5**



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 exluded) [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): **15**
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): **34**
Ploidy level (x): **2**
2C genome size [Mbp]: **1854.61**

1Cx monoploid genome size [Mbp]: **927.31**
Genomic GC content: **38.1 %**

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: **4 – transition between values 3 and 5**
Moisture indicator value: **8 – transition between values 7 and 9**
Reaction indicator value: **5 – indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions**
Nutrient indicator value: **6 – transition between values 5 and 7**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1**
Herb layer disturbance frequency indicator value: **-0.38**
Whole-community disturbance severity indicator value: **0.27**
Herb layer disturbance severity indicator value: **0.29**
Whole-community structure based disturbance indicator value: **0.43**
Herb layer structure-based disturbance indicator value: **0.56**

Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **2 – optimum**

4 Wetland and riverine herbaceous vegetation

4D Riverine reed vegetation: **1 – rare occurrence**
4G Tall-sedge beds: **1 – rare occurrence**
4K Petasites fringes of montane brooks: **1 – rare occurrence**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 – rare occurrence**
5C Alpine and subalpine soft-water springs: **1 – rare occurrence**
5E Acidic moss-rich fens and peatland meadows: **1 – rare occurrence**

6 Meadows and mesic pastures

6B Montane mesic meadows: **2 – optimum**
6C Pastures and park grasslands: **1 – rare occurrence**
6E Wet Cirsium meadows: **2 – optimum**
6F Intermittently wet Molinia meadows: **1 – rare occurrence**

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 – rare occurrence**
7B Submontane Nardus grasslands: **1 – rare occurrence**

11 Heathlands and scrub

11D Subalpine acidophilous Pinus mugo scrub: **1 – rare occurrence**

11H Subalpine deciduous scrub: **2 – optimum**

11I Willow carrs: **1 – rare occurrence**

11J Willow galleries of loamy and sandy river banks: **1 – rare occurrence**

12 Forests

12B Alluvial forests: **1 – rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.2 – taxon occurring partly in the forest, but mainly in open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 – taxon occurring partly in the forest, but mainly in open vegetation**

Diagnostic taxon

Diagnostic taxon of alliances: **TDB *Polygono bistortae-Trisetion flavescentis***

Diagnostic taxon of associations: **TDB03 *Meo athamantici-Festucetum rubrae***, **TDF05 *Polygono bistortae-Cirsietum heterophylli***

Constant taxon

Constant taxon of associations: **TDF05 *Polygono bistortae-Cirsietum heterophylli***

Dominant taxon

Dominant taxon of associations: **TDF05 *Polygono bistortae-Cirsietum heterophylli***, **TDF14 *Chaerophyllo hirsuti-Filipenduletum ulmariae***

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.4**

Ecological specialization index for non-forest vegetation: **5.6**

Ecological specialization index for forest vegetation: **5.7**

Colonization ability

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

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

Optimum successional age [years]: **7**

Distribution and frequency

Continentality degree: **6**

Distribution range extension along the continentality gradient: **5**

Elevational belt in the Czech Republic: **submontane belt, montane belt, subalpine belt**

Expansive taxon in the region: **Bohemian Moravian Oreophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 353

taxon.data.freq_in_quad: 825

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **33.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **26.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **21.3 %**

Mean percentage cover in vegetation plots: **21.1 %**

Maximum percentage cover in vegetation plots: **88 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **18**
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

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**