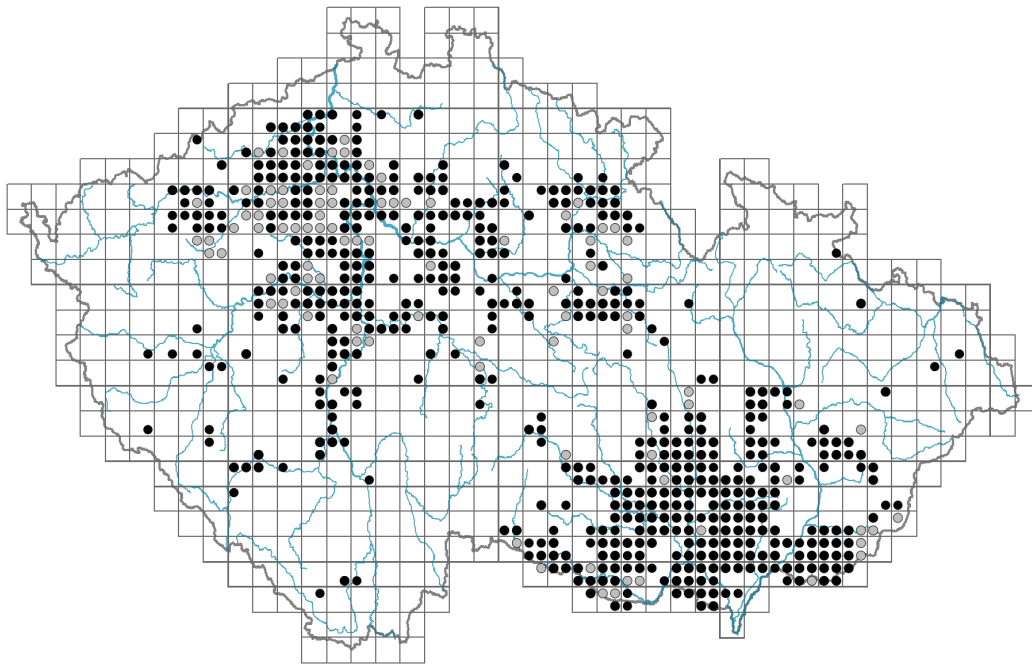


# *Bupleurum falcatum*

## 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.

## Habitus and growth type

Height [m]: **0.3-1.2**Growth form: **polycarpic perennial non-clonal herb**Life form: **hemicryptophyte**Life strategy: **CSR - competitor/stress-tolerator/ruderal**Life strategy (Pierce method based on leaf traits): **S/CSR**Life strategy (Pierce method, C-score): **22.4 %**Life strategy (Pierce method, S-score): **60.6 %**Life strategy (Pierce method, R-score): **17 %**

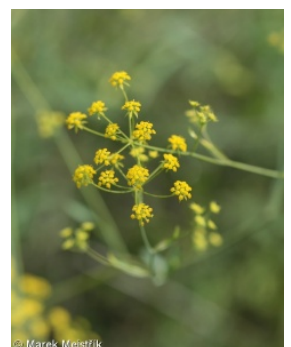
## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**Leaf arrangement (phyllotaxis): **alternate**Leaf shape: **simple - entire**Stipules: **absent**Petiole: **both present and absent**Leaf life span: **summer green**Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

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

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Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **yellow**

Flower symmetry: **actinomorphic**

Perianth type: **calyx absent, corolla present**

Perianth fusion: **free**

Inflorescence type: **umbrella composita**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination**

Pollinator spectrum: **hoverflies (solitary bees)**



© Pavel Vasek

## Fruit, seed and dispersal

Fruit type: **dry fruit - cremocarp**

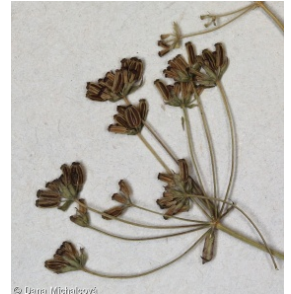
Fruit colour: **brown**

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

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

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

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



© Dana Michalová

## Belowground organs and clonality

Shoot metamorphosis: **pleiocorm**

Storage organ: **pleiocorm**

Shoot life span (cyclicality): **dicyclic or polycyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **sympodial**

Primary root: **present**

Position of root buds: **lateral roots**

Role of root buds in life-history of a plant: **additive**

### Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **5**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **15**

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): **20**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

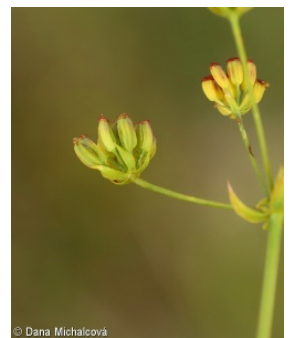
Number of buds per shoot at the soil surface (root buds included): **5**

