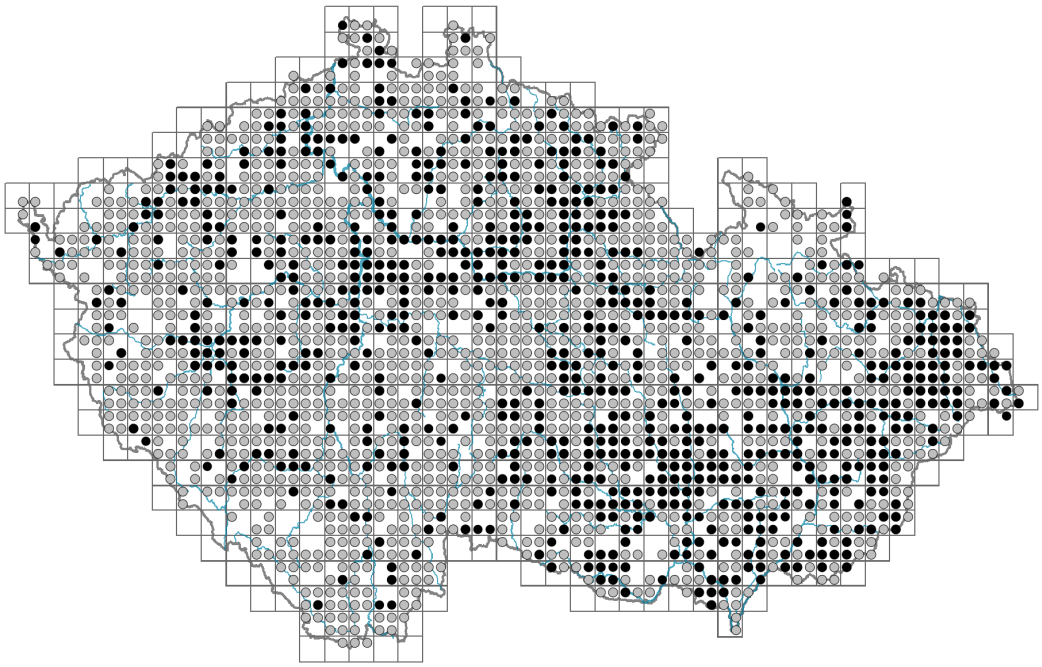
Epilobium hirsutum

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]: **0.5–1.5**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **CR/CSR**
Life strategy (Pierce method, C-score): **42.3 %**
Life strategy (Pierce method, S-score): **18.5 %**
Life strategy (Pierce method, R-score): **39.2 %**

Leaf

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

Flower

Flowering period [month]: **April–September**

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**
Flower colour: **red-violet**
Flower symmetry: **actinomorphic**
Perianth type: **calyx and corolla**
Perianth fusion: **free**
Calyx fusion: **hypanthium**
Inflorescence type: **racemus**
Dicliny: **synoecious, gynomonoecious, gynodioecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **insect-pollination, selfing**



Fruit, seed and dispersal

Fruit type: **dry fruit – capsule**
Reproduction type: **by seed/spores and vegetatively**
Dispersal unit (diaspore): **seed**
Dispersal strategy: **Epilobium (mainly anemochory and autochory)**
Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Shoot metamorphosis: **stolon**
Storage organ: **stolon**
Type of clonal growth organ: **hypogeogenous 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]:
Number of clonal offspring:
Lateral spreading distance by clonal growth [m]: **0.27**
Clonal index: **6**

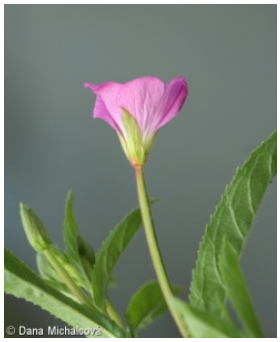
Bud bank

Number of buds per shoot at the soil surface (root buds excluded):
Number of buds per shoot at a depth of 0–10 cm (root buds excluded):
Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **4**
Size of the belowground bud bank (root buds excluded): **24**
Depth of the belowground bud bank (root buds exluded) [cm]: **6**
Number of buds per shoot at the soil surface (root buds included):
Number of buds per shoot at a depth of 0–10 cm (root buds included):
Number of buds per shoot at a depth greater than 10 cm (root buds included): **4**
Size of the belowground bud bank (root buds included): **24**
Depth of the belowground bud bank (root buds included) [cm]: **6**

