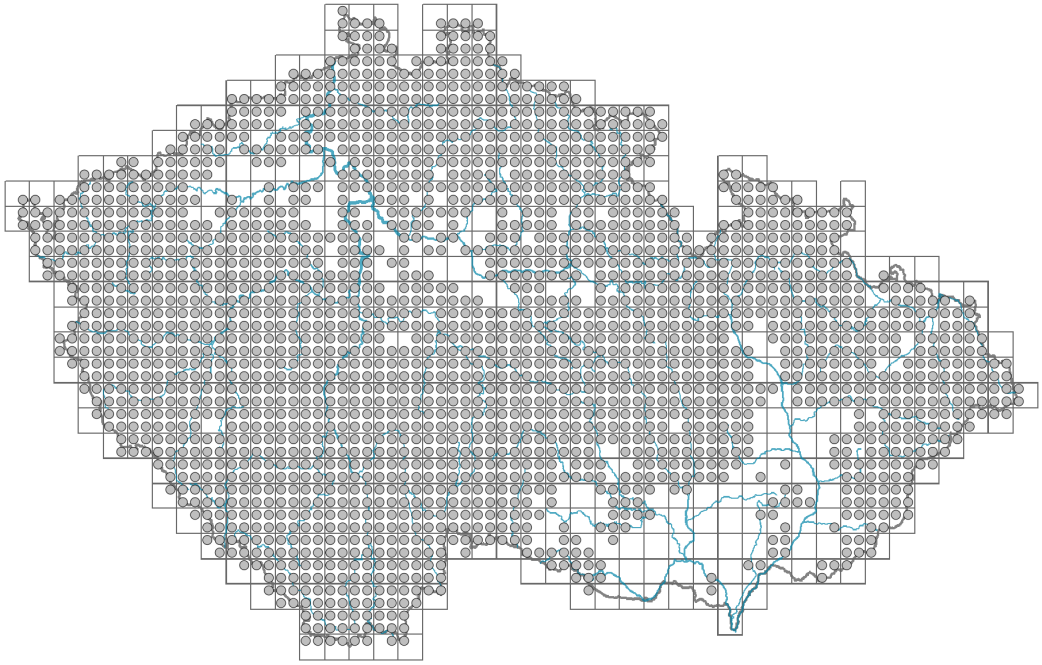
Vaccinium myrtillus

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]: **0.15–0.6**
Growth form: **dwarf shrub**
Life form: **chamaephyte**
Life strategy: **CS – competitor/stress-tolerator**
Life strategy (Pierce method based on leaf traits): **S/SR**
Life strategy (Pierce method, C-score): **3.5 %**
Life strategy (Pierce method, S-score): **63.7 %**
Life strategy (Pierce method, R-score): **32.9 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
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**

Flower

Flowering period [month]: **April–June**
Flowering phase: **4 Fagus sylvatica-Galeobdolon (start of mid-spring)**
Flower colour: **white, green-white**
Flower symmetry: **actinomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **fused**
Shape of the sympetalous corolla or syntepalous perianth: **urceolate**
Calyx fusion: **synsepalous**
Inflorescence type: **flores solitarii**
Dicliny: **synoecious**
Generative reproduction type: **mixed mating**
Pollination syndrome: **insect-pollination, selfing**
Pollinator spectrum: **bumblebees (honeybee, solitary bees, other Hymenoptera, hoverflies, flies s. l., other Diptera, butterflies, other pollinators, unknown)**

Fruit, seed and dispersal

Fruit type: **fleshy fruit – berry**
Fruit colour: **blue, black**
Reproduction type: **mostly vegetatively, rarely 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

Shoot metamorphosis: **stolon**
Type of clonal growth organ: **hypogeogenous rhizome**
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]: **4**
Number of clonal offspring: **0.6**
Lateral spreading distance by clonal growth [m]: **0.2**
Clonal index: **4**

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): **5**
Size of the belowground bud bank (root buds excluded): **25**
Depth of the belowground bud bank (root buds exluded) [cm]: **6**
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): **5**
Size of the belowground bud bank (root buds included): **25**

