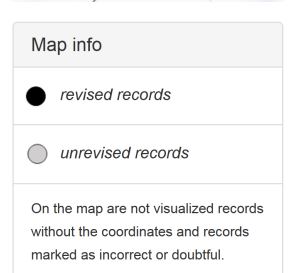
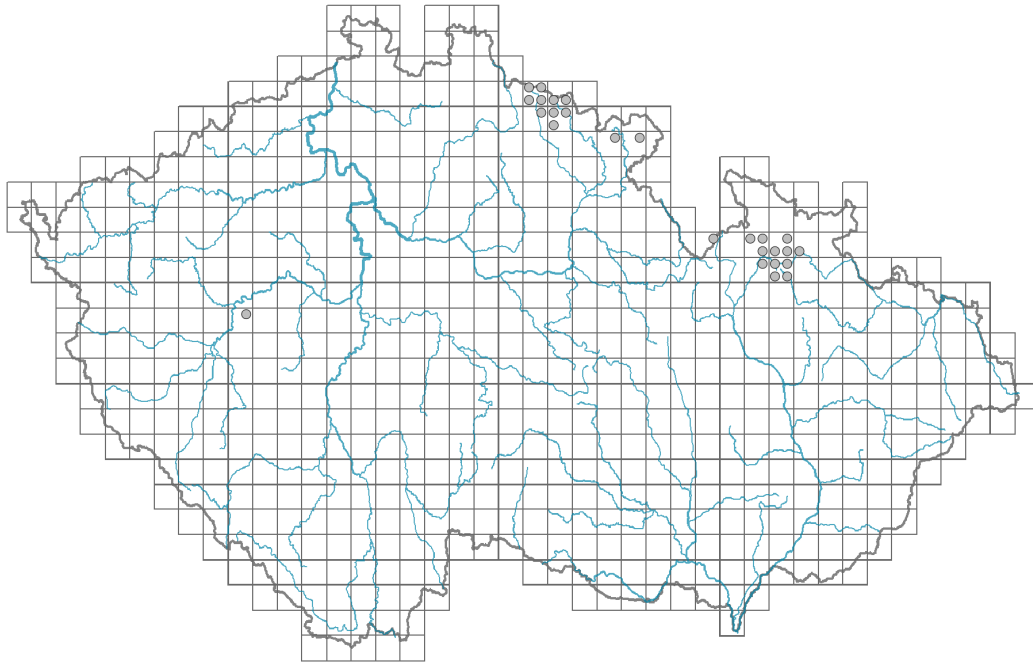


Adenostyles alliariae

Distribution



Habitus and growth type

Height [m]: **0.6-1.5**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **85.8 %**

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

Life strategy (Pierce method, R-score): **14.2 %**



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: **summer green**

Leaf anatomy: **mesomorphic, hygromorphic**

Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**

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

Flower symmetry: **actinomorphic**

Perianth type: **calyx reduced, corolla present**

Perianth fusion: **fused**

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

Calyx fusion: **pappus**

Inflorescence type: **corymbothsyrus ex anthodiis compositus**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

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

Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**

Fruit colour: **brown**

Reproduction type: **by seed/spores and vegetatively**

Dispersal unit (diaspore): **fruit, infrutescence or its part**

Dispersal strategy: **Epilobium (mainly anemochory and autochory)**

Myrmecochory: **probably non-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 (cyclicity): **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]:

Number of clonal offspring: **0.8**

Lateral spreading distance by clonal growth [m]: **0.07**

Clonal index: **4**

Bud bank

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

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

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

Size of the belowground bud bank (root buds excluded):

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

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

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

Number of buds per shoot at a depth greater than 10 cm (root buds included):

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

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

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**



Carnivory: **non-carnivorous**

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

Karyology

Chromosome number (2n): **38**

Ploidy level (x): **4**

2C genome size [Mbp]: **15823.33**

1Cx monoploid genome size [Mbp]: **3955.83**

Genomic GC content: **39.7 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

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

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

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

Reaction indicator value: **5x - indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions (generalist)**

Nutrient indicator value: **7 - occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.48**

