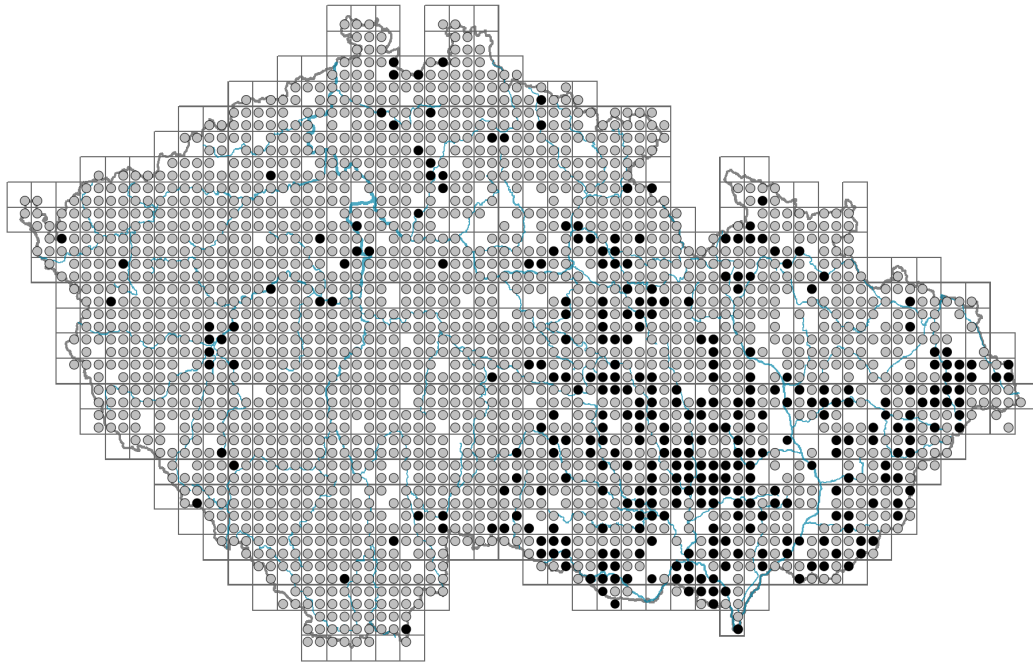


# *Pilosella officinarum*

## 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]: **0.05-0.3**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

Life strategy (Pierce method based on leaf traits): **R/SR**

Life strategy (Pierce method, C-score): **9.6 %**

Life strategy (Pierce method, S-score): **26.3 %**

Life strategy (Pierce method, R-score): **64.1 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

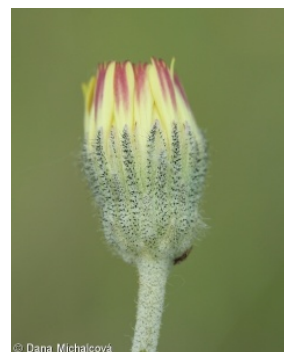
Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **mesomorphic**

## Flower

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



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: **anthodium solitarium**

Dicliny: **synoecious**

Generative reproduction type: **alogamy self-incompatibility, facultative apomixis**

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

Pollinator spectrum: **honeybee, flies s. l. (bumblebees, solitary bees, other**

**Hymenoptera, hoverflies, other Diptera, butterflies, beetles, nitidulids, thrips, other pollinators)**



## 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: **stolon, rhizome**

Storage organ: **rhizome**

Type of clonal growth organ: **stolon**

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

Shoot life span (cyclicality): **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]: **2.1**

Number of clonal offspring: **3.4**

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

Clonal index: **5**

Position of root buds: **lateral roots**

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): **11**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **13**

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

Size of the belowground bud bank (root buds excluded): **24**

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

Number of buds per shoot at the soil surface (root buds included): **11**

Number of buds per shoot at a depth of 0–10 cm (root buds included): **14**

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

Size of the belowground bud bank (root buds included): **40**

Depth of the belowground bud bank (root buds included) [cm]: **8**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **36, 54 (18, 45, 63)**

Ploidy level (x): **4, 6 (2, 5, 7)**

2C genome size [Mbp]: **6096.9**

1Cx monoploid genome size [Mbp]: **1524.22**

Genomic GC content: **40.1 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **7 - half-light plant, mostly occurring at full light, but also in the shade up to about 30% 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: **4 - transition between values 3 and 5**

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: **2 - transition between values 1 and 3**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.07**

