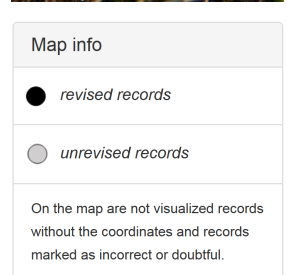
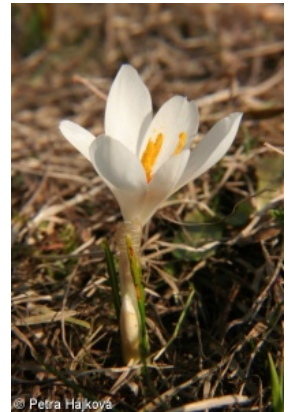
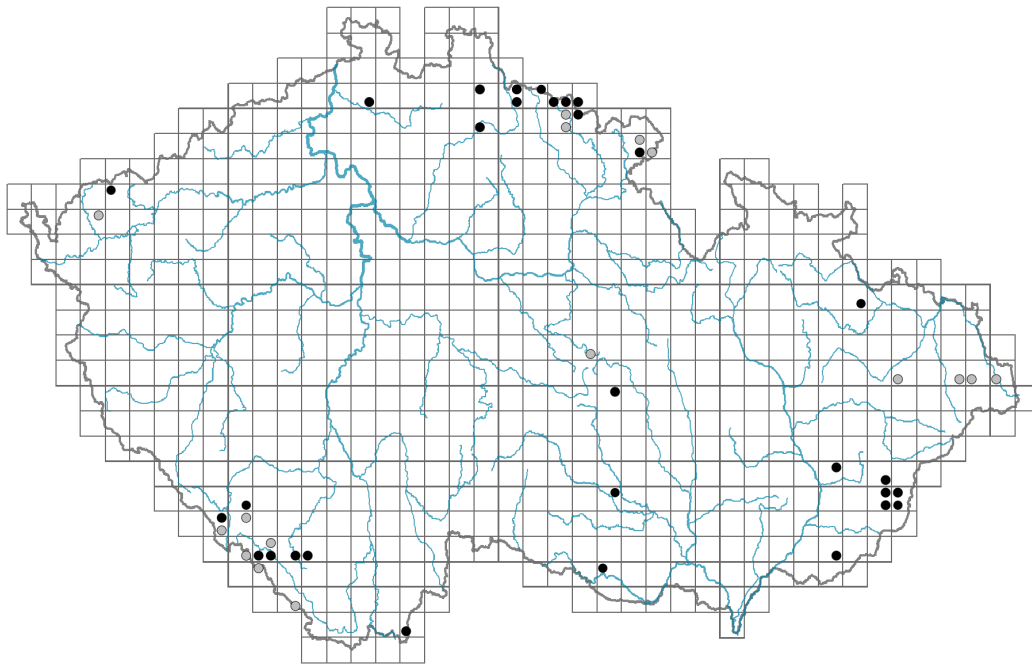


# *Crocus vernus*

## Distribution



## Habitus and growth type

Height [m]: **0.05-0.15**

Growth form: **clonal herb**

Life form: **geophyte**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

## Leaf

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

Leaf arrangement (phyllotaxis): **rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **spring green**

Leaf anatomy: **mesomorphic**

## Flower

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

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

Flower colour: **white, violet**

Flower symmetry: **actinomorphic**

Perianth type: **homochlamydeous**



Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **funnel-shaped**

Inflorescence type: **flores solitarii**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

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

### Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

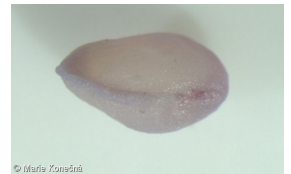
Fruit colour: **brown**

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

Dispersal unit (diaspore): **seed**

Dispersal strategy: **Allium (mainly autochory)**

Myrmecochory: **myrmecochorous, probably myrmecochorous**



### Belowground organs and clonality

Shoot metamorphosis: **shoot tuber**

Storage organ: **shoot tuber**

Type of clonal growth organ: **belowground stem tuber**

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]: **1.3**

Number of clonal offspring: **1**

Lateral spreading distance by clonal growth [m]: **0.01**

Clonal index: **3**

#### 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): **5**

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): **5**

Depth of the belowground bud bank (root buds excluded) [cm]: **5**

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): **5**

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): **5**

Depth of the belowground bud bank (root buds included) [cm]: **5**

### Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **8**

Ploidy level (x): **2**

2C genome size [Mbp]: **4416.74**

1Cx monoploid genome size [Mbp]: **2208.37**

Genomic GC content: **43.7 %**

## 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: **3 - cool indicator, occurring mainly in subalpine 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: **6 - transition between values 5 and 7**

Nutrient indicator value: **4x - transition between values 3 and 5 (generalist)**

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

## Habitat and sociology

Occurrence in habitats

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

6B Montane mesic meadows: **2 - optimum**

6C Pastures and park grasslands: **1 - rare occurrence**

6E Wet Cirsium meadows: **1 - rare occurrence**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **1 - rare occurrence**

12 Forests

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

Affinity to the forest environment

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

Colonization ability

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

## Distribution and frequency

Floristic zone: **southern temperate, submeridional**

Floristic region: **Europe**

Continental degree: **4**

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

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 40

taxon.data.freq\_in\_quad: 50

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**

Occurrence frequency in vegetation plots with a cover above 5%: **66.7 %**

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: **9.3 %**

Maximum percentage cover in vegetation plots: **13 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **6**

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

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

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

### **Threats and protection**

Red List 2017 (national categories): **C2r - endangered taxon, rare**

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

Legal protection: **endangered taxon**