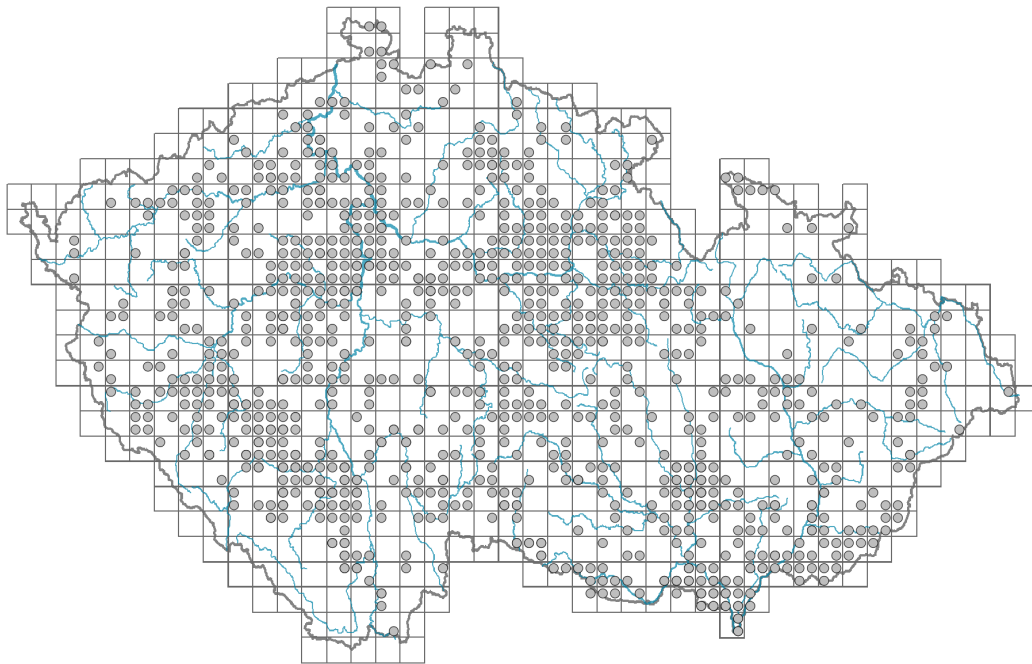


Leonurus cardiaca

Distribution



© Pavel Veselý

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**

Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - palmately divided**

Stipules: **absent**

Petiole: **present**

Flower

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

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

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **bilabiate**

Calyx fusion: **synsepalous**

Inflorescence type: **pseudospica e verticillastris composita**



© Dana Michalčová



© Pavel Veselý

Generative reproduction type: **facultative allogamy**

Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of four one-seeded nutlets**

Fruit colour: **brown**

Dispersal unit (diaspore): **fruit, infrutescence or its part**

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

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

Belowground organs and clonality

Type of clonal growth organ: **hypogeogenous rhizome**

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: **2.7**

Lateral spreading distance by clonal growth [m]: **0.01**

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): **12**

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): **17**

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): **12**

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): **17**

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): **18**

Ploidy level (x): **2**

2C genome size [Mbp]: **1355.68**

1Cx monoploid genome size [Mbp]: **677.84**

Genomic GC content: **38.8 %**

Taxon origin

Origin in the Czech Republic: **archaeophyte**



Invasion status: **naturalized**

Geographic origin: **Europe, Mediterranean, hybrid origin, anecophyte**

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: **5 - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**

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: **-0.52**

Herb layer disturbance frequency indicator value: **-0.52**

Whole-community disturbance severity indicator value: **0.67**

Herb layer disturbance severity indicator value: **0.67**

Whole-community structure based disturbance indicator value: **0.47**

Herb layer structure-based disturbance indicator value: **0.55**

Habitat and sociology

Occurrence in habitats

11 Heathlands and scrub

11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

12 Forests

12T Robinia pseudacacia plantations: **2 - optimum**

12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

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

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

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

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

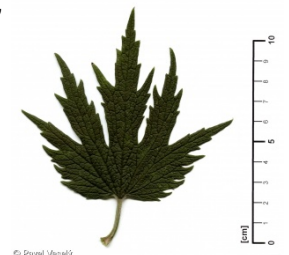
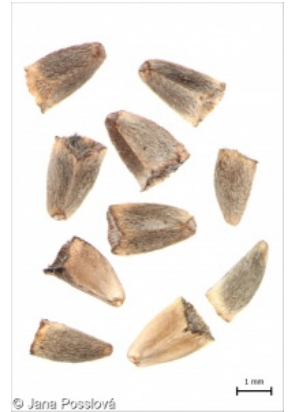
Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Diagnostic taxon

Diagnostic taxon of associations: [XBG12 Ivaetum xanthiifoliae](#), [XBI05 Matricario discoideae-Anthemidetum cotulae](#), [XCE01 Urtico urentis-Chenopodietum bonihenrici](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.9**



Ecological specialization index for non-forest vegetation: **4.9**

Distribution and frequency

Continentality degree: 7

Distribution range extension along the continental gradient: 7

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: 439

taxon.data.freq_in_quad: 874

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **13.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.7 %**

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

Mean percentage cover in vegetation plots: **4.4 %**

Maximum percentage cover in vegetation plots: **38 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: 7

Number of narrow habitats in which the taxon has its optimum: 3

Number of broad habitats in which the taxon occurs: 3

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

Threats and protection

Legal protection: **not protected by law**