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

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

Karyology

Chromosome number (2n): **24**
Ploidy level (x): **2**
2C genome size [Mbp]: **1052.66**
1Cx monoploid genome size [Mbp]: **526.33**
Genomic GC content: **41.3 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **5x – semi-shade plant, only exceptionally occurring in full light, but usually at more than 10% of the diffuse radiation incident in an open area (generalist)**
Temperature indicator value: **5x – moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**
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: **2 – transition between values 1 and 3**
Nutrient indicator value: **3 – occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.84**
Herb layer disturbance frequency indicator value: **-1.02**
Whole-community disturbance severity indicator value: **0.26**
Herb layer disturbance severity indicator value: **0.15**
Whole-community structure based disturbance indicator value: **0.13**
Herb layer structure-based disturbance indicator value: **0.17**

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: **1 – rare occurrence**

2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **2 – optimum**
2B Subalpine tall-forb and tall-grass vegetation: **2 – optimum**

4 Wetland and riverine herbaceous vegetation

4K Petasites fringes of montane brooks: **1 – rare occurrence**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 – rare occurrence**
5C Alpine and subalpine soft-water springs: **1 – rare occurrence**
5E Acidic moss-rich fens and peatland meadows: **1 – rare occurrence**
5F Transitional mires: **1 – rare occurrence**
5G Raised bogs: **3 – dominant**
5H Wet peat soils and bog hollows: **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**

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **2 – optimum**
7B Submontane Nardus grasslands: **2 – optimum**

8 Dry grasslands

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: **3 – dominant**
11D Subalpine acidophilous Pinus mugo scrub: **4 – constant dominant**
11H Subalpine deciduous scrub: **2 – optimum**
11I Willow carrs: **1 – rare occurrence**
11L Tall mesic and xeric shrub: **1 – rare occurrence**
11N Low xeric scrub: **1 – rare occurrence**
11R Scrub and pioneer woodland of forests clearings: **2 – optimum**

12 Forests

12A Alder carrs: **2 – optimum**
12B Alluvial forests: **1 – rare occurrence**
12C Oak-hornbeam forests: **2 – optimum**
12D Ravine forests: **1 – rare occurrence**
12E Herb-rich beech forests: **2 – optimum**
12F Limestone beech forests: **2 – optimum**
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**
12K Acidophilous oak forests: **4 – constant dominant**
12L Boreo-continental pine forests: **4 – constant dominant**

12O Peri-Alpidic pine forests: **1 – rare occurrence**
12P Peatland pine forests: **4 – constant dominant**
12Q Peatland birch forests: **2 – optimum**
12R Acidophilous spruce forests: **4 – constant dominant**
12S Basiphilous spruce forests: **2 – optimum**
12V Spruce plantations: **4 – constant dominant**
12W Pine and larch plantations: **3 – dominant**

13 Anthropogenic vegetation

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: **KC *Roso pendulinae-Pinetea mugo***, **LD *Quercetea robori-petraeae***, **LF *Vaccinio-Piceetea***, **RC *Oxycocco-Sphagnetea***
Diagnostic taxon of alliances: **KCA *Pinion mugo***, **LBE *Luzulo-Fagion sylvaticae***, **LDA *Quercion roboris***, **LFB *Dicrano-Pinion sylvestris***, **LFC *Piceion abietis***, **LFD *Vaccinio uliginosi-Pinion sylvestris***, **RCA *Sphagnion magellanici***, **TEF *Genisto pilosae-Vaccinion***
Diagnostic taxon of associations: **AAA02 *Junco trifidi-Empetretum hermaphroditi***, **ADA02 *Crepido conyzifoliae-Calamagrostietum villosae***, **KBC06 *Piceo abietis-Sorbetum aucupariae***, **KCA01 *Dryopterido dilatatae-Pinetum mugo***, **LBA02 *Piceo abietis-Alnetum glutinosae***, **LBE03 *Luzulo-Abietetum albae***, **LBE04 *Vaccinio myrtilli-Abietetum albae***, **LDA03 *Vaccinio vitis-idaeae-Quercetum roboris***, **LFB01 *Cladino-Pinetum sylvestris***, **LFB02 *Vaccinio myrtilli-Pinetum sylvestris***, **LFB04 *Asplenio cuneifolii-Pinetum sylvestris***, **LFC01 *Calamagrostio villosae-Piceetum abietis***, **LFC02 *Athyrio distentifolii-Piceetum abietis***, **LFC04 *Soldanello montanae-Piceetum abietis***, **LFD02 *Vaccinio uliginosi-Pinetum sylvestris***, **LFD03 *Vaccinio-Pinetum montanae***, **LFD04 *Vaccinio uliginosi-Piceetum abietis***, **RCA03 *Vaccinio uliginosi-Pinetum mugo***, **TEA01 *Festuco supinae-Nardetum strictae***, **TEF02 *Calamagrostio arundinaceae-Vaccinietum myrtilli***, **TEF03 *Festuco supinae-Vaccinietum myrtilli***, **XEA06 *Pteridietum aquilini***

