

# *Lepidium ruderale*

## 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]: **0.1-0.5**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **R - ruderal**

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

Life strategy (Pierce method, C-score): **10.8 %**

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

Life strategy (Pierce method, R-score): **89.2 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire, simple - pinnately divided**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **overwintering green**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

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

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

Flower colour: **white**

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

Perianth fusion: **reduced**

Calyx fusion: **aposepalous**

Inflorescence type: **racemus**

Dicliny: **synoecious**

Generative reproduction type: **autogamy**

Pollination syndrome: **selfing**

## **Fruit, seed and dispersal**

Fruit type: **dry fruit - silicula**

Fruit colour: **brown**

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

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

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

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

## **Belowground organs and clonality**

Shoot life span (cyclicity): **monocyclic shoots prevailing**

Primary root: **present**

### **Bud bank**

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

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):

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):

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):

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): **32 (16)**

Ploidy level (x): **4 (2)**

2C genome size [Mbp]: **586.57**

1Cx monoploid genome size [Mbp]: **146.64**

Genomic GC content: **37.1 %**

## Taxon origin

Origin in the Czech Republic: **archaeophyte**

Invasion status: **naturalized**

Geographic origin: **Mediterranean**

Period of introduction: **Bronze Age (2300-750 BCE)**

Introduction pathway: **unintentional - anthropogenic**

## 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: **6 - transition between values 5 and 7**

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

Reaction indicator value: **7x - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions (generalist)**

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

Salinity indicator value: **1 - salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**

### Indicator values for disturbance

Whole-community disturbance frequency indicator value: **0.29**

Herb layer disturbance frequency indicator value: **0.29**

Whole-community disturbance severity indicator value: **0.84**

Herb layer disturbance severity indicator value: **0.84**

Whole-community structure based disturbance indicator value: **0.67**

Herb layer structure-based disturbance indicator value: **0.67**

## Habitat and sociology

### Occurrence in habitats

6 Meadows and mesic pastures

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

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

9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **1 - rare occurrence**

9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

9F Basiphilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **2 - optimum**

13C Annual vegetation of trampled habitats: **2 - optimum**

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

### 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: [XA \*Polygono arenastri-Poëtea annuae\*](#)

Diagnostic taxon of alliances: [XAA \*Coronopodo-Polygonion arenastri\*](#), [XBH \*Sisymbrium officinalis\*](#), [XBK \*Eragrostion cilianensi-minoris\*](#)

Diagnostic taxon of associations: [XAA02 \*Sclerochloo durae-Polygonetum arenastri\*](#), [XAA04 \*Eragrostio minoris-Polygonetum arenastri\*](#), [XBG08 \*Descurainietum sophiae\*](#), [XBG12 \*Ivaetum xanthiifoliae\*](#), [XBH01 \*Hordeetum murini\*](#), [XBK01 \*Digitario sanguinalis-Eragrostietum minoris\*](#), [XBK03 \*Eragrostio poaeoidis-Panicetum capillaris\*](#)

Constant taxon

Constant taxon of associations: [XAA02 \*Sclerochloo durae-Polygonetum arenastri\*](#), [XBI03 \*Polygono arenastri-Chenopodietum muralis\*](#), [XBK01 \*Digitario sanguinalis-Eragrostietum minoris\*](#), [XBK03 \*Eragrostio poaeoidis-Panicetum capillaris\*](#)

Dominant taxon

Dominant taxon of associations: [XBG02 \*Chenopodietum urbici\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.1**

Ecological specialization index for non-forest vegetation: **5.1**

## Distribution and frequency

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

Floristic region: **Europe, Asia**

Continental degree: **6**

Distribution range extension along the continentality gradient: **6**

Elevational belt in the Czech Republic: **lowlands, colline belt (montane belt)**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **491**

taxon.data.freq\_in\_quad: **1106**

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%: **5.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.9 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.9 %**

Mean percentage cover in vegetation plots: **3.5 %**

Maximum percentage cover in vegetation plots: **63 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **8**

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

Number of broad habitats in which the taxon occurs: **3**

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**