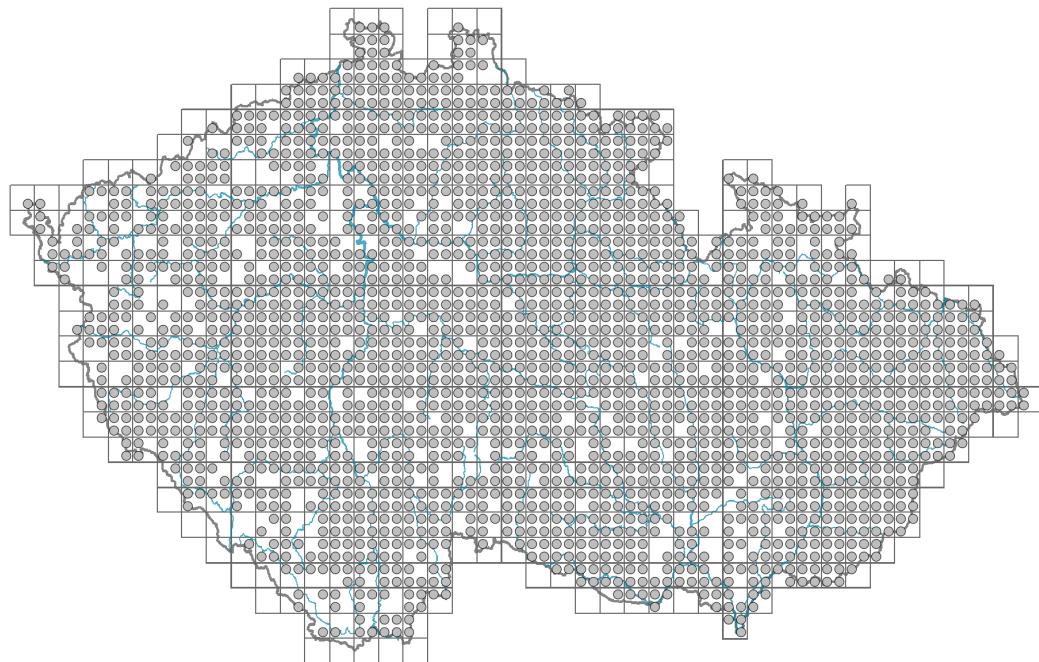


# *Lysimachia nummularia*

## Distribution



## Habitus and growth type

Height [m]: **0.03-0.08**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

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

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

Life strategy (Pierce method, C-score): **13.1 %**

Life strategy (Pierce method, S-score): **32.5 %**

Life strategy (Pierce method, R-score): **54.4 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **mainly present**

Leaf life span: **evergreen**

Leaf anatomy: **hygromorphic**



## Flower

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

Flowering phase: 7 **Ligustrum vulgare-Stachys sylvatica** (end of early summer)

Flower colour: **yellow**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **rotate, funnel-shaped**

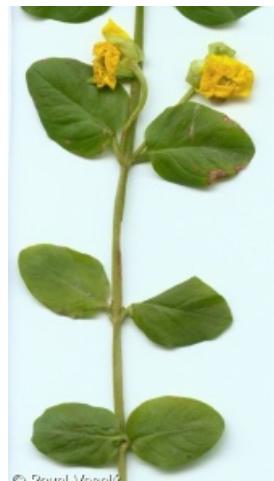
Calyx fusion: **fused at the base**

Inflorescence type: **flores solitarii**

Dicliny: **synoecious**

Generative reproduction type: **allogamy self-incompatibility**

Pollination syndrome: **insect-pollination**



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Fruit colour: **red, brown**

Reproduction type: **mostly vegetatively, rarely by seed/spores**

Dispersal unit (diaspore): **seed**

Dispersal strategy: **Allium (mainly autochory)**

Myrmecochory: **non-myrmecochorous (b)**



## Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

Type of clonal growth organ: **stolon**

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

Shoot life span (cyclicity): **monocyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **monopodial**

Primary root: **absent**

Persistence of the clonal growth organ [year]: **2.6**

Number of clonal offspring: **3.9**

Lateral spreading distance by clonal growth [m]: **0.14**

Clonal index: **5**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **15**

Number of buds per shoot at a depth of 0-10 cm (root buds excluded): **3**

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]: **2**

Number of buds per shoot at the soil surface (root buds included): **15**

Number of buds per shoot at a depth of 0-10 cm (root buds included): **3**

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]: **2**



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



## Karyology

Chromosome number (2n): **30 (32, 36, 43)**

Ploidy level (x): **4**

2C genome size [Mbp]: **2745.99**

1Cx monoploid genome size [Mbp]: **686.5**

Genomic GC content: **38.6 %**



## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **5x - semi-shade plant, only exceptionally occurring in full light, but usually at more than 10% of the diffuse radiation incident in an open area (generalist)**

