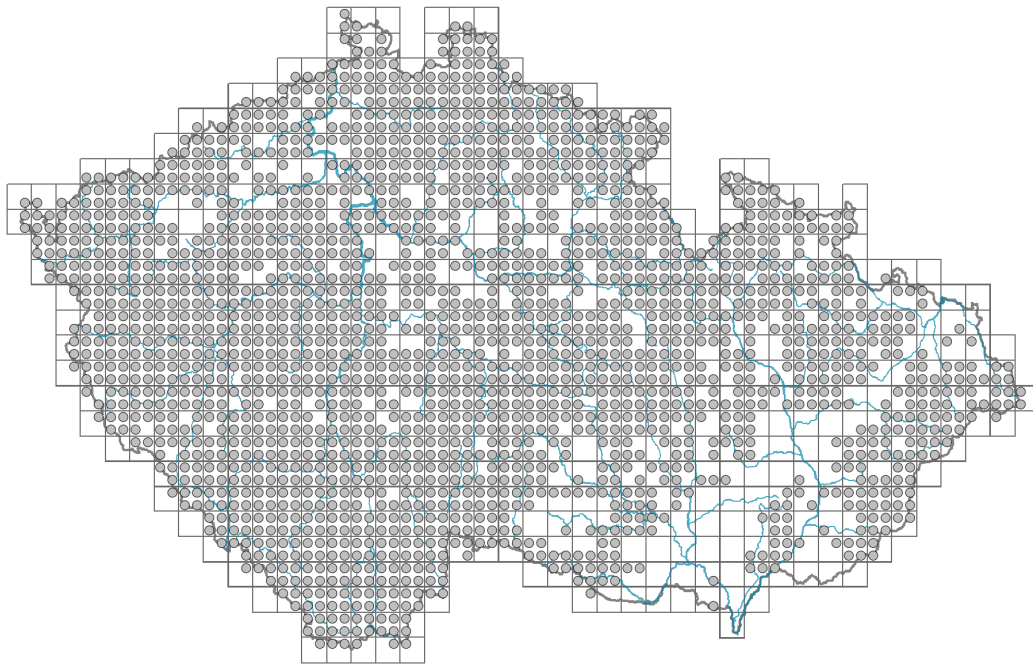


# Calluna vulgaris

## 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]: **0.15-0.5**

Growth form: **dwarf shrub**

Life form: **chamaephyte**

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

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

Life strategy (Pierce method, C-score): **0 %**

Life strategy (Pierce method, S-score): **86.1 %**

Life strategy (Pierce method, R-score): **13.9 %**

## Leaf

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

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

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf deciduousness in woody plants: **evergreen**

Leaf anatomy: **scleromorphic**

Functional leaf type in woody plants: **scale-like, sclerophyllous**



## Flower

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

Flowering phase: **9 Hedera helix-Solidago (early autumn)**

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

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **aposepalous**

Inflorescence type: **racemus**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

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

Pollinator spectrum: **honeybee, bumblebees, hoverflies (solitary bees, other Hymenoptera, flies s. l., meat flies s. l., other Diptera, butterflies, beetles, nitidulids, other pollinators)**

## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Fruit colour: **brown**

Reproduction type: **mostly by seed/spores, rarely vegetatively**

Dispersal unit (diaspore): **seed**

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

Myrmecochory: **non-myrmecochorous (b)**

## Belowground organs and clonality

Shoot metamorphosis: **stolon**

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

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

Primary root: **present**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **12**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **9**

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): **22**

Depth of the belowground bud bank (root buds excluded) [cm]: **3**

Number of buds per shoot at the soil surface (root buds included): **12**

Number of buds per shoot at a depth of 0–10 cm (root buds included): **9**

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): **22**

Depth of the belowground bud bank (root buds included) [cm]: **3**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



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## Karyology

Chromosome number (2n): **16**

Ploidy level (x): **2**

2C genome size [Mbp]: **1044.89**

1Cx monoploid genome size [Mbp]: **522.44**

Genomic GC content: **42.3 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

### Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**

Temperature indicator value: **5x - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**

Moisture indicator value: **5x - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out (generalist)**

Reaction indicator value: **1 - indicator of strong acidity, never occurring in slightly acidic to alkaline conditions**

Nutrient indicator value: **1 - occurring at nutrient-poorest sites**

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

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.68**

Herb layer disturbance frequency indicator value: **-1.25**

Whole-community disturbance severity indicator value: **0.21**

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

Whole-community structure based disturbance indicator value: **0.29**

Herb layer structure-based disturbance indicator value: **0.3**

## Habitat and sociology

### Occurrence in habitats

#### 1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

1B Siliceous cliffs and block fields: **2 - optimum**

#### 2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **2 - optimum**

2B Subalpine tall-forb and tall-grass vegetation: **2 - optimum**

#### 5 Vegetation of springs and mires

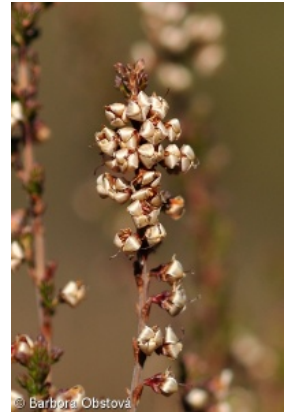
5C Alpine and subalpine soft-water springs: **1 - rare occurrence**

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**

5F Transitional mires: **1 - rare occurrence**

5G Raised bogs: **3 - dominant**

5H Wet peat soils and bog hollows: **2 - optimum**



## 6 Meadows and mesic pastures

6F Intermittently wet *Molinia* meadows: **1 - rare occurrence**

## 7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **2 - optimum**7B Submontane *Nardus* grasslands: **2 - optimum**

## 8 Dry grasslands

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

## 9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **2 - optimum**9C *Festuca* grasslands on acidic sands: **1 - rare occurrence**9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

## 11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **3 - dominant**11D Subalpine acidophilous *Pinus mugo* scrub: **2 - optimum**11H Subalpine deciduous scrub: **1 - rare occurrence**11N Low xeric scrub: **1 - rare occurrence**11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

## 12 Forests

12G Acidophilous beech forests: **1 - rare occurrence**12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**12I Sub-continental thermophilous oak forests: **1 - rare occurrence**12J Acidophilous thermophilous oak forests: **1 - rare occurrence**12K Acidophilous oak forests: **2 - optimum**12L Boreo-continental pine forests: **3 - dominant**12O Peri-Alpidic pine forests: **1 - rare occurrence**12P Peatland pine forests: **2 - optimum**12Q Peatland birch forests: **2 - optimum**12R Acidophilous spruce forests: **2 - optimum**12S Basiphilous spruce forests: **1 - rare occurrence**12V Spruce plantations: **1 - rare occurrence**12W Pine and larch plantations: **1 - rare occurrence**

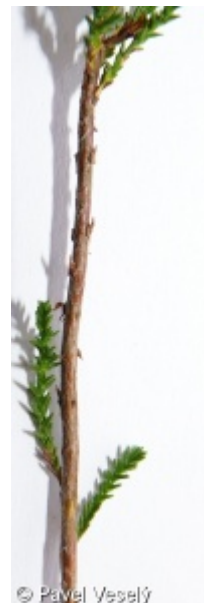
## 13 Anthropogenic vegetation

13F Herbaceous vegetation of forests clearings and *Rubus* scrub: **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 classes: [AB \*Juncetea trifidi\*](#), [AC \*Elyno-Seslerietea\*](#), [LF \*Vaccinio-Piceetea\*](#), [RC \*Oxycocco-Sphagnetea\*](#)Diagnostic taxon of alliances: [ABA \*Juncion trifidi\*](#), [ACA \*Agrostion alpinae\*](#), [LFB \*Dicrano-Pinion sylvestris\*](#), [LFD \*Vaccinio uliginosi-Pinion sylvestris\*](#), [RCA](#)

***Sphagnion magellanici*, *RCB Oxycocco palustris-Ericion tetralicis*, *RCC Oxycocco microcarpi-Empetrium hermaphroditi*, *TEE Euphorbio cyparissiae-Callunium vulgare*, *TEF Genisto pilosae-Vaccinium***

Diagnostic taxon of associations: ***AAA01 Avenello flexuosae-Callunetum vulgare*, *ABA01 Cetrario-Festucetum supinae*, *ACA01 Saxifrago oppositifoliae-Festucetum versicoloris*, *LFB01 Cladino-Pinetum sylvestris*, *LFD03 Vaccinio-Pinetum montanae*, *RCA02 Andromedo polifoliae-Sphagnetum magellanici*, *RCA03 Vaccinio uliginosi-Pinetum mugo*, *RCB01 Trichophoro cespitosi-Sphagnetum papillosum*, *RCC02 Empetro nigri-Sphagnetum fuscum*, *TEE01 Euphorbio cyparissiae-Callunetum vulgare*, *TEF01 Vaccinio-Callunetum vulgare***

