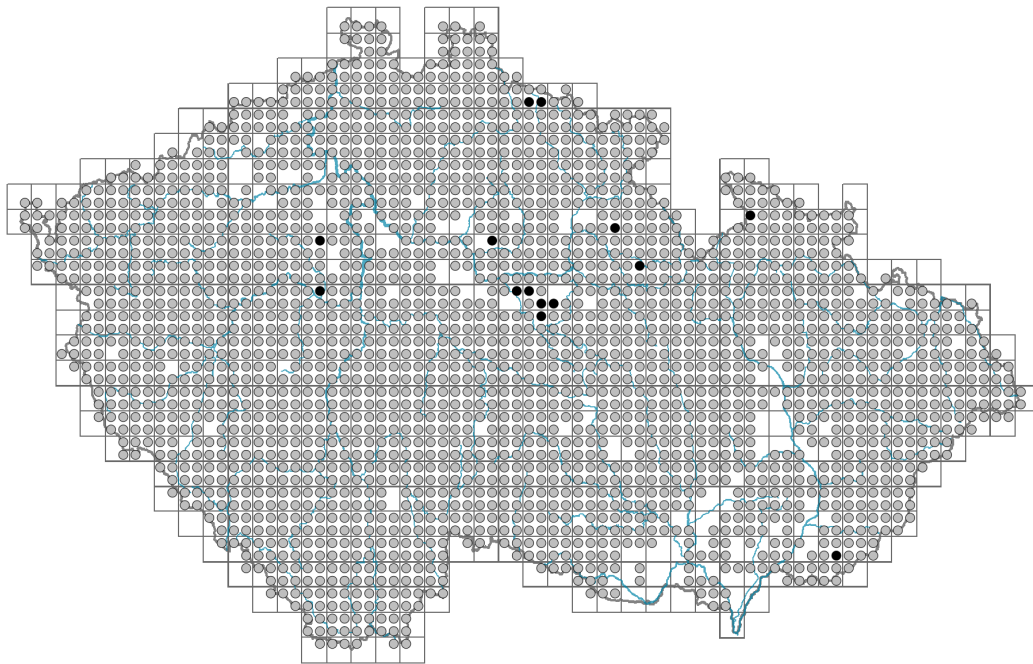


# *Hieracium murorum*

## 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]: **0.2-0.6**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **49.3 %**

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

Life strategy (Pierce method, R-score): **50.7 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate, rosulate**

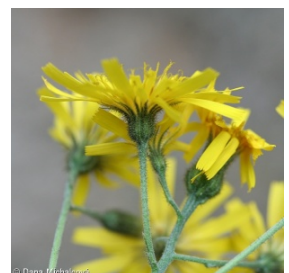
Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **mesomorphic, hygromorphic**



## Flower

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

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

Flower colour: **yellow**

Flower symmetry: **zygomorphic**

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

Perianth fusion: **fused**

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

Calyx fusion: **pappus**

Inflorescence type: **anthella ex anthodiis composita**

Dicliny: **synoecious**

Generative reproduction type: **obligate apomixis**

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



## Fruit, seed and dispersal

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

Fruit colour: **brown, black**

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): **monocyclic 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]: **0.01**

Clonal index: **3**



## 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): **15**

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): **20**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

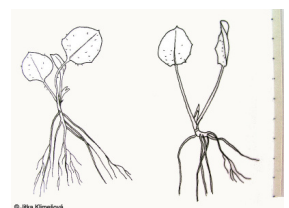
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Size of the belowground bud bank (root buds included): **20**

Depth of the belowground bud bank (root buds included) [cm]: **4**



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **27 (36)**

Ploidy level (x): **3 (4)**

2C genome size [Mbp]: **10460.4**

1Cx monoploid genome size [Mbp]: **3486.8**

Genomic GC content: **40.3 %**

## 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: **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: **5 - indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions**

Nutrient indicator value: **4 - transition between values 3 and 5**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.96**

