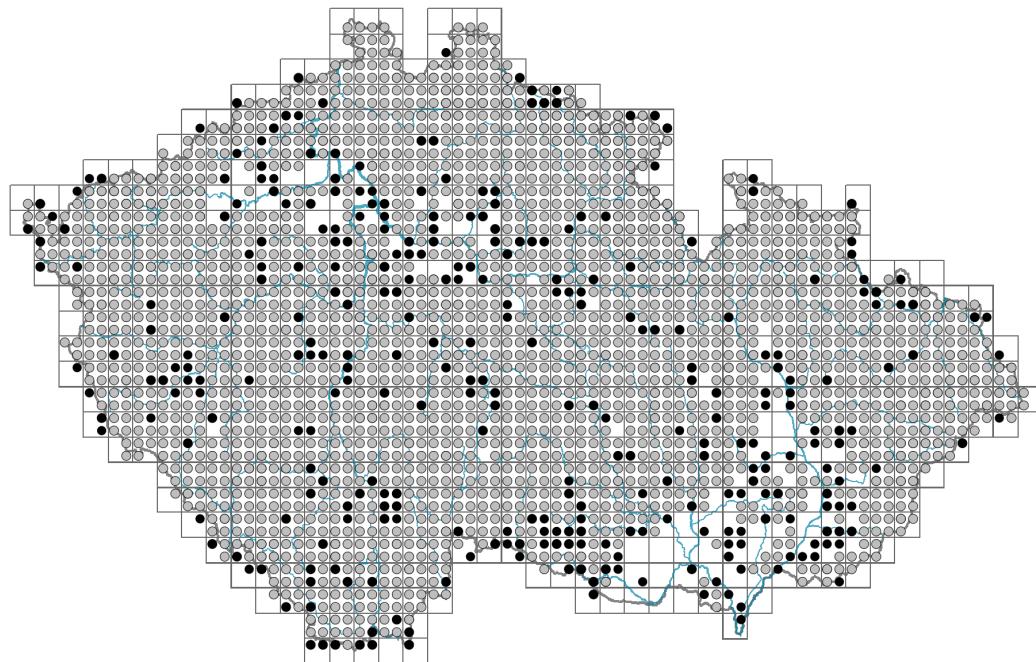


# *Sorbus aucuparia*

## 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]: **1-15**

Growth form: **tree (shrub)**

Life form: **macrophanerophyte, nanophanerophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **24.5 %**

Life strategy (Pierce method, S-score): **54.3 %**

Life strategy (Pierce method, R-score): **21.2 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **compound - imparipinnate**

Stipules: **present**

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**

## Flower

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

Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **hypanthium**

Inflorescence type: **corymbothrysus**

Dicliny: **synoecious**

Generative reproduction type: **allogamy self-incompatibility**

Pollination syndrome: **insect-pollination**

Pollinator spectrum: **flies s. l., meat flies s. l., other Diptera, nitidulids, thrips (honeybee, bumblebees, other Hymenoptera, hoverflies, beetles, other pollinators)**



## Fruit, seed and dispersal

Fruit type: **fleshy fruit - pome**

Fruit colour: **orange, red**

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

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): **5**

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

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): **5**

Depth of the belowground bud bank (root buds excluded) [cm]: **1**

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**

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): **35**

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): **34**

Ploidy level (x): **2**

2C genome size [Mbp]: **1212.56**

1Cx monoploid genome size [Mbp]: **606.28**

Genomic GC content: **39.9 %**



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## Taxon origin

Origin in the Czech Republic: **native**



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## 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: **5x - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out (generalist)**

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

Nutrient indicator value: **4x - transition between values 3 and 5 (generalist)**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.91**

Herb layer disturbance frequency indicator value: **-0.83**

Whole-community disturbance severity indicator value: **0.26**

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

Whole-community structure based disturbance indicator value: **0.1**

Herb layer structure-based disturbance indicator value: **0.19**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **1 - rare occurrence**

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **1 - rare occurrence**

8 Dry grasslands

8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 - rare occurrence**

11D Subalpine acidophilous Pinus mugo scrub: **2 - optimum**

11H Subalpine deciduous scrub: **3 - dominant**

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

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: **2 - optimum**

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

12C Oak-hornbeam forests: **2 - optimum**

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

12E Herb-rich beech forests: **2 - optimum**

12F Limestone beech forests: **1 - rare occurrence**

12G Acidophilous beech forests: **2 - optimum**

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: **2 - optimum**

12L Boreo-continental pine forests: **2 - optimum**

12O Peri-Alpidic pine forests: **1 - rare occurrence**

12Q Peatland birch forests: **2 - optimum**

12R Acidophilous spruce forests: **2 - optimum**

12S Basiphilous spruce forests: **2 - optimum**

12T Robinia pseudacacia plantations: **1 - rare occurrence**

12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

12V Spruce plantations: **2 - optimum**

12W Pine and larch plantations: **2 - optimum**

## 13 Anthropogenic vegetation

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: [\*\*KC Roso pendulinae-Pinetea mugo\*\*](#)

Diagnostic taxon of alliances: [\*\*ADC Salicion silesiacae, KCA Pinion mugo\*\*](#)

Diagnostic taxon of associations: [\*\*ADC01 Salici silesiacae-Betuletum carpaticae,\*\*](#)

[\*\*ADC02 Pado borealis-Sorbetum aucupariae, KBC06 Piceo abietis-Sorbetum\*\*](#)

[\*\*aucupariae, LBC04 Athyrio distentifolii-Fagetum sylvaticae\*\*](#)

### Constant taxon

Constant taxon of classes: [\*\*KC Roso pendulinae-Pinetea mugo\*\*](#)

Constant taxon of alliances: [\*\*ADC Salicion silesiacae, KCA Pinion mugo\*\*](#)

Constant taxon of associations: [\*\*ADC01 Salici silesiacae-Betuletum carpaticae,\*\*](#)

[\*\*ADC02 Pado borealis-Sorbetum aucupariae, KBC01 Ribeso alpini-Rosetum\*\*](#)

[\*\*pendulinae, KBC06 Piceo abietis-Sorbetum aucupariae, KCA02 Adenostylo\*\*](#)

[\*\*alliariae-Pinetum mugo, LBA01 Alnetum incanae, LBC04 Athyrio distentifolii-\*\*](#)

[\*\*Fagetum sylvaticae, LBE03 Luzulo-Abietetum albae, LDA03 Vaccinio vitis-idaeae-\*\*](#)

[\*\*Quercetum roboris, LFB04 Asplenio cuneifolii-Pinetum sylvestris, LFC02 Athyrio\*\*](#)

[\*\*distentifolii-Piceetum abietis\*\*](#)

### Dominant taxon

Dominant taxon of associations: [\*\*ADC02 \*Pado borealis-Sorbetum aucupariae\*, KBC06\*\*](#)

### [\*\*Piceo abietis-Sorbetum aucupariae\*\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.4**

Ecological specialization index for non-forest vegetation: **3.5**

Ecological specialization index for forest vegetation: **4.4**

Colonization ability

Index of colonization success (ICS): **8**

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

Optimum successional age [years]: **35**

## **Distribution and frequency**

Floristic zone: **arctic, boreal, northern temperate, southern temperate, submeridional**

Floristic region: **Europe, Asia**

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

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 660

taxon.data.freq\_in\_quad: 2344

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.9 %**

Occurrence frequency in vegetation plots with a cover above 5%: **11.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1 %**

Mean percentage cover in vegetation plots: **4.3 %**

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: **32**

Number of narrow habitats in which the taxon has its optimum: **17**

Number of broad habitats in which the taxon occurs: **7**

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**