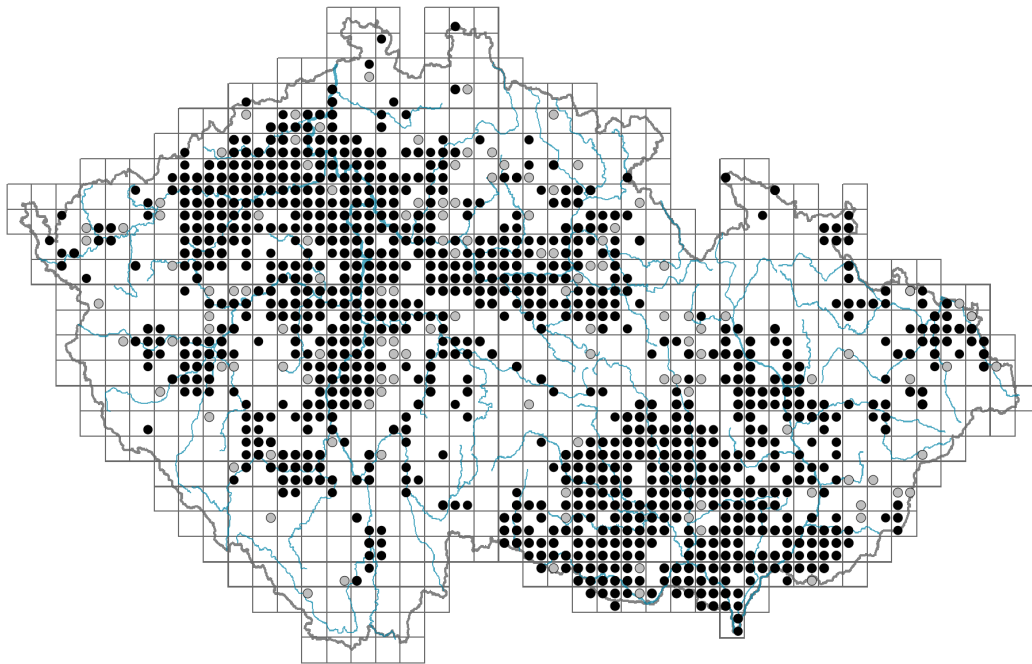


# *Centaurea stoebe*

## 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.

## Habitus and growth type

Height [m]: **0.3-1.5**

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

Life form: **hemicryptophyte**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

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

Life strategy (Pierce method, C-score): **30.2 %**

Life strategy (Pierce method, S-score): **0 %**

Life strategy (Pierce method, R-score): **69.8 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate, rosulate**

Leaf shape: **simple - pinnately divided**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **evergreen**

Leaf anatomy: **scleromorphic**



© Vladimír Nejšlechta



© Tomáš Kebert

## Flower

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

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

Flower colour: **white, pink**

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: **corymbothyrus ex anthodiis compositus**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination**



## Fruit, seed and dispersal

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

Fruit colour: **green, 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

Root metamorphosis: **primary storage root**

Storage organ: **primary storage root**

Shoot life span (cyclicality): **dicyclic or polycyclic 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): **9**

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): **14**

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): **9**

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): **14**

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): **18, 36**

Ploidy level (x): **2, 4**

2C genome size [Mbp]: **1438.08**

1Cx monoploid genome size [Mbp]: **719.04**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**

Temperature indicator value: **7 - heat indicator, occurring in relatively warm lowlands**

Moisture indicator value: **2 - transition between values 1 and 3**

Reaction indicator value: **6 - transition between values 5 and 7**

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: **-0.5**

Herb layer disturbance frequency indicator value: **-0.31**

Whole-community disturbance severity indicator value: **0.26**

Herb layer disturbance severity indicator value: **0.3**

Whole-community structure based disturbance indicator value: **0.57**

Herb layer structure-based disturbance indicator value: **0.6**

## 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: **1 - rare occurrence**

6C Pastures and park 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**

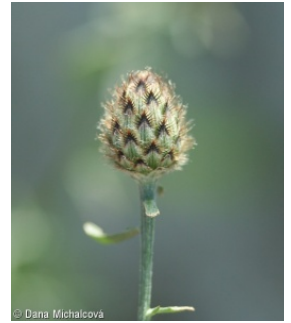
8C Narrow-leaved sub-continental steppes: **2 - optimum**

8D Broad-leaved dry grasslands: **2 - optimum**

8E Acidophilous dry grasslands: **2 - optimum**

8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

9 Sand grasslands and rock-outcrop vegetation



© Dana Michalcová



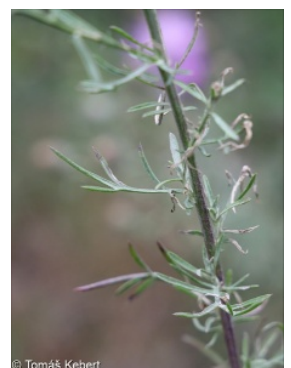
© Pavel Veselý



© Martin Kocourek



© Dana Michalcová



© Tomáš Kebert

- 9B Open vegetation of acidic sands: **1 - rare occurrence**  
 9C Festuca grasslands on acidic sands: **2 - optimum**  
 9D Pannonian sand steppes: **1 - rare occurrence**  
 9E Acidophilous vegetation of spring therophytes and succulents: **2 - optimum**  
 9F Basiphilous vegetation of spring therophytes and succulents: **2 - optimum**  
 11 Heathlands and scrub  
 11A Dry lowland to subalpine heathlands: **1 - rare occurrence**  
 11L Tall mesic and xeric shrub: **1 - rare occurrence**  
 11N Low xeric scrub: **1 - rare occurrence**  
 12 Forests  
 12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**  
 12J Acidophilous thermophilous oak forests: **1 - rare occurrence**  
 12O Peri-Alpidic pine forests: **1 - rare occurrence**  
 12T Robinia pseudacacia plantations: **1 - rare occurrence**  
 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: **2 - optimum**

#### 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: [TH Festuco-Brometea](#)

Diagnostic taxon of alliances: [TFF Alysso alyssoidis-Sedion](#), [THA Alysso-Festucion pallentis](#), [THB Bromo pannonici-Festucion pallentis](#), [THC Diantho lumnitzeri-Seslerion](#), [THD Festucion valesiaca](#), [THG Koelerio-Phleion phleoidis](#)

Diagnostic taxon of associations: [THA02 Seselio ossei-Festucetum pallentis](#), [THA03 Sedo albi-Allietum montani](#), [THB01 Poo badensis-Festucetum pallentis](#), [THC01 Carici humilis-Seslerietum caeruleae](#), [THD01 Festuco valesiaca-Stipetum capillatae](#), [THD02 Erysimo crepidifolii-Festucetum valesiaca](#), [THD03 Festuco rupicola-Caricetum humilis](#), [THG02 Avenulo pratensis-Festucetum valesiaca](#)

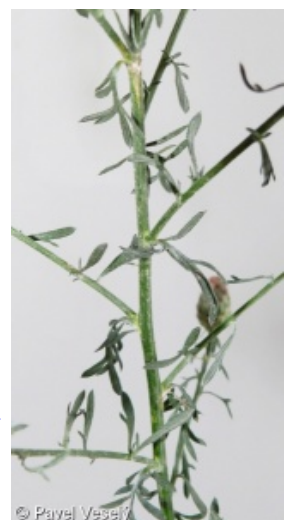
#### Constant taxon

Constant taxon of alliances: [TFF Alysso alyssoidis-Sedion](#), [THA Alysso-Festucion pallentis](#), [THB Bromo pannonici-Festucion pallentis](#), [THC Diantho lumnitzeri-Seslerion](#), [THD Festucion valesiaca](#), [THG Koelerio-Phleion phleoidis](#)

Constant taxon of associations: [TFF01 Cerastietum](#), [TFF02 Alysso alyssoidis-Sedetum](#), [THA02 Seselio ossei-Festucetum pallentis](#), [THA03 Sedo albi-Allietum montani](#), [THA04 Helichryso arenarii-Festucetum pallentis](#), [THB01 Poo badensis-Festucetum pallentis](#), [THC01 Carici humilis-Seslerietum caeruleae](#), [THC02 Minuartio setaceae-Seslerietum caeruleae](#), [THD01 Festuco valesiaca-Stipetum capillatae](#), [THD02 Erysimo crepidifolii-Festucetum valesiaca](#), [THD03 Festuco rupicola-Caricetum humilis](#), [THD04 Koelerio macranthae-Stipetum joannis](#), [THG01 Potentillo heptaphyllae-Festucetum rupicola](#), [THG02 Avenulo pratensis-Festucetum valesiaca](#)

#### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.5**



Ecological specialization index for non-forest vegetation: **4.5**

Ecological specialization index for forest vegetation: **4.6**

Colonization ability

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

Index of colonization potential (ICP): **6**

Optimum successional age [years]: **22**

## Distribution and frequency

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

Floristic region: **Europe**

Continentality degree: **6**

Distribution range extension along the continentality gradient: **6**

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: **444**

taxon.data.freq\_in\_quad: **1100**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **5.9 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.1 %**

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

Mean percentage cover in vegetation plots: **2.8 %**

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: **9**

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**

