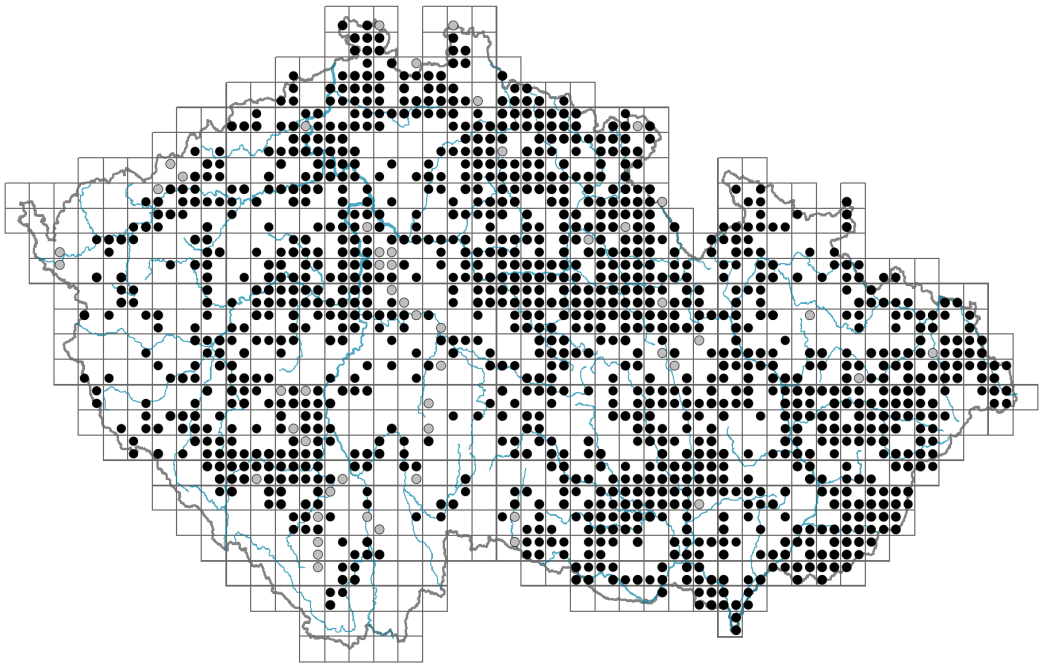
Gagea lutea

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]: **0.1–0.25**
Growth form: **clonal herb**
Life form: **geophyte**
Life strategy: **CSR – competitor/stress-tolerator/ruderal**
Life strategy (Pierce method based on leaf traits): **R/CR**
Life strategy (Pierce method, C-score): **33.7 %**
Life strategy (Pierce method, S-score): **0 %**
Life strategy (Pierce method, R-score): **66.3 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **opposite**
Leaf shape: **simple – entire**
Stipules: **absent**
Petiole: **absent**
Leaf life span: **spring green**
Leaf anatomy: **hygromorphic**

Flower

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

Flowering phase: **2 Acer platanoides-Anemone nemorosa (start of early spring)**
Flower colour: **yellow**
Flower symmetry: **actinomorphic**
Perianth type: **homochlamydeous**
Perianth fusion: **free**
Inflorescence type: **umbella**
Dicliny: **synoecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **insect-pollination, selfing, pseudocleistogamy**

Fruit, seed and dispersal

Fruit type: **dry fruit – capsule**
Fruit colour: **brown**
Reproduction type: **by seed/spores and vegetatively**
Dispersal unit (diaspore): **seed, bulbil or tuber**
Dispersal strategy: **Allium (mainly autochory)**
Myrmecochory: **myrmecochorous**

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 (cyclicity): **monocyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **sympodial**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **1**
Number of clonal offspring: **3.5**
Lateral spreading distance by clonal growth [m]: **0.01**
Clonal index: **3**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **3**
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **5**
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 exluded) [cm]: **4**
Number of buds per shoot at the soil surface (root buds included): **3**
Number of buds per shoot at a depth of 0–10 cm (root buds included): **5**
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]: **4**

Trophic mode

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

Karyology

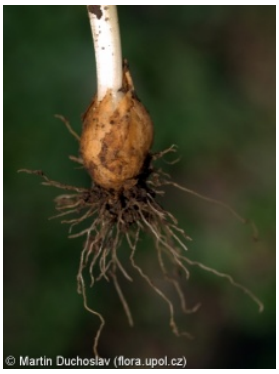
Chromosome number (2n): **72 (84)**
Ploidy level (x): **6 (7)**
2C genome size [Mbp]: **38756.97**
1Cx monoploid genome size [Mbp]: **6459.49**
Genomic GC content: **46 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values



Light indicator value: **4 – transition between values 3 and 5**
Temperature indicator value: **5 – moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**
Moisture indicator value: **6 – transition between values 5 and 7**
Reaction indicator value: **7 – indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**
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: **-1.85**
Herb layer disturbance frequency indicator value: **-0.7**
Whole-community disturbance severity indicator value: **0.3**
Herb layer disturbance severity indicator value: **0.17**
Whole-community structure based disturbance indicator value: **0.12**
Herb layer structure-based disturbance indicator value: **0.23**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4K Petasites fringes of montane brooks: **1 – rare occurrence**
4L Nitrophilous herbaceous fringes of lowland rivers: **1 – rare occurrence**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 – rare occurrence**

6 Meadows and mesic pastures

6C Pastures and park grasslands: **1 – rare occurrence**
6D Alluvial meadows of lowland rivers: **1 – rare occurrence**

11 Heathlands and scrub

11J Willow galleries of loamy and sandy river banks: **2 – optimum**
11L Tall mesic and xeric shrub: **1 – rare occurrence**
11R Scrub and pioneer woodland of forests clearings: **1 – rare occurrence**

12 Forests

12B Alluvial forests: **2 – optimum**
12C Oak-hornbeam forests: **1 – rare occurrence**
12D Ravine forests: **1 – rare occurrence**
12E Herb-rich beech forests: **1 – rare occurrence**
12F Limestone beech forests: **1 – rare occurrence**
12T Robinia pseudacacia plantations: **1 – rare occurrence**
12U Plantations of broad-leaved non-native trees: **1 – rare occurrence**

13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 – optimum**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **1.1 – taxon occurring mainly in the closed forest**
Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.1 – taxon occurring mainly in the closed forest**

Diagnostic taxon

Diagnostic taxon of associations: **KBB05 *Rhamno catharticae-Cornetum sanguineae***, **LBA06 *Ficario vernae-Ulmetum campestris***

Constant taxon

Constant taxon of associations: **LBA06 *Ficario vernae-Ulmetum campestris***

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.2**
Ecological specialization index for non-forest vegetation: **4.4**
Ecological specialization index for forest vegetation: **5.7**

Colonization ability

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

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional**
Floristic region: **Europe, Asia**
Distribution range extension along the continentality gradient: **5**
Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt (montane belt)**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 528
taxon.data.freq_in_quad: 1263

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.3 %**
Occurrence frequency in vegetation plots with a cover above 5%: **15.2 %**
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: **3.3 %**
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: **16**

Number of narrow habitats in which the taxon has its optimum: **3**
Number of broad habitats in which the taxon occurs: **6**
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**