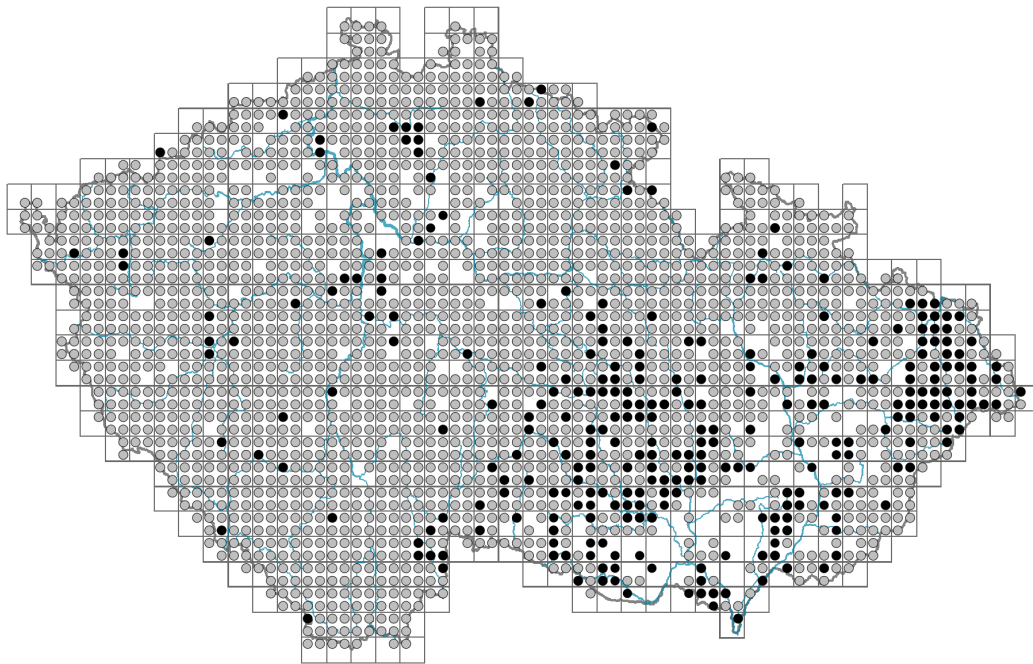


# *Epilobium angustifolium*

## Distribution



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### 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]: **0.5-2**

Growth form: **clonal herb**

Life form: **hemicryptophyte (geophyte)**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **46 %**

Life strategy (Pierce method, S-score): **24 %**

Life strategy (Pierce method, R-score): **30.1 %**

## 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: **summer green**

Leaf anatomy: **mesomorphic, hygromorphic**

## Flower

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



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Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **pink, red-violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **hypanthium**

Inflorescence type: **racemus**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

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

Pollinator spectrum: **bumblebees, flies s. l., butterflies (honeybee, solitary bees, other Hymenoptera, hoverflies, meat flies s. l., other Diptera, beetles, other pollinators, unknown)**

### Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Fruit colour: **red, brown**

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

Root metamorphosis: **root shoot**

Type of clonal growth organ: **root with adventitious buds**

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

Shoot life span (cyclicality): **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: **3.7**

Lateral spreading distance by clonal growth [m]: **0.13**

Clonal index: **5**

Position of root buds: **lateral roots**

Role of root buds in life-history of a plant: **necessary**

### 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): **7**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **1**

Size of the belowground bud bank (root buds excluded): **13**

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): **15**

Number of buds per shoot at a depth greater than 10 cm (root buds included): **15**

Size of the belowground bud bank (root buds included): **35**

Depth of the belowground bud bank (root buds included) [cm]: **9**



## 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]: **1285.32**

1Cx monoploid genome size [Mbp]: **321.33**

Genomic GC content: **40.3 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**

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

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: **6 - transition between values 5 and 7**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.32**

