Galeopsis tetrahit agg.
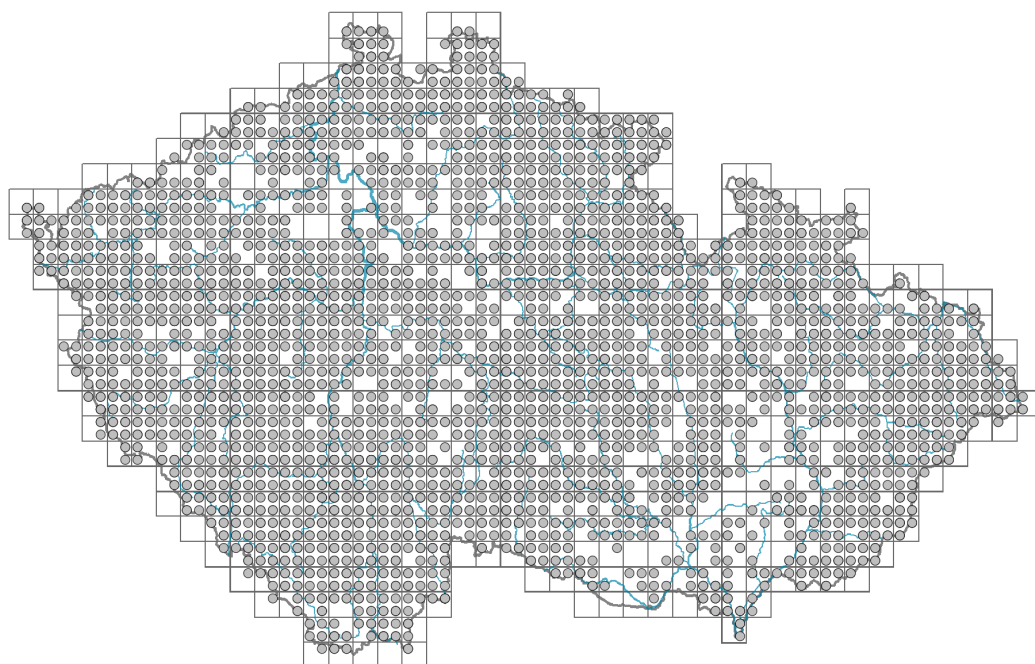
Distribution

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]: **0.1-0.9**
Growth form: **annual herb**
Life form: **therophyte**
Life strategy: **CR – competitor/ruderal**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **opposite**
Leaf shape: **simple – entire**
Stipules: **absent**
Petiole: **present**
Leaf life span: **summer green**
Leaf anatomy: **mesomorphic, hygromorphic**

Flower

Flowering period [month]: **July-October**
Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**
Flower colour: **white, yellow, pink, pink-violet, red-violet**
Flower symmetry: **zygomorphic**
Perianth type: **calyx and corolla**

Perianth fusion: **fused**

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

Calyx fusion: **synsepalous**

Inflorescence type: **pseudospica e verticillastris composita**

Dicliny: **synoecious, gynomonoecious**

Generative reproduction type: **facultative autogamy**

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

Pollinator spectrum: **bumblebees, hoverflies, flies s. l., meat flies s. l., butterflies, nitidulids**

Fruit, seed and dispersal

Fruit type: **dry fruit – cluster of four one-seeded nutlets**

Fruit colour: **yellow, brown, grey**

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

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

Dispersal strategy: **Allium (mainly autochory)**

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

Belowground organs and clonality

Shoot life span (cyclicity): **monocyclic shoots prevailing**

Primary root: **present**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **3**

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

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): **3**

Depth of the belowground bud bank (root buds exluded) [cm]: **1**

Number of buds per shoot at the soil surface (root buds included): **3**

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

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): **3**

Depth of the belowground bud bank (root buds included) [cm]: **1**

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]: **2812.89**

1Cx monoploid genome size [Mbp]: **703.22**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 – transition between values 5 and 7; rarely at less than 20% 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: **5 – indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**

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: **-1.32**

Herb layer disturbance frequency indicator value: **-0.56**

Whole-community disturbance severity indicator value: **0.63**

Herb layer disturbance severity indicator value: **0.6**

Whole-community structure based disturbance indicator value: **0.33**

Herb layer structure-based disturbance indicator value: **0.4**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

