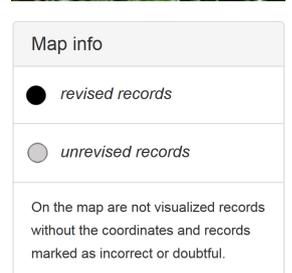
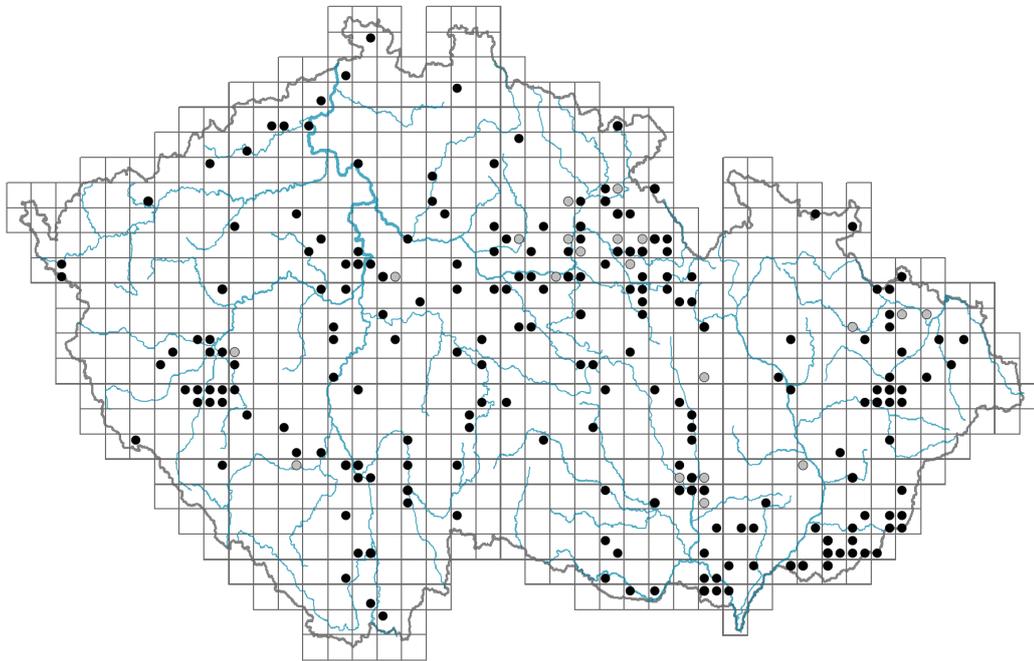


Silybum marianum

Distribution



Habitus and growth type

Height [m]: **0.6-1.5**

Growth form: **annual herb**

Life form: **therophyte (hemicryptophyte)**

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

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: **overwintering green**

Leaf anatomy: **scleromorphic, mesomorphic**

Flower

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

Flower colour: **red-violet**

Flower symmetry: **actinomorphic**

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

Perianth fusion: **fused**



Shape of the sympetalous corolla or syntepalous perianth: **tubular**
 Calyx fusion: **pappus**
 Inflorescence type: **corymbothyrus ex anthodiis compositus**
 Dicliny: **synoecious**
 Generative reproduction type: **facultative autogamy**
 Pollination syndrome: **insect-pollination**



Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**
 Fruit colour: **yellow, brown**
 Reproduction type: **only by seed/spores**
 Dispersal unit (diaspore): **fruit, infructescence or its part**
 Dispersal strategy: **Epilobium (mainly anemochory and 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):
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **3**
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded):
 Size of the belowground bud bank (root buds excluded): **8**
 Depth of the belowground bud bank (root buds excluded) [cm]: **2**
 Number of buds per shoot at the soil surface (root buds included):
 Number of buds per shoot at a depth of 0–10 cm (root buds included): **3**
 Number of buds per shoot at a depth greater than 10 cm (root buds included):
 Size of the belowground bud bank (root buds included): **8**
 Depth of the belowground bud bank (root buds included) [cm]: **2**

Trophic mode

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

Taxon origin

Origin in the Czech Republic: **archaeophyte**
 Invasion status: **casual**
 Geographic origin: **Mediterranean**
 Year of the first record in the wild: **1837**
 Period of introduction: **Late Middle Ages (1200-1500)**
 Introduction pathway: **intentional - crops, 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: **7 - heat indicator, occurring in relatively warm lowlands**

Moisture indicator value: **4 - transition between values 3 and 5**

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**

Habitat and sociology

Occurrence in habitats

13 Anthropogenic vegetation

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

13B Annual vegetation of arable land: **1 - rare occurrence**

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**

Distribution and frequency

Floristic zone: **submeridional, meridional**

Floristic region: **Europe, Near East**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **174**

taxon.data.freq_in_quad: **227**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**

Occurrence frequency in vegetation plots with a cover above 5%: **33.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **33.3 %**

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

Mean percentage cover in vegetation plots: **13.7 %**

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: **3**

Number of narrow habitats in which the taxon has its optimum: **0**

Number of broad habitats in which the taxon occurs: **1**

Number of broad habitats in which the taxon has its optimum: **0**

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**