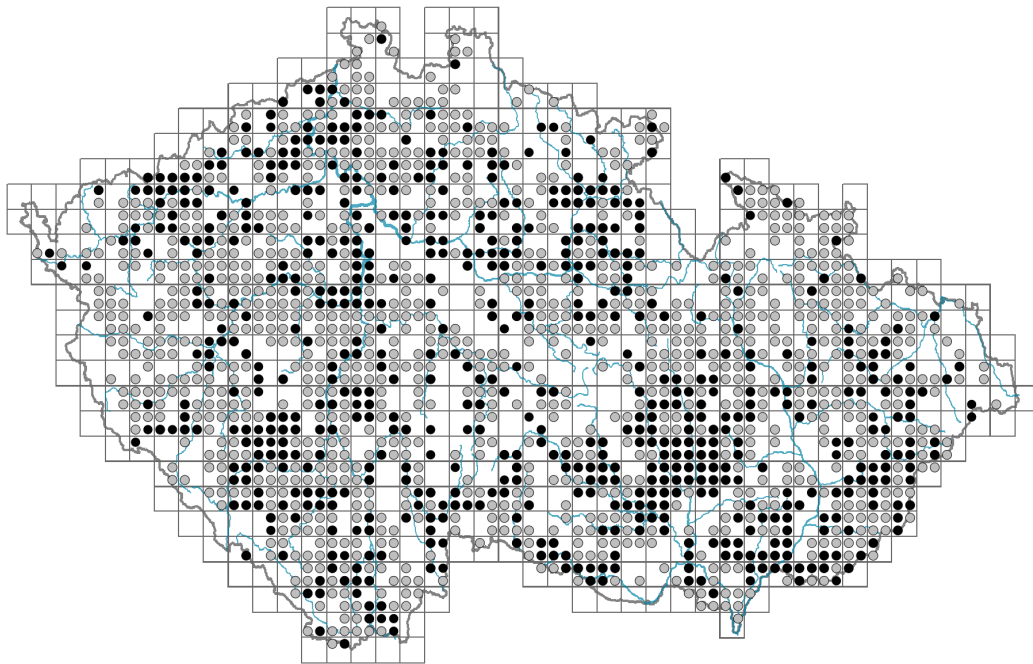


# *Silene nutans*

## 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]: **0.2-0.5**

Growth form: **polycarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

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

Life strategy (Pierce method based on leaf traits): **CR**

Life strategy (Pierce method, C-score): **45 %**

Life strategy (Pierce method, S-score): **1.8 %**

Life strategy (Pierce method, R-score): **53.2 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite, rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

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



Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **synsepalous**

Inflorescence type: **panicula e dichasiis composita**

Dicliny: **synoecious, gynodioecious, trioecious**

Generative reproduction type: **facultative allogamy**

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



## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Fruit colour: **brown**

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

Dispersal unit (diaspore): **seed**

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

Myrmecochory: **probably non-myrmecochorous**



## Belowground organs and clonality

Shoot metamorphosis: **pleiocorm**

Root metamorphosis: **primary storage root**

Storage organ: **pleiocorm, primary storage root**

Shoot life span (cyclicality): **dicyclic or polycyclic shoots prevailing**

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

Primary root: **present**

Position of root buds: **lateral roots**

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

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): **15**

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): **20**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

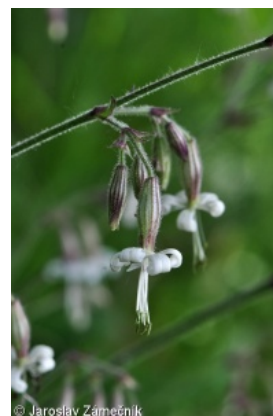
Number of buds per shoot at the soil surface (root buds included): **5**

Number of buds per shoot at a depth of 0–10 cm (root buds included): **19**

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): **39**

Depth of the belowground bud bank (root buds included) [cm]: **8**



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **24**

Ploidy level (x): **2**

2C genome size [Mbp]: **4308.84**

1Cx monoploid genome size [Mbp]: **2154.42**

Genomic GC content: **40.7 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**

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

Moisture indicator value: **3 - missing on damp soil**

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

Nutrient indicator value: **3 - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.8**