Herb layer disturbance frequency indicator value: **-0.33**

Whole-community disturbance severity indicator value: **0.26**

Herb layer disturbance severity indicator value: **0.27**

Whole-community structure based disturbance indicator value: **0.5**

Herb layer structure-based disturbance indicator value: **0.58**

## 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**

1D Mobile calcareous screes: **2 - optimum**

2 Alpine and subalpine grasslands

- 2A Alpine grasslands on siliceous bedrock: **1 - rare occurrence**
- 5 Vegetation of springs and mires
- 5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**
- 6 Meadows and mesic pastures
- 6A Mesic Arrhenatherum meadows: **2 - optimum**
- 6B Montane mesic meadows: **1 - rare occurrence**
- 6C Pastures and park grasslands: **2 - optimum**
- 6F Intermittently wet Molinia meadows: **1 - rare occurrence**
- 7 Acidophilous grasslands
- 7A Subalpine and montane acidophilous grasslands: **2 - optimum**
- 7B Submontane Nardus grasslands: **2 - optimum**
- 8 Dry grasslands
- 8A Hercynian dry grasslands on rock outcrops: **2 - optimum**
- 8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**
- 8C Narrow-leaved sub-continental steppes: **2 - optimum**
- 8D Broad-leaved dry grasslands: **2 - optimum**
- 8E Acidophilous dry grasslands: **2 - optimum**
- 8F Thermophilous forest fringe vegetation: **1 - rare occurrence**
- 9 Sand grasslands and rock-outcrop vegetation
- 9B Open vegetation of acidic sands: **2 - optimum**
- 9C Festuca grasslands on acidic sands: **2 - optimum**
- 9D Pannonian sand steppes: **2 - optimum**
- 9E Acidophilous vegetation of spring therophytes and succulents: **2 - optimum**
- 9F Basiphilous vegetation of spring therophytes and succulents: **2 - optimum**
- 10 Saline vegetation
- 10I Inland saline meadows: **1 - rare occurrence**
- 11 Heathlands and scrub
- 11A Dry lowland to subalpine heathlands: **2 - optimum**
- 11L Tall mesic and xeric shrub: **1 - rare occurrence**
- 11N Low xeric scrub: **1 - rare occurrence**
- 12 Forests
- 12C Oak-hornbeam 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: **2 - optimum**
- 12K Acidophilous oak forests: **1 - rare occurrence**
- 12L Boreo-continental pine forests: **1 - rare occurrence**
- 12O Peri-Alpidic pine forests: **1 - rare occurrence**
- 12T Robinia pseudacacia plantations: **1 - rare occurrence**
- 12V Spruce plantations: **1 - rare occurrence**
- 12W Pine and larch plantations: **2 - optimum**
- 13 Anthropogenic vegetation
- 13D Perennial thermophilous ruderal vegetation: **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: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

## Diagnostic taxon

Diagnostic taxon of classes: [TF \*Koelerio-Coryneporetea\*](#)

Diagnostic taxon of alliances: [TEC \*Violion caninae\*](#), [TEE \*Euphorbio cyparissiae-Callunion vulgaris\*](#), [TFD \*Hyperico perforati-Scleranthion perennis\*](#), [THG \*Koelerio-Phleion phleoidis\*](#)

Diagnostic taxon of associations: [LCC02 \*Genisto pilosae-Quercetum petraeae\*](#), [TEE01 \*Euphorbio cyparissiae-Callunetum vulgaris\*](#), [TFD01 \*Polytricho piliferi-Scleranthetum perennis\*](#), [TFD02 \*Jasiono montanae-Festucetum ovinae\*](#), [THA04 \*Helichryso arenariae-Festucetum pallentis\*](#), [THG01 \*Potentillo heptaphyllae-Festucetum rupicola\*](#), [THG02 \*Avenulo pratensis-Festucetum valesiaca\*](#), [THG03 \*Viscario vulgaris-Avenuletum pratensis\*](#)

## Constant taxon

Constant taxon of classes: [TF \*Koelerio-Coryneporetea\*](#), [TG \*Festucea vaginatae\*](#)

Constant taxon of alliances: [TEC \*Violion caninae\*](#), [TEE \*Euphorbio cyparissiae-Callunion vulgaris\*](#), [TFC \*Armerion elongatae\*](#), [TFD \*Hyperico perforati-Scleranthion perennis\*](#), [TFE \*Arabidopsis thalianae\*](#), [TGA \*Festucion vaginatae\*](#), [THG \*Koelerio-Phleion phleoidis\*](#)

Constant taxon of associations: [LCC02 \*Genisto pilosae-Quercetum petraeae\*](#), [LDA02 \*Viscario vulgaris-Quercetum petraeae\*](#), [SCA03 \*Teucro botryos-Melicetum ciliatae\*](#), [TDC02 \*Anthoxantho odorati-Agrostietum tenuis\*](#), [TEC01 \*Festuco capillatae-Nardetum strictae\*](#), [TEC02 \*Campanulo rotundifoliae-Dianthetum deltoidis\*](#), [TEE01 \*Euphorbio cyparissiae-Callunetum vulgaris\*](#), [TFA02 \*Festuco psammophilae-Koelerietum glaucae\*](#), [TFC01 \*Sileno otitae-Festucetum brevipilae\*](#), [TFC02 \*Erysimo diffusi-Agrostietum capillaris\*](#), [TFD01 \*Polytricho piliferi-Scleranthetum perennis\*](#), [TFD02 \*Jasiono montanae-Festucetum ovinae\*](#), [TFE01 \*Festuco-Veronicetum dillenii\*](#), [TGA01 \*Diantho serotini-Festucetum vaginatae\*](#), [THA02 \*Seselio ossei-Festucetum pallentis\*](#), [THA04 \*Helichryso arenariae-Festucetum pallentis\*](#), [THG01 \*Potentillo heptaphyllae-Festucetum rupicola\*](#), [THG02 \*Avenulo pratensis-Festucetum valesiaca\*](#), [THG03 \*Viscario vulgaris-Avenuletum pratensis\*](#)

## Dominant taxon

Dominant taxon of associations: [TEC02 \*Campanulo rotundifoliae-Dianthetum deltoidis\*](#)

## Ecological specialization indices

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

Ecological specialization index for non-forest vegetation: **4.4**

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]: **27**

## 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: **649**

taxon.data.freq\_in\_quad: **2230**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.4 %**

Occurrence frequency in vegetation plots with a cover above 5%: **14.2 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.4 %**

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

Mean percentage cover in vegetation plots: **4.4 %**

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: **40**

Number of narrow habitats in which the taxon has its optimum: **17**

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

Number of broad habitats in which the taxon has its optimum: **7**

## 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**