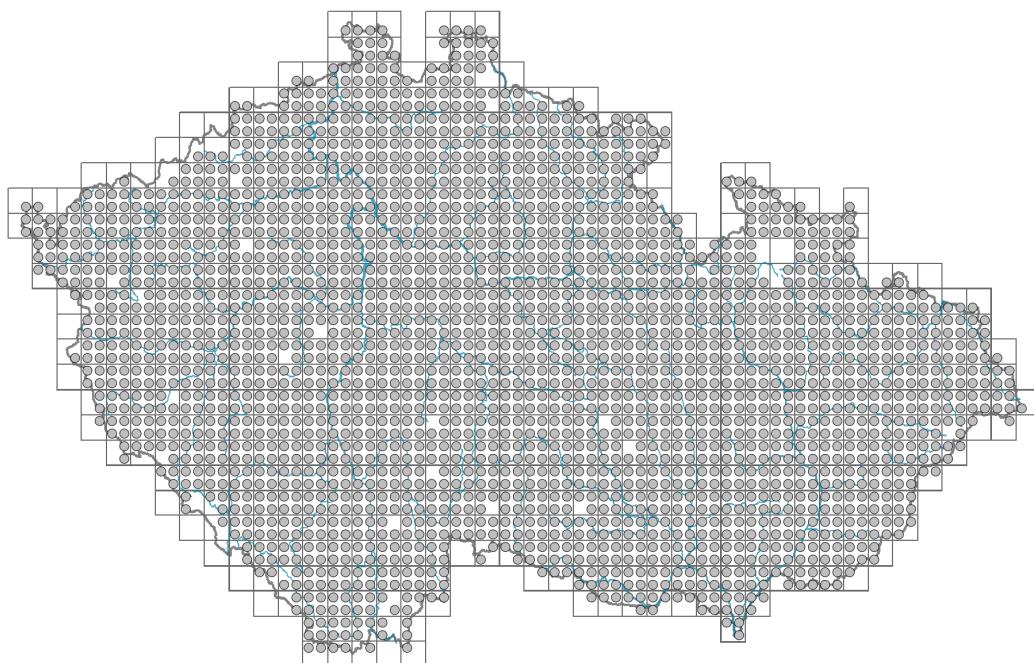


# *Sambucus nigra*

## 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]: **1.5-7**

Growth form: **shrub**

Life form: **nanophanerophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **36.2 %**

Life strategy (Pierce method, S-score): **23.4 %**

Life strategy (Pierce method, R-score): **40.4 %**

## 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 deciduousness in woody plants: **winter deciduous**

Leaf anatomy: **mesomorphic, hygromorphic**

Functional leaf type in woody plants: **broad deciduous or semi-deciduous**

## Flower

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

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early 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: **corymbothyrsus**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

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



## Fruit, seed and dispersal

Fruit type: **fleshy fruit - drupe**

Fruit colour: **violet, black**

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

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

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

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



## Belowground organs and clonality

### Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **0**

Number of buds per shoot at a depth of 0-10 cm (root buds excluded): **5**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **5**

Size of the belowground bud bank (root buds excluded): **10**

Depth of the belowground bud bank (root buds excluded) [cm]: **10**

Number of buds per shoot at the soil surface (root buds included): **0**

Number of buds per shoot at a depth of 0-10 cm (root buds included): **5**

Number of buds per shoot at a depth greater than 10 cm (root buds included): **5**

Size of the belowground bud bank (root buds included): **10**

Depth of the belowground bud bank (root buds included) [cm]: **10**



## 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]: **22699.33**



1Cx monoploid genome size [Mbp]: **5674.83**

Genomic GC content: **39.5 %**



## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6x - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area (generalist)**

Temperature indicator value: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

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

Reaction indicator value: **6x - transition between values 5 and 7 (generalist)**

Nutrient indicator value: **8 - pronounced nutrient indicator**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.77**

Herb layer disturbance frequency indicator value: **-1**

Whole-community disturbance severity indicator value: **0.28**

Herb layer disturbance severity indicator value: **0.16**

Whole-community structure based disturbance indicator value: **0.09**

Herb layer structure-based disturbance indicator value: **0.17**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1C Walls: **1 - rare occurrence**

1D Mobile calcareous screes: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**

