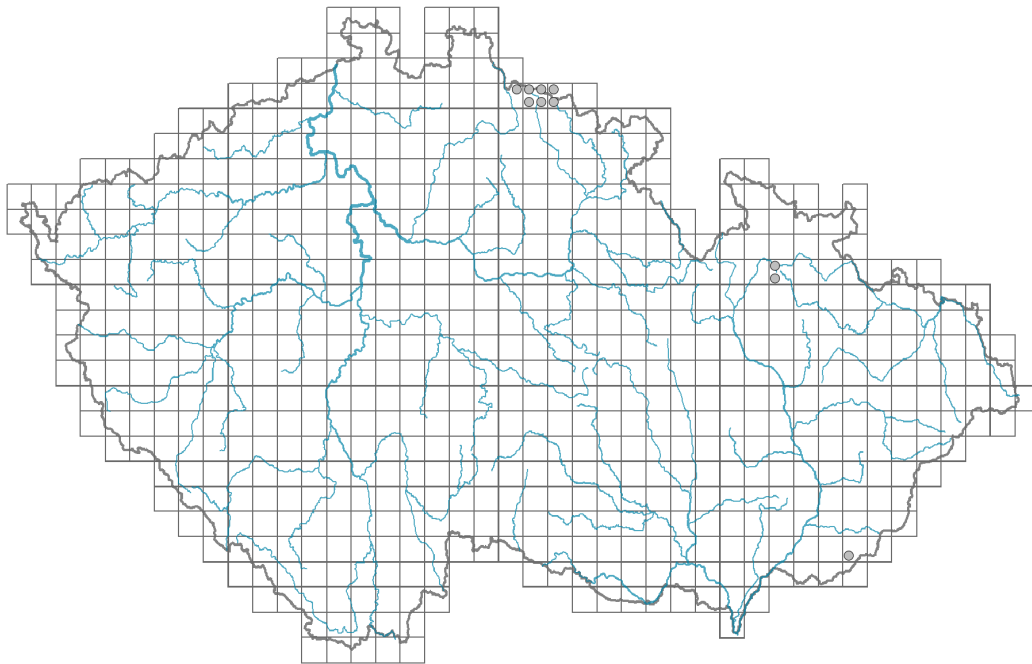


Bartsia alpina

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]: **0.05-0.15**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **20.9 %**

Life strategy (Pierce method, S-score): **31 %**

Life strategy (Pierce method, R-score): **48.2 %**

Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**



Flower

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

Flower colour: **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: **racemus**
 Dicliny: **synoecious**
 Generative reproduction type: **facultative allogamy**
 Pollination syndrome: **wind-pollination, insect-pollination**



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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: **probably non-myrmecochorous**



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Belowground organs and clonality

Shoot metamorphosis: **rhizome**
 Storage organ: **rhizome**
 Type of clonal growth organ: **hypogeogenous rhizome**
 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]: **4**
 Number of clonal offspring: **3.5**
 Lateral spreading distance by clonal growth [m]: **0.13**
 Clonal index: **5**



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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**



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Trophic mode

Parasitism and mycoheterotrophy: **root hemiparasite**
 Carnivory: **non-carnivorous**

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

Karyology

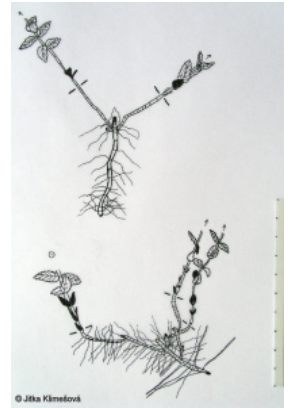
Chromosome number (2n): **24**

Ploidy level (x): **2**

2C genome size [Mbp]: **1454.09**

1Cx monoploid genome size [Mbp]: **727.04**

Genomic GC content: **41.4 %**



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: **3 - cool indicator, occurring mainly in subalpine areas**

Moisture indicator value: **8 - transition between values 7 and 9**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic 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: **-0.66**

Herb layer disturbance frequency indicator value: **-0.66**

Whole-community disturbance severity indicator value: **0.16**

Herb layer disturbance severity indicator value: **0.22**

Whole-community structure based disturbance indicator value: **0.7**

Herb layer structure-based disturbance indicator value: **0.74**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

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

2 Alpine and subalpine grasslands

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

5 Vegetation of springs and mires

5C Alpine and subalpine soft-water springs: **2 - optimum**

11 Heathlands and scrub

11H Subalpine deciduous scrub: **1 - rare occurrence**

Affinity to the forest environment

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

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

Diagnostic taxon

Diagnostic taxon of classes: [AC Elyno-Seslerietea](#)

Diagnostic taxon of alliances: [ACA Agrostion alpinae](#), [ADB Calamagrostion arundinaceae](#), [RAD Swertio perennis-Dichodontion palustris](#)

Diagnostic taxon of associations: [ACA01 Saxifraga oppositifoliae-Festucetum versicoloris](#), [ADB01 Bupleuro longifoliae-Calamagrostietum arundinaceae](#), [RAD02 Swertietum perennis](#), [RBC04 Bartsio alpinae-Caricetum nigrae](#)

Constant taxon

Constant taxon of classes: [AC Elyno-Seslerietea](#)

Constant taxon of alliances: [ACA Agrostion alpinae](#)

Constant taxon of associations: [ACA01 Saxifraga oppositifoliae-Festucetum versicoloris](#), [RAD02 Swertietum perennis](#), [RBC04 Bartsio alpinae-Caricetum nigrae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.8**

Ecological specialization index for non-forest vegetation: **5.3**

Distribution and frequency

Floristic zone: **southern temperate, submeridional**

Floristic region: **Europe, Eastern America**

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

Elevational belt in the Czech Republic: **subalpine belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **5**

taxon.data.freq_in_quad: 10

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%: **4.5 %**

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: **2.9 %**

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: **4**

Number of narrow habitats in which the taxon has its optimum: **3**

Number of broad habitats in which the taxon occurs: **4**

Number of broad habitats in which the taxon has its optimum: **3**

Threats and protection

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

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

Legal protection: **not protected by law**