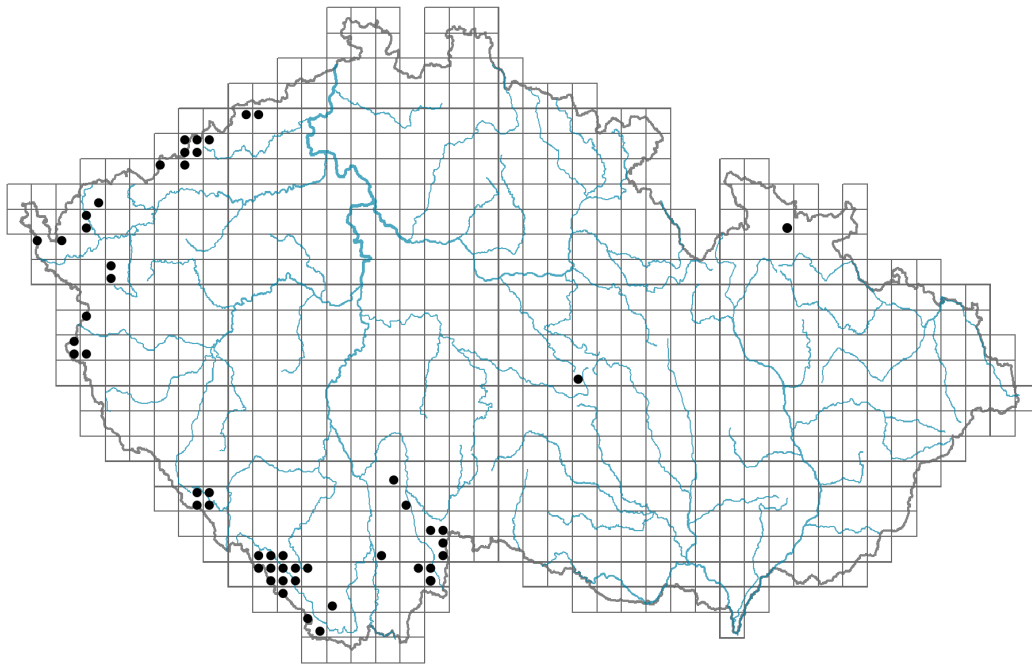


# *Pinus uncinata*

## Distribution

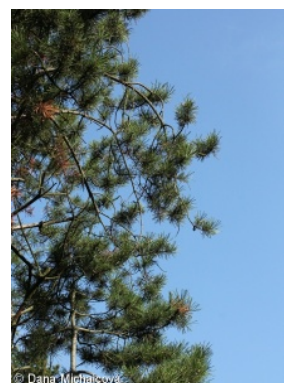


### Map info

● 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]: **4-20**

Growth form: **tree**

Life form: **macrophanerophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **1.2 %**

Life strategy (Pierce method, S-score): **98.8 %**

Life strategy (Pierce method, R-score): **0 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf deciduousness in woody plants: **evergreen**

Leaf anatomy: **scleromorphic**

Functional leaf type in woody plants: **needle-like**

## Flower

Flowering period [month]: **June**

Dicliny: **monoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **wind-pollination**

## Fruit, seed and dispersal

Reproduction type: **only by seed/spores**

Dispersal unit (diaspore): **seed, fruit, infructescence or its part**

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

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]: **37819.27**

1Cx monoploid genome size [Mbp]: **18909.64**

Genomic GC content: **40.5 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

### Ellenberg-type indicator values

Light indicator value: **7 - half-light plant, mostly occurring at full light, but also in the shade up to about 30% of diffuse radiation incident in an open area**

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



Moisture indicator value: **8 - transition between values 7 and 9**

Reaction indicator value: **1 - indicator of strong acidity, never occurring in slightly acidic to alkaline conditions**

Nutrient indicator value: **1 - occurring at nutrient-poorest sites**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-2**

Herb layer disturbance frequency indicator value: **-1.59**

Whole-community disturbance severity indicator value: **0.1**

Herb layer disturbance severity indicator value: **0**

Whole-community structure based disturbance indicator value: **0.07**

Herb layer structure-based disturbance indicator value: **0.03**

## Habitat and sociology

Occurrence in habitats

5 Vegetation of springs and mires

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**

5F Transitional mires: **1 - rare occurrence**

5G Raised bogs: **3 - dominant**

11 Heathlands and scrub

11D Subalpine acidophilous *Pinus mugo* scrub: **2 - optimum**

12 Forests

12P Peatland pine forests: **3 - dominant**

12Q Peatland birch forests: **1 - rare occurrence**

12R Acidophilous spruce forests: **1 - rare occurrence**

Affinity to the forest environment

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: [LFD \*Vaccinio uliginosi-Pinion sylvestris\*](#)

Diagnostic taxon of associations: [LFD02 \*Vaccinio uliginosi-Pinetum sylvestris\*](#),  
[LFD03 \*Vaccinio-Pinetum montanae\*](#), [RCA05 \*Ledo palustris-Pinetum uncinatae\*](#)

Constant taxon

Constant taxon of associations: [LFD03 \*Vaccinio-Pinetum montanae\*](#), [RCA05 \*Ledo palustris-Pinetum uncinatae\*](#)

Dominant taxon

Dominant taxon of associations: [LFD03 \*Vaccinio-Pinetum montanae\*](#), [RCA05 \*Ledo palustris-Pinetum uncinatae\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **7.2**

Ecological specialization index for non-forest vegetation: **6.3**

Ecological specialization index for forest vegetation: **7.2**

Colonization ability

Index of colonization success (ICS): **4**

Index of colonization potential (ICP): **8**

Optimum successional age [years]: **75**

## Distribution and frequency

Floristic zone: **southern temperate, submeridional**

Floristic region: **Europe**

Continentality degree: **5**

Distribution range extension along the continentality gradient: **3**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **42**

taxon.data.freq\_in\_quad: **63**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **76.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **54.9 %**

Occurrence frequency in vegetation plots with a cover above 50%: **25.5 %**

Mean percentage cover in vegetation plots: **33.4 %**

Maximum percentage cover in vegetation plots: **94 %**

Number of habitats with taxon occurrence in the Czech Republic

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

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

Number of broad habitats in which the taxon occurs: **3**

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

## Threats and protection

Red List 2017 (national categories): **C2b - endangered taxon, rare and declining**

Red List 2017 (IUCN categories): **EN - endangered**

Legal protection: **not protected by law**