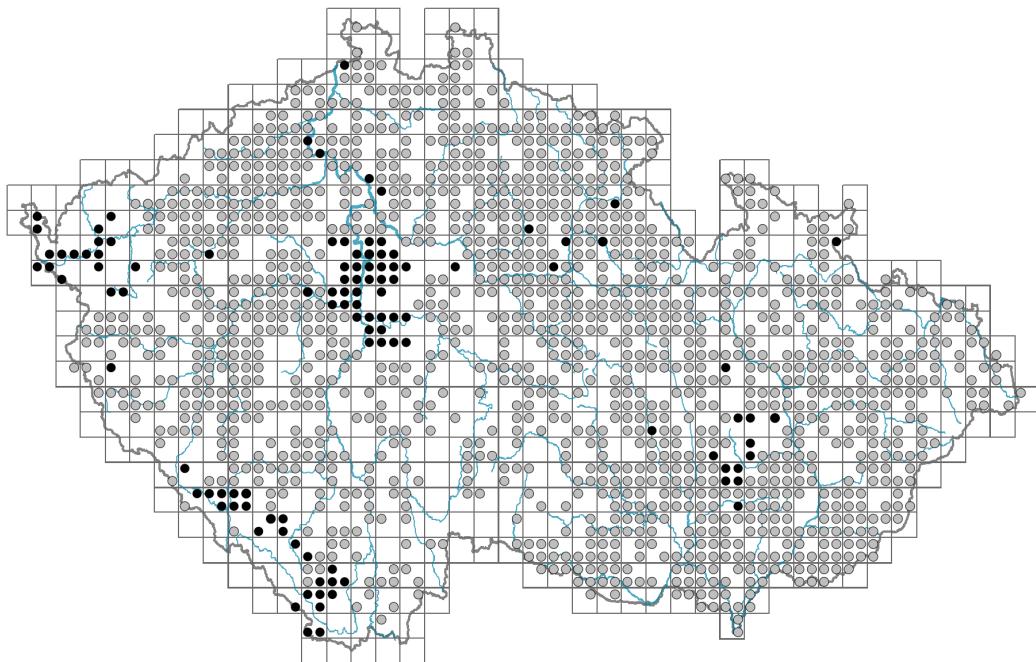


# *Crataegus monogyna*

## 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]: **2-10**

Growth form: **shrub (tree)**

Life form: **nanophanerophyte (macrophanerophyte)**

Life strategy: **C - competitor**

Life strategy (Pierce method based on leaf traits): **S/CS**

Life strategy (Pierce method, C-score): **19.2 %**

Life strategy (Pierce method, S-score): **73.6 %**

Life strategy (Pierce method, R-score): **7.2 %**

## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - pinnately divided**

Stipules: **present**

Petiole: **present**

Leaf life span: **summer green**

Leaf deciduousness in woody plants: **winter deciduous**

Leaf anatomy: **scleromorphic, mesomorphic**

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

## Flower

Flowering period [month]: **May-June**

Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**

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, facultative allogamy**

Pollination syndrome: **insect-pollination, selfing**

Pollinator spectrum: **honeybee, hoverflies, beetles (bumblebees, solitary bees, other Hymenoptera, flies s. l., meat flies s. l., other Diptera, butterflies, nitidulids)**



## Fruit, seed and dispersal

Fruit type: **fleshy fruit - pome**

Fruit colour: **red**

Reproduction type: **only 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: **shoot thorn**

Position of root buds: **lateral roots**

Role of root buds in life-history of a plant: **regenerative**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **0**

Number of buds per shoot at a depth of 0-10 cm (root buds excluded): **5**

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): **10**

Depth of the belowground bud bank (root buds exluded) [cm]: **10**

Number of buds per shoot at the soil surface (root buds included): **0**

Number of buds per shoot at a depth of 0-10 cm (root buds included): **5**

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): **10**

Depth of the belowground bud bank (root buds included) [cm]: **10**



## 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]: **1365.37**

1Cx monoploid genome size [Mbp]: **682.69**

Genomic GC content: **40 %**



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## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

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

Temperature indicator value: **6 - transition between values 5 and 7**

Moisture indicator value: **4 - transition between values 3 and 5**

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**

## Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.79**

Herb layer disturbance frequency indicator value: **-0.96**

Whole-community disturbance severity indicator value: **0.24**

Herb layer disturbance severity indicator value: **0.11**

Whole-community structure based disturbance indicator value: **0.16**

Herb layer structure-based disturbance indicator value: **0.28**

## Habitat and sociology

Occurrence in habitats

### 8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**

8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**

8D Broad-leaved dry grasslands: **1 - rare occurrence**

8E Acidophilous dry grasslands: **1 - rare occurrence**

8F Thermophilous forest fringe vegetation: **2 - optimum**

### 11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 - rare occurrence**

11I Willow carrs: **1 - rare occurrence**

11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**

11L Tall mesic and xeric shrub: **3 - dominant**

11N Low xeric scrub: **2 - optimum**

11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

## 12 Forests

12B Alluvial forests: **1 - rare occurrence**

12C Oak-hornbeam forests: **2 - optimum**

12D Ravine forests: **2 - optimum**

12F Limestone beech forests: **1 - rare occurrence**

12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**

12I Sub-continental thermophilous oak forests: **1 - rare occurrence**

12J Acidophilous thermophilous oak forests: **2 - optimum**

12K Acidophilous oak forests: **1 - rare occurrence**

12O Peri-Alpidic pine forests: **1 - rare occurrence**

12T Robinia pseudacacia plantations: **1 - rare occurrence**

12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

12W Pine and larch plantations: **1 - rare occurrence**

## 13 Anthropogenic vegetation

13D Perennial thermophilous ruderal vegetation: **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**

### Diagnostic taxon

Diagnostic taxon of alliances: [\*\*KBB Berberidion vulgaris, LCA Quercion pubescenti-petraeae, LCB Aceri tatarici-Quercion\*\*](#)

Diagnostic taxon of associations: [\*\*KBB04 Pruno spinosae-Ligustretum vulgaris, LBB04 Primulo veris-Carpinetum betuli, LCA02 Lithospermo purpurocaerulei-Quercetum pubescens, LCA03 Euphorbio-Quercetum, LCB01 Quercetum pubescenti-roboris\*\*](#)

### Constant taxon

Constant taxon of associations: [\*\*LBB04 Primulo veris-Carpinetum betuli, LCA02 Lithospermo purpurocaerulei-Quercetum pubescens, LCB01 Quercetum pubescenti-roboris\*\*](#)

### Dominant taxon

Dominant taxon of associations: [\*\*KBB04 Pruno spinosae-Ligustretum vulgaris, KBB06 Carpino betuli-Prunetum spinosae\*\*](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.1**

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

Ecological specialization index for forest vegetation: **4.6**

## Distribution and frequency

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

Floristic region: **Europe, Western Asia**

Distribution range extension along the continentality gradient: **6**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane belt**

Expansive taxon in the region: **Bohemian Thermophyticum, Bohemian Moravian Mesophyticum, Pannonian Thermophyticum, Carpathian Mesophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 570

taxon.data.freq\_in\_quad: 1424

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **19.4 %**

Occurrence frequency in vegetation plots with a cover above 25%: **5.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1 %**

Mean percentage cover in vegetation plots: **6 %**

Maximum percentage cover in vegetation plots: **88 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **25**

Number of narrow habitats in which the taxon has its optimum: **9**

Number of broad habitats in which the taxon occurs: **4**

Number of broad habitats in which the taxon has its optimum: **3**

## 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**