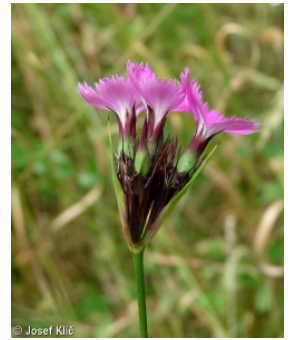
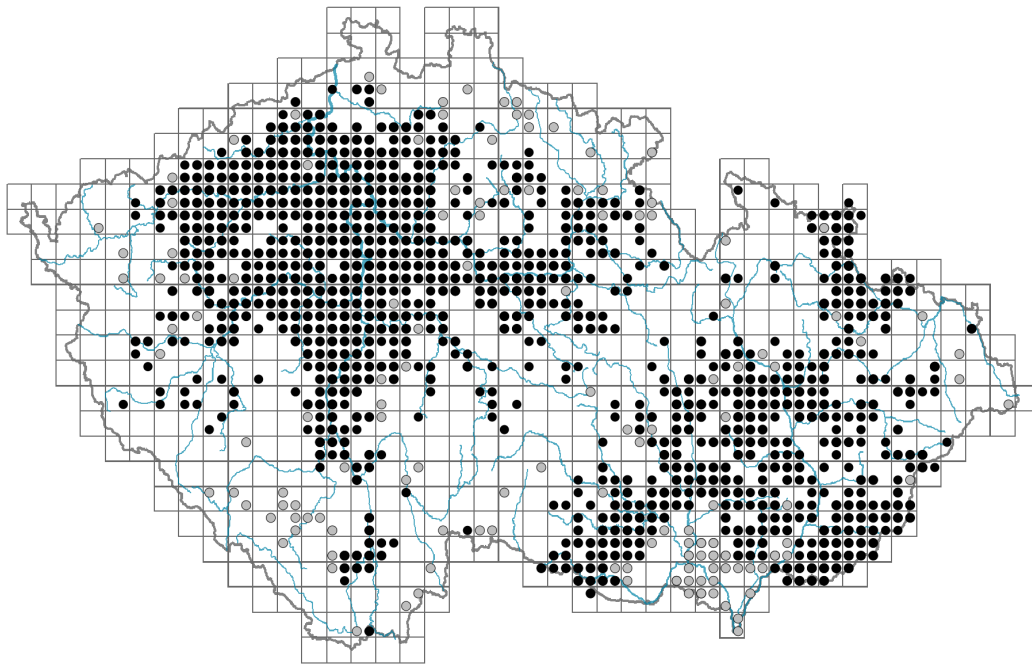


# *Dianthus carthusianorum*

## 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.



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## Habitus and growth type

Height [m]: **0.12-0.6**

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

Life form: **hemicryptophyte**

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

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **summer green**

Leaf anatomy: **scleromorphic**

## Flower

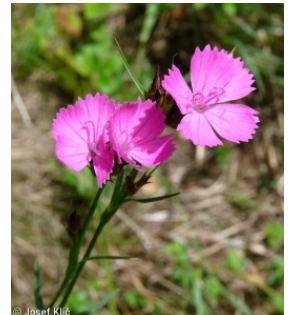
Flowering period [month]: **June-September**

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

Flower colour: **pink, red**

Flower symmetry: **actinomorphic**

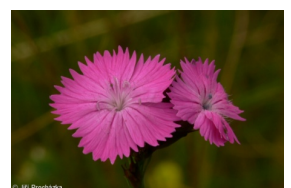
Perianth type: **calyx and corolla**



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© Dana Michalová



© Jiří Procházka

Perianth fusion: **free**  
 Calyx fusion: **synsepalous**  
 Inflorescence type: **fasciculus**  
 Dicliny: **synoecious, gynomonoecious, gynodioecious**  
 Generative reproduction type: **facultative allogamy**  
 Pollination syndrome: **insect-pollination**  
 Pollinator spectrum: **solitary bees, hoverflies, butterflies (beetles)**

### Fruit, seed and dispersal

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

### Belowground organs and clonality

Shoot metamorphosis: **rhizome-like pleiocorm**  
 Storage organ: **rhizome-like pleiocorm**  
 Shoot life span (cyclicality): **dicyclic or polycyclic shoots prevailing**  
 Branching type of stem-derived organs of clonal growth: **sympodial**  
 Primary root: **present**

