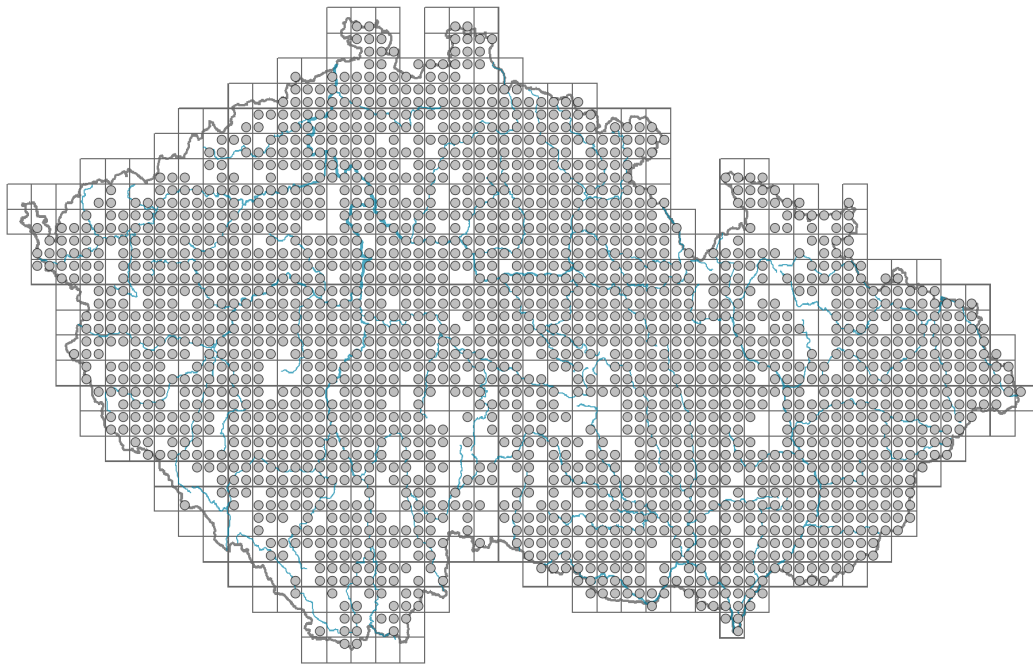


Alliaria petiolata

Distribution



© Milan Chytrý

Map info

● revised records

○ unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



© Vladimír Motýčka

Habitus and growth type

Height [m]: **0.3-0.8**

Growth form: **monocarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CR - competitor/ruderal**

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

Life strategy (Pierce method, C-score): **56.4 %**

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

Life strategy (Pierce method, R-score): **43.6 %**

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: **hygromorphic**

Flower

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



© Pavel Veselý

Flowering phase: **4 Fagus sylvatica-Galeobdolon (start of mid-spring)**
 Flower colour: **white**
 Flower symmetry: **actinomorphic**
 Perianth type: **calyx and corolla**
 Perianth fusion: **free**
 Calyx fusion: **aposepalous**
 Inflorescence type: **racemus**
 Dicliny: **synoecious**
 Generative reproduction type: **facultative autogamy**
 Pollination syndrome: **insect-pollination, selfing**
 Pollinator spectrum: **flies s. l., butterflies, nitidulids (bumblebees, other Hymenoptera, hoverflies, other Diptera, beetles, other pollinators)**

Fruit, seed and dispersal

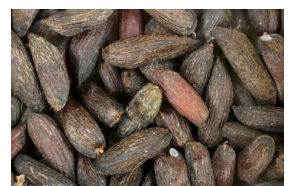
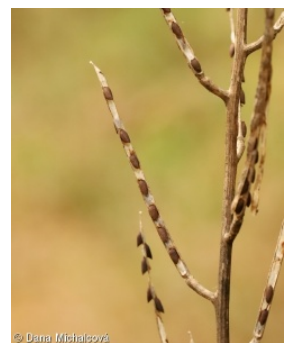
Fruit type: **dry fruit - siliqua**
 Fruit colour: **brown**
 Reproduction type: **only by seed/spores**
 Dispersal unit (diaspore): **seed**
 Dispersal strategy: **Allium (mainly autochory)**
 Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Root metamorphosis: **root shoot**
 Shoot life span (cyclicality): **dicyclic or polycyclic shoots prevailing**
 Primary root: **present**
 Position of root buds: **primary root**
 Role of root buds in life-history of a plant: **additive**
 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): **8**
 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 excluded) [cm]: **3**
 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): **15**
 Size of the belowground bud bank (root buds included): **35**
 Depth of the belowground bud bank (root buds included) [cm]: **9**