Temperature indicator value: **6 - transition between values 5 and 7**

Moisture indicator value: **7 - humidity indicator, focus on well moistened, but not wet soils**

Reaction indicator value: **6x - transition between values 5 and 7 (generalist)**

Nutrient indicator value: **6x - transition between values 5 and 7 (generalist)**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.24**

Herb layer disturbance frequency indicator value: **-0.48**

Whole-community disturbance severity indicator value: **0.29**

Herb layer disturbance severity indicator value: **0.29**

Whole-community structure based disturbance indicator value: **0.38**

Herb layer structure-based disturbance indicator value: **0.47**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **1 - rare occurrence**

3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 - rare occurrence**

4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**

4D Riverine reed vegetation: **1 - rare occurrence**

4E Reed vegetation of brooks: **1 - rare occurrence**

4F Mesotrophic vegetation of muddy substrata: **1 - rare occurrence**

4G Tall-sedge beds: **2 - optimum**

- 4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**  
4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**  
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**  
5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**  
5F Transitional mires: **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: **1 - rare occurrence**  
6D Alluvial meadows of lowland rivers: **2 - optimum**  
6E Wet Cirsium meadows: **2 - optimum**  
6F Intermittently wet Molinia meadows: **2 - optimum**  
6G Vegetation of wet disturbed soils: **2 - optimum**  
7 Acidophilous grasslands  
7B Submontane Nardus grasslands: **1 - rare occurrence**  
8 Dry grasslands  
8F Thermophilous forest fringe vegetation: **1 - rare occurrence**  
10 Saline vegetation  
10I Inland saline meadows: **1 - rare occurrence**  
11 Heathlands and scrub  
11I Willow carrs: **1 - rare occurrence**  
11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**  
11L Tall mesic and xeric shrub: **1 - rare occurrence**  
11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**  
12 Forests  
12A Alder carrs: **2 - optimum**  
12B Alluvial forests: **2 - optimum**  
12C Oak-hornbeam forests: **1 - rare occurrence**  
12D Ravine forests: **1 - rare occurrence**  
12E Herb-rich 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**  
12K Acidophilous oak forests: **1 - rare occurrence**  
12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**  
12V Spruce plantations: **1 - rare occurrence**  
12W Pine and larch plantations: **1 - rare occurrence**  
13 Anthropogenic vegetation  
13B Annual vegetation of arable land: **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: **1 - rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

Diagnostic taxon

Diagnostic taxon of associations: [\*\*LBA07 Fraxino pannionicae-Ulmetum glabrae\*\*](#),  
[\*\*TDE01 Poo trivialis-Alopecuretum pratensis\*\*](#), [\*\*TDE03 Lathyrо palustris-Gratioletum officinalis\*\*](#)

Constant taxon

Constant taxon of alliances: [\*\*TDE Deschampion cespitosae\*\*](#)

Constant taxon of associations: [\*\*KBB05 Rhamno catharticae-Cornetum sanguineae\*\*](#),  
[\*\*LBA05 Pruno padi-Fraxinetum excelsioris\*\*](#), [\*\*LBA07 Fraxino pannionicae-Ulmetum glabrae\*\*](#), [\*\*MCH07 Caricetum vulpinae\*\*](#), [\*\*TDE01 Poo trivialis-Alopecuretum pratensis\*\*](#), [\*\*TDE03 Lathyrо palustris-Gratioletum officinalis\*\*](#), [\*\*TDE04 Cnidio dubii-Deschampsietum cespitosae\*\*](#), [\*\*TDE05 Scutellario hastifoliae-Veronicetum longifoliae\*\*](#), [\*\*TDF02 Cirsietum rivularis\*\*](#), [\*\*TDF07 Scirpo sylvatici-Cirsietum cani\*\*](#), [\*\*TDF09 Caricetum cespitosae\*\*](#), [\*\*TDF11 Junco inflexi-Menthetum longifoliae\*\*](#)

Dominant taxon

Dominant taxon of associations: [\*\*MCH07 Caricetum vulpinae\*\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.2**

Ecological specialization index for non-forest vegetation: **4.8**

Ecological specialization index for forest vegetation: **5**

Colonization ability

Index of colonization success (ICS): **6**

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **33**

## **Distribution and frequency**

Floristic zone: **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**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 637

taxon.data.freq\_in\_quad: 2125

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **5.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **10 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.3 %**

Mean percentage cover in vegetation plots: **3.6 %**

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: **48**

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

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

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**