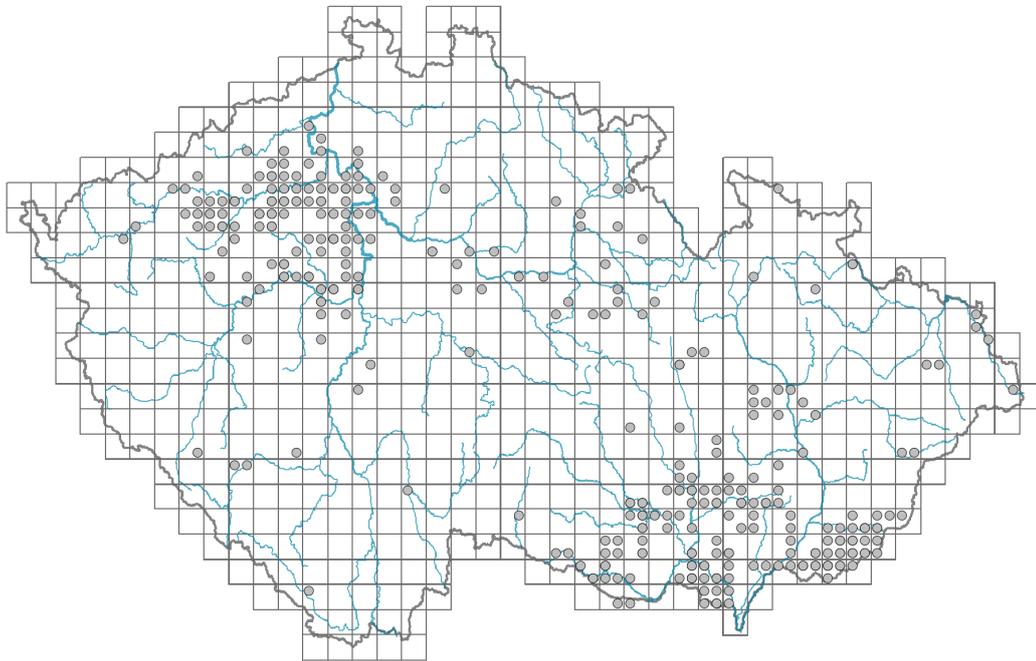


# *Fumaria vaillantii*

## 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]: **0.1-0.3**

Growth form: **annual herb**

Life form: **therophyte**

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

Life strategy (Pierce method, C-score): **10.4 %**

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

Life strategy (Pierce method, R-score): **89.6 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **compound - bipinnate**

Stipules: **absent**

Petiole: **present**

## Flower

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

Flower colour: **pink**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**



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1000 µm

Perianth fusion: **free**  
 Calyx fusion: **aposepalous**  
 Inflorescence type: **racemus**

## Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**  
 Fruit colour: **brown**  
 Dispersal unit (diaspore): **fruit, infrutescence or its part**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **probably myrmecochorous nv**



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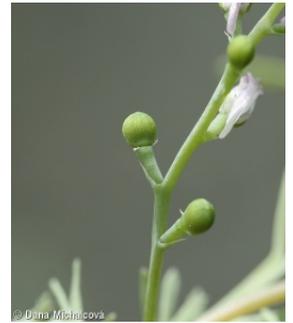
100 µm

## 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):  
 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):



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## 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]: **813.65**  
 1Cx monoploid genome size [Mbp]: **203.41**  
 Genomic GC content: **40.4 %**

## 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: **7 - heat indicator, occurring in relatively warm lowlands**

Moisture indicator value: **4 - transition between values 3 and 5**

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: **0 - not salt tolerant, glycophyte**

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.43**

Herb layer disturbance frequency indicator value: **-0.43**

Whole-community disturbance severity indicator value: **0.91**

Herb layer disturbance severity indicator value: **0.9**

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

Herb layer structure-based disturbance indicator value: **0.63**

## Habitat and sociology

### Occurrence in habitats

1 Vegetation of cliffs, screes and walls

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

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

8 Dry grasslands

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

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**

11 Heathlands and scrub

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

11N Low xeric scrub: **1 - rare occurrence**

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

12 Forests

12D Ravine forests: **1 - rare occurrence**

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

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

12T Robinia pseudacacia plantations: **2 - optimum**

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**

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: [XBA01 \*Caucalido platycarpi-Conringietum orientalis\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.5**

Ecological specialization index for non-forest vegetation: **6.4**

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

Colonization ability

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

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

Optimum successional age [years]: **5**

**Distribution and frequency**

Continental degree: **7**

Distribution range extension along the continentality gradient: **7**

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: **156**

taxon.data.freq\_in\_quad: **263**

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%: **15.6 %**

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: **4.1 %**

Maximum percentage cover in vegetation plots: **29 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **16**

Number of narrow habitats in which the taxon has its optimum: **2**

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

Number of broad habitats in which the taxon has its optimum: **2**

**Threats and protection**

Legal protection: **not protected by law**