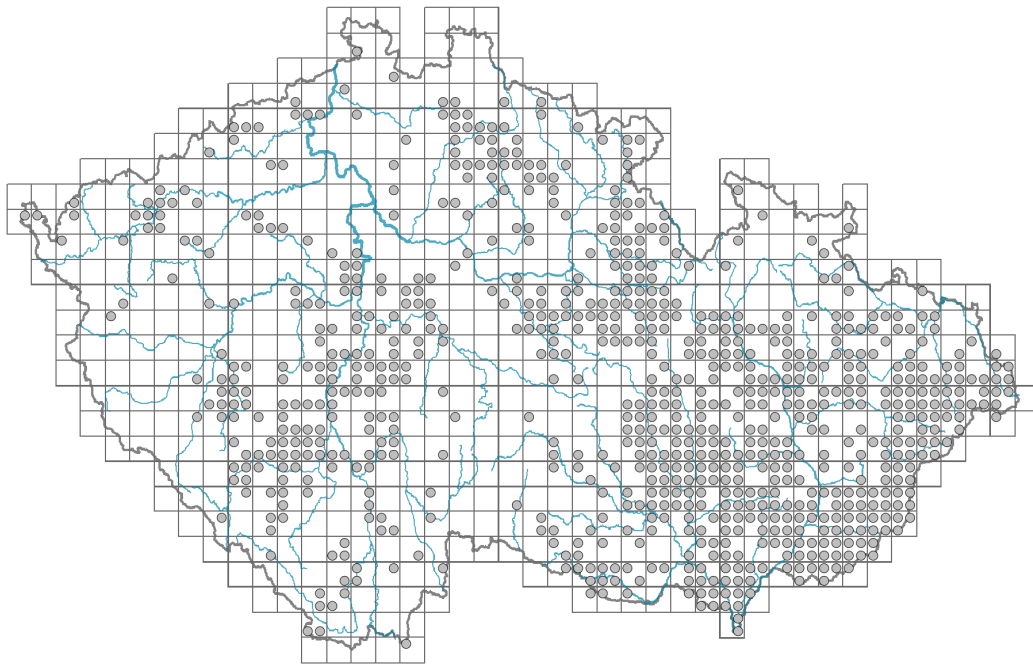


# *Sambucus ebulus*

## Distribution



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### Map info

● revised records

○ unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



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## Habitus and growth type

Height [m]: **0.5-1.5**

Growth form: **clonal herb**

Life form: **geophyte (hemicryptophyte)**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **78.5 %**

Life strategy (Pierce method, S-score): **2.7 %**

Life strategy (Pierce method, R-score): **18.9 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **compound - imparipinnate**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic, hygromorphic**

## Flower

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

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

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

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

Calyx fusion: **synsepalous**

Inflorescence type: **corymbothyrus**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

Pollination syndrome: **insect-pollination**



## Fruit, seed and dispersal

Fruit type: **fleshy fruit - drupe**

Fruit colour: **black**

Reproduction type: **by seed/spores and vegetatively**

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

Dispersal strategy: **Cornus (mainly autochory and endozoochory)**

Myrmecochory: **non-myrmecochorous (b)**

## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

Type of clonal growth organ: **hypogeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

Shoot life span (cyclicality): **monocyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **sympodial**

Primary root: **absent**

Persistence of the clonal growth organ [year]: **4**

Number of clonal offspring: **1**

Lateral spreading distance by clonal growth [m]: **0.27**

Clonal index: **5**

Position of root buds: **lateral roots**

Role of root buds in life-history of a plant: **regenerative**

## 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): **15**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **15**

Size of the belowground bud bank (root buds excluded): **35**

Depth of the belowground bud bank (root buds excluded) [cm]: **9**

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): **15**

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Depth of the belowground bud bank (root buds included) [cm]: **9**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **36**

Ploidy level (x): **4**

2C genome size [Mbp]: **21246.37**

1Cx monoploid genome size [Mbp]: **5311.59**

Genomic GC content: **39.4 %**

## Taxon origin

Origin in the Czech Republic: **archaeophyte**

Invasion status: **naturalized**

Geographic origin: **Europe, Mediterranean**

Period of introduction: **Neolithic (5600-4200 BCE)**

Introduction pathway: **intentional - other, 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: **-0.46**

Herb layer disturbance frequency indicator value: **-0.46**

Whole-community disturbance severity indicator value: **0.57**

Herb layer disturbance severity indicator value: **0.57**

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

Herb layer structure-based disturbance indicator value: **0.61**

## Habitat and sociology

Occurrence in habitats

11 Heathlands and scrub

11L Tall mesic and xeric shrub: **2 - optimum**

## 13 Anthropogenic vegetation

13D Perennial thermophilous ruderal vegetation: **3 - dominant**

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: **1.2 - taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.2 - taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**

### Diagnostic taxon

Diagnostic taxon of alliances: [XCE Arction lappae](#)

Diagnostic taxon of associations: [XCE04 Sambucetum ebuli](#)

### Constant taxon

Constant taxon of associations: [XCE04 Sambucetum ebuli](#)

### Dominant taxon

Dominant taxon of associations: [XCE04 Sambucetum ebuli](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **3.6**

Ecological specialization index for non-forest vegetation: **3.9**

### Colonization ability

Index of colonization success (ICS): **2**

Index of colonization potential (ICP): **7**

Optimum successional age [years]: **13**

## Distribution and frequency

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

Floristic region: **Europe, Western Asia**

Continental degree: **5**

Distribution range extension along the continentality gradient: **4**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **381**

taxon.data.freq\_in\_quad: **794**

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **77.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **75 %**

Occurrence frequency in vegetation plots with a cover above 50%: **67.5 %**

Mean percentage cover in vegetation plots: **60.9 %**

Maximum percentage cover in vegetation plots: **88 %**

### Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **4**

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

Number of broad habitats in which the taxon occurs: **2**

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**