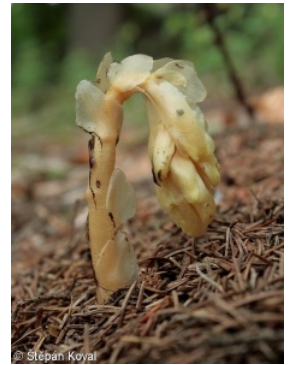
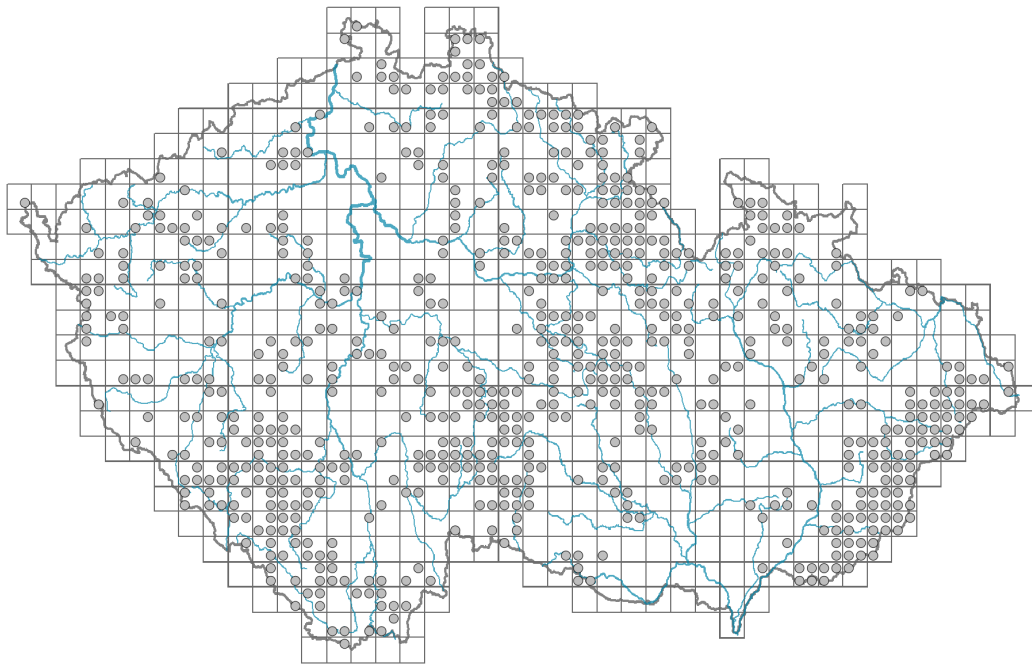


# *Monotropa hypopitys*

## Distribution



© Štěpán Koyan

### Map info

● revised records

○ unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



© Aleš Moravec

## Habitus and growth type

Height [m]: **0.05-0.3**

Growth form: **clonal herb**

Life form: **geophyte**

## Leaf

Leaf presence and metamorphosis: **leaves reduced to scales**

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Leaf anatomy: **mesomorphic**

## Flower

Flowering period [month]: **June-August**

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

Flower colour: **yellow**

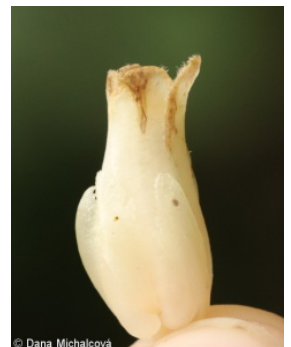
Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **synsepalous**

Inflorescence type: **racemus**



© Dana Michalčová

Dicliny: **synoecious**

Generative reproduction type: **autogamy**

Pollination syndrome: **insect-pollination, selfing**

## 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: **Lycopodium (mainly anemochory)**

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

## Belowground organs and clonality

Root metamorphosis: **root shoot**

## Trophic mode

Parasitism and mycoheterotrophy: **full mycoheterotroph**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **48**

Ploidy level (x): **6**

2C genome size [Mbp]: **5379.97**

1Cx monoploid genome size [Mbp]: **896.66**

Genomic GC content: **42.7 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **3 - shade plant, usually occurring where the incident radiation is less than 5% of that in an open area, but also at sunnier sites**

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**

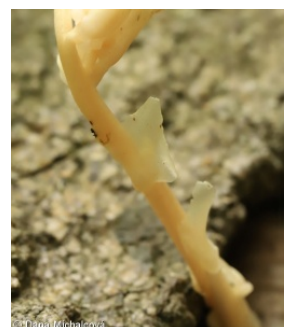
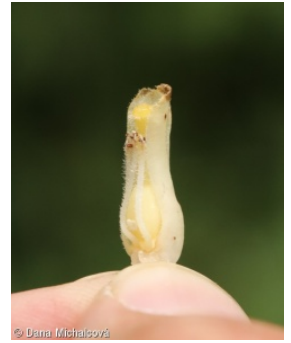
Reaction indicator value: **4 - transition between values 3 and 5**

Nutrient indicator value: **3 - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich 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: **-0.7**  
Whole-community disturbance severity indicator value: **0.19**  
Herb layer disturbance severity indicator value: **0**  
Whole-community structure based disturbance indicator value: **0.03**  
Herb layer structure-based disturbance indicator value: **0.05**

## Habitat and sociology

### Occurrence in habitats

#### 12 Forests

12D Ravine forests: **1 - rare occurrence**  
12E Herb-rich beech forests: **2 - optimum**  
12F Limestone beech forests: **1 - rare occurrence**  
12G Acidophilous beech forests: **2 - optimum**  
12K Acidophilous oak forests: **1 - rare occurrence**  
12L Boreo-continental pine forests: **2 - optimum**  
12R Acidophilous spruce forests: **1 - rare occurrence**  
12V Spruce plantations: **2 - optimum**  
12W Pine and larch plantations: **1 - rare occurrence**

### Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **1.1 - taxon occurring mainly in the closed forest**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.1 - taxon occurring mainly in the closed forest**

### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.9**  
Ecological specialization index for forest vegetation: **4.8**

### Colonization ability

Index of colonization success (ICS): **1**

## Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional, subtropical**

Floristic region: **circumpolar**

Continentality degree: **3**

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

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: 372

taxon.data.freq\_in\_quad: 710

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **0 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **1.5 %**

Maximum percentage cover in vegetation plots: **2 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **9**

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

Number of broad habitats in which the taxon occurs: **1**

Number of broad habitats in which the taxon has its optimum: **1**

### **Threats and protection**

Red List 2017 (national categories): **C3 - vulnerable taxon**

Red List 2017 (IUCN categories): **VU - vulnerable**

Legal protection: **not protected by law**