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

1C Walls: **1 – rare occurrence**

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

2 Alpine and subalpine grasslands

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

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 – rare occurrence**

4D Riverine reed vegetation: **2 – optimum**

4E Reed vegetation of brooks: **1 – rare occurrence**

4G Tall-sedge beds: **1 – rare occurrence**

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 – rare occurrence**

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

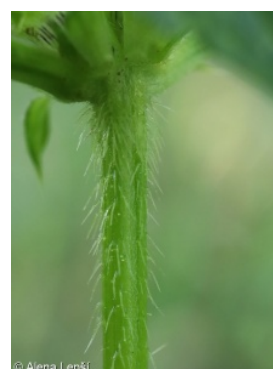4L Nitrophilous herbaceous fringes of lowland rivers: **1 – rare occurrence**

5 Vegetation of springs and mires

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

5E Acidic moss-rich fens and peatland meadows: **1 – rare occurrence**

5F Transitional mires: **1 – rare occurrence**

6 Meadows and mesic pastures

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

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

6C Pastures and park grasslands: **1 – rare occurrence**

6D Alluvial meadows of lowland rivers: **1 – rare occurrence**

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

6F Intermittently wet Molinia meadows: **1 – rare occurrence**

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

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 – rare occurrence**

7B Submontane Nardus grasslands: **1 – rare occurrence**

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **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**

9E Acidophilous vegetation of spring therophytes and succulents: **1 – rare occurrence**

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

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 – rare occurrence**

11H Subalpine deciduous scrub: **1 – rare occurrence**

11I Willow carrs: **1 – rare occurrence**

11J Willow galleries of loamy and sandy river banks: **2 – optimum**

11L Tall mesic and xeric shrub: **1 – rare occurrence**

11R Scrub and pioneer woodland of forests clearings: **2 – optimum**

12 Forests

12A Alder carrs: **1 – rare occurrence**

12B Alluvial forests: **1 – rare occurrence**

12C Oak-hornbeam forests: **1 – rare occurrence**

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: **1 – rare occurrence**

12I Sub-continental thermophilous oak forests: **1 – rare occurrence**

12J Acidophilous thermophilous oak forests: **1 – rare occurrence**

12K Acidophilous oak forests: **1 – rare occurrence**

12L Boreo-continental pine 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

13A Annual vegetation of ruderal habitats: **1 – rare occurrence**

13B Annual vegetation of arable land: **2 – optimum**

13C Annual vegetation of trampled habitats: **1 – rare occurrence**

13D Perennial thermophilous ruderal vegetation: **2 – optimum**

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 – optimum**
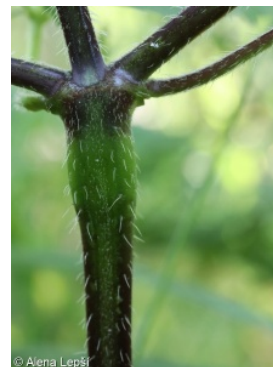
13F Herbaceous vegetation of forests clearings and Rubus scrub: **2 – optimum**

Diagnostic taxon

Diagnostic taxon of alliances: **XBC *Scleranthion annui***

Diagnostic taxon of associations: **XBC02 *Spergulo arvensis-Scleranthetum annui***

Constant taxon

Constant taxon of alliances: **XBC *Scleranthion annui***

Constant taxon of associations: **KAC02 *Salicetum fragilis*, KBE02 *Poo nemoralis-Robinietum pseudoacaciae*, XBC01 *Aphano arvensis-Matricarietum chamomillae*, XBC02 *Spergulo arvensis-Scleranthetum annui*, XDD02 *Torilidetum japonicae*, XEA05 *Digitali-Senecionetum ovati***

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.4**

Ecological specialization index for non-forest vegetation: **3.9**

Ecological specialization index for forest vegetation: **4.3**

Colonization ability

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

Index of colonization potential (ICP): **4**

Optimum successional age [years]: **9.5**

Distribution and frequency

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

Floristic region: **Europe, Asia**

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: 652

taxon.data.freq_in_quad: 2143

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **6.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **11.4 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.1 %**

Mean percentage cover in vegetation plots: **3.8 %**

Maximum percentage cover in vegetation plots: **63 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **56**

Number of narrow habitats in which the taxon has its optimum: **8**

Number of broad habitats in which the taxon occurs: **11**

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