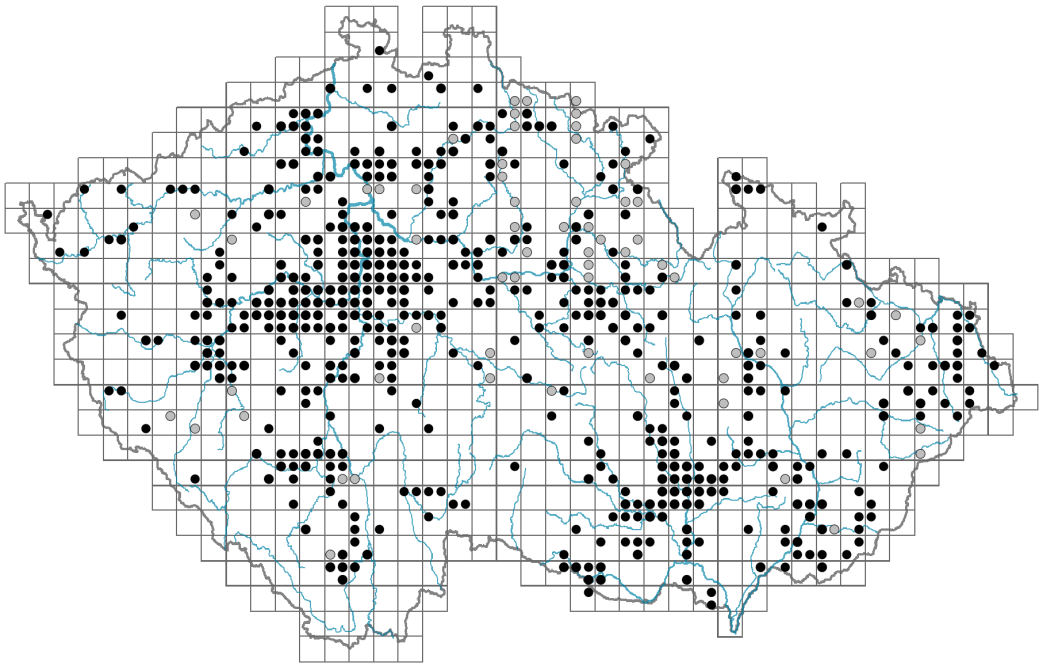
Mahonia aquifolium

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]: **0.5–1.8**
Growth form: **shrub**
Life form: **nanophanerophyte**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **CS**
Life strategy (Pierce method, C-score): **52.4 %**
Life strategy (Pierce method, S-score): **47.6 %**
Life strategy (Pierce method, R-score): **0 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **compound – imparipinnate**
Stipules: **present**
Petiole: **present**
Leaf life span: **evergreen**
Leaf deciduousness in woody plants: **evergreen**
Leaf anatomy: **scleromorphic, mesomorphic**
Functional leaf type in woody plants: **laurophyllous**

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Flower

Flowering period [month]: **May–July**
Flower colour: **yellow**
Flower symmetry: **actinomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **free**
Calyx fusion: **aposepalous**
Inflorescence type: **racemus**
Dicliny: **synoecious**
Generative reproduction type: **allogamy**
Pollination syndrome: **insect-pollination, selfing**

Fruit, seed and dispersal

Fruit type: **fleshy fruit – berry**
Fruit colour: **blue**
Reproduction type: **by seed/spores and vegetatively**
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**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **15**
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): **0**
Size of the belowground bud bank (root buds excluded): **30**
Depth of the belowground bud bank (root buds exluded) [cm]: **3**
Number of buds per shoot at the soil surface (root buds included): **15**
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): **0**
Size of the belowground bud bank (root buds included): **30**
Depth of the belowground bud bank (root buds included) [cm]: **3**

Trophic mode

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

Karyology

Chromosome number (2n): **28**
Ploidy level (x): **2**
2C genome size [Mbp]: **2108.82**
1Cx monoploid genome size [Mbp]: **1054.41**

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Genomic GC content: **41.4 %**

Taxon origin

Origin in the Czech Republic: **neophyte**
Invasion status: **naturalized**
Geographic origin: **North America**
Period of introduction: **Recent Past (1950–2000)**
Introduction pathway: **intentional – ornamental**

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: **4 – transition between values 3 and 5**
Reaction indicator value: **6 – transition between values 5 and 7**
Nutrient indicator value: **5 – occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Habitat and sociology

Occurrence in habitats

11 Heathlands and scrub

11L Tall mesic and xeric shrub: **1 – rare occurrence**

12 Forests

12D Ravine forests: **1 – rare occurrence**
12J Acidophilous thermophilous oak forests: **1 – rare occurrence**
12T Robinia pseudacacia plantations: **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**

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.1**

Colonization ability

Index of colonization success (ICS): **3**
Index of colonization potential (ICP): **9**
Optimum successional age [years]: **40**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional**
Floristic region: **Western America**
Continentality degree: **3**

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Distribution range extension along the continentality gradient: **3**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 322
taxon.data.freq_in_quad: 559

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**
Occurrence frequency in vegetation plots with a cover above 5%: **20 %**
Occurrence frequency in vegetation plots with a cover above 25%: **0 %**
Occurrence frequency in vegetation plots with a cover above 50%: **0 %**
Mean percentage cover in vegetation plots: **3 %**
Maximum percentage cover in vegetation plots: **8 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **4**
Number of narrow habitats in which the taxon has its optimum: **0**
Number of broad habitats in which the taxon occurs: **2**
Number of broad habitats in which the taxon has its optimum: **0**

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**

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