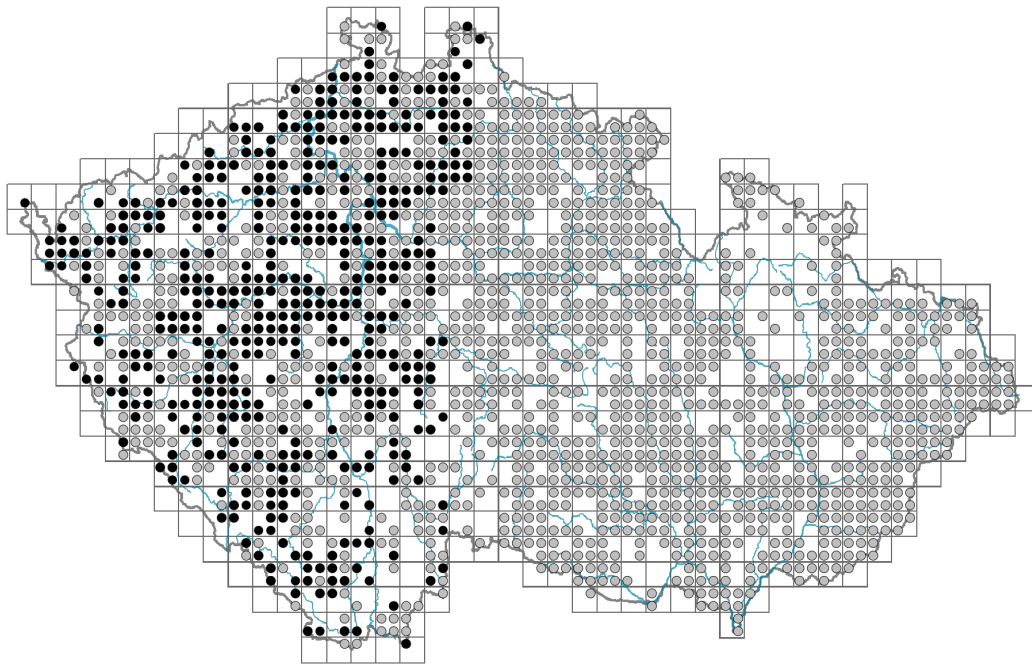


# *Malus domestica*

## 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**

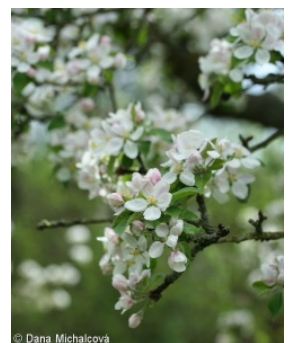
Functional leaf type in woody plants: **broad deciduous or semi-deciduous**

## Flower

Flowering period [month]: **May**

Flower colour: **white**

Flower symmetry: **actinomorphic**



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, infructescence 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

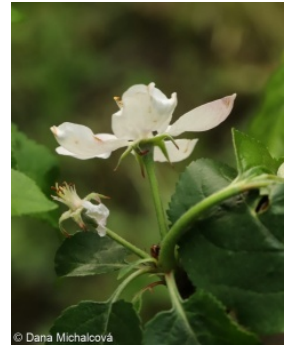
Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**

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**



**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**

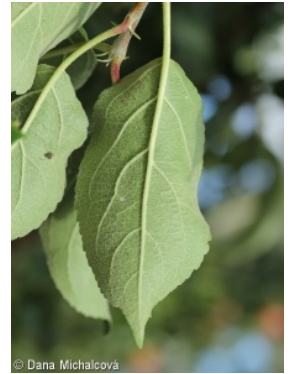
## Affinity to the forest environment

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**Continental 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**

## 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**

