

# Rubus idaeus

## 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]: **0.5**

Growth form: **shrub**

Life form: **nanophanerophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **52.3 %**

Life strategy (Pierce method, S-score): **24.3 %**

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



## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

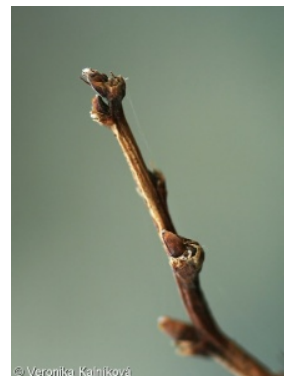
Leaf shape: **compound - imparipinnate**

Stipules: **present**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**



## Flower

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



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**

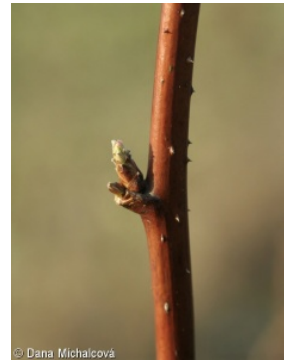
Calyx fusion: **aposepalous**

Inflorescence type: **racemus, panicula**

Dicliny: **synoecious**

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

Pollinator spectrum: **honeybee, bumblebees, flies s. l., butterflies (other Hymenoptera, hoverflies, beetles)**



## Fruit, seed and dispersal

Fruit type: **fleshy fruit - head of one-seeded drupes**

Fruit colour: **red**

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**

Type of clonal growth organ: **root with adventitious buds**

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

Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**

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

Primary root: **absent**

Persistence of the clonal growth organ [year]:

Number of clonal offspring:

Lateral spreading distance by clonal growth [m]: **0.17**

Clonal index: **4**

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):

Number of buds per shoot at a depth of 0-10 cm (root buds excluded): **13**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **4**

Size of the belowground bud bank (root buds excluded): **21**

Depth of the belowground bud bank (root buds excluded) [cm]: **6**

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):

Number of buds per shoot at a depth greater than 10 cm (root buds included): **16**

Size of the belowground bud bank (root buds included): **41**

Depth of the belowground bud bank (root buds included) [cm]: **8**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **14**

Ploidy level (x): **2**

2C genome size [Mbp]: **589.23**

1Cx monoploid genome size [Mbp]: **294.61**

Genomic GC content: **41 %**

## 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: **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: **5x - indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions (generalist)**

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

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.76**

Herb layer disturbance frequency indicator value: **-0.76**

Whole-community disturbance severity indicator value: **0.34**

Herb layer disturbance severity indicator value: **0.25**

Whole-community structure based disturbance indicator value: **0.2**

Herb layer structure-based disturbance indicator value: **0.23**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

1B Siliceous cliffs and block fields: **2 - optimum**

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

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **2 - optimum**

4 Wetland and riverine herbaceous vegetation

- 4D Riverine reed vegetation: **1 - rare occurrence**  
4J River gravel banks: **1 - rare occurrence**  
4K Petasites fringes of montane brooks: **2 - optimum**  
4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**
- 5 Vegetation of springs and mires  
5A Hard-water springs with tufa formation: **1 - rare occurrence**  
5B Lowland to montane soft-water springs: **1 - rare occurrence**  
5C Alpine and subalpine soft-water springs: **1 - rare occurrence**
- 6 Meadows and mesic pastures  
6A Mesic Arrhenatherum meadows: **1 - rare occurrence**  
6B Montane mesic meadows: **1 - rare occurrence**  
6C Pastures and park grasslands: **1 - rare occurrence**  
6E Wet Cirsium meadows: **1 - rare occurrence**  
6F Intermittently wet Molinia meadows: **1 - rare occurrence**  
6G Vegetation of wet disturbed soils: **1 - rare occurrence**
- 7 Acidophilous grasslands  
7A Subalpine and montane acidophilous grasslands: **1 - rare occurrence**  
7B Submontane Nardus grasslands: **1 - rare occurrence**
- 8 Dry grasslands  
8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**  
8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**  
8E Acidophilous dry grasslands: **1 - rare occurrence**  
8F Thermophilous forest fringe vegetation: **1 - rare occurrence**
- 9 Sand grasslands and rock-outcrop vegetation  
9B Open vegetation of acidic sands: **1 - rare occurrence**  
9C Festuca grasslands on acidic sands: **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: **2 - optimum**  
11I Willow carrs: **1 - rare occurrence**  
11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**  
11L Tall mesic and xeric shrub: **2 - optimum**  
11R Scrub and pioneer woodland of forests clearings: **2 - optimum**
- 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: **2 - optimum**  
12G Acidophilous beech forests: **2 - optimum**  
12I Sub-continental thermophilous oak forests: **1 - rare occurrence**  
12J Acidophilous thermophilous oak forests: **1 - rare occurrence**  
12K Acidophilous oak forests: **1 - rare occurrence**  
12L Boreo-continental pine forests: **2 - optimum**  
12O Peri-Alpidic pine forests: **2 - optimum**

