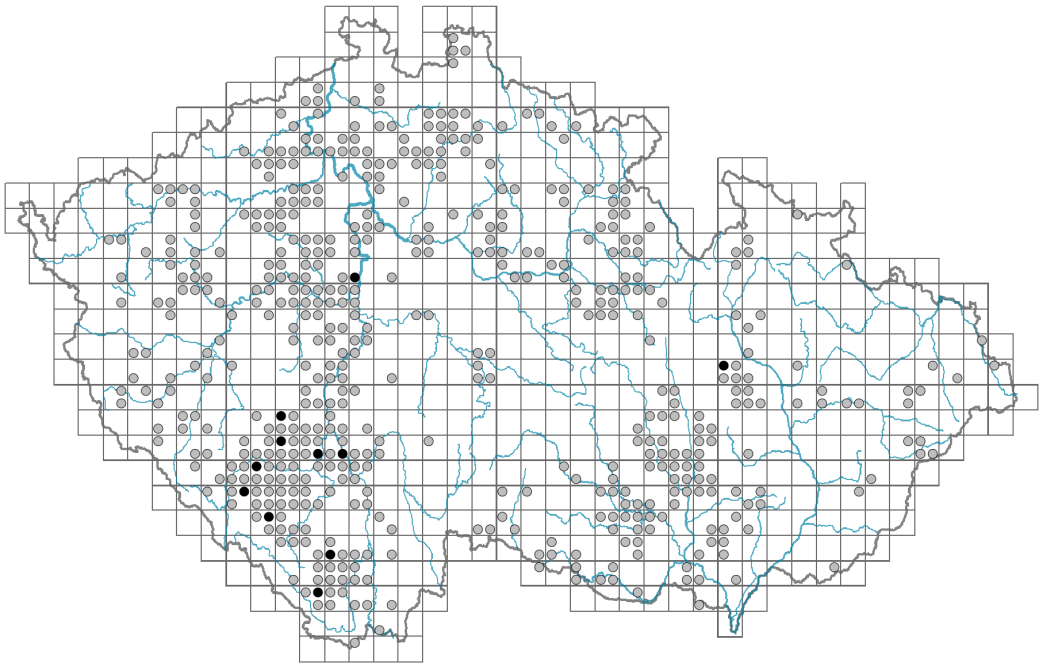
Viola collina

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]: **0.05–0.2**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **CSR – competitor/stress-tolerator/ruderal**

Leaf

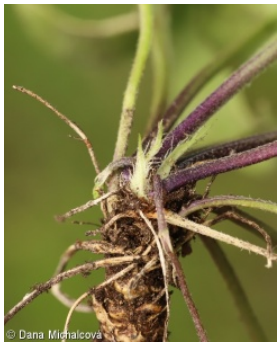
Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **rosulate**
Leaf shape: **simple – entire**
Stipules: **present**
Petiole: **present**
Leaf life span: **summer green**
Leaf anatomy: **mesomorphic**

Flower

Flowering period [month]: **March–May**
Flowering phase: **2 Acer platanoides-Anemone nemorosa (start of early spring)**
Flower colour: **white, blue-violet**
Flower symmetry: **zygomorphic**
Perianth type: **calyx and corolla**

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz

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**
Fruit colour: **brown**
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 (cyclicity): **monocyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **monopodial**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **4**
Number of clonal offspring: **0.5**
Lateral spreading distance by clonal growth [m]: **0.01**
Clonal index: **2**



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 exluded) [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]: **1234.85**
1Cx monoploid genome size [Mbp]: **308.71**
Genomic GC content: **40.8 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 – transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**
Temperature indicator value: **5 – moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**
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: **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: **-1.63**
Herb layer disturbance frequency indicator value: **-0.97**
Whole-community disturbance severity indicator value: **0.24**
Herb layer disturbance severity indicator value: **0.15**
Whole-community structure based disturbance indicator value: **0.13**
Herb layer structure-based disturbance indicator value: **0.12**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 – rare occurrence**
1D Mobile calcareous screes: **1 – rare occurrence**

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 – rare occurrence**
8B Submediterranean dry grasslands on rock outcrops: **2 – optimum**
8D Broad-leaved dry grasslands: **1 – rare occurrence**
8F Thermophilous forest fringe vegetation: **2 – optimum**

9 Sand grasslands and rock-outcrop vegetation

9C Festuca grasslands on acidic sands: **1 – rare occurrence**
9F Basiphilous vegetation of spring therophytes and succulents: **1 – rare occurrence**

11 Heathlands and scrub

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz

11L Tall mesic and xeric shrub: **2 – optimum**
11N Low xeric scrub: **2 – optimum**

12 Forests

12C Oak-hornbeam forests: **1 – rare occurrence**
12D Ravine forests: **2 – optimum**
12F Limestone beech forests: **2 – optimum**
12H Peri-Alpidic basiphilous thermophilous oak forests: **2 – optimum**
12I Sub-continental thermophilous oak forests: **1 – rare occurrence**
12J Acidophilous thermophilous oak forests: **1 – rare occurrence**
12L Boreo-continental pine forests: **1 – rare occurrence**
12O Peri-Alpidic pine forests: **2 – optimum**
12T Robinia pseudacacia plantations: **1 – rare occurrence**
12U Plantations of broad-leaved non-native trees: **1 – rare occurrence**
12W Pine and larch plantations: **2 – optimum**

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**

Diagnostic taxon

Diagnostic taxon of alliances: **LBD *Sorbo-Fagion sylvaticae***
Diagnostic taxon of associations: **KBB03 *Populo tremulae-Coryletum avellanae***, **LBD01 *Cephalanthero damasonii-Fagetum sylvaticae***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4**
Ecological specialization index for non-forest vegetation: **4.2**
Ecological specialization index for forest vegetation: **4.5**

Colonization ability

Index of colonization success (ICS): **3**
Index of colonization potential (ICP): **3**
Optimum successional age [years]: **13**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional**
Floristic region: **Europe, Asia**
Continentality degree: **6**
Distribution range extension along the continentality gradient: **5**
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: 266
taxon.data.freq_in_quad: 524

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.3 %**
Occurrence frequency in vegetation plots with a cover above 5%: **2.9 %**
Occurrence frequency in vegetation plots with a cover above 25%: **1 %**
Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz

Mean percentage cover in vegetation plots: **2.6 %**
Maximum percentage cover in vegetation plots: **38 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **21**
Number of narrow habitats in which the taxon has its optimum: **9**
Number of broad habitats in which the taxon occurs: **5**
Number of broad habitats in which the taxon has its optimum: **3**

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**

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz