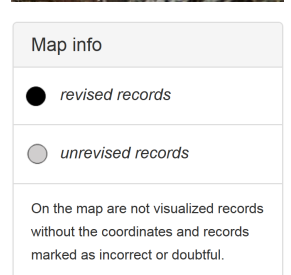
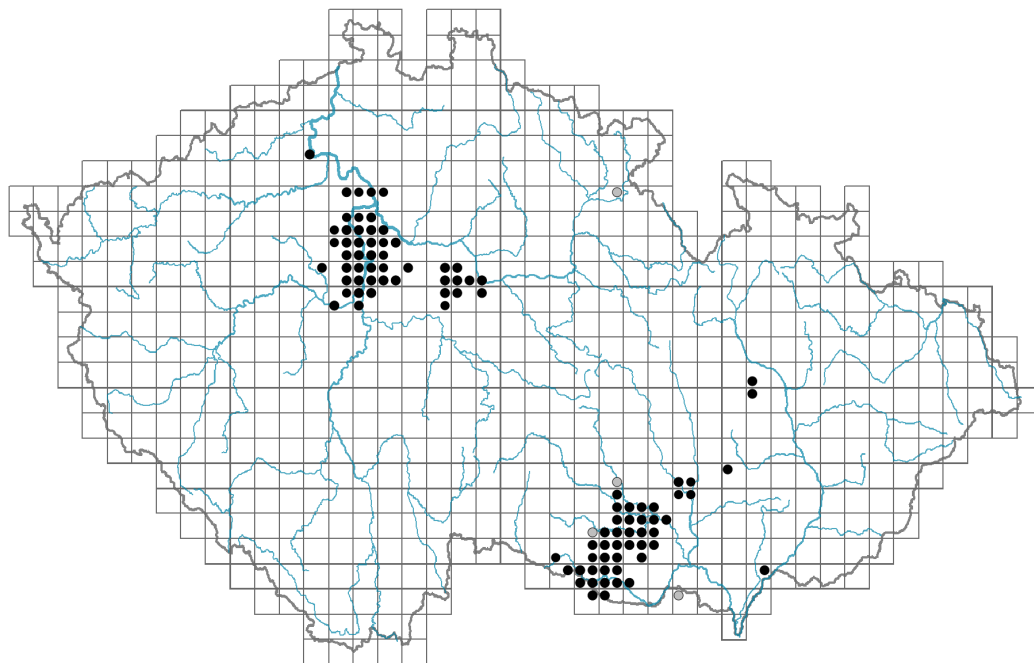


Gagea bohemica

Distribution



Habitus and growth type

Height [m]: **0.02-0.1**

Growth form: **clonal herb**

Life form: **geophyte**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

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

Life strategy (Pierce method, C-score): **4.4 %**

Life strategy (Pierce method, S-score): **84.1 %**

Life strategy (Pierce method, R-score): **11.6 %**

Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **overwintering green**

Leaf anatomy: **hygromorphic**

Flower

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

Flowering phase: **1 Corylus avellana-Leucojum vernalis (pre-spring)**
 Flower colour: **yellow**
 Flower symmetry: **actinomorphic**
 Perianth type: **homochlamydeous**
 Perianth fusion: **free**
 Inflorescence type: **flores solitarii**
 Dicliny: **synoecious**
 Generative reproduction type: **facultative allogamy**
 Pollination syndrome: **insect-pollination, pseudocleistogamy**

Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**
 Reproduction type: **mostly vegetatively, rarely by seed/spores**
 Dispersal unit (diaspore): **bulbil or tuber**
 Dispersal strategy: **Allium (mainly autochory)**
 Myrmecochory: **myrmecochorous nv**

Belowground organs and clonality

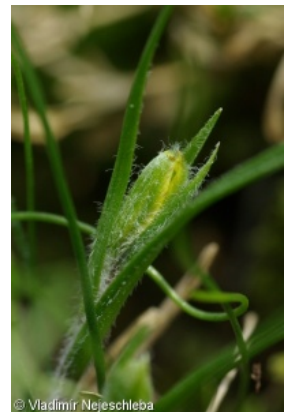
Shoot metamorphosis: **bulb**
 Storage organ: **bulb**
 Type of clonal growth organ: **bulb**
 Freely dispersible organs of clonal growth: **absent**
 Shoot life span (cyclicality): **monocyclic shoots prevailing**
 Branching type of stem-derived organs of clonal growth: **sympodial**
 Primary root: **absent**
 Persistence of the clonal growth organ [year]: **1.2**
 Number of clonal offspring: **5.9**
 Lateral spreading distance by clonal growth [m]: **0.01**
 Clonal index: **4**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **1**
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **7**
 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): **8**
 Depth of the belowground bud bank (root buds excluded) [cm]: **5**
 Number of buds per shoot at the soil surface (root buds included): **1**
 Number of buds per shoot at a depth of 0–10 cm (root buds included): **7**
 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): **8**
 Depth of the belowground bud bank (root buds included) [cm]: **5**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
 Carnivory: **non-carnivorous**
 Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**



Karyology

Chromosome number (2n): **60**

Ploidy level (x): **5**

2C genome size [Mbp]: **15309.13**

1Cx monoploid genome size [Mbp]: **3061.83**

Genomic GC content: **46.2 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **9 - full light plant, occurring only in fully irradiated places, not at less than 50% of diffuse radiation incident in an open area**

Temperature indicator value: **8 - transition between values 7 and 9**

Moisture indicator value: **2 - transition between values 1 and 3**

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

Nutrient indicator value: **2 - transition between values 1 and 3**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **0.01**

Herb layer disturbance frequency indicator value: **0.01**

Whole-community disturbance severity indicator value: **0.28**

Herb layer disturbance severity indicator value: **0.33**

Whole-community structure based disturbance indicator value: **0.73**

Herb layer structure-based disturbance indicator value: **0.74**

Habitat and sociology

Occurrence in habitats

8 Dry grasslands

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

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

9 Sand grasslands and rock-outcrop vegetation

9E Acidophilous vegetation of spring therophytes and succulents: **2 - optimum**

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

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 alliances: [TFE Arabidopsion thalianae](#)

Diagnostic taxon of associations: [TFE01 Festuco-Veronicetum dillenii](#), [THA04 Helichryso arenarii-Festucetum pallentis](#), [THG02 Avenulo pratensis-Festucetum](#)

valesiaca

Constant taxon

Constant taxon of alliances: **TFE Arabidopsion thalianae**

Constant taxon of associations: **TFE01 Festuco-Veronicetum dillenii**

Ecological specialization indices

Ecological specialization index for all vegetation types: **6.1**

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

Colonization ability

Index of colonization success (ICS): **1**

Index of colonization potential (ICP): **1**

Distribution and frequency

Floristic zone: **southern temperate, submeridional**

Floristic region: **Europe**

Continental degree: **5**

Distribution range extension along the continentality gradient: **4**

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: **54**

taxon.data.freq_in_quad: **103**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **14.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0 %**

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

Mean percentage cover in vegetation plots: **3.8 %**

Maximum percentage cover in vegetation plots: **13 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **4**

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

Number of broad habitats in which the taxon occurs: **2**

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

Threats and protection

Red List 2017 (national categories): **C2r - endangered taxon, rare**

Red List 2017 (IUCN categories): **VU - vulnerable**

Legal protection: **endangered taxon**