Number of buds per shoot at a depth of 0–10 cm (root buds included): **17**

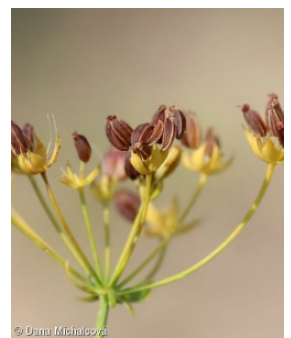
Number of buds per shoot at a depth greater than 10 cm (root buds included): **15**

Size of the belowground bud bank (root buds included): **37**

Depth of the belowground bud bank (root buds included) [cm]: **9**



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## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **16**

Ploidy level (x): **2**

2C genome size [Mbp]: **621.94**

1Cx monoploid genome size [Mbp]: **310.97**

Genomic GC content: **37.5 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**

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

Moisture indicator value: **3 - missing on damp soil**

Reaction indicator value: **8 - transition between values 7 and 9, occurring mostly in calcium-rich conditions**

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

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.34**

Herb layer disturbance frequency indicator value: **-0.58**

Whole-community disturbance severity indicator value: **0.22**

Herb layer disturbance severity indicator value: **0.2**

Whole-community structure based disturbance indicator value: **0.32**

Herb layer structure-based disturbance indicator value: **0.39**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

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

5 Vegetation of springs and mires

5D Calcareous fens: **1 - rare occurrence**

6 Meadows and mesic pastures

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

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

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **1 - rare occurrence**

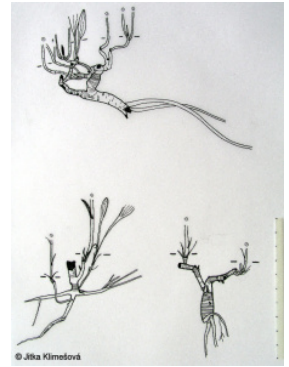
8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

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

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



- 8E Acidophilous dry grasslands: **1 - rare occurrence**
- 8F Thermophilous forest fringe vegetation: **2 - optimum**
- 9 Sand grasslands and rock-outcrop vegetation
- 9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**
- 10 Saline vegetation
- 10I Inland saline meadows: **1 - rare occurrence**
- 11 Heathlands and scrub
- 11L Tall mesic and xeric shrub: **2 - optimum**
- 11N Low xeric scrub: **2 - optimum**
- 12 Forests
- 12C Oak-hornbeam forests: **1 - rare occurrence**
- 12D Ravine forests: **1 - rare occurrence**
- 12F Limestone beech forests: **1 - rare occurrence**
- 12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**
- 12I Sub-continental thermophilous oak forests: **2 - optimum**
- 12J Acidophilous thermophilous oak forests: **2 - optimum**
- 12O Peri-Alpidic pine forests: **2 - optimum**
- 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**
- 13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**
- Affinity to the forest environment
- Affinity to the forest environment in Thermophyticum: **2.1 - taxon occurring both in the forest and open vegetation**
- Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**
- Diagnostic taxon
- Diagnostic taxon of alliances: [KBA Prunion fruticosae](#), [LCA Quercion pubescenti-petraeae](#), [LCB Aceri tatarici-Quercion](#), [THE Cirsio-Brachypodium pinnati](#)
- Diagnostic taxon of associations: [LBF04 Seslerio albicantis-Tilietum cordatae](#), [LCA01 Lathyro collini-Quercetum pubescentis](#), [LCA02 Lithospermo purpureocaerulei-Quercetum pubescentis](#), [LCA03 Euphorbio-Quercetum](#), [THE01 Scabioso ochroleucaae-Brachypodium pinnati](#), [THE03 Polygalo majoris-Brachypodium pinnati](#), [THH03 Geranio sanguinei-Peucedanetum cervariae](#)
- Constant taxon
- Constant taxon of alliances: [LCA Quercion pubescenti-petraeae](#), [THE Cirsio-Brachypodium pinnati](#)
- Constant taxon of associations: [LBF04 Seslerio albicantis-Tilietum cordatae](#), [LCA01 Lathyro collini-Quercetum pubescentis](#), [LCA02 Lithospermo purpureocaerulei-Quercetum pubescentis](#), [LCA03 Euphorbio-Quercetum](#), [THE01 Scabioso ochroleucaae-Brachypodium pinnati](#), [THE03 Polygalo majoris-Brachypodium pinnati](#), [THH03 Geranio sanguinei-Peucedanetum cervariae](#)
- Ecological specialization indices
- Ecological specialization index for all vegetation types: **4.7**
- Ecological specialization index for non-forest vegetation: **5**
- Ecological specialization index for forest vegetation: **5.1**



## Colonization ability

Index of colonization success (ICS): **6**

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

Optimum successional age [years]: **26**

## Distribution and frequency

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

Floristic region: **Europe, Asia**

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: **275**

taxon.data.freq\_in\_quad: **644**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **5.9 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.2 %**

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

Mean percentage cover in vegetation plots: **2.9 %**

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: **26**

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

Number of broad habitats in which the taxon occurs: **9**

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**