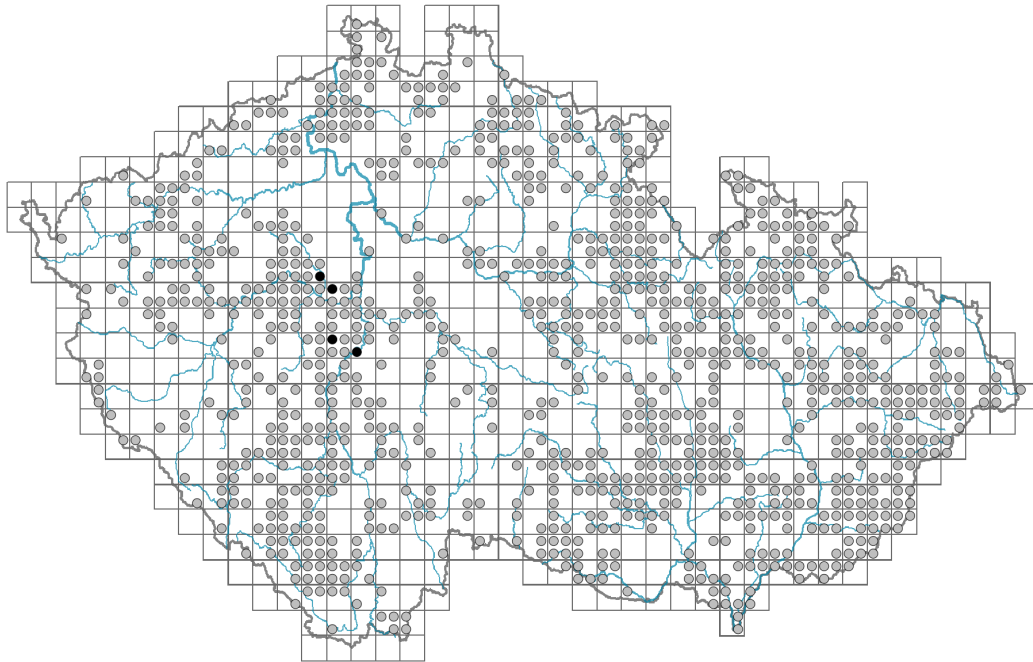


# *Cardamine impatiens*

## 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]: **0.1-0.8**

Growth form: **polycarpic perennial non-clonal herb**

Life form: **therophyte (hemicryptophyte)**

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

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

Life strategy (Pierce method, C-score): **8.5 %**

Life strategy (Pierce method, S-score): **47.3 %**

Life strategy (Pierce method, R-score): **44.2 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate, rosulate**

Leaf shape: **compound - imparipinnate**

Stipules: **absent**

Petiole: **mainly present**

Leaf life span: **overwintering green**

Leaf anatomy: **mesomorphic**

## Flower

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



Flowering phase: **6 Cornus sanguinea-Melica uniflora (start of early summer)**

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: **mixed mating**

Pollination syndrome: **insect-pollination**



## Fruit, seed and dispersal

Fruit type: **dry fruit - siliqua**

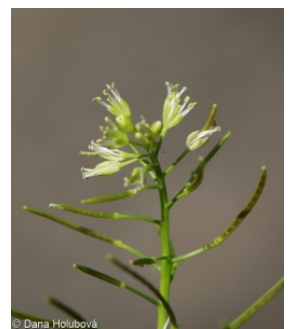
Fruit colour: **brown**

Reproduction type: **by seed/spores and vegetatively**

Dispersal unit (diaspore): **seed**

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

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



## Belowground organs and clonality

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

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

Primary root: **present**

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): **3**

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]: **2**

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): **3**

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]: **2**



## 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]: **356.39**

1Cx monoploid genome size [Mbp]: **178.2**

Genomic GC content: **37 %**

## 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: **-1.93**

Herb layer disturbance frequency indicator value: **-0.71**

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

Herb layer disturbance severity indicator value: **0.12**

Whole-community structure based disturbance indicator value: **0.07**

Herb layer structure-based disturbance indicator value: **0.13**

## Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4D Riverine reed vegetation: **1 - rare occurrence**

4K Petasites fringes of montane brooks: **1 - rare occurrence**

5 Vegetation of springs and mires

5A Hard-water springs with tufa formation: **2 - optimum**

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

6 Meadows and mesic pastures

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

11 Heathlands and scrub

11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**

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**

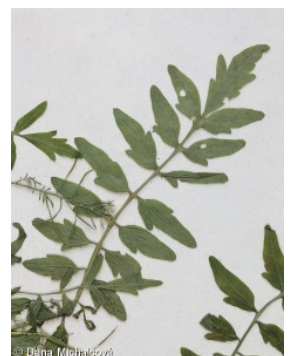
12C Oak-hornbeam forests: **2 - optimum**

12D Ravine forests: **2 - optimum**

12E Herb-rich beech forests: **2 - optimum**

12F Limestone beech forests: **1 - rare occurrence**

12G Acidophilous beech forests: **1 - rare occurrence**



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

12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

12V Spruce plantations: **1 - rare occurrence**

### 13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

### Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **1.2 - taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.2 - taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**

### Diagnostic taxon

Diagnostic taxon of associations: [\*\*LBA07 Fraxino pannonicae-Ulmetum glabrae\*\*](#)

### Ecological specialization indices

Ecological specialization index for all vegetation types: **5.4**

Ecological specialization index for non-forest vegetation: **4.5**

Ecological specialization index for forest vegetation: **5.6**

### Colonization ability

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

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

Optimum successional age [years]: **11**



## Distribution and frequency

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

Floristic region: **Europe, Asia**

Continental degree: **5**

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

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: **463**

taxon.data.freq\_in\_quad: **978**

### Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.8 %**

Occurrence frequency in vegetation plots with a cover above 5%: **1.6 %**

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: **2 %**

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: **19**

Number of narrow habitats in which the taxon has its optimum: **5**

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**

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**