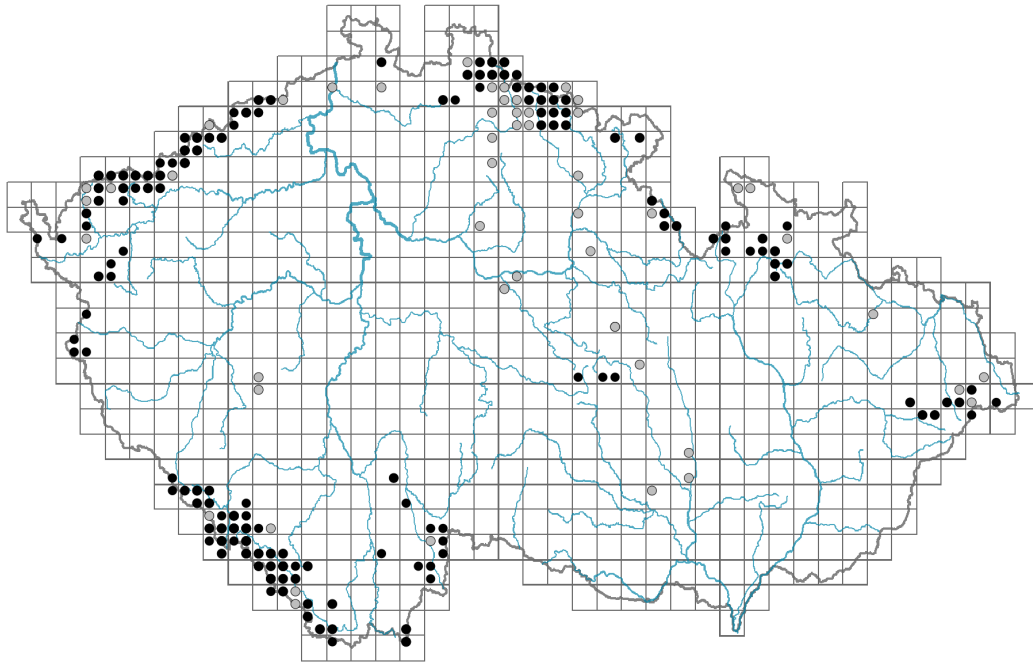


# *Pinus mugo* agg.

## Distribution



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### 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]: **0.3-20**

Growth form: **shrub, tree**

Life form: **macrophanerophyte, nanophanerophyte**

Life strategy: **C - competitor**

## 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-July**

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

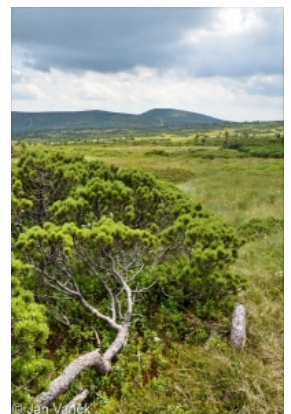
Dicliny: **monoecious**



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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): **15**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **15**

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): **30**

Depth of the belowground bud bank (root buds excluded) [cm]: **3**

Number of buds per shoot at the soil surface (root buds included): **15**

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): **0**

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

Depth of the belowground bud bank (root buds included) [cm]: **3**

### 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]: **37646.9**

1Cx monoploid genome size [Mbp]: **18823.45**

### Taxon origin

Origin in the Czech Republic: **native**

### Ecological indicator values

#### Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**

Temperature indicator value: **3 - cool indicator, occurring mainly in subalpine areas**

Moisture indicator value: **7x - humidity indicator, focus on well moistened, but not wet soils (generalist)**

Reaction indicator value: **3x - acidity indicator, occurring mainly in acidic**



**conditions, exceptionally in neutral conditions (generalist)**

Nutrient indicator value: **2 - transition between values 1 and 3**

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

## 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

2A Alpine grasslands on siliceous bedrock: **2 - optimum**

2B Subalpine tall-forb and tall-grass vegetation: **2 - optimum**

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**

6 Meadows and mesic pastures

6B Montane mesic meadows: **1 - rare occurrence**

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **2 - optimum**

11 Heathlands and scrub

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

11D Subalpine acidophilous *Pinus mugo* scrub: **4 - constant dominant**

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

12 Forests

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

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

12R Acidophilous spruce forests: **2 - optimum**

12S Basiphilous spruce forests: **1 - rare occurrence**

## Distribution and frequency

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

Floristic region: **Europe**

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

Expansive taxon in the region: **Bohemian Moravian Oreophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 159

taxon.data.freq\_in\_quad: 259

Commonness in vegetation plots from the Czech Republic

Maximum percentage cover in vegetation plots: **99 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **15**

Number of narrow habitats in which the taxon has its optimum: **7**

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

Number of broad habitats in which the taxon has its optimum: **5**

