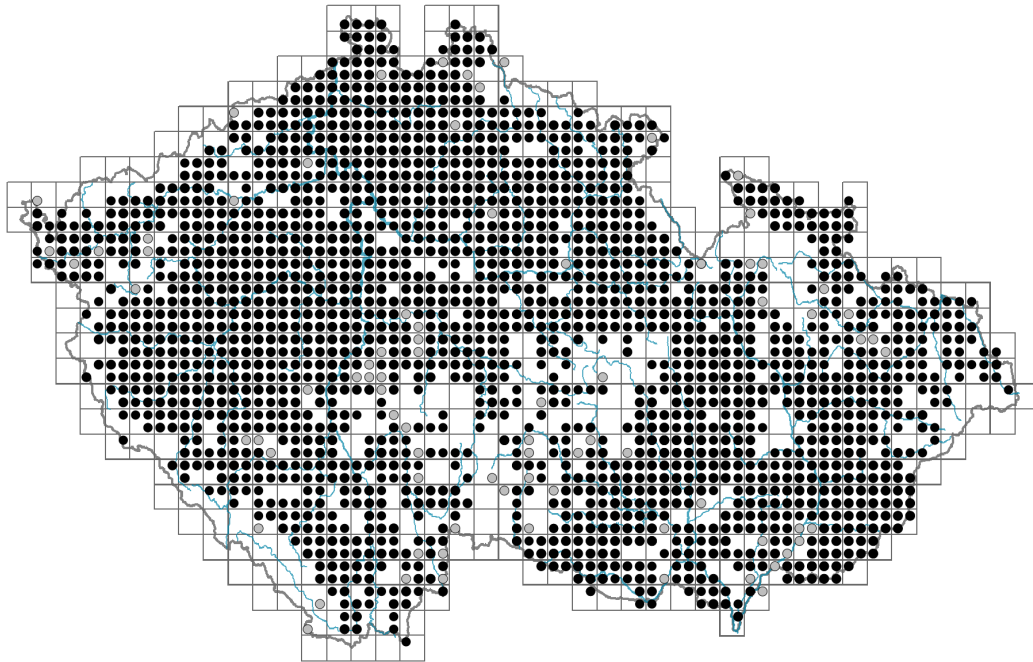


# Quercus petraea agg.

## 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**

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**

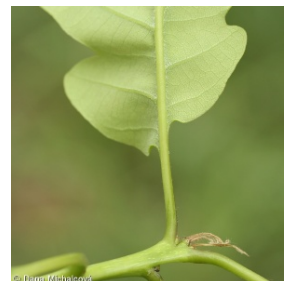
12H Peri-Alpidic basiphilous thermophilous oak forests: **4 - constant dominant**

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](#)

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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](#)

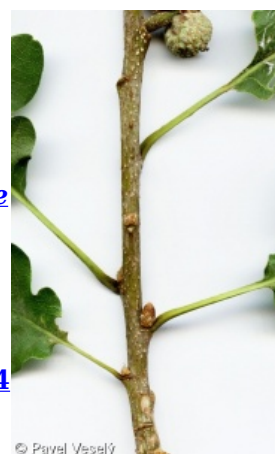
Dominant taxon

Dominant taxon of associations: [LBB01 Galio sylvatici-Carpinetum betuli](#), [LBB02 Stellario holostaeae-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: 612

taxon.data.freq\_in\_quad: 1967

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**

