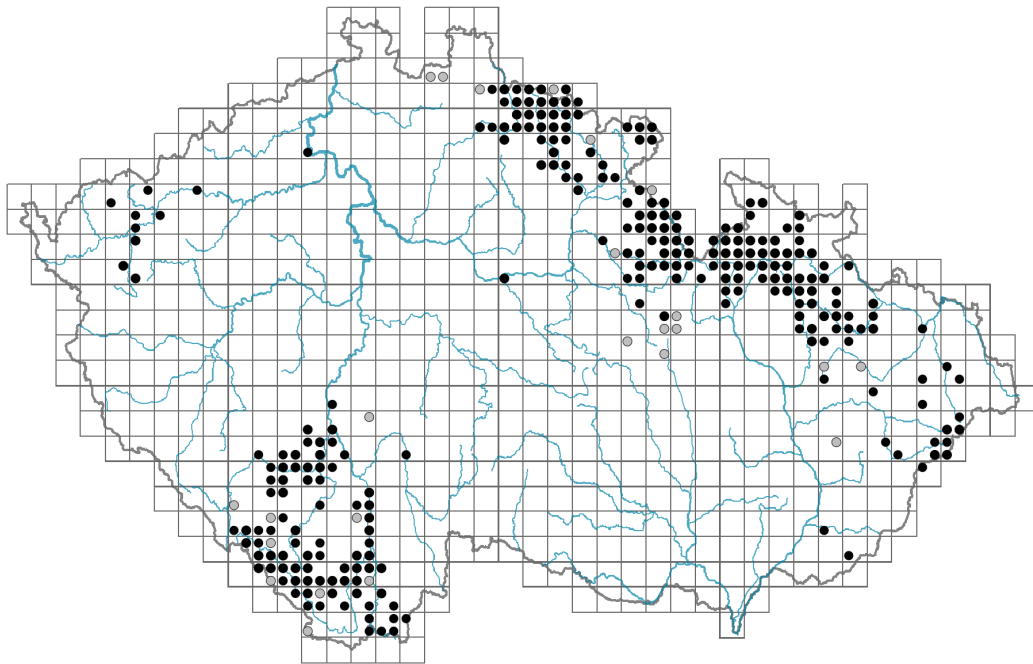


# *Carduus personata*

## Distribution



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### 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]: **0.6-2**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - pinnately divided**

Stipules: **absent**

Petiole: **mainly absent**

Leaf anatomy: **mesomorphic, hygromorphic**



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## Flower

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

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

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: **corymbothyrus ex anthodiis compositus**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

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

## Fruit, seed and dispersal

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

Fruit colour: **brown**

Reproduction type: **by seed/spores and vegetatively**

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

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

Myrmecochory: **myrmecochorous nv**

## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

Type of clonal growth organ: **epigeogenous 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]: **4**

Number of clonal offspring: **0.8**

Lateral spreading distance by clonal growth [m]: **0.01**

Clonal index: **3**

## 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**

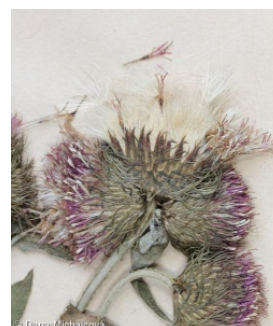
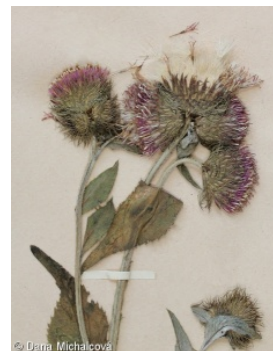
Depth of the belowground bud bank (root buds included) [cm]: **4**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



## Karyology

Chromosome number (2n): **22**

Ploidy level (x): **2**

2C genome size [Mbp]: **1649**

1Cx monoploid genome size [Mbp]: **824.5**

Genomic GC content: **39.4 %**

## 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: **7 - humidity indicator, focus on well moistened, but not wet soils**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **8 - pronounced nutrient indicator**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.24**

Herb layer disturbance frequency indicator value: **-0.56**

Whole-community disturbance severity indicator value: **0.32**

Herb layer disturbance severity indicator value: **0.32**

Whole-community structure based disturbance indicator value: **0.32**

Herb layer structure-based disturbance indicator value: **0.34**

## 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**

4K Petasites fringes of montane brooks: **2 - optimum**

5 Vegetation of springs and mires

5C Alpine and subalpine soft-water springs: **1 - rare occurrence**

6 Meadows and mesic pastures

6B Montane mesic meadows: **1 - rare occurrence**

11 Heathlands and scrub

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

11H Subalpine deciduous scrub: **1 - rare occurrence**

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



11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

## 12 Forests

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

## 13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**

## Affinity to the forest environment

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: [ADD \*Adenostylion alliariae\*](#), [XDF \*Rumicion alpini\*](#)

Diagnostic taxon of associations: [ADD01 \*Ranunculo platanifolii-Adenostyletum alliariae\*](#), [ADD03 \*Trollio altissimi-Geranium sylvatici\*](#), [ADD04 \*Laserpitio archangelicae-Dactylidetum glomeratae\*](#), [ADE01 \*Daphno mezerei-Dryopteridetum filicis-maris\*](#), [XDF01 \*Rumicetum alpini\*](#)

## Constant taxon

Constant taxon of associations: [ADD03 \*Trollio altissimi-Geranium sylvatici\*](#), [ADD04 \*Laserpitio archangelicae-Dactylidetum glomeratae\*](#), [ADE01 \*Daphno mezerei-Dryopteridetum filicis-maris\*](#)

## Dominant taxon

Dominant taxon of associations: [XDF01 \*Rumicetum alpini\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.8**

Ecological specialization index for non-forest vegetation: **5.1**

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

## Colonization ability

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

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

## Distribution and frequency

Floristic zone: **southern temperate, submeridional**

Floristic region: **Europe**

Continental degree: **4**

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

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 169

taxon.data.freq\_in\_quad: 318

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **12.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.3 %**

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

Mean percentage cover in vegetation plots: **4 %**

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: **3**

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**