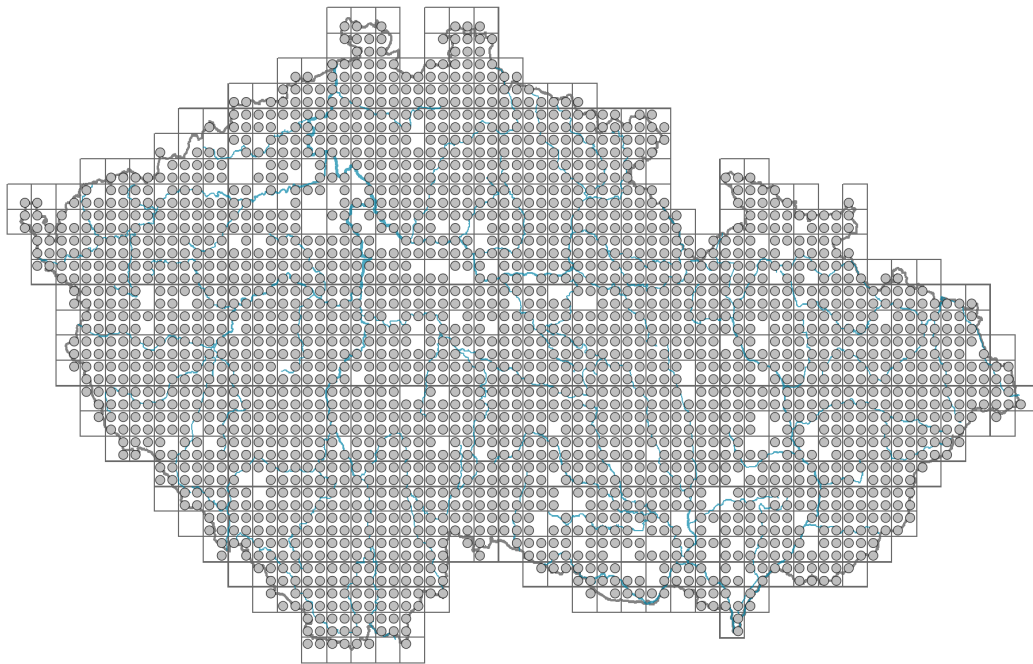


# *Populus tremula*

## 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]: **15-25**

Growth form: **tree**

Life form: **macrophanerophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **32.8 %**

Life strategy (Pierce method, S-score): **54.4 %**

Life strategy (Pierce method, R-score): **12.9 %**



## 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]: **March-April**

Flowering phase: **1 Corylus avellana-Leucojum vernum (pre-spring)**

Flower colour: **green**

Perianth type: **flower achlamydeous**

Inflorescence type: **amentum e floribus masculis, amentum e floribus femineis**

Dicliny: **dioecious**

Generative reproduction type: **alogamy**

Pollination syndrome: **wind-pollination**



© Dana Michalčová

## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Fruit colour: **brown**

Reproduction type: **by seed/spores and vegetatively**

Dispersal unit (diaspore): **seed**

Dispersal strategy: **Epilobium (mainly anemochory and autochory)**

Myrmecochory: **non-myrmecochorous (b)**



© Vladimír Motýčka

## Belowground organs and clonality

Root metamorphosis: **root shoot**

Position of root buds: **lateral roots**

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

### 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): **15**

Number of buds per shoot at a depth greater than 10 cm (root buds included): **15**

Size of the belowground bud bank (root buds included): **30**

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



© Vladimír Motýčka

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**



© Vladimír Motýčka

## Karyology

Chromosome number (2n): **38**

Ploidy level (x): **2**

2C genome size [Mbp]: **803.88**

1Cx monoploid genome size [Mbp]: **401.94**

Genomic GC content: **36.6 %**



© Tomáš Kalous

## 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: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

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: **5x - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites (generalist)**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.81**

Herb layer disturbance frequency indicator value: **-0.85**

Whole-community disturbance severity indicator value: **0.28**

Herb layer disturbance severity indicator value: **0.15**

Whole-community structure based disturbance indicator value: **0.12**

Herb layer structure-based disturbance indicator value: **0.17**

## Habitat and sociology

### Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **1 - rare occurrence**

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **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**

