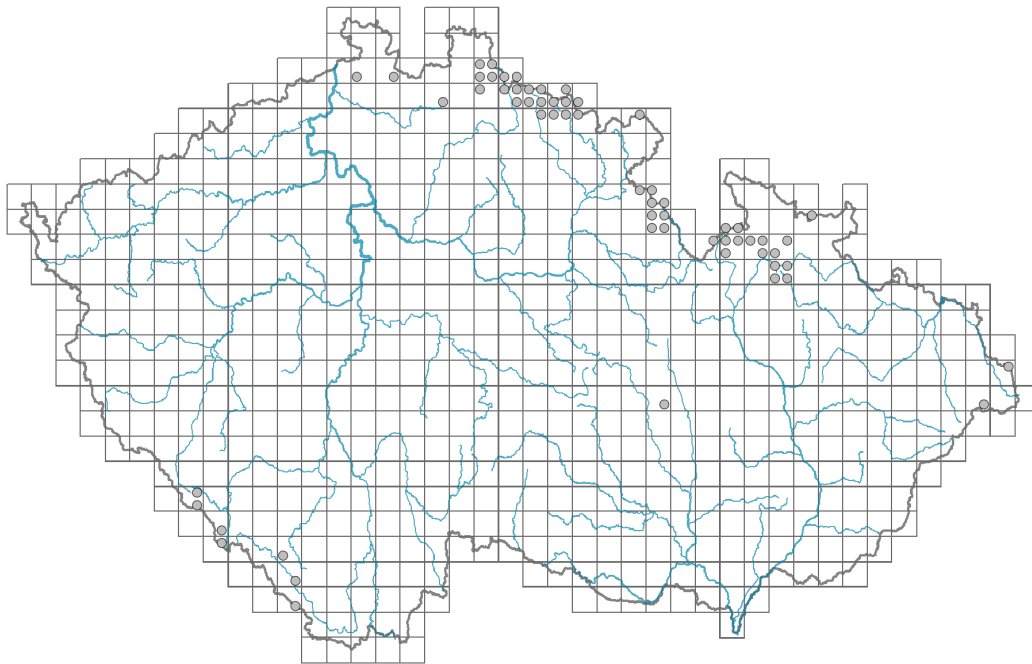


# *Gnaphalium norvegicum*

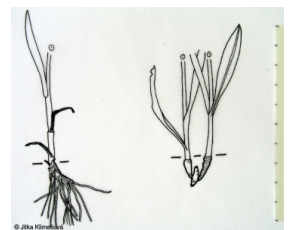
## Distribution



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]: **0.1-0.5**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **18 %**

Life strategy (Pierce method, S-score): **34.8 %**

Life strategy (Pierce method, R-score): **47.2 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **evergreen**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

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

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**  
Flower colour: **brown, red-brown**  
Flower symmetry: **actinomorphic**  
Perianth type: **calyx reduced, corolla present**  
Perianth fusion: **fused**  
Shape of the sympetalous corolla or syntepalous perianth: **tubular, filiform**  
Calyx fusion: **pappus**  
Inflorescence type: **pseudospica ex anthodiis composita**  
Dicliny: **gynomonoecious**  
Generative reproduction type: **mixed mating**  
Pollination syndrome: **insect-pollination, selfing**

### **Fruit, seed and dispersal**

Fruit type: **dry fruit - achene/cypsela/samara**  
Fruit colour: **brown**  
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 nv**

### **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 (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]: **3.5**  
Number of clonal offspring: **0.9**  
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): **13**  
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): **18**  
Depth of the belowground bud bank (root buds excluded) [cm]: **4**  
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): **13**  
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): **18**  
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): **56**

Ploidy level (x): **8**

2C genome size [Mbp]: **3826.53**

1Cx monoploid genome size [Mbp]: **478.32**

Genomic GC content: **38.9 %**

## 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: **3 - cool indicator, occurring mainly in subalpine 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: **4 - transition between values 3 and 5**

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

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

## Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **1 - rare occurrence**

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

6 Meadows and mesic pastures

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

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **2 - optimum**

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

11 Heathlands and scrub

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

11D Subalpine acidophilous Pinus mugo scrub: **1 - rare occurrence**

12 Forests

12R Acidophilous spruce forests: **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**

## Ecological specialization indices

Ecological specialization index for all vegetation types: **5.9**

Ecological specialization index for non-forest vegetation: **5.9**

## Colonization ability

Index of colonization success (ICS): **1**

## Distribution and frequency

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

Floristic region: **Europe, Asia, Americas**

Continentality degree: **5**

Distribution range extension along the continentality gradient: **4**

Elevational belt in the Czech Republic: **montane belt, subalpine belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **34**

taxon.data.freq\_in\_quad: **61**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0 %**

Occurrence frequency in vegetation plots with a cover above 5%: **0 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0 %**

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

Mean percentage cover in vegetation plots: **2 %**

Maximum percentage cover in vegetation plots: **3 %**

## Number of habitats with taxon occurrence in the Czech Republic

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

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

Number of broad habitats in which the taxon occurs: **5**

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

## Threats and protection

Red List 2017 (national categories): **C3 - vulnerable taxon**

Red List 2017 (IUCN categories): **NT - near threatened**

Legal protection: **not protected by law**