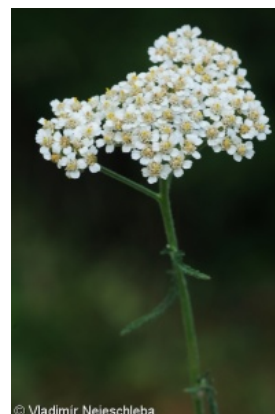
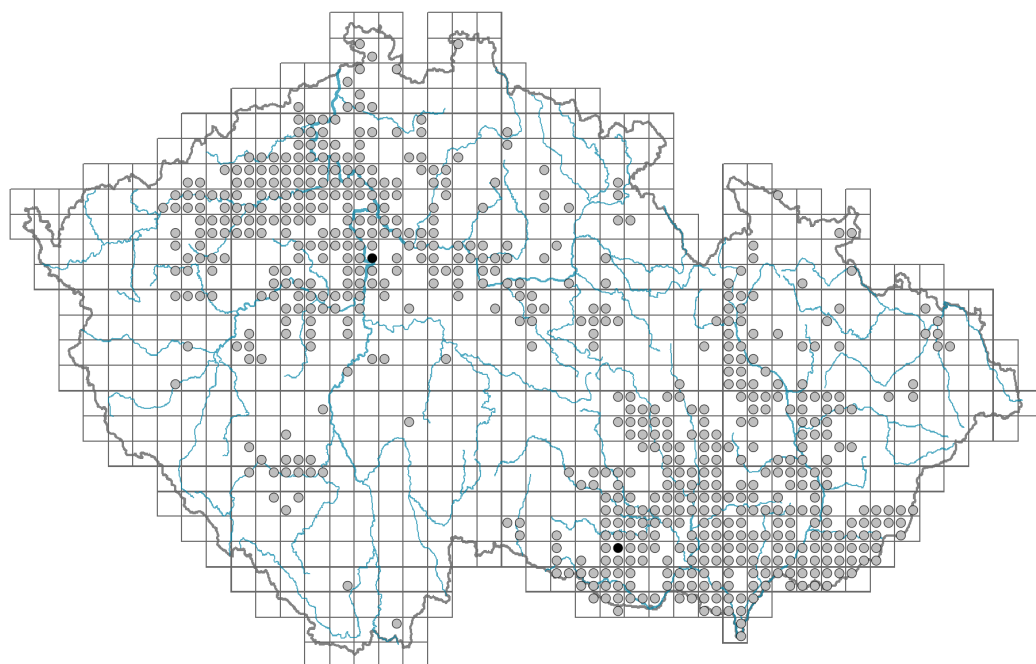


# *Achillea collina*

## 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]: **0.15-0.7**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **41 %**

Life strategy (Pierce method, S-score): **15.8 %**

Life strategy (Pierce method, R-score): **43.2 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - pinnately divided**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

Flowering period [month]: **June-October**

Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**  
Flower colour: **white, pink**  
Flower symmetry: **actinomorphic, zygomorphic**  
Perianth type: **calyx absent, corolla present**  
Perianth fusion: **fused**  
Shape of the sympetalous corolla or syntepalous perianth: **ligulate, tubular**  
Inflorescence type: **corymbothyrus ex anthodiis compositus**  
Dicliny: **gynomonoecious**  
Generative reproduction type: **alogamy self-incompatibility, facultative alogamy**  
Pollination syndrome: **insect-pollination**

## **Fruit, seed and dispersal**

Fruit type: **dry fruit - achene/cypsela/samara**  
Fruit colour: **brown, grey**  
Reproduction type: **by seed/spores and vegetatively**  
Dispersal unit (diaspore): **fruit, infrutescence or its part**  
Dispersal strategy: **Allium (mainly autochory)**  
Myrmecochory: **probably myrmecochorous nv**

## **Belowground organs and clonality**

Shoot metamorphosis: **rhizome-like pleiocorm**  
Storage organ: **rhizome-like pleiocorm**

## **Trophic mode**

Parasitism and mycoheterotrophy: **autotrophic**  
Carnivory: **non-carnivorous**  
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## **Karyology**

Chromosome number (2n): **36**  
Ploidy level (x): **4**  
2C genome size [Mbp]: **9295.79**  
1Cx monoploid genome size [Mbp]: **2323.95**  
Genomic GC content: **40.2 %**

## **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: **6 - transition between values 5 and 7**  
Moisture indicator value: **4 - transition between values 3 and 5**

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: **1 - salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**

## 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: **1 - rare occurrence**

#### 6 Meadows and mesic pastures

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

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

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

6F Intermittently wet Molinia meadows: **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: **2 - optimum**

8D Broad-leaved dry grasslands: **2 - optimum**

8E Acidophilous dry grasslands: **2 - optimum**

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: **2 - optimum**

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

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

#### 10 Saline vegetation

10I Inland saline meadows: **1 - rare occurrence**

#### 11 Heathlands and scrub

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**

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**

12O Peri-Alpidic pine forests: **1 - rare occurrence**

12W Pine and larch plantations: **1 - rare occurrence**

#### 13 Anthropogenic vegetation

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

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**

Constant taxon

Constant taxon of classes: [TH Festuco-Brometea](#)

Constant taxon of alliances: [TEE Euphorbio cyparissiae-Callunion vulgaris](#), [TFC Armerion elongatae](#), [THD Festucion valesiacae](#), [THE Cirsio-Brachypodion pinnati](#), [THG Koelerio-Phleion phleoidis](#), [XCA Onopordion acanthii](#)

Constant taxon of associations: [TEE01 Euphorbio cyparissiae-Callunetum vulgaris](#), [TFA02 Festuco psammophilae-Koelerietum glaucae](#), [TFC01 Sileno otitae-Festucetum brevipilae](#), [TFC02 Erysimo diffusi-Agrostietum capillaris](#), [THA04 Helichryso arenariae-Festucetum pallentis](#), [THC04 Asplenio cuneifolii-Seslerietum caeruleae](#), [THD01 Festuco valesiacae-Stipetum capillatae](#), [THD03 Festuco rupicolae-Caricetum humilis](#), [THE01 Scabioso ochroleucae-Brachypodietum pinnati](#), [THG01 Potentillo heptaphyllae-Festucetum rupicolae](#), [THG02 Avenulo pratensis-Festucetum valesiacae](#), [THG03 Viscario vulgaris-Avenuletum pratensis](#), [THH03 Geranio sanguinei-Peucedanetum cervariae](#), [XCA02 Salvia nemorosae-Marrubietum peregrini](#), [XCA03 Potentillo argenteae-Artemisietum absinthii](#), [XCB02 Berteroetum incanae](#), [XCB03 Dauco carotae-Crepidetum rheadifoliae](#), [XCB04 Dauco carotae-Picridetum hieracioidis](#), [XCB11 Asclepiadetum syriacae](#), [XCC02 Falcario vulgaris-Elytrigietum repentis](#), [XCC03 Convolvulo arvensis-Brometum inermis](#)

## Distribution and frequency

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

Floristic region: **Europe**

Continentality degree: **6**

Distribution range extension along the continentality gradient: **3**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **287**

taxon.data.freq\_in\_quad: **625**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **30**

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

Number of broad habitats in which the taxon occurs: **8**

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**