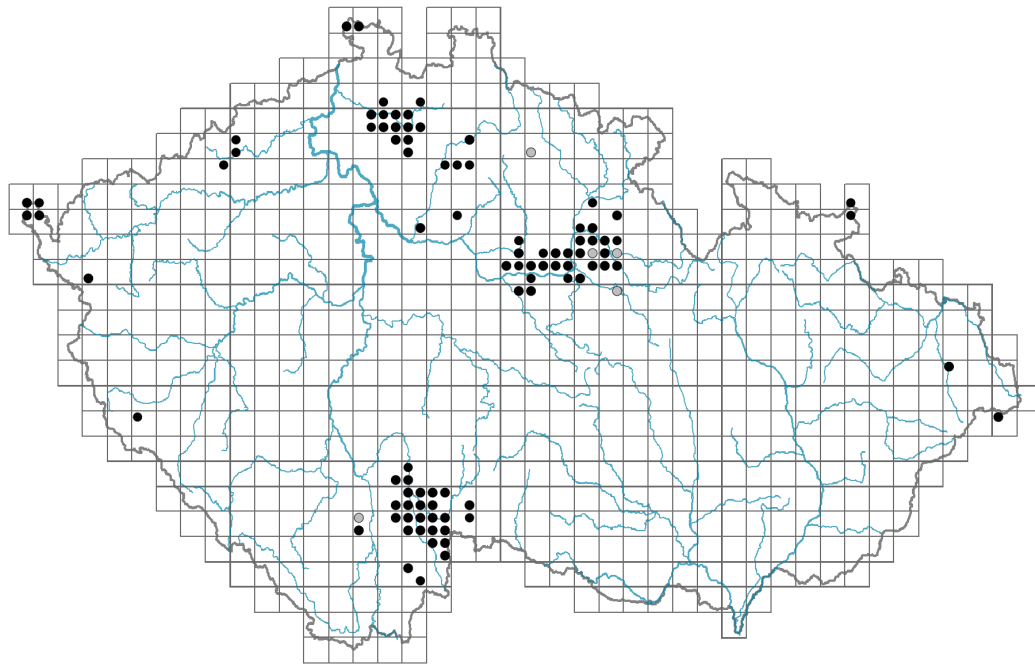


# Hydrocotyle vulgaris

## Distribution

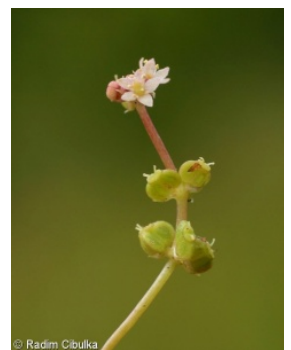


### Map info

● 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]: **0.1-0.15**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

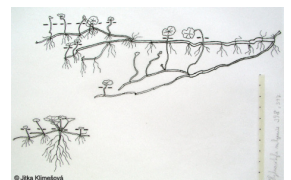
Life strategy: **S - stress-tolerator**

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

Life strategy (Pierce method, C-score): **28.7 %**

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

Life strategy (Pierce method, R-score): **71.3 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **present**

Leaf life span: **evergreen**

Leaf anatomy: **hygromorphic, helomorphic**

## Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**

Flower colour: **green-white**

Flower symmetry: **actinomorphic**

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

Perianth fusion: **free**

Inflorescence type: **racemus**

Dicliny: **synoecious, gynomonoecious**

Generative reproduction type: **autogamy**

Pollination syndrome: **selfing**

## **Fruit, seed and dispersal**

Fruit type: **dry fruit - pair of nutlets**

Fruit colour: **green, yellow**

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

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

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

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

## **Belowground organs and clonality**

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

Type of clonal growth organ: **epigeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

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

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

Primary root: **absent**

Persistence of the clonal growth organ [year]: **1.6**

Number of clonal offspring: **6**

Lateral spreading distance by clonal growth [m]: **0.18**

Clonal index: **5**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **11**

Number of buds per shoot at a depth of 0-10 cm (root buds excluded): **8**

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): **19**

Depth of the belowground bud bank (root buds excluded) [cm]: **3**

Number of buds per shoot at the soil surface (root buds included): **11**

Number of buds per shoot at a depth of 0-10 cm (root buds included): **8**

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): **19**

Depth of the belowground bud bank (root buds included) [cm]: **3**

## **Trophic mode**

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **96**

Ploidy level (x): **8**

2C genome size [Mbp]: **1654.82**

1Cx monoploid genome size [Mbp]: **206.85**

Genomic GC content: **37.2 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6x - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area (generalist)**

Temperature indicator value: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

Moisture indicator value: **9 - wetness indicator, focus on often soaked, poorly aerated soils**

Reaction indicator value: **3 - acidity indicator, occurring mainly in acidic conditions, exceptionally in neutral conditions**

Nutrient indicator value: **3 - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.93**

Herb layer disturbance frequency indicator value: **-0.72**

Whole-community disturbance severity indicator value: **0.13**

Herb layer disturbance severity indicator value: **0.15**

Whole-community structure based disturbance indicator value: **0.52**

Herb layer structure-based disturbance indicator value: **0.5**

## Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4G Tall-sedge beds: **1 - rare occurrence**

5 Vegetation of springs and mires

5D Calcareous fens: **1 - rare occurrence**

5E Acidic moss-rich fens and peatland meadows: **2 - optimum**

5F Transitional mires: **1 - rare occurrence**

5H Wet peat soils and bog hollows: **1 - rare occurrence**

6 Meadows and mesic pastures

6E Wet Cirsium meadows: **1 - rare occurrence**

6F Intermittently wet Molinia meadows: **1 - rare occurrence**

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

12 Forests

12A Alder carrs: **2 - optimum**

12Q Peatland birch forests: **1 - rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

Diagnostic taxon

Diagnostic taxon of associations: [LAB01 \*Salicetum auritae\*](#), [RBC02 \*Drosero anglicae-Rhynchosporium albae\*](#)

Constant taxon

Constant taxon of associations: [MAB01 \*Centunculo minimi-Anthocerotum punctati\*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.3**

Ecological specialization index for non-forest vegetation: **5.2**

Ecological specialization index for forest vegetation: **5.9**

Colonization ability

Index of colonization success (ICS): **2**

Index of colonization potential (ICP): **5**

Optimum successional age [years]: **75**

## Distribution and frequency

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

Floristic region: **Europe**

Continental degree: **4**

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: **59**

taxon.data.freq\_in\_quad: **106**

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%: **18.6 %**

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: **4.9 %**

Maximum percentage cover in vegetation plots: **23 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **11**

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

Number of broad habitats in which the taxon occurs: **5**

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

## **Threats and protection**

Red List 2017 (national categories): **C3 - vulnerable taxon**

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

Legal protection: **vulnerable taxon**