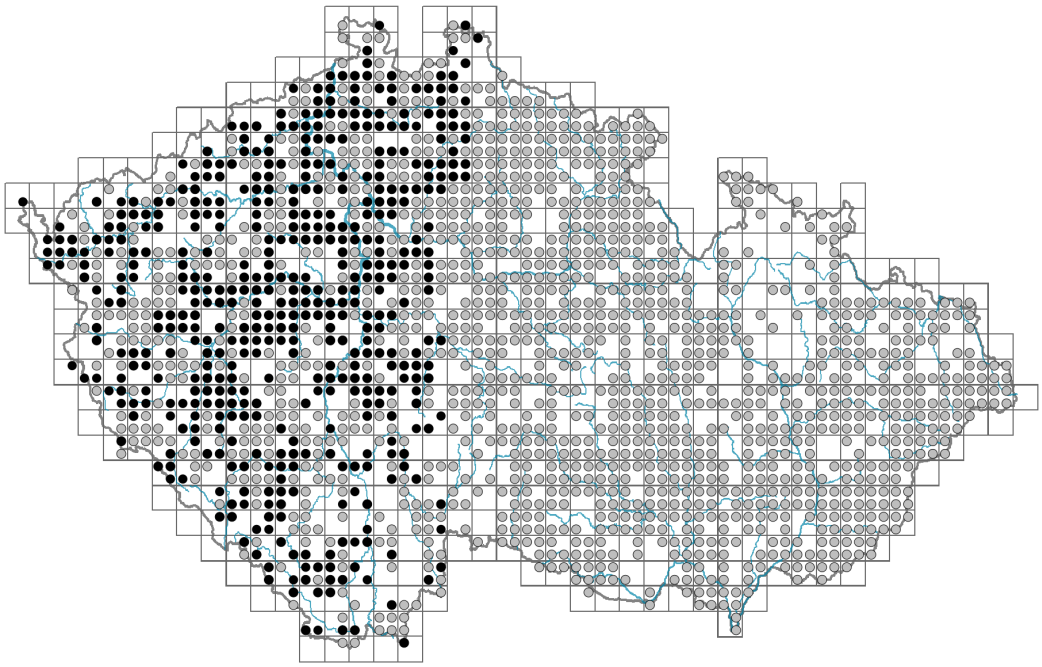
Malus domestica

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]: **6–14**
Growth form: **tree (shrub)**
Life form: **macrophanerophyte (nanophanerophyte)**
Life strategy: **C – competitor**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **simple – entire**
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**
Flower colour: **white**
Flower symmetry: **actinomorphic**

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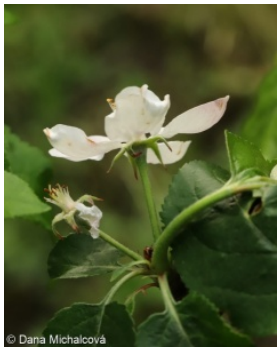

Perianth type: **calyx and corolla**
Perianth fusion: **free**
Calyx fusion: **hypanthium**
Inflorescence type: **corymbus**
Dicliny: **synoecious**
Generative reproduction type: **allogamy self-incompatibility**
Pollination syndrome: **insect-pollination**

Fruit, seed and dispersal

Fruit type: **fleshy fruit – pome**
Fruit colour: **green, yellow, red**
Reproduction type: **mostly by seed/spores, rarely vegetatively**
Dispersal unit (diaspore): **seed, fruit, infrutescence or its part**
Dispersal strategy: **Cornus (mainly autochory and endozoochory)**
Myrmecochory: **non-myrmecochorous (b)**

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]: **1310.16**
1Cx monoploid genome size [Mbp]: **655.08**
Genomic GC content: **40.4 %**

Taxon origin

Origin in the Czech Republic: **archaeophyte**
Invasion status: **naturalized**
Geographic origin: **anecophyte**
Period of introduction: **Early Middle Ages (550–1200)**
Introduction pathway: **intentional – crops**

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: **5 – indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**
Reaction indicator value: **7 – indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**
Nutrient indicator value: **5 – occurring at moderately nutrient-rich sites, and less**

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frequently at poor and rich sites
Salinity indicator value: **0 – not salt tolerant, glycophyte**

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**

11 Heathlands and scrub

11L Tall mesic and xeric shrub: **2 – optimum**
11N Low xeric scrub: **1 – rare occurrence**
11R Scrub and pioneer woodland of forests clearings: **2 – optimum**

12 Forests

12B Alluvial forests: **1 – rare occurrence**
12C Oak-hornbeam forests: **1 – rare occurrence**
12D Ravine forests: **1 – rare occurrence**
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**
12T Robinia pseudacacia plantations: **1 – rare occurrence**
12U Plantations of broad-leaved non-native trees: **1 – rare occurrence**

13 Anthropogenic vegetation

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

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.2 – taxon occurring partly in the forest, but mainly in open vegetation**
Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 – taxon occurring partly in the forest, but mainly in open vegetation**

Colonization ability

Index of colonization success (ICS): **1**

Distribution and frequency

Floristic zone: **submeridional**
Floristic region: **Europe**
Continentality degree: **7**
Distribution range extension along the continentality gradient: **4**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 610
taxon.data.freq_in_quad: 1762

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **14**
Number of narrow habitats in which the taxon has its optimum: **2**
Number of broad habitats in which the taxon occurs: **4**
Number of broad habitats in which the taxon has its optimum: **1**

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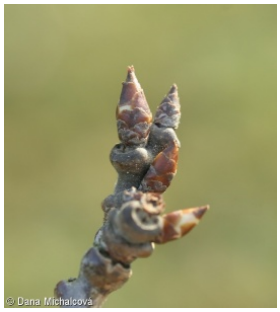
Threats and protection

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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