

Valerianella dentata

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]: **0.1-0.4**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **R - ruderal**

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

Life strategy (Pierce method, C-score): **8.2 %**

Life strategy (Pierce method, S-score): **31.7 %**

Life strategy (Pierce method, R-score): **60.2 %**

Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **overwintering green**

Leaf anatomy: **mesomorphic**

Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**
 Flower colour: **white, pink**
 Flower symmetry: **zygomorphic**
 Perianth type: **calyx reduced, corolla present**
 Perianth fusion: **fused**
 Shape of the sympetalous corolla or syntepalous perianth: **rotate, funnel-shaped**
 Calyx fusion: **synsepalous**
 Inflorescence type: **dichasium**
 Dicliny: **synoecious**
 Generative reproduction type: **facultative autogamy**
 Pollination syndrome: **insect-pollination, selfing**



Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**
 Fruit colour: **brown**
 Reproduction type: **only by seed/spores**
 Dispersal unit (diaspore): **fruit, infrutescence or its part**
 Dispersal strategy: **Allium (mainly autochory)**
 Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Shoot life span (cyclicality): **monocyclic shoots prevailing**
 Primary root: **present**
 Bud bank
 Number of buds per shoot at the soil surface (root buds excluded):
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded):
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded):
 Size of the belowground bud bank (root buds excluded):
 Depth of the belowground bud bank (root buds excluded) [cm]:
 Number of buds per shoot at the soil surface (root buds included):
 Number of buds per shoot at a depth of 0–10 cm (root buds included):
 Number of buds per shoot at a depth greater than 10 cm (root buds included):
 Size of the belowground bud bank (root buds included):
 Depth of the belowground bud bank (root buds included) [cm]:

Trophic mode

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

Karyology

Chromosome number (2n): **14 (16)**
 Ploidy level (x): **2**
 2C genome size [Mbp]: **378.81**
 1Cx monoploid genome size [Mbp]: **189.4**

Genomic GC content: **38 %**

Taxon origin

Origin in the Czech Republic: **archaeophyte**

Invasion status: **naturalized**

Geographic origin: **Mediterranean**

Period of introduction: **Bronze Age (2300-750 BCE)**

Introduction pathway: **unintentional - agriculture**



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: **4 - transition between values 3 and 5**

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

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: **0.22**

Herb layer disturbance frequency indicator value: **0.22**

Whole-community disturbance severity indicator value: **0.97**

Herb layer disturbance severity indicator value: **0.97**

Whole-community structure based disturbance indicator value: **0.7**

Herb layer structure-based disturbance indicator value: **0.82**



Habitat and sociology

Occurrence in habitats

9 Sand grasslands and rock-outcrop vegetation

9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

13 Anthropogenic vegetation

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

13B Annual vegetation of arable land: **2 - optimum**

13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**

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 alliances: **[XBC Scleranthion annui](#)**

Ecological specialization indices

Ecological specialization index for all vegetation types: **6.5**



Ecological specialization index for non-forest vegetation: **6.5**

Colonization ability

Index of colonization success (ICS): **3**

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

Optimum successional age [years]: **6**

Distribution and frequency

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

Floristic region: **Europe**

Continental degree: **4**

Distribution range extension along the continentality gradient: **4**

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: 505

taxon.data.freq_in_quad: 1128

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **5.6 %**

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: **2.9 %**

Maximum percentage cover in vegetation plots: **23 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **5**

Number of narrow habitats in which the taxon has its optimum: **1**

Number of broad habitats in which the taxon occurs: **2**

Number of broad habitats in which the taxon has its optimum: **1**

Threats and protection

Red List 2017 (national categories): **C4a - near threatened taxon**

Red List 2017 (IUCN categories): **LC - least concern**

Legal protection: **not protected by law**

