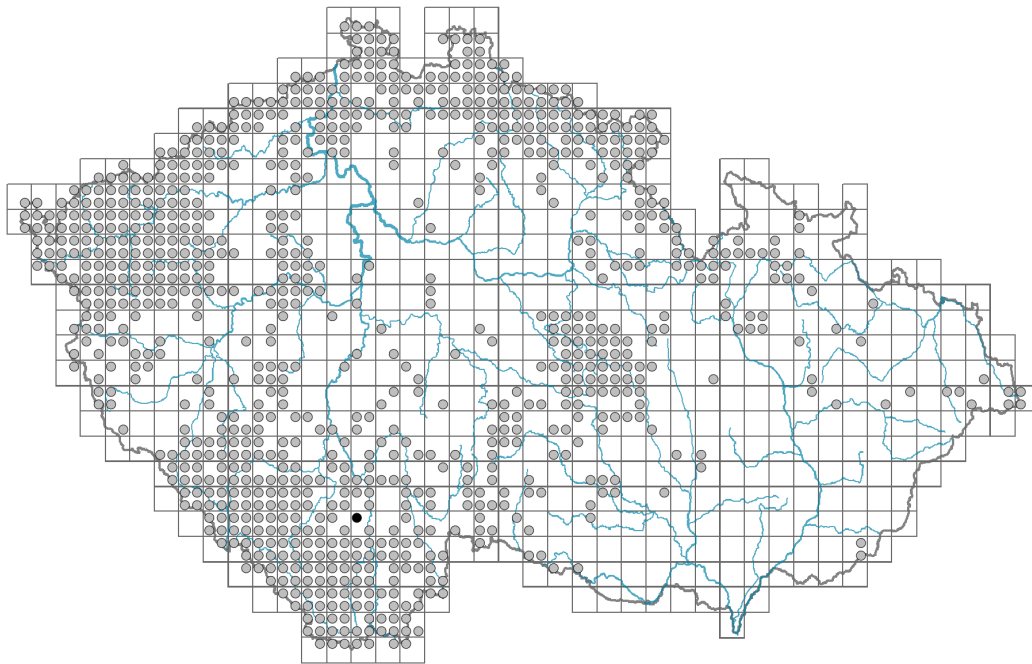


Cirsium heterophyllum

Distribution



© Pavel Veselý

Map info

● revised records

○ unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



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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 (cyclicality): **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 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): **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**

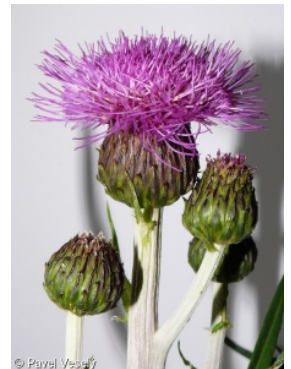
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

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 flavescens*](#)

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

Continental 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: **382**

taxon.data.freq_in_quad: **915**

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**