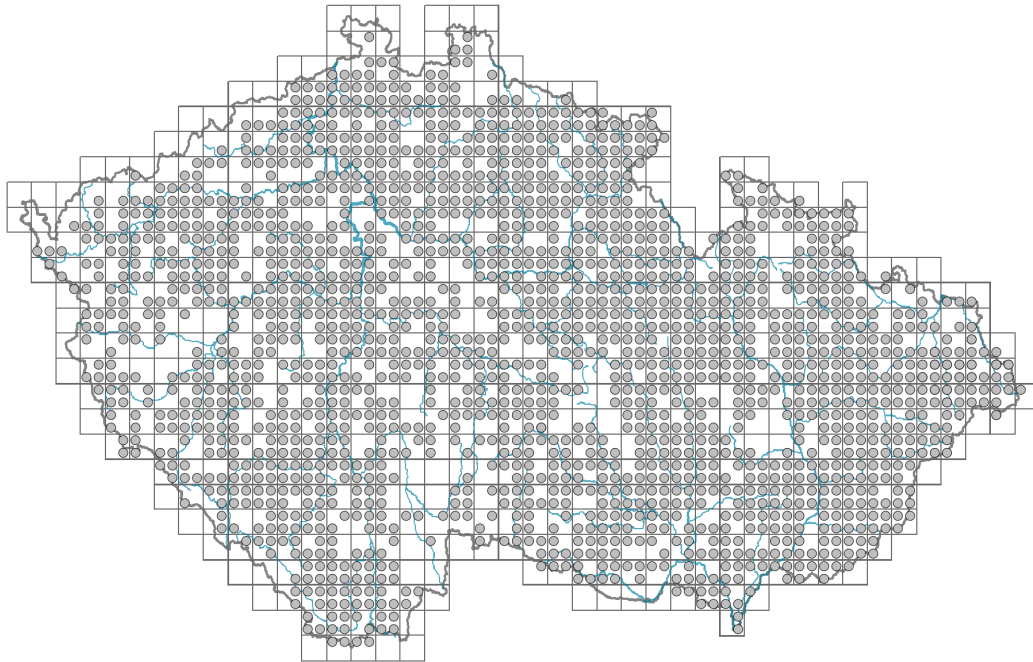


# Clinopodium vulgare

## Distribution



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### 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]: **0.1-0.8**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

Life strategy (Pierce method based on leaf traits): **CSR**

Life strategy (Pierce method, C-score): **25.6 %**

Life strategy (Pierce method, S-score): **38.2 %**

Life strategy (Pierce method, R-score): **36.3 %**



© Dana Michalcová

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**

## Flower

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

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **white, pink, pink-violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **bilabiate**

Calyx fusion: **synsepalous**

Inflorescence type: **pseudospica e verticillastris composita**

Dicliny: **gynomonoecious, gynodioecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination**

Pollinator spectrum: **bumblebees (honeybee, solitary bees, hoverflies, unknown)**

## Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of four one-seeded nutlets**

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

Dispersal unit (diaspore): **fruit, infrutescence or its part**

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

Myrmecochory: **myrmecochorous**

## Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

Type of clonal growth organ: **hypogeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

Shoot life span (cyclicity): **monocyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **sympodial**

Primary root: **absent**

Persistence of the clonal growth organ [year]:

Number of clonal offspring: **3.5**

Lateral spreading distance by clonal growth [m]: **0.13**

Clonal index: **5**

## Bud bank

Number of buds per shoot at the soil surface (root buds excluded):

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **13**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

Size of the belowground bud bank (root buds excluded): **18**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

Number of buds per shoot at the soil surface (root buds included):

Number of buds per shoot at a depth of 0–10 cm (root buds included): **13**

Number of buds per shoot at a depth greater than 10 cm (root buds included):

Size of the belowground bud bank (root buds included): **18**

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): **2**

2C genome size [Mbp]: **825.52**

1Cx monoploid genome size [Mbp]: **412.76**

Genomic GC content: **40.3 %**



## 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: **6x - transition between values 5 and 7 (generalist)**

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

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

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

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.72**

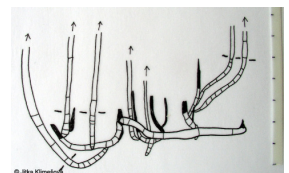
Herb layer disturbance frequency indicator value: **-0.69**

