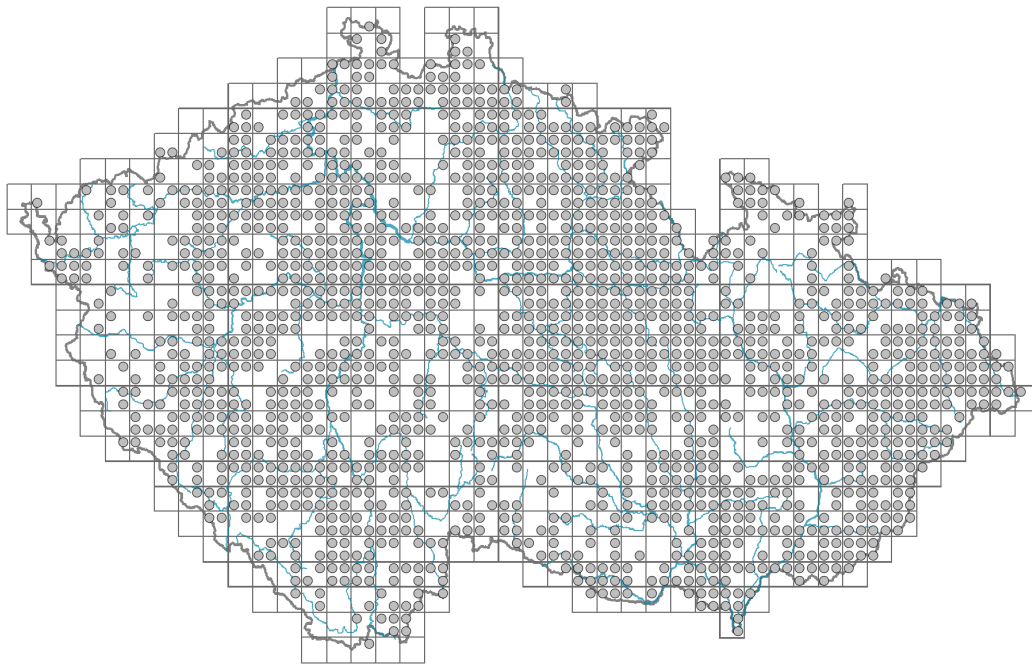


Sonchus asper

Distribution

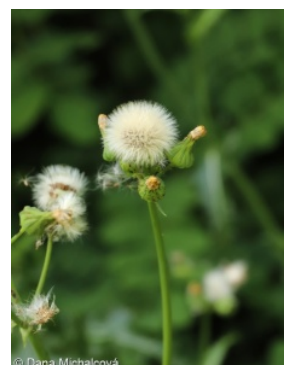
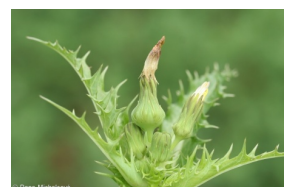


Map info

● 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]: **0.1-1**

Growth form: **annual herb**

Life form: **therophyte**

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

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

Life strategy (Pierce method, C-score): **62.3 %**

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

Life strategy (Pierce method, R-score): **37.7 %**

Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - pinnately divided**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **overwintering green**

Leaf anatomy: **mesomorphic**

Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**

Flower colour: **yellow**

Flower symmetry: **zygomorphic**

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

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **ligulate**

Calyx fusion: **pappus**

Inflorescence type: **corymbothyrus ex anthodiis compositus**

Dicliny: **synoecious**

Generative reproduction type: **facultative autogamy**

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

Pollinator spectrum: **hoverflies, flies s. l., other Diptera, nitidulids (bumblebees, meat flies s. l., beetles)**



Fruit, seed and dispersal

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

Fruit colour: **brown**

Reproduction type: **only by seed/spores**

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

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

Myrmecochory: **probably non-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): **3**

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): **3**

Depth of the belowground bud bank (root buds excluded) [cm]: **1**

Number of buds per shoot at the soil surface (root buds included): **3**

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): **3**

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): **18**

Ploidy level (x): **2**

2C genome size [Mbp]: **1342.23**
1Cx monoploid genome size [Mbp]: **671.12**
Genomic GC content: **38.9 %**

Taxon origin

Origin in the Czech Republic: **archaeophyte**
Invasion status: **naturalized**
Geographic origin: **Mediterranean**
Period of introduction: **Iron Age (750-20 BCE)**
Introduction pathway: **unintentional - agriculture, unintentional - anthropogenic**

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: **6 - transition between values 5 and 7**
Moisture indicator value: **5 - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**
Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**
Nutrient indicator value: **7 - occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites**
Salinity indicator value: **1 - salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**
Indicator values for disturbance
Whole-community disturbance frequency indicator value: **0.18**
Herb layer disturbance frequency indicator value: **0.31**
Whole-community disturbance severity indicator value: **0.95**
Herb layer disturbance severity indicator value: **0.95**
Whole-community structure based disturbance indicator value: **0.73**
Herb layer structure-based disturbance indicator value: **0.82**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls
1A Calcareous cliffs: **1 - rare occurrence**
1C Walls: **1 - rare occurrence**
1D Mobile calcareous screes: **1 - rare occurrence**
4 Wetland and riverine herbaceous vegetation
4D Riverine reed vegetation: **1 - rare occurrence**
4E Reed vegetation of brooks: **1 - rare occurrence**
4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**
4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**
4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**
6 Meadows and mesic pastures

6C Pastures and park grasslands: **1 - rare occurrence**
 6G Vegetation of wet disturbed soils: **1 - rare occurrence**
 10 Saline vegetation
 10I Inland saline meadows: **2 - optimum**
 11 Heathlands and scrub
 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**
 12 Forests
 12T Robinia pseudacacia plantations: **1 - rare occurrence**
 13 Anthropogenic vegetation
 13A Annual vegetation of ruderal habitats: **2 - optimum**
 13B Annual vegetation of arable land: **2 - optimum**
 13C Annual vegetation of trampled habitats: **1 - rare occurrence**
 13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**
 13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**
 13F Herbaceous vegetation of forests clearings and Rubus scrub: **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: [XBA *Caucalidion*](#), [XBB *Veronico-Euphorbion*](#), [XBE *Oxalidion fontanae*](#)
 Diagnostic taxon of associations: [XBA01 *Caucalido platycarpi-Conringietum orientalis*](#), [XBA03 *Euphorbio exiguae-Melandrietum noctiflori*](#), [XBB02 *Veronico-Lamietum hybridi*](#), [XBE01 *Echinochloo cruris-galli-Chenopodietum polyspermi*](#)
 Constant taxon
 Constant taxon of alliances: [XBB *Veronico-Euphorbion*](#)
 Constant taxon of associations: [XBA03 *Euphorbio exiguae-Melandrietum noctiflori*](#), [XBB02 *Veronico-Lamietum hybridi*](#)
 Ecological specialization indices
 Ecological specialization index for all vegetation types: **5.6**
 Ecological specialization index for non-forest vegetation: **5.6**
 Colonization ability
 Index of colonization success (ICS): **4**
 Index of colonization potential (ICP): **2**
 Optimum successional age [years]: **5**

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional**
 Floristic region: **Europe, Asia**
 Distribution range extension along the continentality gradient: **5**
 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: 599

taxon.data.freq_in_quad: 1615

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%: **4.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.2 %**

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

Mean percentage cover in vegetation plots: **2.7 %**

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: **19**

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: **2**

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**