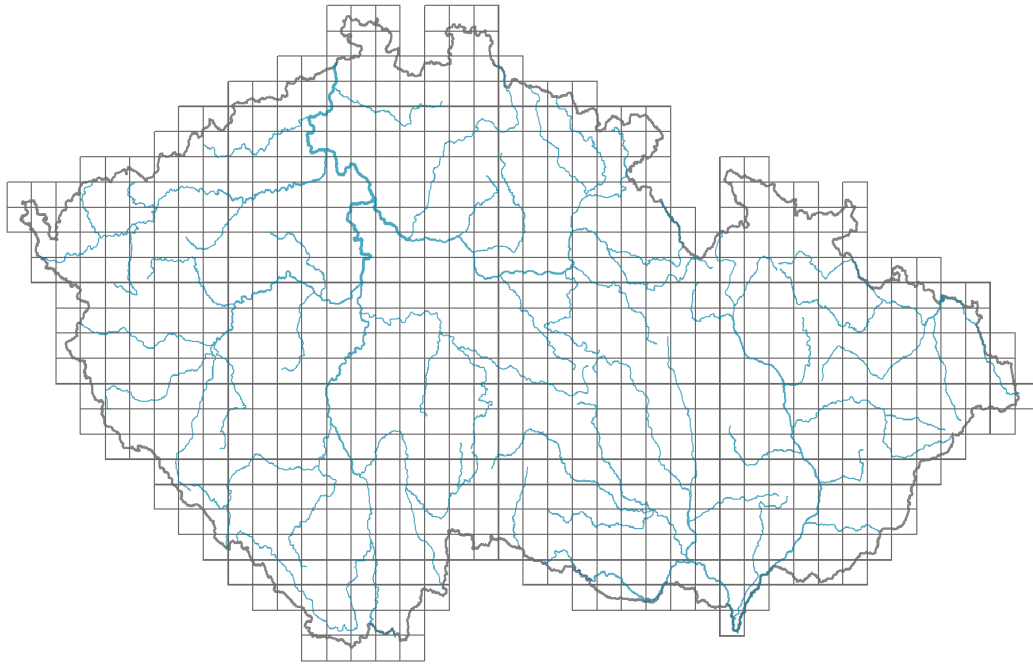


# *Viola rupestris* subsp. *rupestris*

## Distribution

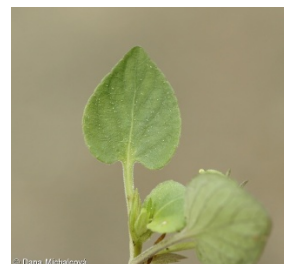


### Map info

● 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]: **0.05-0.1**

Growth form: **polycarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

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

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate, rosulate**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**

## Flower

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

Flowering phase: **3 Prunus avium-Ranunculus auricomus (end of early spring)**

Flower colour: **blue-violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**  
Calyx fusion: **aposepalous**  
Inflorescence type: **flores solitarii**  
Dicliny: **synoecious**  
Generative reproduction type: **mixed mating**  
Pollination syndrome: **insect-pollination, cleistogamy**

### Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**  
Reproduction type: **only by seed/spores**  
Dispersal unit (diaspore): **seed**  
Dispersal strategy: **Allium (mainly autochory)**  
Myrmecochory: **myrmecochorous**



### Belowground organs and clonality

Shoot metamorphosis: **pleiocorm**  
Storage organ: **pleiocorm**  
Primary root: **present**  
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**

### Karyology

Chromosome number (2n): **20**  
Ploidy level (x): **4**  
2C genome size [Mbp]: **977.11**  
1Cx monoploid genome size [Mbp]: **244.28**  
Genomic GC content: **39.8 %**

### 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: **6 - transition between values 5 and 7**

Moisture indicator value: **3 - missing on damp soil**

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

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

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

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.28**

Herb layer disturbance frequency indicator value: **-0.43**

Whole-community disturbance severity indicator value: **0.19**

Herb layer disturbance severity indicator value: **0.19**

Whole-community structure based disturbance indicator value: **0.37**

Herb layer structure-based disturbance indicator value: **0.5**

## Habitat and sociology

### Occurrence in habitats

#### 8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**

8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**

8D Broad-leaved dry grasslands: **1 - rare occurrence**

8E Acidophilous dry grasslands: **2 - optimum**

#### 12 Forests

12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**

12L Boreo-continental pine forests: **1 - rare occurrence**

12O Peri-Alpidic pine forests: **2 - optimum**

12W Pine and larch plantations: **1 - rare occurrence**

### Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

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: [\*\*LFA Festuco-Pinion sylvestris\*\*](#)

Diagnostic taxon of associations: [\*\*LFA01 Festuco-Pinetum sylvestris\*\*](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **6.1**

Ecological specialization index for non-forest vegetation: **6.8**

Ecological specialization index for forest vegetation: **5.8**

### Colonization ability

Index of colonization success (ICS): **2**

Index of colonization potential (ICP): **5**

Optimum successional age [years]: **18**

## Distribution and frequency

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

Floristic region: **Europe, Asia**

Continentality degree: **6**

Distribution range extension along the continentality gradient: **6**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **151**

taxon.data.freq\_in\_quad: **281**

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: **2 %**

Maximum percentage cover in vegetation plots: **3 %**

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: **2**

Number of broad habitats in which the taxon has its optimum: **2**

## Threats and protection

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

Red List 2017 (IUCN categories): **NT - near threatened**

Legal protection: **not protected by law**