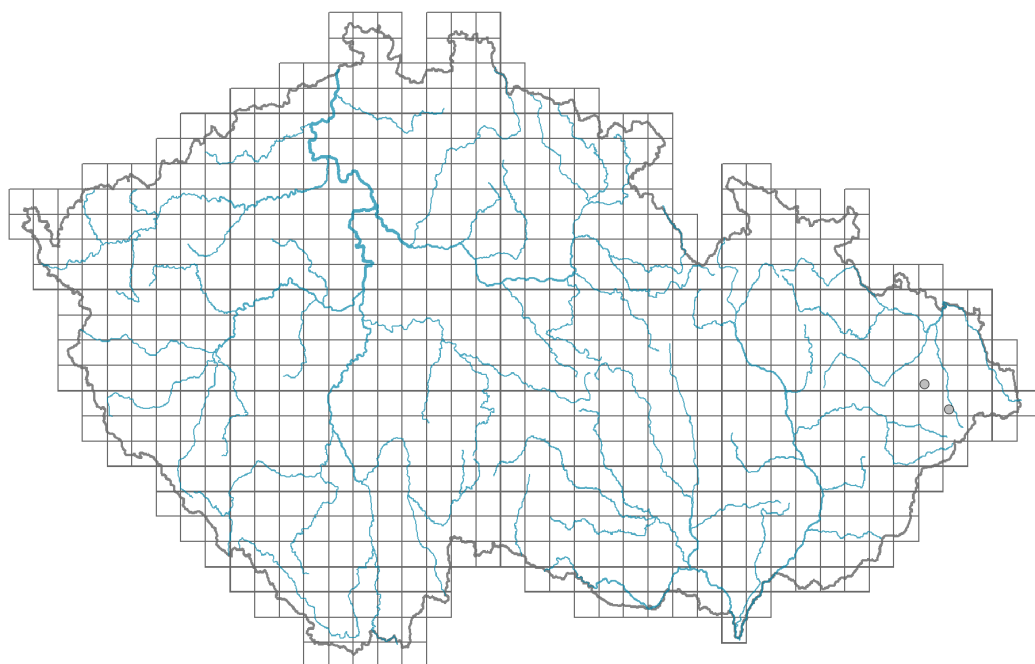


Asplenium ruta-muraria subsp. *ruta-muraria*

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]: **0.05-0.2**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **12.6 %**

Life strategy (Pierce method, S-score): **54.6 %**

Life strategy (Pierce method, R-score): **32.8 %**

Leaf

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

Leaf arrangement (phyllotaxis): **rosulate**

Leaf shape: **compound - bipinnate, compound - tripinnate**

Stipules: **absent**

Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **scleromorphic, mesomorphic**



Flower

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

Dicliny: **synoecious**

Fruit, seed and dispersal

Reproduction type: **only by seed/spores**

Dispersal unit (diaspore): **spore**

Dispersal strategy: **Lycopodium (mainly anemochory)**

Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

Type of clonal growth organ: **epigeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

Primary root: **absent**

Persistence of the clonal growth organ [year]: **2**

Number of clonal offspring: **0.5**

Lateral spreading distance by clonal growth [m]: **0.01**

Clonal index: **2**

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): **5**

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): **10**

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): **5**

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): **10**

Depth of the belowground bud bank (root buds included) [cm]: **3**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

Karyology

Chromosome number (2n): **144**

Ploidy level (x): **4**

2C genome size [Mbp]: **11901.43**

1Cx monoploid genome size [Mbp]: **2975.36**

Genomic GC content: **47 %**

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

Moisture indicator value: **3 - missing on damp soil**

Reaction indicator value: **8 - transition between values 7 and 9, occurring mostly in calcium-rich 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: **-1.41**

Herb layer disturbance frequency indicator value: **-1.2**

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

Herb layer disturbance severity indicator value: **0.16**

Whole-community structure based disturbance indicator value: **0.72**

Herb layer structure-based disturbance indicator value: **0.45**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **2 - optimum**

1B Siliceous cliffs and block fields: **1 - rare occurrence**

1C Walls: **2 - optimum**

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: **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

11N Low xeric scrub: **1 - rare occurrence**

12 Forests

12D Ravine forests: **1 - rare occurrence**

12F Limestone beech forests: **1 - rare occurrence**

12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**

12O Peri-Alpidic pine forests: **2 - optimum**

12W Pine and larch plantations: **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: [LE *Erico-Pinetea*](#), [SA *Asplenietea trichomanis*](#), [SB *Cymbalarium muralis-Parietarietea judaicae*](#)

Diagnostic taxon of alliances: [LEA *Erico carneae-Pinion*](#), [SAA *Cystopteridion*](#), [SAB *Asplenion cuneifolii*](#), [SBA *Cymbalarium muralis-Asplenion*](#), [THC *Diantho lumnitzeri-Seslerion*](#)

Diagnostic taxon of associations: [LEA01 *Thlaspio montani-Pinetum sylvestris*](#), [SAA02 *Asplenietum rutae-murario-trichomanis*](#), [SAB02 *Notholaeno marantae-Sempervivetum hirti*](#), [SBA01 *Cymbalarietum muralis*](#), [SBA02 *Corydalis-lythrum-luteae*](#), [SCA03 *Teucrio botryos-Melicetum ciliatae*](#), [THC01 *Carici humilis-Seslerietum caeruleae*](#), [THC02 *Minuartio setaceae-Seslerietum caeruleae*](#), [THC03 *Saxifrago paniculatae-Seslerietum caeruleae*](#)

Constant taxon

Constant taxon of classes: [SA *Asplenietea trichomanis*](#)

Constant taxon of alliances: [SAA *Cystopteridion*](#)

Constant taxon of associations: [SAA02 *Asplenietum rutae-murario-trichomanis*](#), [SAB02 *Notholaeno marantae-Sempervivetum hirti*](#), [SCA03 *Teucrio botryos-Melicetum ciliatae*](#), [THC03 *Saxifrago paniculatae-Seslerietum caeruleae*](#)

Dominant taxon

Dominant taxon of associations: [SAA02 *Asplenietum rutae-murario-trichomanis*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.3**

Ecological specialization index for non-forest vegetation: **3.5**

Ecological specialization index for forest vegetation: **5.1**

Colonization ability

Index of colonization success (ICS): **3**

Index of colonization potential (ICP): **3**

Optimum successional age [years]: **49**

Distribution and frequency

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

Floristic region: **Europe, Asia**

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

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **488**

taxon.data.freq_in_quad: **986**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **36.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.5 %**

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

Mean percentage cover in vegetation plots: **6.1 %**

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: **14**

Number of narrow habitats in which the taxon has its optimum: **5**

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): **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**