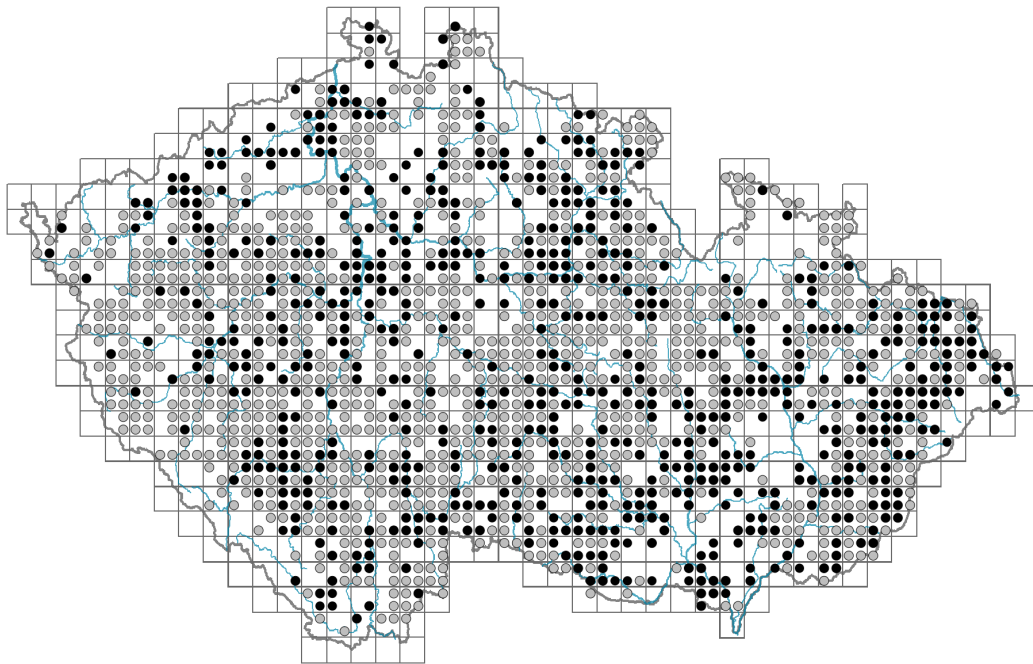


# *Centaurea cyanus*

## 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]: **0.3-0.8**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **CR - competitor/ruderal**

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

Life strategy (Pierce method, C-score): **28.1 %**

Life strategy (Pierce method, S-score): **15.9 %**

Life strategy (Pierce method, R-score): **56 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **overwintering green**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

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

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**  
 Flower colour: **blue**  
 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, facultative allogamy**  
 Pollination syndrome: **insect-pollination**



### Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**  
 Fruit colour: **white, grey**  
 Reproduction type: **only by seed/spores**  
 Dispersal unit (diaspore): **fruit, infrutescence or its part**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **myrmecochorous**



### 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): **24**  
 Ploidy level (x): **2**  
 2C genome size [Mbp]: **1456.59**  
 1Cx monoploid genome size [Mbp]: **728.3**



Genomic GC content: **39.8 %**

## Taxon origin

Origin in the Czech Republic: **archaeophyte**

Invasion status: **naturalized**

Geographic origin: **anecophyte**

Period of introduction: **Early Middle Ages (550-1200)**

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: **5x - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out (generalist)**

Reaction indicator value: **4x - transition between values 3 and 5 (generalist)**

Nutrient indicator value: **6x - transition between values 5 and 7 (generalist)**

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

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **0.51**

Herb layer disturbance frequency indicator value: **0.51**

Whole-community disturbance severity indicator value: **0.99**

Herb layer disturbance severity indicator value: **0.99**

Whole-community structure based disturbance indicator value: **0.8**

Herb layer structure-based disturbance indicator value: **0.87**

## Habitat and sociology

### Occurrence in habitats

#### 8 Dry grasslands

8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**

8E Acidophilous dry grasslands: **1 - rare occurrence**

#### 9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **1 - rare occurrence**

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

#### 13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

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

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: [XBC \*Scleranthion annui\*](#)

Diagnostic taxon of associations: [XBC01 \*Aphano arvensis-Matricarietum chamomillae\*](#), [XBC03 \*Erophilo vernaе-Arabidopsietum thalianae\*](#)

## Constant taxon

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

Constant taxon of associations: [XBC01 \*Aphano arvensis-Matricarietum chamomillae\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **6.3**

Ecological specialization index for non-forest vegetation: **6.3**

## Colonization ability

Index of colonization success (ICS): **4**

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

Optimum successional age [years]: **4**

## Distribution and frequency

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

Floristic region: **Europe**

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: **576**

taxon.data.freq\_in\_quad: **1635**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.4 %**

Occurrence frequency in vegetation plots with a cover above 5%: **20.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **4 %**

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

Mean percentage cover in vegetation plots: **5.5 %**

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: **7**

Number of narrow habitats in which the taxon has its optimum: **1**

Number of broad habitats in which the taxon occurs: **3**

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**

