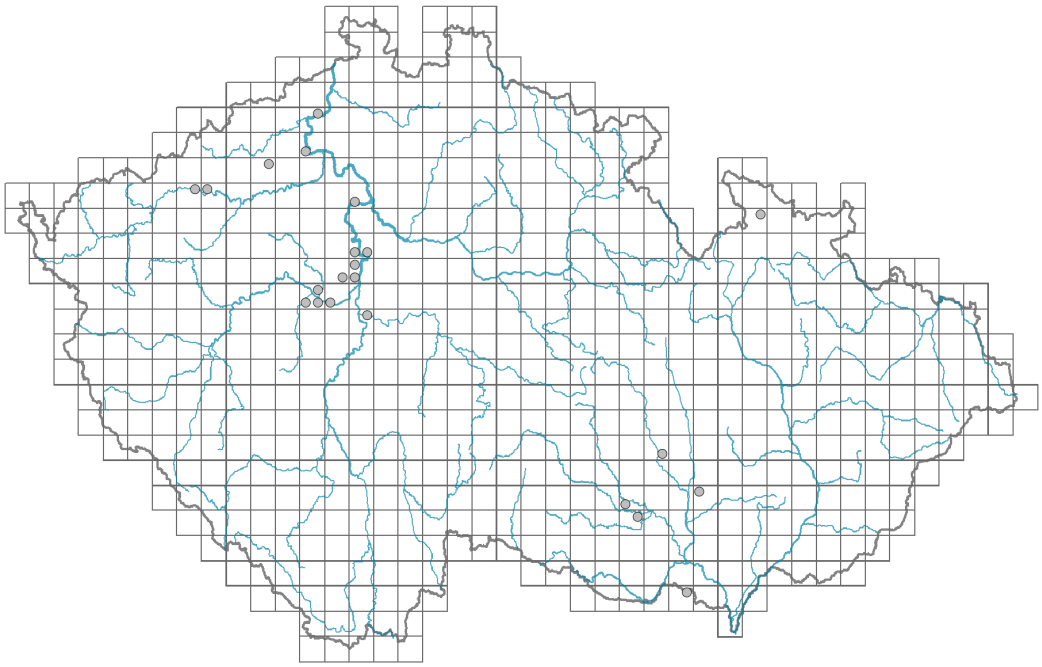
Alyssum montanum subsp. *gmelinii*

Distribution



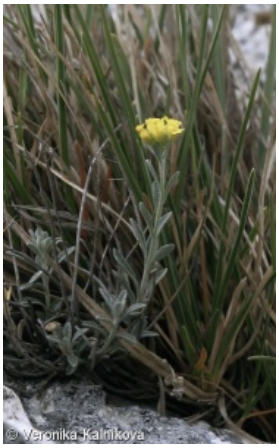


Map info

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]: **0.05–0.35**
Growth form: **polycarpic perennial non-clonal herb**
Life form: **hemicryptophyte**
Life strategy: **CSR – competitor/stress-tolerator/ruderal**
Life strategy (Pierce method based on leaf traits): **S/SR**
Life strategy (Pierce method, C-score): **2.7 %**
Life strategy (Pierce method, S-score): **75.3 %**
Life strategy (Pierce method, R-score): **22 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **simple – entire**
Stipules: **absent**
Petiole: **both present and absent**
Leaf life span: **evergreen**
Leaf anatomy: **scleromorphic**

Flower

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

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Flower colour: **yellow**
Flower symmetry: **actinomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **free**
Calyx fusion: **aposepalous**
Inflorescence type: **racemus**
Dicliny: **synoecious**
Pollination syndrome: **insect-pollination, selfing**



Fruit, seed and dispersal

Fruit type: **dry fruit – silicula**
Fruit colour: **brown**
Reproduction type: **only by seed/spores**
Dispersal unit (diaspore): **seed**
Dispersal strategy: **Allium (mainly autochory)**
Myrmecochory: **non-myrmecochorous (b)**



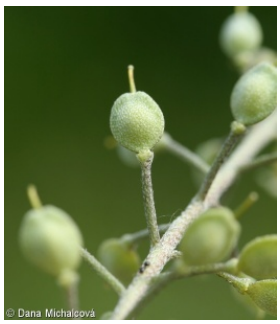


Belowground organs and clonality

Shoot metamorphosis: **pleiocorm**
Storage organ: **pleiocorm**
Shoot life span (cyclicity): **dicyclic or polycyclic 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): **10**
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **3**
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): **13**
Depth of the belowground bud bank (root buds exluded) [cm]: **2**
Number of buds per shoot at the soil surface (root buds included): **10**
Number of buds per shoot at a depth of 0–10 cm (root buds included): **3**
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): **13**
Depth of the belowground bud bank (root buds included) [cm]: **2**





Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**



Karyology

Chromosome number (2n): **32**
Ploidy level (x): **4**
2C genome size [Mbp]: **2489.57**
1Cx monoploid genome size [Mbp]: **622.39**

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Genomic GC content: **40.6 %**



Taxon origin

Origin in the Czech Republic: **native**



Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **9 – full light plant, occurring only in fully irradiated places, not at less than 50% of diffuse radiation incident in an open area**
Temperature indicator value: **7 – heat indicator, occurring in relatively warm lowlands**
Moisture indicator value: **2 – transition between values 1 and 3**
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: **-0.54**
Herb layer disturbance frequency indicator value: **-0.24**
Whole-community disturbance severity indicator value: **0.21**
Herb layer disturbance severity indicator value: **0.25**
Whole-community structure based disturbance indicator value: **0.53**
Herb layer structure-based disturbance indicator value: **0.6**

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: **2 – optimum**
8B Submediterranean dry grasslands on rock outcrops: **2 – optimum**
8C Narrow-leaved sub-continental steppes: **2 – optimum**
8E Acidophilous dry grasslands: **1 – rare occurrence**
8F Thermophilous forest fringe vegetation: **1 – rare occurrence**

9 Sand grasslands and rock-outcrop vegetation

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

12 Forests

12H Peri-Alpidic basiphilous thermophilous oak forests: **1 – rare occurrence**
12J Acidophilous thermophilous oak forests: **1 – rare occurrence**
12K Acidophilous oak forests: **1 – rare occurrence**
12O Peri-Alpidic pine forests: **1 – rare occurrence**
12W Pine and larch plantations: **1 – rare occurrence**

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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 alliances: **TFF *Alysso alyssoidis-Sedion*, THB *Bromo pannonici-Festucion pallentis***

Diagnostic taxon of associations: **THA02 *Seselio ossei-Festucetum pallentis*, THB01 *Poo badensis-Festucetum pallentis*, THC02 *Minuartio setaceae-Seslerietum caeruleae*, THD02 *Erysimo crepidifolii-Festucetum valesiacae***

Constant taxon

Constant taxon of alliances: **THB *Bromo pannonici-Festucion pallentis***

Constant taxon of associations: **THB01 *Poo badensis-Festucetum pallentis*, THC02 *Minuartio setaceae-Seslerietum caeruleae***

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.5**

Ecological specialization index for non-forest vegetation: **5.5**

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

Colonization ability

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

Index of colonization potential (ICP): **1**

Optimum successional age [years]: **42**

Distribution and frequency

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

Floristic region: **Europe**

Continentality degree: **5**

Distribution range extension along the continentality gradient: **4**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 88

taxon.data.freq_in_quad: 153

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.4 %**

Occurrence frequency in vegetation plots with a cover above 5%: **10.2 %**

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: **3.3 %**

Maximum percentage cover in vegetation plots: **23 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **15**

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

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

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

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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**

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