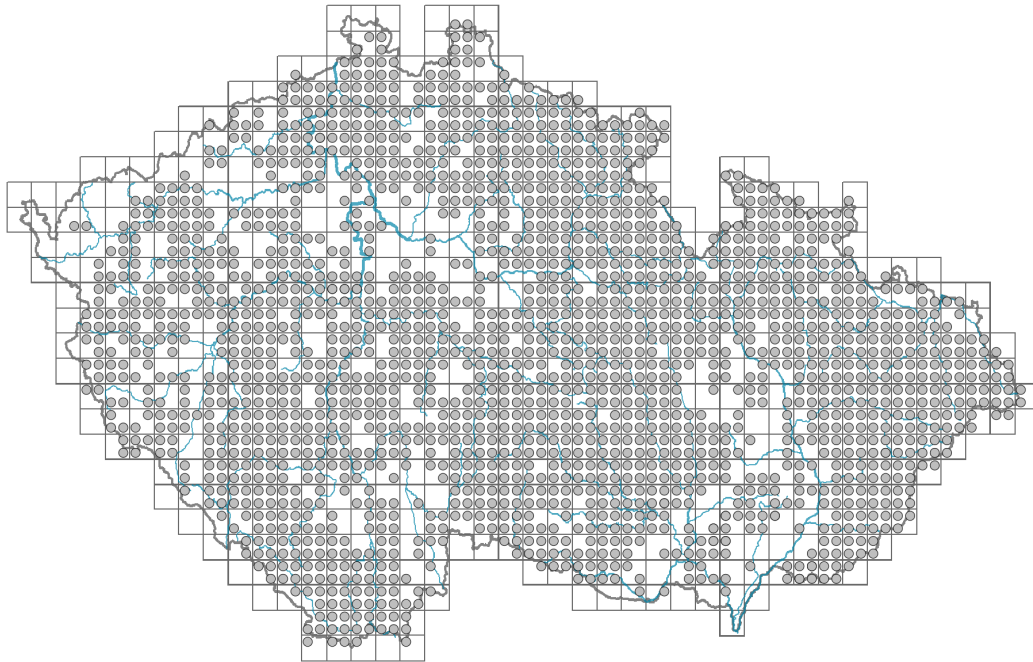


# *Asarum europaeum*

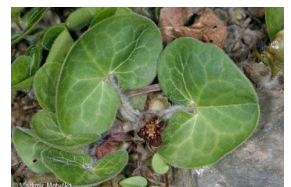
## Distribution



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]: **0.05-0.1**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **52.9 %**

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

Life strategy (Pierce method, R-score): **47.1 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **mesomorphic**



## Flower

Flowering period [month]: **March-May**

Flowering phase: **2 Acer platanoides-Anemone nemorosa (start of early spring)**

Flower colour: **violet, red-brown**

Flower symmetry: **actinomorphic**

Perianth type: **homochlamydeous**

Perianth fusion: **fused**

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

Inflorescence type: **flores solitarii**

Dicliny: **synoecious**

Generative reproduction type: **autogamy**

Pollination syndrome: **selfing**



## 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 (cyclicality): **dicyclic or polycyclic 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: **1**

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

Clonal index: **4**

### 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): **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): **15**

Depth of the belowground bud bank (root buds excluded) [cm]: **2**

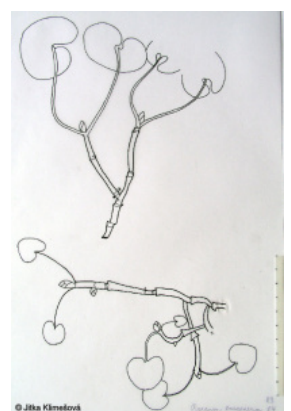
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Size of the belowground bud bank (root buds included): **15**

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): **26**

Ploidy level (x): **2**

2C genome size [Mbp]: **11700.55**

1Cx monoploid genome size [Mbp]: **5850.28**

Genomic GC content: **44.2 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **3 - shade plant, usually occurring where the incident radiation is less than 5% of that in an open area, but also at sunnier sites**

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

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

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

Nutrient indicator value: **6 - transition between values 5 and 7**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.95**

Herb layer disturbance frequency indicator value: **-0.72**

Whole-community disturbance severity indicator value: **0.24**

Herb layer disturbance severity indicator value: **0.08**

Whole-community structure based disturbance indicator value: **0.07**

Herb layer structure-based disturbance indicator value: **0.17**

## Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

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

4 Wetland and riverine herbaceous vegetation

4K Petasites fringes of montane brooks: **1 - rare occurrence**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 - rare occurrence**

6 Meadows and mesic pastures

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

6B Montane mesic meadows: **1 - rare occurrence**

6E Wet Cirsium meadows: **1 - rare occurrence**

## 8 Dry grasslands

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

## 11 Heathlands and scrub

11H Subalpine deciduous scrub: **1 - rare occurrence**11L Tall mesic and xeric shrub: **1 - rare occurrence**11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

## 12 Forests

12A Alder carrs: **1 - rare occurrence**12B Alluvial forests: **2 - optimum**12C Oak-hornbeam forests: **2 - optimum**12D Ravine forests: **2 - optimum**12E Herb-rich beech forests: **2 - optimum**12F Limestone beech forests: **2 - optimum**12G Acidophilous beech forests: **1 - rare occurrence**12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**12I Sub-continental thermophilous oak forests: **2 - optimum**12J Acidophilous thermophilous oak forests: **1 - rare occurrence**12K Acidophilous oak forests: **1 - rare occurrence**12R Acidophilous spruce forests: **1 - rare occurrence**12S Basiphilous spruce 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

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

## 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 classes: [LB \*Carpino-Fagetea\*](#)Diagnostic taxon of alliances: [LBB \*Carpinion betuli\*](#), [LBF \*Tilio platyphylli-Acerion\*](#)Diagnostic taxon of associations: [KBC04 \*Senecioni fuchsii-Coryletum avellanae\*](#), [LBA04 \*Stellario nemorum-Alnetum glutinosae\*](#), [LBB02 \*Stellario holostea-Carpinetum betuli\*](#), [LBB03 \*Carici pilosae-Carpinetum betuli\*](#), [LBB04 \*Primulo veris-Carpinetum betuli\*](#)

## Constant taxon

Constant taxon of alliances: [LBB \*Carpinion betuli\*](#)Constant taxon of associations: [KBC04 \*Senecioni fuchsii-Coryletum avellanae\*](#), [LBA04 \*Stellario nemorum-Alnetum glutinosae\*](#), [LBB02 \*Stellario holostea-Carpinetum betuli\*](#), [LBB03 \*Carici pilosae-Carpinetum betuli\*](#), [LBB04 \*Primulo veris-Carpinetum betuli\*](#), [LBF01 \*Aceri-Tilietum\*](#), [LBF03 \*Arunco dioici-Aceretum pseudoplatani\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **5.3**

Ecological specialization index for non-forest vegetation: **3.7**

Ecological specialization index for forest vegetation: **5.4**

## Colonization ability

Index of colonization success (ICS): **4**

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **75**

## Distribution and frequency

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

Floristic region: **Europe, Siberia**

Continental degree: **5**

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

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: **605**

taxon.data.freq\_in\_quad: **1911**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **18.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.6 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **4.7 %**

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: **30**

Number of narrow habitats in which the taxon has its optimum: **6**

Number of broad habitats in which the taxon occurs: **8**

Number of broad habitats in which the taxon has its optimum: **1**

## 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**