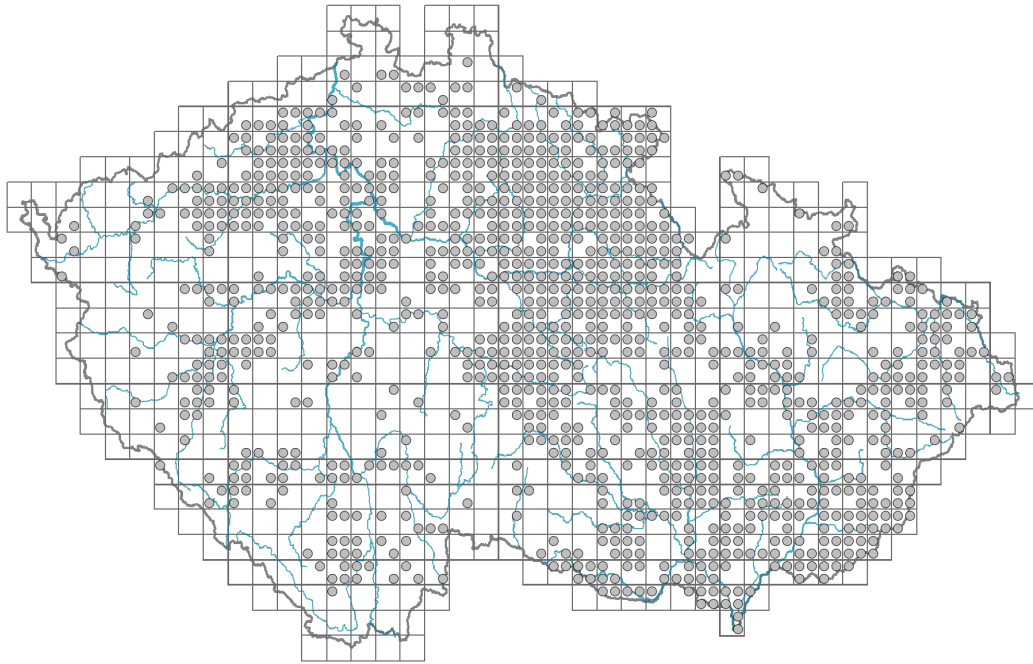


# *Medicago sativa*

## 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]: **0.3**

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

Life form: **hemicryptophyte**

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

Life strategy (Pierce method, C-score): **31 %**

Life strategy (Pierce method, S-score): **25.9 %**

Life strategy (Pierce method, R-score): **43.1 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **compound - ternate**

Stipules: **present**

Petiole: **present**

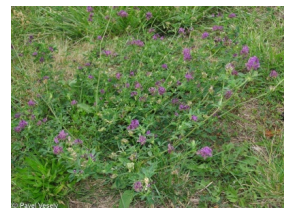
## Flower

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

Flower colour: **blue, blue-violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**



© Miroslav Páda

Perianth fusion: **free**

Calyx fusion: **synsepalous**

Inflorescence type: **racemus**

Generative reproduction type: **alogamy self-incompatibility, facultative alogamy**

Pollinator spectrum: **honeybee, solitary bees, hoverflies (bumblebees, meat flies s. l., butterflies, beetles)**

## Fruit, seed and dispersal

Fruit type: **dry fruit - legume**

Fruit colour: **brown, grey**

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

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

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



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **symbiosis with rhizobia**



## Karyology

Chromosome number (2n): **32**

Ploidy level (x): **4**

2C genome size [Mbp]: **3135.43**

1Cx monoploid genome size [Mbp]: **783.86**

Genomic GC content: **37.9 %**



## Taxon origin

Origin in the Czech Republic: **neophyte**

Invasion status: **naturalized**

Geographic origin: **anecophyte**

Year of the first record in the wild: **1819**

Period of introduction: **Early Modern Period (1500-1800)**

Introduction pathway: **intentional - other, unintentional - agriculture, unintentional - plantations**

## 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: **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: **5x - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites (generalist)**



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: **-0.08**

Herb layer disturbance frequency indicator value: **-0.08**

Whole-community disturbance severity indicator value: **0.65**

Herb layer disturbance severity indicator value: **0.66**

Whole-community structure based disturbance indicator value: **0.59**

Herb layer structure-based disturbance indicator value: **0.65**

## Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **2 - optimum**

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

6D Alluvial meadows of lowland rivers: **1 - rare occurrence**

6G Vegetation of wet disturbed soils: **1 - rare occurrence**

8 Dry grasslands

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

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

8E Acidophilous dry grasslands: **1 - rare occurrence**

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

9 Sand grasslands and rock-outcrop vegetation

9C Festuca grasslands on acidic sands: **1 - rare occurrence**

10 Saline vegetation

10I Inland saline meadows: **1 - rare occurrence**

11 Heathlands and scrub

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

12 Forests

12T Robinia pseudacacia plantations: **1 - rare occurrence**

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

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **2 - optimum**

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

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

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **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**

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.1**



Ecological specialization index for non-forest vegetation: **4.1**

### Colonization ability

Index of colonization success (ICS): **5**

Index of colonization potential (ICP): **7**

Optimum successional age [years]: **10.5**

### Distribution and frequency

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: **447**

taxon.data.freq\_in\_quad: **1067**

### 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%: **10.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **4.3 %**

Occurrence frequency in vegetation plots with a cover above 50%: **2.9 %**

Mean percentage cover in vegetation plots: **4.8 %**

Maximum percentage cover in vegetation plots: **63 %**

### Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **18**

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

Number of broad habitats in which the taxon occurs: **8**

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

### 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**