#### Bud bank

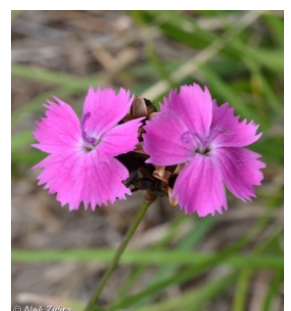
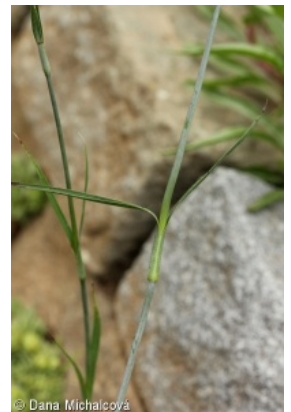
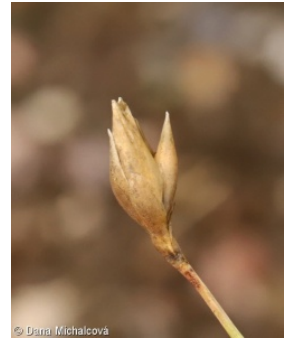
Number of buds per shoot at the soil surface (root buds excluded): **5**  
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **13**  
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **0**  
 Size of the belowground bud bank (root buds excluded): **18**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **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): **13**  
 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]: **4**

### Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**  
 Carnivory: **non-carnivorous**  
 Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

### Karyology

Chromosome number (2n): **30**  
 Ploidy level (x): **2**  
 2C genome size [Mbp]: **953.88**  
 1Cx monoploid genome size [Mbp]: **476.94**



## 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: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

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

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

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**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **2 - optimum**

1D Mobile calcareous screes: **1 - rare occurrence**

6 Meadows and mesic pastures

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

6C Pastures and park grasslands: **1 - rare occurrence**

6F Intermittently wet Molinia meadows: **1 - rare occurrence**

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**

8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

8C Narrow-leaved sub-continental steppes: **2 - optimum**

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

8E Acidophilous dry grasslands: **2 - optimum**

8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **1 - rare occurrence**

9C Festuca grasslands on acidic sands: **2 - optimum**

9D Pannonian sand steppes: **2 - optimum**

9E Acidophilous vegetation of spring therophytes and succulents: **2 - optimum**

9F Basiphilous vegetation of spring therophytes and succulents: **2 - optimum**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 - rare occurrence**

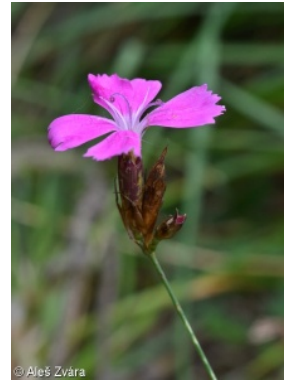
11L Tall mesic and xeric shrub: **1 - rare occurrence**

11N Low xeric scrub: **2 - optimum**

12 Forests

12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**

12I Sub-continental thermophilous oak forests: **1 - rare occurrence**



12J Acidophilous thermophilous oak forests: **2 - optimum**  
 12K Acidophilous oak forests: **1 - rare occurrence**  
 12L Boreo-continental pine forests: **1 - rare occurrence, 2 - optimum**  
 12O Peri-Alpidic pine forests: **2 - optimum**

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: [THD03 \*Festuco rupicolae-Caricetum humilis\*](#)

Constant taxon

Constant taxon of associations: [THA02 \*Seselio ossei-Festucetum pallentis\*](#), [THD02 \*Erysimo crepidifolii-Festucetum valesiacae\*](#), [THD03 \*Festuco rupicolae-Caricetum humilis\*](#), [THF02 \*Brachypodio pinnati-Molinietum arundinaceae\*](#), [THG03 \*Viscario vulgaris-Avenuletum pratensis\*](#)

Dominant taxon

Dominant taxon of associations: [TDA04 \*Potentillo albae-Festucetum rubrae\*](#)

Colonization ability

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

Index of colonization potential (ICP): **4**

Optimum successional age [years]: **75**

## Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional**

Floristic region: **Europe**

Continental degree: **5**

Distribution range extension along the continentality gradient: **3**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, subalpine belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **444**

taxon.data.freq\_in\_quad: **1110**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **25**

Number of narrow habitats in which the taxon has its optimum: **13**

Number of broad habitats in which the taxon occurs: **6**

Number of broad habitats in which the taxon has its optimum: **5**

