

# *Centaurea scabiosa*

## 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]: **0.5-1.2**

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

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **57 %**

Life strategy (Pierce method, S-score): **15 %**

Life strategy (Pierce method, R-score): **28 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - pinnately divided**

Stipules: **absent**

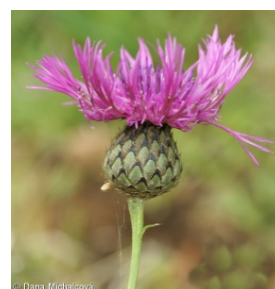
Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **scleromorphic**

## Flower

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



Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **pink-violet, violet**

Flower symmetry: **actinomorphic, zygomorphic**

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

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **funnel-shaped, tubular**

Calyx fusion: **pappus**

Inflorescence type: **corymbothsus ex anthodiis compositus**

Dicliny: **synoecious**

Generative reproduction type: **allogamy self-incompatibility**

Pollination syndrome: **insect-pollination**

Pollinator spectrum: **honeybee, bumblebees (solitary bees, other Hymenoptera, hoverflies, flies s. l., other Diptera, butterflies, beetles, other pollinators, unknown)**

## Fruit, seed and dispersal

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

Fruit colour: **brown, grey**

Reproduction type: **mostly by seed/spores, rarely vegetatively**

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

Dispersal strategy: **Allium (mainly autochory)**

Myrmecochory: **myrmecochorous**

## Belowground organs and clonality

Shoot metamorphosis: **rhizome-like pleiocorm**

Root metamorphosis: **primary storage root**

Storage organ: **rhizome-like pleiocorm, primary storage root**

Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **sympodial**

Primary root: **present**

Position of root buds: **lateral roots**

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

## 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): **14**

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): **19**

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): **20**

Number of buds per shoot at a depth greater than 10 cm (root buds included): **15**

Size of the belowground bud bank (root buds included): **40**

Depth of the belowground bud bank (root buds included) [cm]: **8**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**



Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **20**

Ploidy level (x): **2**

2C genome size [Mbp]: **3051.55**

1Cx monoploid genome size [Mbp]: **1525.77**

Genomic GC content: **41.3 %**

## 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: **6x - transition between values 5 and 7 (generalist)**

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: **4 - transition between values 3 and 5**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.69**

Herb layer disturbance frequency indicator value: **-0.32**

Whole-community disturbance severity indicator value: **0.24**

Herb layer disturbance severity indicator value: **0.27**

Whole-community structure based disturbance indicator value: **0.49**

Herb layer structure-based disturbance indicator value: **0.59**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

1B Siliceous cliffs and block fields: **1 - rare occurrence**

1D Mobile calcareous screes: **1 - rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **2 - optimum**

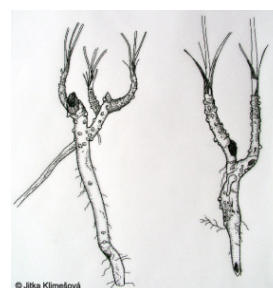
6C Pastures and park grasslands: **1 - rare occurrence**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **1 - rare occurrence**

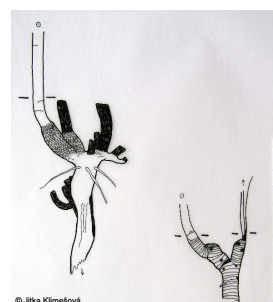
8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**





- 8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**  
 8C Narrow-leaved sub-continental steppes: **2 - optimum**  
 8D Broad-leaved dry grasslands: **2 - optimum**  
 8E Acidophilous dry grasslands: **2 - optimum**  
 8F Thermophilous forest fringe vegetation: **2 - optimum**  
 9 Sand grasslands and rock-outcrop vegetation  
 9C Festuca grasslands on acidic sands: **1 - rare occurrence**  
 9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**  
 11 Heathlands and scrub  
 11A Dry lowland to subalpine heathlands: **1 - rare occurrence**  
 11L Tall mesic and xeric shrub: **2 - optimum**  
 11N Low xeric scrub: **2 - optimum**  
 12 Forests  
 12F Limestone beech forests: **1 - rare occurrence**  
 12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**  
 12J Acidophilous thermophilous oak forests: **1 - rare occurrence**  
 12K Acidophilous oak forests: **1 - rare occurrence**  
 12L Boreo-continental pine forests: **1 - rare occurrence**  
 12O Peri-Alpidic pine forests: **2 - optimum**  
 12W Pine and larch plantations: **1 - rare occurrence**  
 13 Anthropogenic vegetation  
 13A Annual vegetation of ruderal habitats: **1 - rare occurrence**  
 13D Perennial thermophilous ruderal vegetation: **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 classes: [TH Festuco-Brometea](#)

Diagnostic taxon of alliances: [KBA Prunion fruticosae](#), [THE Cirsio-Brachypodion pinnati](#), [THF Bromion erecti](#)

Diagnostic taxon of associations: [THE03 Polygalo majoris-Brachypodietum pinnati](#), [THF01 Carlino acaulis-Brometum erecti](#)

#### Constant taxon

Constant taxon of alliances: [THE Cirsio-Brachypodion pinnati](#), [THF Bromion erecti](#)

Constant taxon of associations: [KBA01 Prunetum fruticosae](#), [THC01 Carici humilis-Seslerietum caeruleae](#), [THE01 Scabioso ochroleucae-Brachypodietum pinnati](#), [THE03 Polygalo majoris-Brachypodietum pinnati](#), [THF01 Carlino acaulis-Brometum erecti](#), [THF02 Brachypodio pinnati-Molinietum arundinaceae](#), [THH03 Geranio sanguinei-Peucedanetum cervariae](#)

#### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.9**

Ecological specialization index for non-forest vegetation: **5**

Ecological specialization index for forest vegetation: **4.4**

#### Colonization ability

Index of colonization success (ICS): **7**

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

Optimum successional age [years]: **32**

## Distribution and frequency

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

Floristic region: **Europe, Western Siberia**

Distribution range extension along the continentality gradient: **7**

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: **565**

taxon.data.freq\_in\_quad: **1666**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **7.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.6 %**

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

Mean percentage cover in vegetation plots: **3.2 %**

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: **26**

Number of narrow habitats in which the taxon has its optimum: **10**

Number of broad habitats in which the taxon occurs: **8**

Number of broad habitats in which the taxon has its optimum: **4**

## 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**