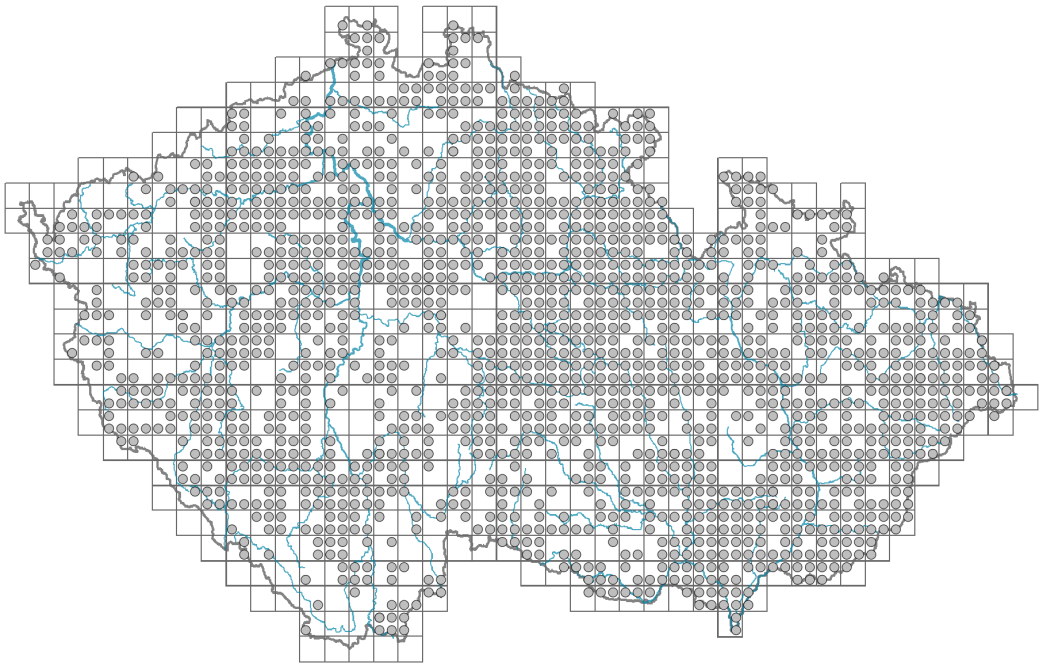
Sonchus arvensis

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]: **0.4–1.5**
Growth form: **clonal herb**
Life form: **geophyte (hemicryptophyte)**
Life strategy: **CR – competitor/ruderal**
Life strategy (Pierce method based on leaf traits): **C/CR**
Life strategy (Pierce method, C-score): **74.9 %**
Life strategy (Pierce method, S-score): **0 %**
Life strategy (Pierce method, R-score): **25.1 %**

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: **mesomorphic**

Flower

Flowering period [month]: **July–October**

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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: **corymbothyrsus ex anthodiis compositus**
Dicliny: **synoecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **insect-pollination, selfing**
Pollinator spectrum: **other Diptera, nitidulids (solitary bees, hoverflies, flies s. l.)**

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: **probably non-myrmecochorous**

Belowground organs and clonality

Root metamorphosis: **root shoot**
Type of clonal growth organ: **root with adventitious buds**
Freely dispersible organs of clonal growth: **absent**
Shoot life span (cyclicity): **monocyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **sympodial**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **2**
Number of clonal offspring: **4.8**
Lateral spreading distance by clonal growth [m]: **0.15**
Clonal index: **4**
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): **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 exluded) [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): **18**
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): **38**
Depth of the belowground bud bank (root buds included) [cm]: **8**

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Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

Karyology

Chromosome number (2n): **54 (18, 36)**
Ploidy level (x): **6**
2C genome size [Mbp]: **5418.63**
1Cx monoploid genome size [Mbp]: **903.11**
Genomic GC content: **39.4 %**

Taxon origin

Origin in the Czech Republic: **archaeophyte**
Invasion status: **naturalized**
Geographic origin: **Mediterranean**
Period of introduction: **Bronze Age (2300–750 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: **5 – moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**
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: **7x – occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites (generalist)**
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: **0.26**
Herb layer disturbance frequency indicator value: **0.26**
Whole-community disturbance severity indicator value: **0.95**
Herb layer disturbance severity indicator value: **0.95**
Whole-community structure based disturbance indicator value: **0.8**
Herb layer structure-based disturbance indicator value: **0.86**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

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1C Walls: **1 – rare occurrence**

4 Wetland and riverine herbaceous vegetation

4B Halophilous reed and sedge beds: **1 – rare occurrence**

4G Tall-sedge beds: **1 – rare occurrence**

4H Vegetation of low annual hygrophilous herbs: **1 – rare occurrence**

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 – rare occurrence**

6 Meadows and mesic pastures

6G Vegetation of wet disturbed soils: **2 – optimum**

10 Saline vegetation

10G Continental vegetation of annual halophilous grasses: **1 – rare occurrence**

10I Inland saline meadows: **1 – rare occurrence**

11 Heathlands and scrub

11J Willow galleries of loamy and sandy river banks: **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**

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **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***

Diagnostic taxon of associations: **XBA03 *Euphorbio exiguae-Melandrietum noctiflori***, **XBB02 *Veronico-Lamietum hybridi***

Constant taxon

Constant taxon of alliances: **XBB *Veronico-Euphorbion***

Constant taxon of associations: **MBB04 *Chenopodio chenopodioidis-Atriplicetum prostratae***, **XBA03 *Euphorbio exiguae-Melandrietum noctiflori***, **XBB02 *Veronico-Lamietum hybridi***

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.5**

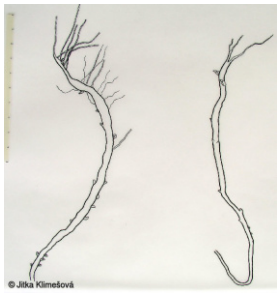
Ecological specialization index for non-forest vegetation: **5.5**

Colonization ability

Index of colonization success (ICS): **6**

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

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: **8**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 586

taxon.data.freq_in_quad: 1610

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **8.5 %**

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

Occurrence frequency in vegetation plots with a cover above 50%: **0.2 %**

Mean percentage cover in vegetation plots: **3.6 %**

Maximum percentage cover in vegetation plots: **63 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **13**

Number of narrow habitats in which the taxon has its optimum: **2**

Number of broad habitats in which the taxon occurs: **6**

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**

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