Quercus petraea agg.

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]: **10–40**
Growth form: **tree**
Life form: **macrophanerophyte**
Life strategy: **C – competitor**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **simple – entire, simple – pinnately divided**
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]: **April–May**
Flowering phase: **4 Fagus sylvatica-Galeobdolon (start of mid-spring)**
Flower colour: **green**

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Perianth type: **reduced**
Perianth fusion: **reduced**
Inflorescence type: **amentum e floribus masculis, flores solitarii feminei**
Dicliny: **monoecious**
Generative reproduction type: **allogamy**
Pollination syndrome: **wind-pollination**

Fruit, seed and dispersal

Fruit type: **dry fruit – achene/cypsela/samara**
Fruit colour: **brown**
Reproduction type: **only by seed/spores**
Dispersal unit (diaspore): **fruit, infrutescence or its part**
Dispersal strategy: **Cornus (mainly autochory and endozoochory)**
Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

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): **0**
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): **0**
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): **0**
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): **0**

Trophic mode

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

Karyology

Chromosome number (2n): **24**
Ploidy level (x): **2**
2C genome size [Mbp]: **1636.06**
1Cx monoploid genome size [Mbp]: **818.03**

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: **5 – indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**
Reaction indicator value: **5x – indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions (generalist)**
Nutrient indicator value: **4x – transition between values 3 and 5 (generalist)**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.96**
Herb layer disturbance frequency indicator value: **-0.74**
Whole-community disturbance severity indicator value: **0.23**
Herb layer disturbance severity indicator value: **0.06**
Whole-community structure based disturbance indicator value: **0.07**
Herb layer structure-based disturbance indicator value: **0.14**

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**

5 Vegetation of springs and mires

5A Hard-water springs with tufa formation: **1 – rare occurrence**

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 – rare occurrence**
8B Submediterranean dry grasslands on rock outcrops: **1 – rare occurrence**
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: **1 – rare occurrence**

11 Heathlands and scrub

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

12 Forests

12A Alder carrs: **1 – rare occurrence**
12B Alluvial forests: **1 – rare occurrence**
12C Oak-hornbeam forests: **4 – constant dominant**
12D Ravine forests: **2 – optimum**
12E Herb-rich beech forests: **2 – optimum**
12F Limestone beech forests: **2 – optimum**
12G Acidophilous beech forests: **2 – optimum**
12H Peri-Alpidic basiphilous thermophilous oak forests: **4 – constant dominant**
12I Sub-continental thermophilous oak forests: **4 – constant dominant**
12J Acidophilous thermophilous oak forests: **4 – constant dominant**

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12K Acidophilous oak forests: **4 – constant dominant**
12L Boreo-continental pine forests: **2 – optimum**
12O Peri-Alpidic pine forests: **2 – optimum**
12Q Peatland birch forests: **1 – rare occurrence**
12T Robinia pseudacacia plantations: **2 – optimum**
12U Plantations of broad-leaved non-native trees: **2 – optimum**
12V Spruce plantations: **1 – rare occurrence**
12W Pine and larch plantations: **2 – optimum**

13 Anthropogenic vegetation

13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 – rare occurrence**

Diagnostic taxon

Diagnostic taxon of classes: **LC *Quercetea pubescentis***, **LD *Quercetea robori-petraeae***

Diagnostic taxon of alliances: **LBB *Carpinion betuli***, **LCA *Quercion pubescenti-petraeae***, **LCB *Aceri tatarici-Quercion***, **LCC *Quercion petraeae***, **LDA *Quercion roboris***

Diagnostic taxon of associations: **LBB01 *Galio sylvatici-Carpinetum betuli***, **LBB03 *Carici pilosae-Carpinetum betuli***, **LBB04 *Primulo veris-Carpinetum betuli***, **LCA03 *Euphorbio-Quercetum***, **LCB01 *Quercetum pubescenti-roboris***, **LCC01 *Sorbo torminalis-Quercetum***, **LCC02 *Genisto pilosae-Quercetum petraeae***, **LCC03 *Melico pictae-Quercetum roboris***, **LDA01 *Luzulo luzuloidis-Quercetum petraeae***, **LDA02 *Viscario vulgaris-Quercetum petraeae***, **LDA03 *Vaccinio vitis-idaeae-Quercetum roboris***

Constant taxon

Constant taxon of classes: **LC *Quercetea pubescentis***, **LD *Quercetea robori-petraeae***

Constant taxon of alliances: **LBB *Carpinion betuli***, **LCA *Quercion pubescenti-petraeae***, **LCB *Aceri tatarici-Quercion***, **LCC *Quercion petraeae***, **LDA *Quercion roboris***

Constant taxon of associations: **LBB01 *Galio sylvatici-Carpinetum betuli***, **LBB03 *Carici pilosae-Carpinetum betuli***, **LBB04 *Primulo veris-Carpinetum betuli***, **LBF04 *Seslerio albicantis-Tilietum cordatae***, **LCA01 *Lathyro collini-Quercetum pubescentis***, **LCA03 *Euphorbio-Quercetum***, **LCB01 *Quercetum pubescenti-roboris***, **LCC01 *Sorbo torminalis-Quercetum***, **LCC02 *Genisto pilosae-Quercetum petraeae***, **LCC03 *Melico pictae-Quercetum roboris***, **LDA01 *Luzulo luzuloidis-Quercetum petraeae***, **LDA02 *Viscario vulgaris-Quercetum petraeae***, **LDA03 *Vaccinio vitis-idaeae-Quercetum roboris***, **LFB03 *Hieracio pallidi-Pinetum sylvestris***

Dominant taxon

Dominant taxon of associations: **LBB01 *Galio sylvatici-Carpinetum betuli***, **LBB02 *Stellario holosteae-Carpinetum betuli***, **LBB03 *Carici pilosae-Carpinetum betuli***, **LBB04 *Primulo veris-Carpinetum betuli***, **LCA01 *Lathyro collini-Quercetum pubescentis***, **LCA03 *Euphorbio-Quercetum***, **LCB01 *Quercetum pubescenti-roboris***, **LCC01 *Sorbo torminalis-Quercetum***, **LCC02 *Genisto pilosae-Quercetum petraeae***, **LCC03 *Melico pictae-Quercetum roboris***, **LDA01 *Luzulo luzuloidis-Quercetum petraeae***, **LDA02 *Viscario vulgaris-Quercetum petraeae***, **LDA03 *Vaccinio vitis-idaeae-Quercetum roboris***, **LDA04 *Holco mollis-Quercetum roboris***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.4**
Ecological specialization index for non-forest vegetation: **3.5**

Ecological specialization index for forest vegetation: **4.5**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional**
Floristic region: **Europe**
Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 628
taxon.data.freq_in_quad: 2113

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **4.1 %**
Occurrence frequency in vegetation plots with a cover above 5%: **69.7 %**
Occurrence frequency in vegetation plots with a cover above 25%: **50.7 %**
Occurrence frequency in vegetation plots with a cover above 50%: **31.7 %**
Mean percentage cover in vegetation plots: **33.2 %**
Maximum percentage cover in vegetation plots: **90 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **32**
Number of narrow habitats in which the taxon has its optimum: **15**
Number of broad habitats in which the taxon occurs: **6**
Number of broad habitats in which the taxon has its optimum: **2**

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