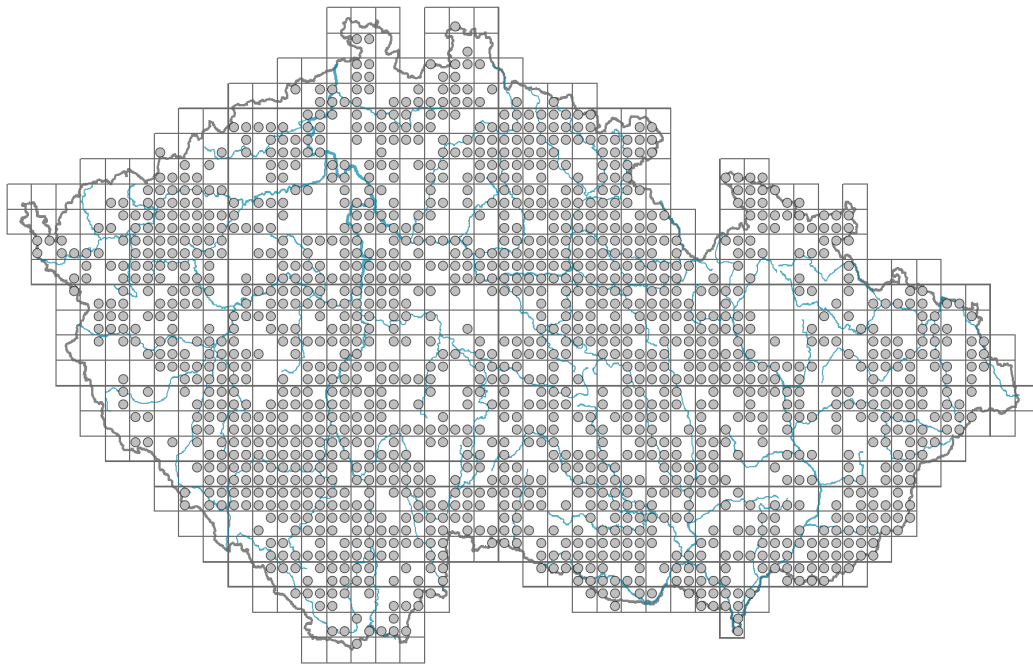


# *Erophila verna*

## 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]: **0.03-0.2**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **SR - stress-tolerator/ruderal**

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

Life strategy (Pierce method, C-score): **8.4 %**

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

Life strategy (Pierce method, R-score): **91.6 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **overwintering green**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

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

Flowering phase: **1 Corylus avellana-Leucojum vernal (pre-spring)**

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **free**

Calyx fusion: **aposepalous**

Inflorescence type: **racemus**

Dicliny: **synoecious**

Generative reproduction type: **autogamy**

Pollination syndrome: **insect-pollination, selfing**



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## Fruit, seed and dispersal

Fruit type: **dry fruit - silicula**

Fruit colour: **brown**

Reproduction type: **only by seed/spores**

Dispersal unit (diaspore): **seed**

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

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



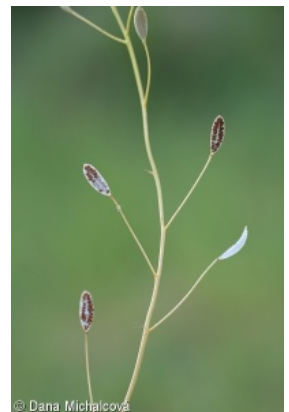
© Ondřej Pánik

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



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## Karyology

Chromosome number (2n): **32 (14, 30, 34, 36, 40)**

Ploidy level (x): **4**

2C genome size [Mbp]: **1348.9**

1Cx monoploid genome size [Mbp]: **337.23**

Genomic GC content: **39.3 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

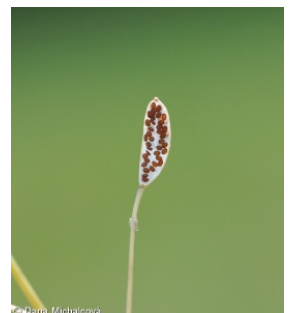
Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**