Whole-community disturbance severity indicator value: **0.26**

Herb layer disturbance severity indicator value: **0.17**

Whole-community structure based disturbance indicator value: **0.2**

Herb layer structure-based disturbance indicator value: **0.28**



## Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

6 Meadows and mesic pastures

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

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

7 Acidophilous grasslands

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

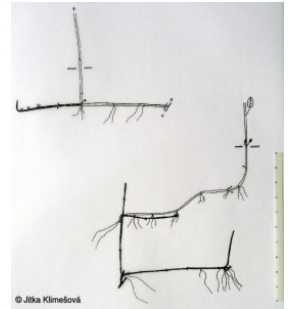
8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**

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

- 8D Broad-leaved dry grasslands: **2 - optimum**  
 8E Acidophilous dry grasslands: **1 - rare occurrence**  
 8F Thermophilous forest fringe vegetation: **2 - optimum**  
 11 Heathlands and scrub  
 11A Dry lowland to subalpine heathlands: **1 - rare occurrence**  
 11H Subalpine deciduous scrub: **1 - rare occurrence**  
 11L Tall mesic and xeric shrub: **2 - optimum**  
 11N Low xeric scrub: **2 - optimum**  
 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**  
 12 Forests  
 12A Alder carrs: **1 - rare occurrence**  
 12B Alluvial forests: **1 - rare occurrence**  
 12C Oak-hornbeam forests: **2 - optimum**  
 12D Ravine forests: **2 - optimum**  
 12E Herb-rich beech forests: **1 - rare occurrence**  
 12F Limestone beech forests: **2 - optimum**  
 12G Acidophilous beech forests: **1 - rare occurrence**  
 12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**  
 12I Sub-continental thermophilous oak forests: **2 - optimum**  
 12J Acidophilous thermophilous oak forests: **2 - optimum**  
 12K Acidophilous oak forests: **1 - rare occurrence**  
 12L Boreo-continental pine forests: **1 - rare occurrence**  
 12O Peri-Alpidic pine forests: **1 - rare occurrence**  
 12T Robinia pseudacacia plantations: **1 - rare occurrence**  
 12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**  
 12V Spruce plantations: **1 - rare occurrence**  
 12W Pine and larch plantations: **1 - rare occurrence**  
 13 Anthropogenic vegetation  
 13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**  
 13F Herbaceous vegetation of forests clearings and Rubus scrub: **2 - optimum**



#### Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **1.2 - taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.2 - taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**

#### Diagnostic taxon

Diagnostic taxon of classes: [LC Quercetea pubescentis](#)

Diagnostic taxon of alliances: [LCA Quercion pubescenti-petraeae](#), [LCB Aceri tatarici-Quercion](#), [LCC Quercion petraeae](#)

Diagnostic taxon of associations: [KBB03 Populo tremulae-Coryletum avellanae](#), [LBB04 Primulo veris-Carpinetum betuli](#), [LCA02 Lithospermo purpureocaerulei-Quercetum pubescentis](#), [LCA03 Euphorbio-Quercetum](#), [LCB02 Carici fritschii-Quercetum roboris](#)

#### Constant taxon

Constant taxon of alliances: [LCA Quercion pubescenti-petraeae](#), [LCB Aceri tatarici-Quercion](#)



Constant taxon of associations: [KBB03 \*Populo tremulae-Coryletum avellanae\*](#),  
[LBB04 \*Primulo veris-Carpinetum betuli\*](#), [LCA02 \*Lithospermo purpureocaerulei-Quercetum pubescentis\*](#), [LCA03 \*Euphorbio-Quercetum\*](#), [LCB02 \*Carici fritschii-Quercetum roboris\*](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **4.2**

Ecological specialization index for non-forest vegetation: **4.4**

Ecological specialization index for forest vegetation: **5.2**

### Colonization ability

Index of colonization success (ICS): **7**

Index of colonization potential (ICP): **7**

Optimum successional age [years]: **32**

### Distribution and frequency

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

Floristic region: **Europe, Americas**

Distribution range extension along the continentality gradient: **5**

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: **608**

taxon.data.freq\_in\_quad: **1802**

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **3.9 %**

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: **2.4 %**

Maximum percentage cover in vegetation plots: **18 %**

### Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **34**

Number of narrow habitats in which the taxon has its optimum: **11**

Number of broad habitats in which the taxon occurs: **7**

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

### 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**