5 Vegetation of springs and mires

5A Hard-water springs with tufa formation: **2 - optimum**

5B Lowland to montane soft-water springs: **1 - rare occurrence**

11 Heathlands and scrub

11J Willow galleries of loamy and sandy river banks: **2 - optimum**

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

11N Low xeric scrub: **1 - rare occurrence**

11R Scrub and pioneer woodland of forests clearings: **3 - dominant**

12 Forests

12A Alder carrs: **1 - rare occurrence**

12B Alluvial forests: **2 - optimum**

12C Oak-hornbeam forests: **1 - rare occurrence**

12D Ravine forests: **2 - optimum**

12E Herb-rich beech forests: **1 - rare occurrence**

- 12F Limestone beech forests: **1 - rare occurrence**
- 12G Acidophilous beech forests: **1 - rare occurrence**
- 12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**
- 12I Sub-continental thermophilous oak forests: **1 - rare occurrence**
- 12J Acidophilous thermophilous oak forests: **1 - rare occurrence**
- 12K Acidophilous oak forests: **1 - rare occurrence**
- 12T Robinia pseudacacia plantations: **4 - constant dominant**
- 12U Plantations of broad-leaved non-native trees: **2 - optimum**
- 12V Spruce plantations: **2 - optimum**
- 12W Pine and larch plantations: **2 - optimum**
- 13 Anthropogenic vegetation
- 13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**
- 13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**
- 13F Herbaceous vegetation of forests clearings and Rubus scrub: **2 - optimum**
- Affinity to the forest environment
- Affinity to the forest environment in Thermophyticum: **2.1 - taxon occurring both in the forest and open vegetation**
- Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.1 - taxon occurring both in the forest and open vegetation**
- Diagnostic taxon
- Diagnostic taxon of classes: [\*\*KB Rhamno-Prunetea\*\*](#)
- Diagnostic taxon of alliances: [\*\*KBD Aegopodio podagrariae-Sambucion nigrae\*\*](#), [\*\*KBE Chelidonio majoris-Robinion pseudoacaciae\*\*](#), [\*\*LBA Alnion incanae\*\*](#)
- Diagnostic taxon of associations: [\*\*KBD01 Sambucetum nigrae\*\*](#), [\*\*KBE01 Chelidonio majoris-Robinietum pseudoacaciae\*\*](#), [\*\*KBE02 Poo nemoralis-Robinietum pseudoacaciae\*\*](#), [\*\*LBA05 Pruno padi-Fraxinetum excelsioris\*\*](#)
- Constant taxon
- Constant taxon of alliances: [\*\*KBD Aegopodio podagrariae-Sambucion nigrae\*\*](#), [\*\*KBE Chelidonio majoris-Robinion pseudoacaciae\*\*](#)
- Constant taxon of associations: [\*\*KBD01 Sambucetum nigrae\*\*](#), [\*\*KBE01 Chelidonio majoris-Robinietum pseudoacaciae\*\*](#), [\*\*KBE02 Poo nemoralis-Robinietum pseudoacaciae\*\*](#), [\*\*LBA04 Stellario nemorum-Alnetum glutinosae\*\*](#), [\*\*LBA05 Pruno padi-Fraxinetum excelsioris\*\*](#), [\*\*LBA06 Ficario vernae-Ulmetum campestris\*\*](#)
- Dominant taxon
- Dominant taxon of associations: [\*\*KBD01 Sambucetum nigrae\*\*](#), [\*\*KBE01 Chelidonio majoris-Robinietum pseudoacaciae\*\*](#), [\*\*KBE02 Poo nemoralis-Robinietum pseudoacaciae\*\*](#)
- Ecological specialization indices
- Ecological specialization index for all vegetation types: **4.4**
- Ecological specialization index for non-forest vegetation: **3.6**
- Ecological specialization index for forest vegetation: **4.7**
- Colonization ability
- Index of colonization success (ICS): **8**
- Index of colonization potential (ICP): **7**
- Optimum successional age [years]: **30**



## Distribution and frequency

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

Floristic region: **Europe**

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

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

Expansive taxon in the region: **Bohemian Thermophyticum, Bohemian Moravian Mesophyticum, Bohemian Moravian Oreophyticum, Pannonian Thermophyticum, Carpathian Mesophyticum, Carpathian Oreophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 658

`taxon.data.freq_in_quad: 2407`

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **37.9 %**

Occurrence frequency in vegetation plots with a cover above 25%: **16.3 %**

Occurrence frequency in vegetation plots with a cover above 50%: **8.5 %**

Mean percentage cover in vegetation plots: **13.2 %**

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: **27**

Number of narrow habitats in which the taxon has its optimum: **12**

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

Number of broad habitats in which the taxon has its optimum: **4**



## 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**