12P Peatland pine forests: **1 - rare occurrence**

12Q Peatland birch forests: **1 - rare occurrence**

12R Acidophilous spruce forests: **1 - rare occurrence**

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

13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **4 - constant dominant**

### 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 classes: [XE \*Epilobietea angustifolii\*](#)

Diagnostic taxon of alliances: [KBC \*Sambuco-Salicion capreae\*](#), [XEA \*Fragarion vescae\*](#)

Diagnostic taxon of associations: [KBC02 \*Rubetum idaei\*](#), [KBC03 \*Senecioni fuchsii-Sambucetum racemosae\*](#), [LBA01 \*Alnetum incanae\*](#), [LBC05 \*Galio rotundifolii-Abietetum albae\*](#), [XEA01 \*Senecioni-Epilobietum angustifolii\*](#), [XEA02 \*Digitali purpureae-Epilobietum angustifolii\*](#), [XEA03 \*Rubo idaei-Calamagrostietum arundinaceae\*](#), [XEA04 \*Junco effusi-Calamagrostietum villosae\*](#), [XEA05 \*Digitali-Senecionetum ovati\*](#), [XEA07 \*Gymnocarpio dryopteridis-Athyrietum filicis-feminae\*](#)

### Constant taxon

Constant taxon of classes: [LE \*Erico-Pinetea\*](#), [XE \*Epilobietea angustifolii\*](#)

Constant taxon of alliances: [ADE \*Dryopterido filicis-maris-Athyrium distentifolii\*](#), [KBC \*Sambuco-Salicion capreae\*](#), [LEA \*Erico carnea-Pinion\*](#), [XEA \*Fragarion vescae\*](#)

Constant taxon of associations: [ADC02 \*Pado borealis-Sorbetum aucupariae\*](#), [ADD03 \*Trollio altissimi-Geranium sylvatici\*](#), [ADD05 \*Chaerophyllo hirsuti-Cicerbitetum alpinae\*](#), [ADE01 \*Daphno mezerei-Dryopteridetum filicis-maris\*](#), [ADE02 \*Adenostylo alliariae-Athyrietum distentifolii\*](#), [KAB02 \*Salicetum purpureae\*](#), [KBC02 \*Rubetum idaei\*](#), [KBC03 \*Senecioni fuchsii-Sambucetum racemosae\*](#), [KBC04 \*Senecioni fuchsii-Coryletum avellanae\*](#), [KBC05 \*Salicetum capreae\*](#), [KBC06 \*Piceo abietis-Sorbetum aucupariae\*](#), [KCA02 \*Adenostylo alliariae-Pinetum mugo\*](#), [LBA01 \*Alnetum incanae\*](#), [LBA02 \*Piceo abietis-Alnetum glutinosae\*](#), [LBA03 \*Carici remotae-Fraxinetum excelsioris\*](#), [LBC04 \*Athyrio distentifolii-Fagetum sylvaticae\*](#), [LBC05 \*Galio rotundifolii-Abietetum albae\*](#), [LBE02 \*Calamagrostio villosae-Fagetum sylvaticae\*](#), [LBE03 \*Luzulo-Abietetum albae\*](#), [LEA01 \*Thlaspio montani-Pinetum sylvestris\*](#), [LFB04 \*Asplenio cuneifolii-Pinetum sylvestris\*](#), [LFC02 \*Athyrio distentifolii-Piceetum abietis\*](#), [SAC03 \*Asplenio trichomanis-Polypodietum vulgare\*](#), [XDB02 \*Petasitetum hybrido-kablikiani\*](#), [XDC01 \*Stachyo sylvaticae-Impatientetum noli-tangere\*](#), [XEA01 \*Senecioni-Epilobietum angustifolii\*](#), [XEA02 \*Digitali purpureae-Epilobietum angustifolii\*](#), [XEA03 \*Rubo idaei-Calamagrostietum arundinaceae\*](#), [XEA04 \*Junco effusi-Calamagrostietum villosae\*](#),

[XEA05 Digitali-Senecionetum ovati](#), [XEA06 Pteridietum aquilini](#), [XEA07 Gymnocarpio dryopteridis-Athyrietum filicis-feminae](#)

Dominant taxon

Dominant taxon of associations: [KBC02 Rubetum idaei](#), [KBC03 Senecioni fuchsii-Sambucetum racemosae](#), [XDB02 Petasitetum hybrido-kablikiani](#), [XEA01 Senecioni-Epilobietum angustifolii](#), [XEA03 Rubo idaei-Calamagrostietum arundinaceae](#), [XEA05 Digitali-Senecionetum ovati](#), [XEA06 Pteridietum aquilini](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.1**

Ecological specialization index for non-forest vegetation: **3.4**

Ecological specialization index for forest vegetation: **4.7**

Colonization ability

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

Index of colonization potential (ICP): **6**

Optimum successional age [years]: **30**

## Distribution and frequency

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

Floristic region: **circumpolar**

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

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: **666**

taxon.data.freq\_in\_quad: **2406**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **6.4 %**

Occurrence frequency in vegetation plots with a cover above 5%: **16.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **4.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **2.2 %**

Mean percentage cover in vegetation plots: **6 %**

Maximum percentage cover in vegetation plots: **98 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **55**

Number of narrow habitats in which the taxon has its optimum: **20**

Number of broad habitats in which the taxon occurs: **11**

Number of broad habitats in which the taxon has its optimum: **6**

## 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**