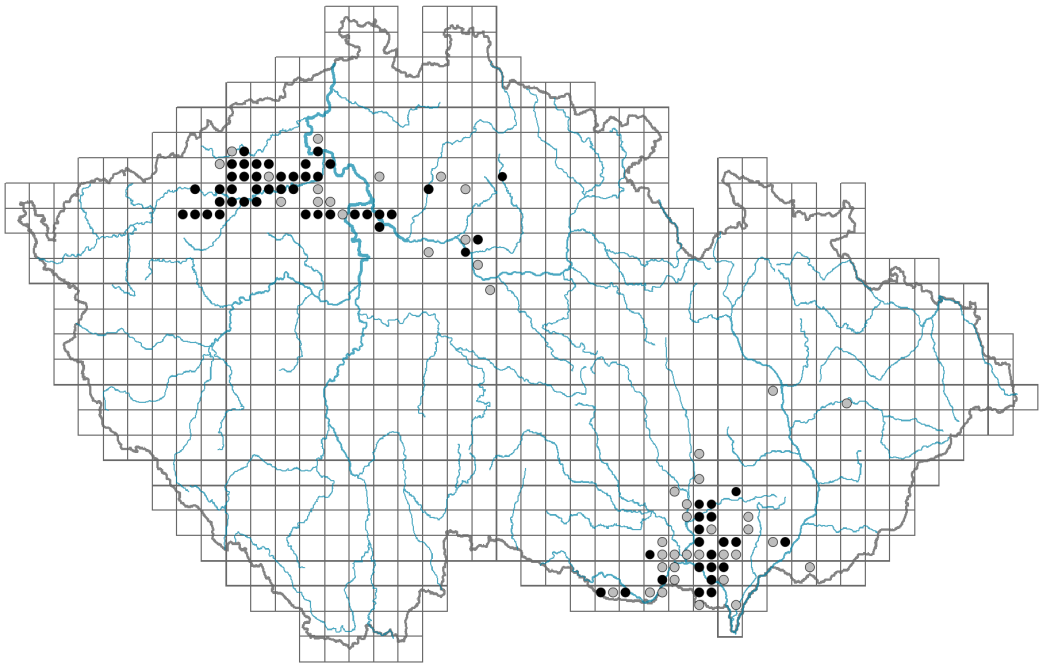
Melilotus dentatus

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]: **0.3–1**
Growth form: **annual herb**
Life form: **hemicryptophyte**
Life strategy: **CS – competitor/stress-tolerator**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **compound – ternate**
Stipules: **present**
Petiole: **present**
Leaf life span: **summer green**
Leaf anatomy: **mesomorphic**

Flower

Flowering period [month]: **June–September**
Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**
Flower colour: **yellow**
Flower symmetry: **zygomorphic**
Perianth type: **calyx and corolla**

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Perianth fusion: **free**
Calyx fusion: **synsepalous**
Inflorescence type: **racemus**
Dicliny: **synoecious**
Pollination syndrome: **insect-pollination**

Fruit, seed and dispersal

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

Belowground organs and clonality

Root metamorphosis: **primary storage root**
Storage organ: **primary storage root**
Shoot life span (cyclicity): **monocyclic shoots prevailing**
Primary root: **present**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **4**
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): **6**
Depth of the belowground bud bank (root buds exluded) [cm]: **3**
Number of buds per shoot at the soil surface (root buds included): **4**
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): **6**
Depth of the belowground bud bank (root buds included) [cm]: **3**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **symbiosis with rhizobia**

Karyology

Chromosome number (2n): **16**
Ploidy level (x): **2**
2C genome size [Mbp]: **2232.6**
1Cx monoploid genome size [Mbp]: **1116.3**
Genomic GC content: **38.9 %**

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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: **6 – transition between values 5 and 7**
Moisture indicator value: **7 – humidity indicator, focus on well moistened, but not wet soils**
Reaction indicator value: **8 – transition between values 7 and 9, occurring mostly in calcium-rich conditions**
Nutrient indicator value: **6 – transition between values 5 and 7**
Salinity indicator value: **5 – α-mesohaline, mostly on soils with a moderate salt content**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.21**
Herb layer disturbance frequency indicator value: **-0.21**
Whole-community disturbance severity indicator value: **0.28**
Herb layer disturbance severity indicator value: **0.32**
Whole-community structure based disturbance indicator value: **0.63**
Herb layer structure-based disturbance indicator value: **0.7**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4B Halophilous reed and sedge beds: **2 – optimum**
4G Tall-sedge beds: **1 – rare occurrence**
4I Vegetation of nitrophilous annual hygrophilous herbs: **1 – rare occurrence**

6 Meadows and mesic pastures

6C Pastures and park grasslands: **1 – rare occurrence**
6D Alluvial meadows of lowland rivers: **1 – rare occurrence**
6G Vegetation of wet disturbed soils: **2 – optimum**

10 Saline vegetation

10I Inland saline meadows: **2 – optimum**
10J Saline steppes: **1 – rare occurrence**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 – rare occurrence**
13C Annual vegetation of trampled habitats: **1 – rare occurrence**
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**

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Diagnostic taxon

Diagnostic taxon of classes: **TC *Festuco-Puccinellietea***

Diagnostic taxon of alliances: **MCB *Meliloto dentati-Bolboschoenion maritimi***, **TCA *Puccinellion limosae***, **TCB *Juncion gerardii***

Diagnostic taxon of associations: **MCB01 *Astero pannonici-Bolboschoenetum compacti***, **TCA01 *Puccinellietum limosae***, **TCB01 *Scorzonero parviflorae-Juncetum gerardii***, **TCB02 *Loto tenuis-Potentilletum anserinae***, **TCB03 *Agrostio stoloniferae-Juncetum ranarii***

Constant taxon

Constant taxon of classes: **TC *Festuco-Puccinellietea***

Constant taxon of alliances: **TCB *Juncion gerardii***

Constant taxon of associations: **MBB04 *Chenopodio chenopodioidis-Atriplicetum prostratae***, **MCB01 *Astero pannonici-Bolboschoenetum compacti***, **TCB01 *Scorzonero parviflorae-Juncetum gerardii***, **TCB02 *Loto tenuis-Potentilletum anserinae***, **TCB03 *Agrostio stoloniferae-Juncetum ranarii***

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.3**

Ecological specialization index for non-forest vegetation: **5.3**

Colonization ability

Index of colonization success (ICS): **1**

Index of colonization potential (ICP): **1**

Distribution and frequency

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

Floristic region: **Europe, Western Asia**

Continentality degree: **8**

Distribution range extension along the continentality gradient: **6**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 56

taxon.data.freq_in_quad: 107

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%: **14.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.6 %**

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

Mean percentage cover in vegetation plots: **4.5 %**

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: **11**

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

Number of broad habitats in which the taxon occurs: **4**

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

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Threats and protection

Red List 2017 (national categories): **C2t – endangered taxon, declining**
Red List 2017 (IUCN categories): **EN – endangered**
Legal protection: **not protected by law**

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