Constant taxon

Constant taxon of classes: **AA *Loiseleurio-Vaccinietea***, **AD *Mulgedio-Aconitetea***, **KC *Roso pendulinae-Pinetea mugo***, **LD *Quercetea robori-petraeae***, **LF *Vaccinio-Piceetea***, **RC *Oxycocco-Sphagnetea***, **TE *Calluno-Ulicetea***, **XE *Epilobietea angustifolii***
Constant taxon of alliances: **AAA *Loiseleurio procumbentis-Vaccinion***, **ABA *Juncion trifidi***, **ADA *Calamagrostion villosae***, **ADB *Calamagrostion arundinaceae***, **ADC *Salicion silesiacae***, **ADE *Dryopterido filicis-maris-Athyrion distentifolii***, **KCA *Pinion mugo***, **LBE *Luzulo-Fagion sylvaticae***, **LDA *Quercion roboris***, **LFA *Festuco-Pinion sylvestris***, **LFB *Dicrano-Pinion sylvestris***, **LFC *Piceion abietis***, **LFD *Vaccinio uliginosi-Pinion sylvestris***, **RCA *Sphagnion magellanici***, **TEA *Nardion strictae***, **TEF *Genisto pilosae-Vaccinion***, **XEA *Fragarion vescae***
Constant taxon of associations: **AAA01 *Avenello flexuosae-Callunetum vulgaris***, **AAA02 *Junco trifidi-Empetretum hermaphroditi***, **ABA01 *Cetrario-Festucetum supinae***, **ADA01 *Sphagno compacti-Molinietum caeruleae***, **ADA02 *Crepido conyzifoliae-Calamagrostietum villosae***, **ADB01 *Bupleuro longifoliae-**