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]: **785.87**
1Cx monoploid genome size [Mbp]: **196.47**
Genomic GC content: **42.1 %**

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: **8 – transition between values 7 and 9**
Reaction indicator value: **7 – indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**
Nutrient indicator value: **8 – pronounced nutrient indicator**
Salinity indicator value: **1 – salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**

Indicator values for disturbance

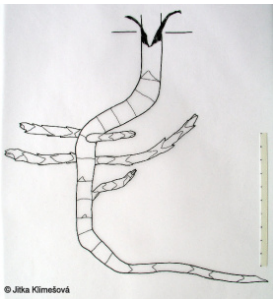
Whole-community disturbance frequency indicator value: **-0.61**
Herb layer disturbance frequency indicator value: **-0.53**
Whole-community disturbance severity indicator value: **0.36**
Herb layer disturbance severity indicator value: **0.39**
Whole-community structure based disturbance indicator value: **0.55**
Herb layer structure-based disturbance indicator value: **0.59**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 – rare occurrence**
4B Halophilous reed and sedge beds: **1 – rare occurrence**
4C Eutrophic vegetation of muddy substrata: **1 – rare occurrence**
4D Riverine reed vegetation: **1 – rare occurrence**
4E Reed vegetation of brooks: **2 – optimum**
4G Tall-sedge beds: **1 – rare occurrence**
4H Vegetation of low annual hygrophilous herbs: **1 – rare occurrence**
4I Vegetation of nitrophilous annual hygrophilous herbs: **2 – optimum**
4J River gravel banks: **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

5A Hard-water springs with tufa formation: **1 – rare occurrence**
5B Lowland to montane soft-water springs: **1 – rare occurrence**
5D Calcareous fens: **1 – rare occurrence**

6 Meadows and mesic pastures

6D Alluvial meadows of lowland rivers: **1 – rare occurrence**
6E Wet Cirsium meadows: **2 – optimum**
6G Vegetation of wet disturbed soils: **1 – rare occurrence**

10 Saline vegetation

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

11 Heathlands and scrub

11J Willow galleries of loamy and sandy river banks: **1 – rare occurrence**

12 Forests

12A Alder carrs: **1 – rare occurrence**
12B Alluvial forests: **1 – rare occurrence**

13 Anthropogenic vegetation

13D Perennial thermophilous ruderal vegetation: **1 – rare occurrence**
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: **2.2 – 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 associations: **XDA02 *Calystegio sepium-Epilobietum hirsuti***

Constant taxon

Constant taxon of associations: **XDA02 *Calystegio sepium-Epilobietum hirsuti***

Dominant taxon

Dominant taxon of associations: **XDA02 *Calystegio sepium-Epilobietum hirsuti***

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.7**
Ecological specialization index for non-forest vegetation: **3.7**
Ecological specialization index for forest vegetation: **4.6**

Colonization ability

Index of colonization success (ICS): **6**
Index of colonization potential (ICP): **7**
Optimum successional age [years]: **6**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional, subtropical, tropical, austral or antarctic**
Floristic region: **Europe, Asia**
Distribution range extension along the continentality gradient: **6**
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: 624
taxon.data.freq_in_quad: 2033

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.9 %**
Occurrence frequency in vegetation plots with a cover above 5%: **13.8 %**
Occurrence frequency in vegetation plots with a cover above 25%: **5.4 %**
Occurrence frequency in vegetation plots with a cover above 50%: **2.3 %**
Mean percentage cover in vegetation plots: **5.5 %**
Maximum percentage cover in vegetation plots: **88 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **24**
Number of narrow habitats in which the taxon has its optimum: **3**
Number of broad habitats in which the taxon occurs: **7**
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**