Herb layer disturbance frequency indicator value: **-0.73**

Whole-community disturbance severity indicator value: **0.14**

Herb layer disturbance severity indicator value: **0.13**

Whole-community structure based disturbance indicator value: **0.25**

Herb layer structure-based disturbance indicator value: **0.31**

Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **3 - dominant**

4 Wetland and riverine herbaceous vegetation

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

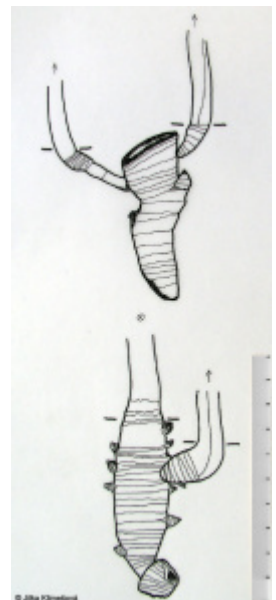
5 Vegetation of springs and mires

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

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

11 Heathlands and scrub

11D Subalpine acidophilous Pinus mugo scrub: **1 - rare occurrence**



11H Subalpine deciduous scrub: **2 - optimum**

12 Forests

12E Herb-rich beech forests: **1 - rare occurrence**

12R Acidophilous spruce forests: **1 - rare occurrence**

12S Basiphilous spruce forests: **2 - optimum**

Affinity to the forest environment

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: [AD Mulgedio-Aconitetea](#)

Diagnostic taxon of alliances: [ADC Salicion silesiacae](#), [ADD Adenostylion alliariae](#), [ADE Dryopterido filicis-maris-Athyrium distentifolii](#), [RAD Swertio perennis-Dichodontion palustris](#)

Diagnostic taxon of associations: [ADA03 Viola sudeticae-Deschampsietum cespitosae](#), [ADC01 Salici silesiacae-Betuletum carpaticae](#), [ADC02 Pado borealis-Sorbetum aucupariae](#), [ADD01 Ranunculo platanifolii-Adenostyletum alliariae](#), [ADD02 Salicetum lapponum](#), [ADD04 Laserpitio archangelicae-Dactylidetum glomeratae](#), [ADE02 Adenostylo alliariae-Athyrietum distentifolii](#), [LBC04 Athyrio distentifolii-Fagetum sylvaticae](#), [LFC02 Athyrio distentifolii-Piceetum abietis](#), [RAD03 Cardaminetum opicii](#)

Constant taxon

Constant taxon of alliances: [ADC Salicion silesiacae](#), [ADD Adenostylion alliariae](#), [ADE Dryopterido filicis-maris-Athyrium distentifolii](#)

Constant taxon of associations: [ADC01 Salici silesiacae-Betuletum carpaticae](#), [ADC02 Pado borealis-Sorbetum aucupariae](#), [ADD01 Ranunculo platanifolii-Adenostyletum alliariae](#), [ADD02 Salicetum lapponum](#), [ADD04 Laserpitio archangelicae-Dactylidetum glomeratae](#), [ADE02 Adenostylo alliariae-Athyrietum distentifolii](#), [KCA02 Adenostylo alliariae-Pinetum mugo](#), [RAD03 Cardaminetum opicii](#)

Dominant taxon

Dominant taxon of associations: [ADD01 Ranunculo platanifolii-Adenostyletum alliariae](#), [ADD04 Laserpitio archangelicae-Dactylidetum glomeratae](#), [LFC02 Athyrio distentifolii-Piceetum abietis](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.7**

Ecological specialization index for non-forest vegetation: **5.9**

Ecological specialization index for forest vegetation: **6.3**

Distribution and frequency

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

Floristic region: **Europe**

Continentality degree: **4**

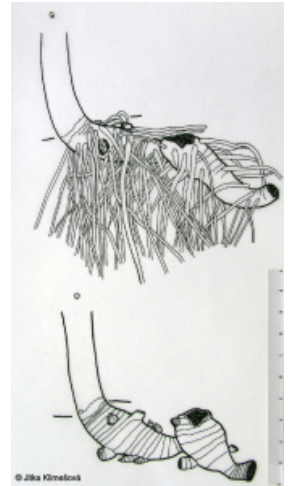
Distribution range extension along the continentality gradient: **4**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **13**

taxon.data.freq_in_quad: **26**

Commonness in vegetation plots from the Czech Republic



Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **41.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **28.8 %**

Occurrence frequency in vegetation plots with a cover above 50%: **15.1 %**

Mean percentage cover in vegetation plots: **18.5 %**

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: **9**

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

Number of broad habitats in which the taxon occurs: **5**

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

Threats and protection

Red List 2017 (national categories): **C4a - near threatened taxon**

Red List 2017 (IUCN categories): **LC - least concern**

Legal protection: **not protected by law**