8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

11 Heathlands and scrub

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

11H Subalpine deciduous scrub: **1 - rare occurrence**

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

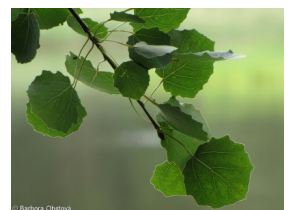
11L Tall mesic and xeric shrub: **1 - rare occurrence**

11R Scrub and pioneer woodland of forests clearings: **3 - dominant**

12 Forests

12A Alder carrs: **1 - rare occurrence**

12B Alluvial forests: **2 - optimum**

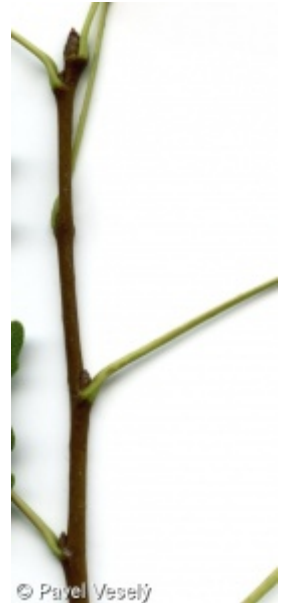




12C Oak-hornbeam forests: **2 - optimum**  
 12D Ravine forests: **1 - rare occurrence**  
 12E Herb-rich beech forests: **1 - rare occurrence**  
 12F Limestone beech forests: **1 - rare occurrence**  
 12G Acidophilous beech forests: **1 - rare occurrence**  
 12I Sub-continental thermophilous oak forests: **1 - rare occurrence**  
 12K Acidophilous oak forests: **2 - optimum**  
 12L Boreo-continental pine forests: **1 - rare occurrence**  
 12O Peri-Alpidic pine forests: **1 - rare occurrence**  
 12Q Peatland birch forests: **1 - rare occurrence**  
 12R Acidophilous spruce forests: **1 - rare occurrence**  
 12V Spruce plantations: **1 - rare occurrence**  
 12W Pine and larch plantations: **1 - rare occurrence**  
 13 Anthropogenic vegetation  
 13F Herbaceous vegetation of forests clearings and Rubus scrub: **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 associations: [KBC05 \*Salicetum capreae\*](#), [LDA04 \*Holco mollis-Quercetum roboris\*](#)  
 Constant taxon  
 Constant taxon of associations: [KAB03 \*Salici purpureae-Myricarietum germanicae\*](#)  
 Ecological specialization indices  
 Ecological specialization index for all vegetation types: **4**  
 Ecological specialization index for non-forest vegetation: **3**  
 Ecological specialization index for forest vegetation: **4.2**  
 Colonization ability  
 Index of colonization success (ICS): **8**  
 Index of colonization potential (ICP): **9**  
 Optimum successional age [years]: **20**

## Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional**  
 Floristic region: **Europe, Asia**  
 Distribution range extension along the continentality gradient: **7**  
 Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane belt**  
 Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 664  
 taxon.data.freq\_in\_quad: 2311  
 Commonness in vegetation plots from the Czech Republic  
 Occurrence frequency in vegetation plots: **0.6 %**



Occurrence frequency in vegetation plots with a cover above 5%: **20.9 %**

Occurrence frequency in vegetation plots with a cover above 25%: **4.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1.7 %**

Mean percentage cover in vegetation plots: **6.4 %**

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

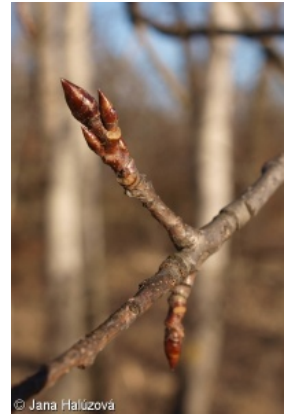
Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **27**

Number of narrow habitats in which the taxon has its optimum: **4**

Number of broad habitats in which the taxon occurs: **7**

Number of broad habitats in which the taxon has its optimum: **2**



## 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**

