

# *Euphorbia esula* agg.

## 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]: **0.3-1**

Growth form: **clonal herb**

Life form: **hemicryptophyte, geophyte**

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

## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present, both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **scleromorphic, mesomorphic**

## Flower

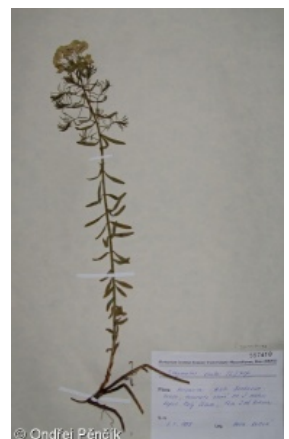
Flowering period [month]: **May-July**

Flower colour: **green**

Perianth type: **flower achlamydeous**

Inflorescence type: **pseudumbrella e cyathiis composita**

Dicliny: **synoecious**



Generative reproduction type: **mixed mating**  
 Pollination syndrome: **insect-pollination, selfing**

## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**  
 Reproduction type: **by seed/spores and vegetatively**  
 Dispersal unit (diaspore): **seed**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **myrmecochorous**

## Belowground organs and clonality

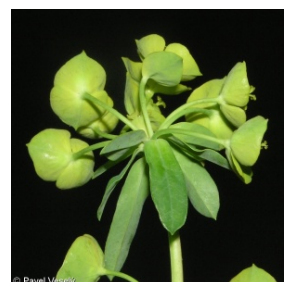
Shoot metamorphosis: **rhizome-like pleiocorm**  
 Root metamorphosis: **root shoot**  
 Storage organ: **rhizome-like pleiocorm**  
 Type of clonal growth organ: **root with adventitious buds**  
 Freely dispersible organs of clonal growth: **absent**  
 Shoot life span (cyclicality): **monocyclic shoots prevailing**  
 Branching type of stem-derived organs of clonal growth: **sympodial**  
 Primary root: **absent**  
 Persistence of the clonal growth organ [year]: **4**  
 Number of clonal offspring: **2.8**  
 Lateral spreading distance by clonal growth [m]: **0.09**  
 Clonal index: **3**  
 Position of root buds: **lateral roots**  
 Role of root buds in life-history of a plant: **necessary**  
**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): **6**  
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **1**  
 Size of the belowground bud bank (root buds excluded): **12**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **5**  
 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): **15**  
 Number of buds per shoot at a depth greater than 10 cm (root buds included): **12**  
 Size of the belowground bud bank (root buds included): **32**  
 Depth of the belowground bud bank (root buds included) [cm]: **8**

## Trophic mode

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

## Karyology

Chromosome number (2n): **20, 60, 64**  
 Ploidy level (x): **2, 6**



2C genome size [Mbp]: **2326.91**

1Cx monoploid genome size [Mbp]: **580.17**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% 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: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **4x - transition between values 3 and 5 (generalist)**

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

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1D Mobile calcareous screes: **2 - optimum**

4 Wetland and riverine herbaceous vegetation

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

4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **2 - optimum**

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

6D Alluvial meadows of lowland rivers: **2 - optimum**

6E Wet Cirsium meadows: **2 - optimum**

6F Intermittently wet Molinia meadows: **2 - optimum**

7 Acidophilous grasslands

7B Submontane Nardus grasslands: **1 - rare occurrence**

8 Dry grasslands

8B Submediterranean dry grasslands on rock outcrops: **1 - rare occurrence**

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

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

8E Acidophilous dry grasslands: **2 - optimum**

8F Thermophilous forest fringe vegetation: **2 - optimum**

9 Sand grasslands and rock-outcrop vegetation

9C Festuca grasslands on acidic sands: **2 - optimum**

10 Saline vegetation

10I Inland saline meadows: **1 - rare occurrence**

11 Heathlands and scrub





11A Dry lowland to subalpine heathlands: **1 - rare occurrence**

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

11L Tall mesic and xeric shrub: **1 - rare occurrence**

11N Low xeric scrub: **2 - optimum**

12 Forests

12B Alluvial forests: **1 - rare occurrence**

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

12I Sub-continental thermophilous oak forests: **1 - rare occurrence**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

13B Annual vegetation of arable land: **1 - rare occurrence**

13D Perennial thermophilous ruderal vegetation: **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**

## Distribution and frequency

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

Floristic region: **Europe, Western Asia**

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: 570

taxon.data.freq\_in\_quad: 1525

Commonness in vegetation plots from the Czech Republic

Maximum percentage cover in vegetation plots: **18 %**

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: **13**

Number of broad habitats in which the taxon occurs: **10**

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



