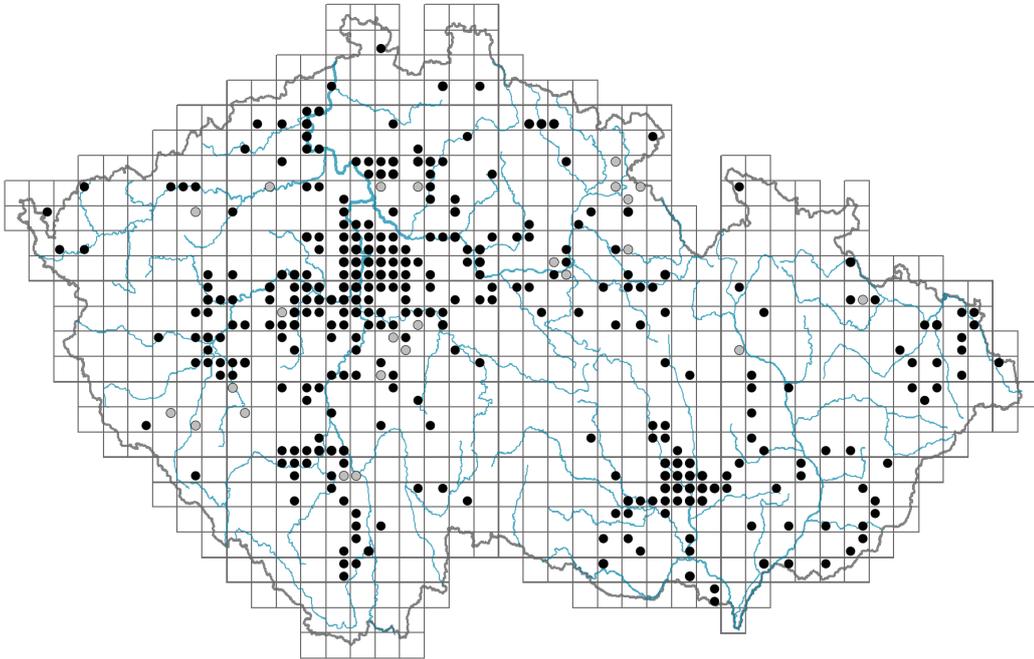


# *Mahonia aquifolium*

## Distribution



© Pavel Veselý

### Map info

● revised records

● unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



© Pavel Veselý



© Milan Chytrý



© Vladimír Moysa

## 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**

## 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 excluded) [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**

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**

Continental degree: **3**



Distribution range extension along the continentality gradient: **3**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 218

taxon.data.freq\_in\_quad: 348

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**