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

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

Herb layer disturbance severity indicator value: **0.07**

Whole-community structure based disturbance indicator value: **0.09**

Herb layer structure-based disturbance indicator value: **0.16**

## 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**

2 Alpine and subalpine grasslands

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

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**

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**

8D Broad-leaved dry grasslands: **1 - rare occurrence**

8E Acidophilous dry grasslands: **1 - rare occurrence**

8F Thermophilous forest fringe vegetation: **2 - optimum**

## 9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **1 - rare occurrence**

9C Festuca grasslands on 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**

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

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

11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

## 12 Forests

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

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: **2 - optimum**

12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**

12I Sub-continental thermophilous oak forests: **2 - optimum**

12J Acidophilous thermophilous oak forests: **2 - optimum**

12K Acidophilous oak forests: **2 - optimum**

12L Boreo-continental pine forests: **1 - rare occurrence**

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

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: **2 - optimum**

12V Spruce plantations: **2 - optimum**

12W Pine and larch plantations: **2 - optimum**

## 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: **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 classes: [LB \*Carpino-Fagetea\*](#), [LC \*Quercetea pubescentis\*](#), [LD \*Quercetea robori-petraeae\*](#)

Diagnostic taxon of alliances: [LBB \*Carpinion betuli\*](#), [LBD \*Sorbo-Fagion sylvaticae\*](#), [LBE \*Luzulo-Fagion sylvaticae\*](#), [LCC \*Quercion petraeae\*](#), [LDA \*Quercion roboris\*](#)

Diagnostic taxon of associations: [LBB04 \*Primulo veris-Carpinetum betuli\*](#), [LBD01 \*Cephalanthero damasonii-Fagetum sylvaticae\*](#), [LBE03 \*Luzulo-Abietetum albae\*](#), [LBF04 \*Seslerio albicantis-Tilietum cordatae\*](#), [LCC01 \*Sorbo torminalis-Quercetum\*](#), [LDA01 \*Luzulo luzuloidis-Quercetum petraeae\*](#)

Constant taxon

Constant taxon of classes: [LC \*Quercetea pubescentis\*](#), [LD \*Quercetea robori-petraeae\*](#), [LE \*Erico-Pinetea\*](#)

Constant taxon of alliances: [LBB \*Carpinion betuli\*](#), [LBD \*Sorbo-Fagion sylvaticae\*](#), [LBE \*Luzulo-Fagion sylvaticae\*](#), [LCC \*Quercion petraeae\*](#), [LDA \*Quercion roboris\*](#), [LEA \*Erico carnea-Pinion\*](#), [LFA \*Festuco-Pinion sylvestris\*](#)

Constant taxon of associations: [LBB01 \*Galio sylvatici-Carpinetum betuli\*](#), [LBB03 \*Carici pilosae-Carpinetum betuli\*](#), [LBB04 \*Primulo veris-Carpinetum betuli\*](#), [LBC05 \*Galio rotundifolii-Abietetum albae\*](#), [LBD01 \*Cephalanthero damasonii-Fagetum sylvaticae\*](#), [LBE01 \*Luzulo luzuloidis-Fagetum sylvaticae\*](#), [LBE03 \*Luzulo-Abietetum albae\*](#), [LBF04 \*Seslerio albicantis-Tilietum cordatae\*](#), [LCC01 \*Sorbo torminalis-Quercetum\*](#), [LCC03 \*Melico pictae-Quercetum roboris\*](#), [LDA01 \*Luzulo luzuloidis-Quercetum petraeae\*](#), [LDA02 \*Viscario vulgaris-Quercetum petraeae\*](#), [LEA01 \*Thlaspio montani-Pinetum sylvestris\*](#), [LFA01 \*Festuco-Pinetum sylvestris\*](#), [LFB04 \*Asplenio cuneifolii-Pinetum sylvestris\*](#)

Dominant taxon

Dominant taxon of associations: [LBD01 \*Cephalanthero damasonii-Fagetum sylvaticae\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.5**

Ecological specialization index for non-forest vegetation: **3.1**

Ecological specialization index for forest vegetation: **4.7**

Colonization ability

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

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

Optimum successional age [years]: **33**

## Distribution and frequency

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

Floristic region: **Europe**

Distribution range extension along the continentality gradient: **5**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **661**

taxon.data.freq\_in\_quad: **2325**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **3.2 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.3 %**

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

Mean percentage cover in vegetation plots: **2.4 %**

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: **44**

Number of narrow habitats in which the taxon has its optimum: **14**

Number of broad habitats in which the taxon occurs: **9**

Number of broad habitats in which the taxon has its optimum: **2**

## 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**