Herb layer disturbance frequency indicator value: **-0.68**

Whole-community disturbance severity indicator value: **0.24**

Herb layer disturbance severity indicator value: **0.14**

Whole-community structure based disturbance indicator value: **0.19**

Herb layer structure-based disturbance indicator value: **0.23**

## 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**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

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

7 Acidophilous grasslands

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

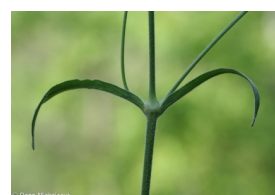
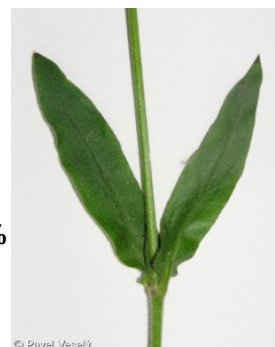
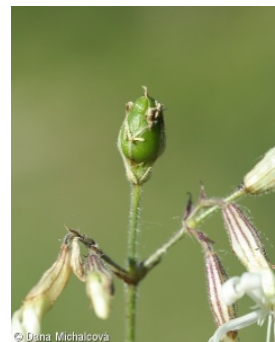
8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**

8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**

8D Broad-leaved dry grasslands: **2 - optimum**





- 8E Acidophilous dry grasslands: **2 - optimum**  
 8F Thermophilous forest fringe vegetation: **2 - optimum**  
 9 Sand grasslands and rock-outcrop vegetation  
 9C Festuca grasslands on acidic sands: **1 - rare occurrence**  
 9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**  
 9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**  
 11 Heathlands and scrub  
 11A Dry lowland to subalpine heathlands: **1 - rare occurrence**  
 11L Tall mesic and xeric shrub: **1 - rare occurrence**  
 11N Low xeric scrub: **1 - rare occurrence**  
 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**  
 12 Forests  
 12C Oak-hornbeam forests: **2 - optimum**  
 12D Ravine forests: **1 - rare occurrence**  
 12F Limestone beech forests: **1 - rare occurrence**  
 12G Acidophilous beech forests: **1 - rare occurrence**  
 12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**  
 12I Sub-continental thermophilous oak forests: **2 - optimum**  
 12J Acidophilous thermophilous oak forests: **2 - optimum**  
 12K Acidophilous oak forests: **2 - optimum**  
 12L Boreo-continental pine forests: **1 - rare occurrence**  
 12O Peri-Alpidic pine forests: **1 - rare occurrence**  
 12T Robinia pseudacacia plantations: **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: **2 - optimum**  
 13 Anthropogenic vegetation  
 13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

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

#### Diagnostic taxon

Diagnostic taxon of classes: [LC Quercetea pubescentis](#)

Diagnostic taxon of alliances: [LCB Aceri tatarici-Quercion](#), [LCC Quercion petraeae](#)

Diagnostic taxon of associations: [LCA02 Lithospermo purpureo-caerulei-Quercetum pubescentis](#), [LCB02 Carici fritschii-Quercetum roboris](#), [LCC01 Sorbo torminalis-Quercetum](#), [LDA02 Viscario vulgaris-Quercetum petraeae](#)

#### Constant taxon

Constant taxon of classes: [LC Quercetea pubescentis](#)

Constant taxon of alliances: [LCC Quercion petraeae](#)

Constant taxon of associations: [LCB02 Carici fritschii-Quercetum roboris](#), [LCC01 Sorbo torminalis-Quercetum](#), [LDA02 Viscario vulgaris-Quercetum petraeae](#)

#### Ecological specialization indices



Ecological specialization index for all vegetation types: **4.2**  
 Ecological specialization index for non-forest vegetation: **4.4**  
 Ecological specialization index for forest vegetation: **5**  
 Colonization ability  
 Index of colonization success (ICS): **6**  
 Index of colonization potential (ICP): **7**  
 Optimum successional age [years]: **28**

## Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional**  
 Floristic region: **Europe, Western Siberia**  
 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: **574**  
 taxon.data.freq\_in\_quad: **1584**  
 Commonness in vegetation plots from the Czech Republic  
 Occurrence frequency in vegetation plots: **1.3 %**  
 Occurrence frequency in vegetation plots with a cover above 5%: **3.8 %**  
 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: **2.4 %**  
 Maximum percentage cover in vegetation plots: **13 %**  
 Number of habitats with taxon occurrence in the Czech Republic  
 Number of narrow habitats in which the taxon occurs: **34**  
 Number of narrow habitats in which the taxon has its optimum: **9**  
 Number of broad habitats in which the taxon occurs: **8**  
 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**

