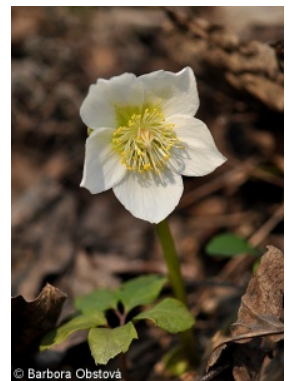
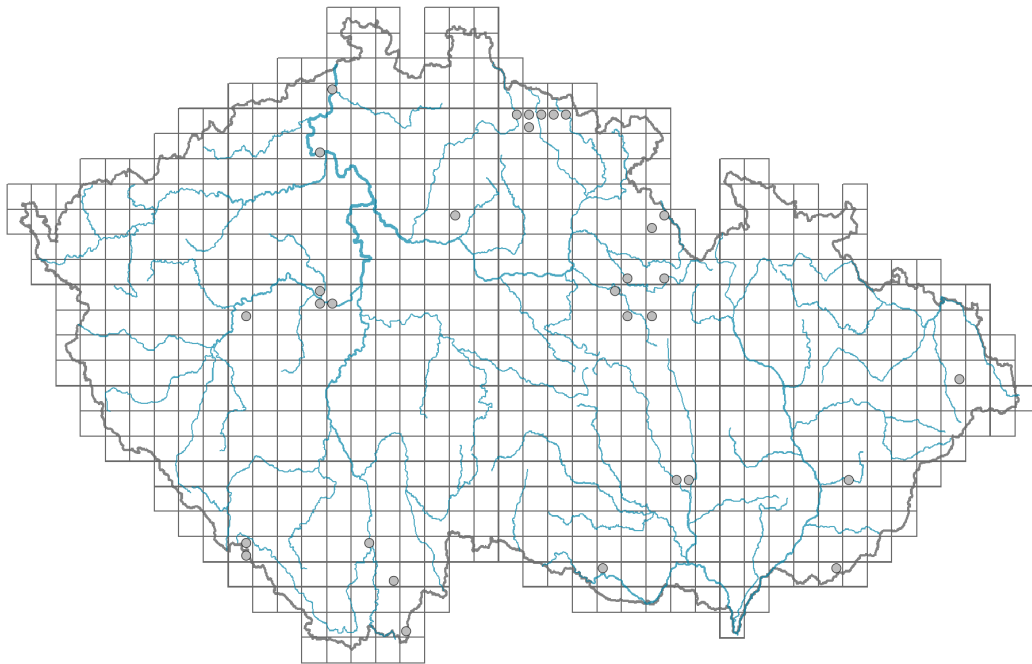


Helleborus niger

Distribution

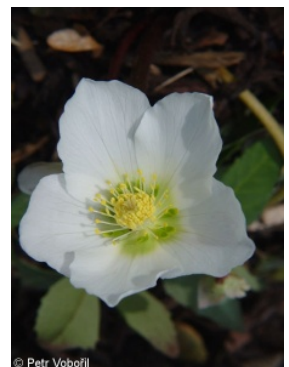
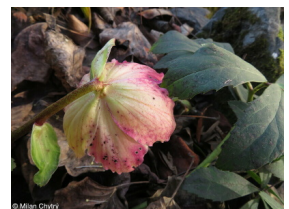


Map info

● 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]: **0.15-0.3**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CS - competitor/stress-tolerator**

Life strategy (Pierce method based on leaf traits): **C/CS**

Life strategy (Pierce method, C-score): **80.3 %**

Life strategy (Pierce method, S-score): **16.2 %**

Life strategy (Pierce method, R-score): **3.5 %**

Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - pedate**

Stipules: **absent**

Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **scleromorphic**

Flower

Flowering period [month]: **January-March**

Flower colour: **white**
 Flower symmetry: **actinomorphic**
 Perianth type: **homochlamydeous**
 Perianth fusion: **free**
 Inflorescence type: **flores solitarii**
 Dicliny: **synoecious**
 Generative reproduction type: **mixed mating**
 Pollination syndrome: **selfing**

Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of follicles**
 Fruit colour: **green, brown, grey**
 Reproduction type: **by seed/spores and vegetatively**
 Dispersal unit (diaspore): **seed**
 Dispersal strategy: **Allium (mainly autochory)**
 Myrmecochory: **myrmecochorous**

Belowground organs and clonality

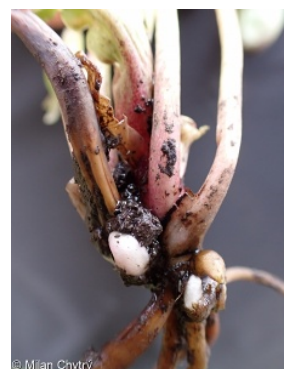
Shoot metamorphosis: **rhizome**
 Storage organ: **rhizome**
 Type of clonal growth organ: **epigeogenous rhizome**
 Freely dispersible organs of clonal growth: **absent**
 Shoot life span (cyclicality): **monocyclic shoots prevailing**
 Branching type of stem-derived organs of clonal growth: **sympodial**
 Primary root: **absent**
 Persistence of the clonal growth organ [year]: **4**
 Number of clonal offspring: **1**
 Lateral spreading distance by clonal growth [m]: **0.13**
 Clonal index: **4**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **5**
 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): **20**
 Depth of the belowground bud bank (root buds excluded) [cm]: **4**
 Number of buds per shoot at the soil surface (root buds included): **5**
 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): **20**
 Depth of the belowground bud bank (root buds included) [cm]: **4**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
 Carnivory: **non-carnivorous**
 Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**



Taxon origin

Origin in the Czech Republic: **archaeophyte/neophyte**

Invasion status: **casual**

Geographic origin: **Europe, Mediterranean**

Year of the first record in the wild: **1874**

Period of introduction: **Late Middle Ages and Early Modern Period (merged category, 1200-1800)**

Introduction pathway: **intentional - ornamental**

Ecological indicator values

Ellenberg-type indicator values

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

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: **8 - transition between values 7 and 9, occurring mostly in calcium-rich conditions**

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

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

Habitat and sociology

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Distribution and frequency

Floristic zone: **southern temperate, submeridional**

Floristic region: **Europe**

Continental degree: **4**

Distribution range extension along the continentality gradient: **2**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **24**

taxon.data.freq_in_quad: **31**

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**