

# Cornus sanguinea

## 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.

## Habitus and growth type

Height [m]: 2-5

Growth form: **shrub**

Life form: **nanophanerophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **29 %**

Life strategy (Pierce method, S-score): **43.3 %**

Life strategy (Pierce method, R-score): **27.7 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

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

Leaf anatomy: **mesomorphic**

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



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## Flower

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

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

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

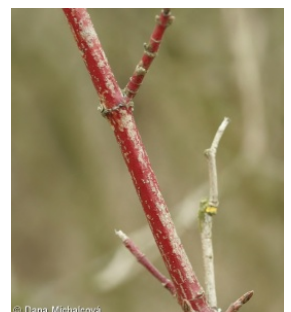
Calyx fusion: **synsepalous**

Inflorescence type: **corymbothyrsum**

Dicliny: **synoecious**

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

Pollinator spectrum: **beetles, other pollinators (honeybee, solitary bees, other Hymenoptera, other Diptera, butterflies, nitidulids)**



## Fruit, seed and dispersal

Fruit type: **fleshy fruit - drupe**

Fruit colour: **blue, 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

Root metamorphosis: **root shoot**

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): **0**

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

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

Size of the belowground bud bank (root buds excluded): **20**

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): **15**

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): **30**

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): **22**

Ploidy level (x): **2**

2C genome size [Mbp]: **2059.62**

1Cx monoploid genome size [Mbp]: **1029.81**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% 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: **5x - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites (generalist)**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.86**

Herb layer disturbance frequency indicator value: **-0.87**

Whole-community disturbance severity indicator value: **0.25**

Herb layer disturbance severity indicator value: **0.1**

Whole-community structure based disturbance indicator value: **0.11**

Herb layer structure-based disturbance indicator value: **0.2**

## Habitat and sociology

Occurrence in habitats

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**

8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**

8D Broad-leaved dry grasslands: **1 - rare occurrence**

8F Thermophilous forest fringe vegetation: **2 - optimum**

11 Heathlands and scrub

11I Willow carrs: **1 - rare occurrence**

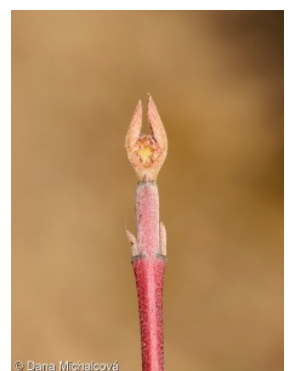
11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**

11L Tall mesic and xeric shrub: **3 - dominant**

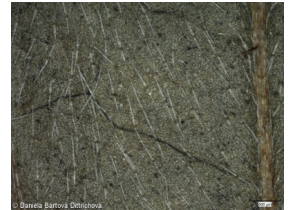
11N Low xeric scrub: **2 - optimum**

11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

12 Forests



- 12A Alder carrs: **1 - rare occurrence**
- 12B Alluvial forests: **2 - optimum**
- 12C Oak-hornbeam forests: **2 - optimum**
- 12D Ravine forests: **2 - optimum**
- 12E Herb-rich beech forests: **1 - rare occurrence**
- 12F Limestone beech forests: **2 - optimum**
- 12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**
- 12I Sub-continental thermophilous oak forests: **2 - optimum**
- 12J Acidophilous thermophilous oak forests: **1 - rare occurrence**
- 12K Acidophilous oak forests: **1 - rare occurrence**
- 12O Peri-Alpidic pine forests: **1 - rare occurrence**
- 12T Robinia pseudacacia plantations: **1 - rare occurrence**
- 12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**
- 12V Spruce plantations: **1 - rare occurrence**
- 12W Pine and larch plantations: **1 - rare occurrence**
- 13 Anthropogenic vegetation
- 13D Perennial thermophilous ruderal vegetation: **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: **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: [LC \*Quercetea pubescentis\*](#)
- Diagnostic taxon of alliances: [KBB \*Berberidion vulgaris\*](#), [LCA \*Quercion pubescenti-petraeae\*](#), [LCB \*Aceri tatarici-Quercion\*](#)
- Diagnostic taxon of associations: [KBB03 \*Populo tremulae-Coryletum avellanae\*](#), [KBB04 \*Pruno spinosae-Ligustretum vulgaris\*](#), [KBB05 \*Rhamno catharticae-Cornetum sanguineae\*](#), [LBA07 \*Fraxino pannonicae-Ulmetum glabrae\*](#), [LBB04 \*Primulo veris-Carpinetum betuli\*](#), [LCA01 \*Lathyro collini-Quercetum pubescentis\*](#), [LCA03 \*Euphorbio-Quercetum\*](#), [LCB01 \*Quercetum pubescenti-roboris\*](#)
- Constant taxon
- Constant taxon of alliances: [LCA \*Quercion pubescenti-petraeae\*](#)
- Constant taxon of associations: [KBB03 \*Populo tremulae-Coryletum avellanae\*](#), [KBB04 \*Pruno spinosae-Ligustretum vulgaris\*](#), [KBB05 \*Rhamno catharticae-Cornetum sanguineae\*](#), [LBA07 \*Fraxino pannonicae-Ulmetum glabrae\*](#), [LBB04 \*Primulo veris-Carpinetum betuli\*](#), [LCA01 \*Lathyro collini-Quercetum pubescentis\*](#), [LCA03 \*Euphorbio-Quercetum\*](#), [LCB01 \*Quercetum pubescenti-roboris\*](#)
- Dominant taxon
- Dominant taxon of associations: [KBB04 \*Pruno spinosae-Ligustretum vulgaris\*](#), [KBB05 \*Rhamno catharticae-Cornetum sanguineae\*](#), [LBA07 \*Fraxino pannonicae-Ulmetum glabrae\*](#)
- Ecological specialization indices
- Ecological specialization index for all vegetation types: **4.3**
- Ecological specialization index for non-forest vegetation: **3.7**
- Ecological specialization index for forest vegetation: **4.9**
- Colonization ability



Index of colonization success (ICS): **8**  
Index of colonization potential (ICP): **8**  
Optimum successional age [years]: **35**

## Distribution and frequency

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

Floristic region: **Europe**

Distribution range extension along the continentality gradient: **5**

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

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **576**

taxon.data.freq\_in\_quad: **1850**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **21 %**

Occurrence frequency in vegetation plots with a cover above 25%: **6.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1.1 %**

Mean percentage cover in vegetation plots: **6.2 %**

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: **27**

Number of narrow habitats in which the taxon has its optimum: **9**

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

Number of broad habitats in which the taxon has its optimum: **3**

## Threats and protection

Legal protection: **not protected by law**