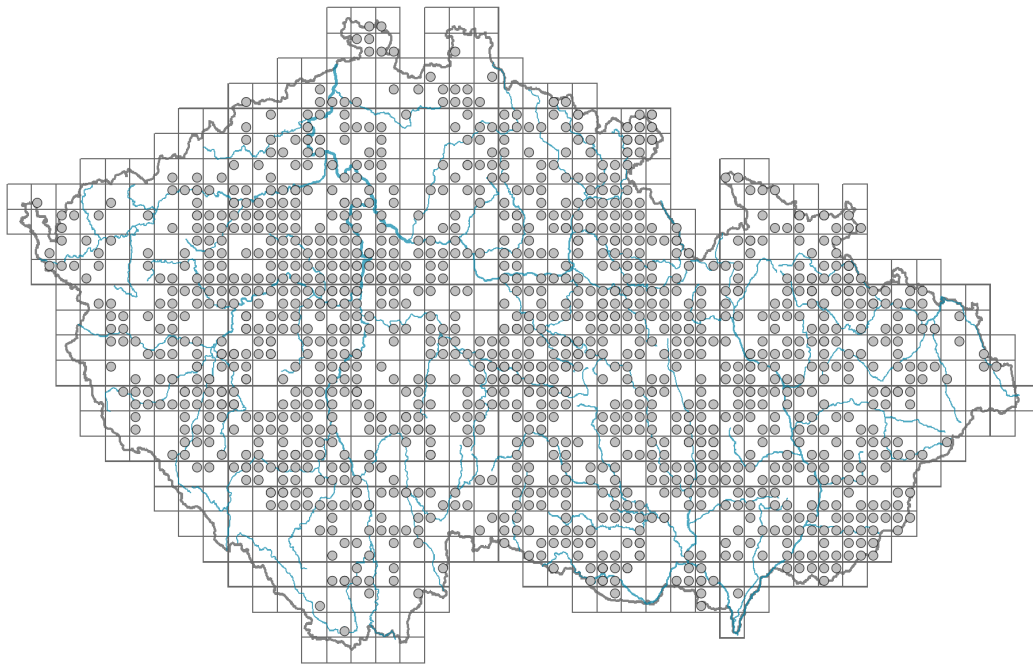


# *Fumaria officinalis*

## Distribution

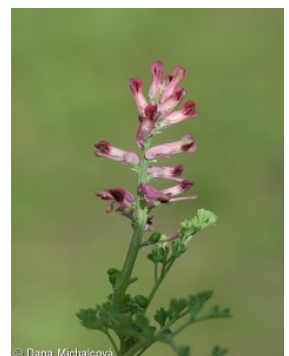


### Map info

● 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/CR**

Life strategy (Pierce method, C-score): **19.3 %**

Life strategy (Pierce method, S-score): **0 %**

Life strategy (Pierce method, R-score): **80.7 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **compound - bipinnate, compound - tripinnate**

Stipules: **absent**

Petiole: **present**

Leaf life span: **overwintering green**

Leaf anatomy: **mesomorphic, hygromorphic**

## Flower

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

Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**

Flower colour: **pink, red-violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

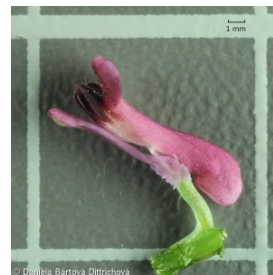
Calyx fusion: **aposepalous**

Inflorescence type: **racemus**

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, infructescence or its part**

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

Myrmecochory: **probably myrmecochorous**



## Belowground organs and clonality

Shoot life span (cyclicity): **monocyclic shoots prevailing**

Primary root: **present**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **0**

Number of buds per shoot at a depth of 0-10 cm (root buds excluded): **0**

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): **0**

Number of buds per shoot at the soil surface (root buds included): **0**

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

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): **0**



## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



## Karyology

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

Ploidy level (x): **4**

2C genome size [Mbp]: **845.87**

1Cx monoploid genome size [Mbp]: **211.47**



## 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: **5 - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**

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

Nutrient indicator value: **7 - occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites**

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

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **0.05**

Herb layer disturbance frequency indicator value: **0.26**

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

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

Whole-community structure based disturbance indicator value: **0.75**

Herb layer structure-based disturbance indicator value: **0.84**

## Habitat and sociology

### Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1C Walls: **1 - rare occurrence**

9 Sand grasslands and rock-outcrop vegetation

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

11 Heathlands and scrub

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

11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

12 Forests

12J Acidophilous thermophilous oak forests: **1 - rare occurrence**

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

13 Anthropogenic vegetation

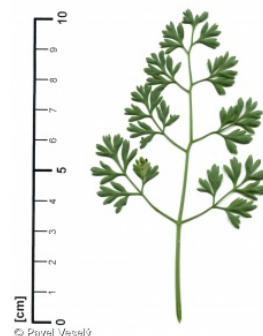
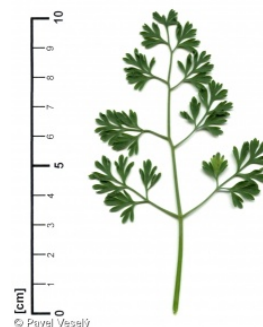
13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

13B Annual vegetation of arable land: **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

Diagnostic taxon

Diagnostic taxon of associations: [XBA02 \*Lathyro tuberosi\*-\*Adonidetum aestivalis\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **6**

Ecological specialization index for non-forest vegetation: **6.1**

Colonization ability

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

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **19**

### Distribution and frequency

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

Floristic region: **Europe**

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: **512**

taxon.data.freq\_in\_quad: **1212**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.9 %**

Occurrence frequency in vegetation plots with a cover above 5%: **4.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.4 %**

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

Mean percentage cover in vegetation plots: **2.7 %**

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: **9**

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

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

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

### Threats and protection

Legal protection: **not protected by law**