Trophic mode

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



Karyology

Chromosome number (2n): **42**

Ploidy level (x): **6**

2C genome size [Mbp]: **1867.36**

1Cx monoploid genome size [Mbp]: **311.23**

Genomic GC content: **40.5 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **5x - semi-shade plant, only exceptionally occurring in full light, but usually at more than 10% of the diffuse radiation incident in an open area (generalist)**

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

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: **8 - pronounced nutrient indicator**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.73**

Herb layer disturbance frequency indicator value: **-0.78**

Whole-community disturbance severity indicator value: **0.34**

Herb layer disturbance severity indicator value: **0.25**

Whole-community structure based disturbance indicator value: **0.17**

Herb layer structure-based disturbance indicator value: **0.2**

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: **1 - rare occurrence**

1C Walls: **1 - rare occurrence**

1D Mobile calcareous screes: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4K Petasites fringes of montane brooks: **2 - optimum**

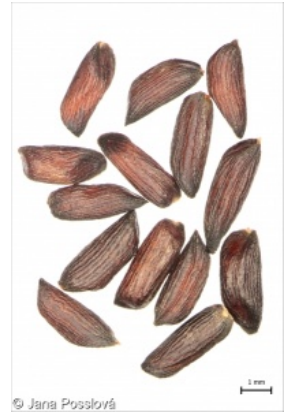
4L Nitrophilous herbaceous fringes of lowland rivers: **2 - optimum**

5 Vegetation of springs and mires

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

6 Meadows and mesic pastures

6G Vegetation of wet disturbed soils: **1 - rare occurrence**



8 Dry grasslands

8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

9 Sand grasslands and rock-outcrop vegetation

9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

11 Heathlands and scrub

11I Willow carrs: **1 - rare occurrence**11J Willow galleries of loamy and sandy river banks: **2 - optimum**11L Tall mesic and xeric shrub: **2 - optimum**11N Low xeric scrub: **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: **1 - rare occurrence**12F Limestone beech forests: **1 - rare occurrence**12G Acidophilous beech forests: **1 - rare occurrence**12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**12I Sub-continental thermophilous oak forests: **1 - rare occurrence**12J Acidophilous thermophilous oak forests: **2 - optimum**12K Acidophilous oak forests: **1 - rare occurrence**12T Robinia pseudacacia plantations: **2 - optimum**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

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**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 alliances: [XDD Geo urbani-Alliarion petiolatae](#)Diagnostic taxon of associations: [KBB05 Rhamno catharticae-Cornetum sanguineae](#), [XDD01 Alliarion petiolatae-Chaerophylletum temuli](#)

Constant taxon

Constant taxon of alliances: [XDD Geo urbani-Alliarion petiolatae](#)Constant taxon of associations: [KBB05 Rhamno catharticae-Cornetum sanguineae](#), [LBF01 Aceri-Tilietum](#), [XDD01 Alliarion petiolatae-Chaerophylletum temuli](#), [XDD03 Anthriscetum trichospermae](#)

Dominant taxon

Dominant taxon of associations: [XDD01 Alliarion petiolatae-Chaerophylletum temuli](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.3**

Ecological specialization index for non-forest vegetation: **3.8**

Ecological specialization index for forest vegetation: **4.8**

Colonization ability

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

Index of colonization potential (ICP): **6**

Optimum successional age [years]: **40**

Distribution and frequency

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

Floristic region: **Europe, Western Asia**

Distribution range extension along the continentality gradient: **6**

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

Expansive taxon in the region: **Bohemian Thermophyticum, Bohemian Moravian Mesophyticum, Pannonian Thermophyticum, Carpathian Mesophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **627**

taxon.data.freq_in_quad: **2066**

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%: **10.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **3.9 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1.8 %**

Mean percentage cover in vegetation plots: **4.8 %**

Maximum percentage cover in vegetation plots: **88 %**

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: **9**

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**