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

Moisture indicator value: **3x - missing on damp soil (generalist)**

Reaction indicator value: **5x - indicator of moderate acidity, occurring rarely in strongly acidic as well as in neutral to alkaline conditions (generalist)**

Nutrient indicator value: **3 - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**



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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: **0.06**

Whole-community disturbance severity indicator value: **0.53**

Herb layer disturbance severity indicator value: **0.56**

Whole-community structure based disturbance indicator value: **0.76**

Herb layer structure-based disturbance indicator value: **0.83**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **1 - rare occurrence**

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

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

6B Montane mesic meadows: **1 - rare occurrence**

6C Pastures and park grasslands: **2 - optimum**

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

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

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**

8C Narrow-leaved sub-continental steppes: **2 - optimum**

8D Broad-leaved dry grasslands: **1 - rare occurrence**

8E Acidophilous dry grasslands: **2 - optimum**

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

9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **2 - optimum**

9C Festuca grasslands on acidic sands: **2 - optimum**

9D Pannonian sand steppes: **2 - optimum**

9E Acidophilous vegetation of spring therophytes and succulents: **3 - dominant**

9F Basiphilous vegetation of spring therophytes and succulents: **2 - optimum**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 - rare occurrence**

12 Forests

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

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

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

12W Pine and larch plantations: **1 - rare occurrence**

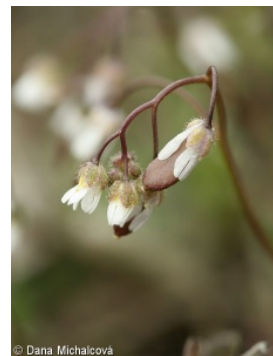
13 Anthropogenic vegetation

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

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

13C Annual vegetation of trampled habitats: **1 - rare occurrence**

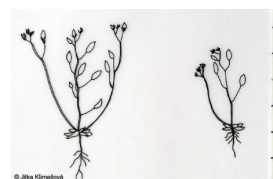
13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**



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## 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 classes: [TG \*Festucetea vaginatae\*](#)

Diagnostic taxon of alliances: [TFE \*Arabidopsion thalianae\*](#), [TGA \*Festucion vaginatae\*](#), [XBD \*Arnosseridion minimae\*](#)

Diagnostic taxon of associations: [TDA04 \*Potentillo albae-Festucetum rubrae\*](#), [TFD01 \*Polytricho piliferi-Scleranthetum perennis\*](#), [TFE01 \*Festuco-Veronicetum dillenii\*](#), [TFF01 \*Cerastietum\*](#), [TGA01 \*Diantho serotini-Festucetum vaginatae\*](#), [THA04 \*Helichryso arenarii-Festucetum pallentis\*](#), [XBC03 \*Erophilo vernae-Arabidopsietum thalianae\*](#), [XBD01 \*Sclerantho annui-Arnoseridetum minimae\*](#)

## Constant taxon

Constant taxon of alliances: [TFE \*Arabidopsion thalianae\*](#)

Constant taxon of associations: [TFE01 \*Festuco-Veronicetum dillenii\*](#), [THA04 \*Helichryso arenarii-Festucetum pallentis\*](#), [XBC03 \*Erophilo vernae-Arabidopsietum thalianae\*](#)

## Dominant taxon

Dominant taxon of associations: [TFE01 \*Festuco-Veronicetum dillenii\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.2**

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

## Colonization ability

Index of colonization success (ICS): **4**

Index of colonization potential (ICP): **3**

Optimum successional age [years]: **30**

**Distribution and frequency**

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

Floristic region: **Europe, Western Asia**

Distribution range extension along the continentality gradient: **5**

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: **576**

taxon.data.freq\_in\_quad: **1509**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **6.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1 %**

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

Mean percentage cover in vegetation plots: **3 %**

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: **27**

Number of narrow habitats in which the taxon has its optimum: **10**

Number of broad habitats in which the taxon occurs: **7**

Number of broad habitats in which the taxon has its optimum: **4**

### **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**