Calamagrostietum arundinaceae, **ADC01 *Salici silesiacae-Betuletum carpaticae***, **ADE02 *Adenostylo alliariae-Athyrietum distentifolii***, **KBC06 *Piceo abietis-Sorbetum aucupariae***, **KCA01 *Dryopterido dilatatae-Pinetum mugo***, **KCA02 *Adenostylo alliariae-Pinetum mugo***, **LAA01 *Thelypterido palustris-Alnetum glutinosae***, **LBA02 *Piceo abietis-Alnetum glutinosae***, **LBC04 *Athyrio distentifolii-Fagetum sylvaticae***, **LBE01 *Luzulo luzuloidis-Fagetum sylvaticae***, **LBE02 *Calamagrostio villosae-Fagetum sylvaticae***, **LBE03 *Luzulo-Abietetum albae***, **LBE04 *Vaccinio myrtilli-Abietetum albae***, **LDA01 *Luzulo luzuloidis-Quercetum petraeae***, **LDA03 *Vaccinio vitis-idaeae-Quercetum roboris***, **LDA04 *Holco mollis-Quercetum roboris***, **LFA01 *Festuco-Pinetum sylvestris***, **LFB01 *Cladino-Pinetum sylvestris***, **LFB02 *Vaccinio myrtilli-Pinetum sylvestris***, **LFB04 *Asplenio cuneifolii-Pinetum sylvestris***, **LFC01 *Calamagrostio villosae-Piceetum abietis***, **LFC02 *Athyrio distentifolii-Piceetum abietis***, **LFC03 *Equiseto sylvatici-Piceetum abietis***, **LFC04 *Soldanello montanae-Piceetum abietis***, **LFD01 *Vaccinio uliginosi-Betuletum pubescentis***, **LFD02 *Vaccinio uliginosi-Pinetum sylvestris***, **LFD03 *Vaccinio-Pinetum montanae***, **LFD04 *Vaccinio uliginosi-Piceetum abietis***, **RCA02 *Andromedo polifoliae-Sphagnetum magellanici***, **RCA03 *Vaccinio uliginosi-Pinetum mugo***, **RCA04 *Sphagno-Pinetum sylvestris***, **RCA05 *Ledo palustris-Pinetum uncinatae***, **RCC01 *Trichophoro cespitosi-Sphagnetum compacti***, **TEA01 *Festuco supinae-Nardetum strictae***, **TEA02 *Thesio alpini-Nardetum strictae***, **TEF01 *Vaccinio-Callunetum vulgaris***, **TEF02 *Calamagrostio arundinaceae-Vaccinietum myrtilli***, **TEF03 *Festuco supinae-Vaccinietum myrtilli***, **XEA02 *Digitali purpureae-Epilobietum angustifolii***, **XEA04 *Junco effusi-Calamagrostietum villosae***, **XEA06 *Pteridietum aquilini***, **XEA07 *Gymnocarpio dryopteridis-Athyrietum filicis-feminae***

Dominant taxon

Dominant taxon of associations: **KBC06 *Piceo abietis-Sorbetum aucupariae***, **KCA01 *Dryopterido dilatatae-Pinetum mugo***, **LBE01 *Luzulo luzuloidis-Fagetum sylvaticae***, **LBE02 *Calamagrostio villosae-Fagetum sylvaticae***, **LBE04 *Vaccinio myrtilli-Abietetum albae***, **LDA01 *Luzulo luzuloidis-Quercetum petraeae***, **LDA03 *Vaccinio vitis-idaeae-Quercetum roboris***, **LFB02 *Vaccinio myrtilli-Pinetum sylvestris***, **LFB04 *Asplenio cuneifolii-Pinetum sylvestris***, **LFC01 *Calamagrostio villosae-Piceetum abietis***, **LFC02 *Athyrio distentifolii-Piceetum abietis***, **LFC04 *Soldanello montanae-Piceetum abietis***, **LFD02 *Vaccinio uliginosi-Pinetum sylvestris***, **LFD03 *Vaccinio-Pinetum montanae***, **LFD04 *Vaccinio uliginosi-Piceetum abietis***, **RCA03 *Vaccinio uliginosi-Pinetum mugo***, **RCA04 *Sphagno-Pinetum sylvestris***, **TEF02 *Calamagrostio arundinaceae-Vaccinietum myrtilli***, **TEF03 *Festuco supinae-Vaccinietum myrtilli***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4**

Ecological specialization index for non-forest vegetation: **3.8**

Ecological specialization index for forest vegetation: **4.5**

Colonization ability

Index of colonization success (ICS): **7**

Index of colonization potential (ICP): **5**

Optimum successional age [years]: **24**

Distribution and frequency

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

Floristic region: **Europe, Siberia**

Distribution range extension along the continentality gradient: **6**
Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane belt, subalpine belt**
Expansive taxon in the region: **Bohemian Moravian Mesophyticum, Bohemian Moravian Oreophyticum, Carpathian Mesophyticum, Carpathian Oreophyticum**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 629
taxon.data.freq_in_quad: 2168

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **7.1 %**
Occurrence frequency in vegetation plots with a cover above 5%: **44.4 %**
Occurrence frequency in vegetation plots with a cover above 25%: **23.9 %**
Occurrence frequency in vegetation plots with a cover above 50%: **9.9 %**
Mean percentage cover in vegetation plots: **16 %**
Maximum percentage cover in vegetation plots: **99 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **48**
Number of narrow habitats in which the taxon has its optimum: **23**
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**