Constant taxon

Constant taxon of classes: ***AA Loiseleurio-Vaccinietea*, *AB Juncetea trifidi*, *AC Elyno-Seslerietea*, *RC Oxycocco-Sphagnetea*, *TE Calluno-Ulicetea***

Constant taxon of alliances: ***AAA Loiseleurio procumbentis-Vaccinium*, *ABA Juncion trifidi*, *ABB Nardo strictae-Caricion bigelowii*, *ACA Agrostion alpinae*, *ADB Calamagrostion arundinaceae*, *LFA Festuco-Pinion sylvestris*, *LFB Dicrano-Pinion sylvestris*, *LFD Vaccinio uliginosi-Pinion sylvestris*, *RCA Sphagnion magellanici*, *RCB Oxycocco palustris-Ericion tetralicis*, *RCC Oxycocco microcarpi-Empetrium hermaphroditi*, *TEE Euphorbio cyparissiae-Callunium vulgare*, *TEF Genisto pilosae-Vaccinium***

Constant taxon of associations: ***AAA01 Avenello flexuosae-Callunetum vulgare*, *ABA01 Cetrario-Festucetum supinae*, *ABB01 Carici bigelowii-Nardetum strictae*, *ACA01 Saxifrago oppositifoliae-Festucetum versicoloris*, *ACA02 Saxifrago paniculatae-Agrostietum alpinae*, *ADB01 Bupleuro longifoliae-Calamagrostietum arundinaceae*, *LDA03 Vaccinio vitis-idaeae-Quercetum roboris*, *LFA01 Festuco-Pinetum sylvestris*, *LFB01 Cladino-Pinetum sylvestris*, *LFB02 Vaccinio myrtilli-Pinetum sylvestris*, *LFB04 Asplenio cuneifolii-Pinetum sylvestris*, *LFD01 Vaccinio uliginosi-Betuletum pubescentis*, *LFD02 Vaccinio uliginosi-Pinetum sylvestris*, *LFD03 Vaccinio-Pinetum montanae*, *LFD04 Vaccinio uliginosi-Piceetum abietis*, *RBE03 Rhynchosporo albae-Sphagnetum tenelli*, *RCA01 Eriophoro vaginati-Sphagnetum recurvi*, *RCA02 Andromedo polifoliae-Sphagnetum magellanici*, *RCA03 Vaccinio uliginosi-Pinetum mugo*, *RCB01 Trichophoro cespitosi-Sphagnetum papillosum*, *RCC02 Empetro nigri-Sphagnetum fuscum*, *TEE01 Euphorbio cyparissiae-Callunetum vulgare*, *TEF01 Vaccinio-Callunetum vulgare***

Dominant taxon

Dominant taxon of associations: ***AAA01 Avenello flexuosae-Callunetum vulgare*, *LFB02 Vaccinio myrtilli-Pinetum sylvestris*, *LFD01 Vaccinio uliginosi-Betuletum pubescentis*, *RBC02 Drosero anglicae-Rhynchosporium albae*, *RCB01 Trichophoro cespitosi-Sphagnetum papillosum*, *RCC01 Trichophoro cespitosi-Sphagnetum compactum*, *RCC02 Empetro nigri-Sphagnetum fuscum*, *TEE01 Euphorbio cyparissiae-Callunetum vulgare*, *TEF01 Vaccinio-Callunetum vulgare***

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.7**

Ecological specialization index for non-forest vegetation: **3.9**

Ecological specialization index for forest vegetation: **4.7**

Colonization ability

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

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

Optimum successional age [years]: **15**

## Distribution and frequency

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

Floristic region: **Europe, Western Siberia**

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

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

Expansive taxon in the region: **Bohemian Moravian Oreophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **621**

taxon.data.freq\_in\_quad: **2008**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.9 %**

Occurrence frequency in vegetation plots with a cover above 5%: **35.4 %**

Occurrence frequency in vegetation plots with a cover above 25%: **20.8 %**

Occurrence frequency in vegetation plots with a cover above 50%: **10 %**

Mean percentage cover in vegetation plots: **14.5 %**

Maximum percentage cover in vegetation plots: **95 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **39**

Number of narrow habitats in which the taxon has its optimum: **16**

Number of broad habitats in which the taxon occurs: **10**

Number of broad habitats in which the taxon has its optimum: **8**

## 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**