Herb layer disturbance frequency indicator value: **-0.69**

Whole-community disturbance severity indicator value: **0.48**

Herb layer disturbance severity indicator value: **0.46**

Whole-community structure based disturbance indicator value: **0.24**

Herb layer structure-based disturbance indicator value: **0.27**

## 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**

2 Alpine and subalpine grasslands

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

4 Wetland and riverine herbaceous vegetation



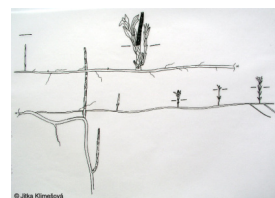
- 4D Riverine reed vegetation: **1 - rare occurrence**  
 4J River gravel banks: **1 - rare occurrence**  
 4K Petasites fringes of montane brooks: **1 - rare occurrence**  
 6 Meadows and mesic pastures  
 6B Montane mesic meadows: **1 - rare occurrence**  
 7 Acidophilous grasslands  
 7A Subalpine and montane acidophilous grasslands: **1 - rare occurrence**  
 7B Submontane Nardus grasslands: **1 - rare occurrence**  
 8 Dry grasslands  
 8F Thermophilous forest fringe vegetation: **1 - rare occurrence**  
 9 Sand grasslands and rock-outcrop vegetation  
 9B Open vegetation of acidic sands: **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**  
 11H Subalpine deciduous scrub: **1 - rare occurrence**  
 11L Tall mesic and xeric shrub: **1 - rare occurrence**  
 11R Scrub and pioneer woodland of forests clearings: **4 - constant dominant**  
 12 Forests  
 12C Oak-hornbeam forests: **1 - rare occurrence**  
 12D Ravine forests: **1 - rare occurrence**  
 12E Herb-rich beech forests: **1 - rare occurrence**  
 12F Limestone beech forests: **1 - rare occurrence**  
 12G Acidophilous beech 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**  
 12P Peatland pine forests: **1 - rare occurrence**  
 12Q Peatland birch forests: **1 - rare occurrence**  
 12R Acidophilous spruce forests: **1 - rare occurrence**  
 12S Basiphilous spruce forests: **2 - optimum**  
 12V Spruce plantations: **2 - optimum**  
 12W Pine and larch plantations: **2 - optimum**  
 13 Anthropogenic vegetation  
 13A Annual vegetation of ruderal habitats: **1 - rare occurrence**  
 13C Annual vegetation of trampled habitats: **1 - rare occurrence**  
 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: **4 - constant dominant**  
 Affinity to the forest environment  
 Affinity to the forest environment in Thermophyticum: **1.2 - taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**  
 Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.2 - taxon occurring mainly along forest edges and in forest openings, including forest**



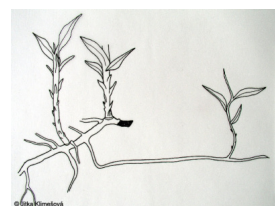
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**roads and paths, windthrow sites, burnt sites and forest clearings**

## Diagnostic taxon

Diagnostic taxon of classes: [XE \*Epilobietea angustifolii\*](#)Diagnostic taxon of alliances: [KBC \*Sambuco-Salicion capreae\*](#), [XEA \*Fragarion vescae\*](#)Diagnostic taxon of associations: [KBC02 \*Rubetum idaei\*](#), [KBC03 \*Senecioni fuchsii-Sambucetum racemosae\*](#), [XEA01 \*Senecioni-Epilobietum angustifolii\*](#), [XEA02 \*Digitali purpureae-Epilobietum angustifolii\*](#), [XEA03 \*Rubo idaei-Calamagrostietum arundinaceae\*](#), [XEA04 \*Junco effusi-Calamagrostietum villosae\*](#), [XEA05 \*Digitali-Senecionetum ovati\*](#), [XEA07 \*Gymnocarpio dryopteridis-Athyrietum filicis-feminae\*](#)

## Constant taxon

Constant taxon of classes: [XE \*Epilobietea angustifolii\*](#)Constant taxon of alliances: [KBC \*Sambuco-Salicion capreae\*](#), [XEA \*Fragarion vescae\*](#)Constant taxon of associations: [KBC02 \*Rubetum idaei\*](#), [KBC03 \*Senecioni fuchsii-Sambucetum racemosae\*](#), [XEA01 \*Senecioni-Epilobietum angustifolii\*](#), [XEA02 \*Digitali purpureae-Epilobietum angustifolii\*](#), [XEA03 \*Rubo idaei-Calamagrostietum arundinaceae\*](#), [XEA04 \*Junco effusi-Calamagrostietum villosae\*](#), [XEA05 \*Digitali-Senecionetum ovati\*](#), [XEA07 \*Gymnocarpio dryopteridis-Athyrietum filicis-feminae\*](#)

## Dominant taxon

Dominant taxon of associations: [XEA01 \*Senecioni-Epilobietum angustifolii\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **3.8**Ecological specialization index for non-forest vegetation: **3.6**Ecological specialization index for forest vegetation: **4.7**

## Colonization ability

Index of colonization success (ICS): **8**Index of colonization potential (ICP): **9**Optimum successional age [years]: **15****Distribution and frequency**Floristic zone: **arctic, boreal, northern temperate, southern temperate, submeridional, meridional**Floristic region: **circumpolar**Distribution range extension along the continentality gradient: **8**Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane belt, subalpine belt**Expansive taxon in the region: **Bohemian Thermophyticum, Bohemian Moravian Mesophyticum, Bohemian Moravian Oreophyticum, Pannonian Thermophyticum, Carpathian Mesophyticum, Carpathian Oreophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 666

taxon.data.freq\_in\_quad: 2251

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.8 %**Occurrence frequency in vegetation plots with a cover above 5%: **12.9 %**Occurrence frequency in vegetation plots with a cover above 25%: **4.9 %**Occurrence frequency in vegetation plots with a cover above 50%: **2.8 %**

Mean percentage cover in vegetation plots: **5.8 %**

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: **37**

Number of narrow habitats in which the taxon has its optimum: **6**

Number of broad habitats in which the taxon occurs: **10**

Number of broad habitats in which the taxon has its optimum: **4**

### **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**