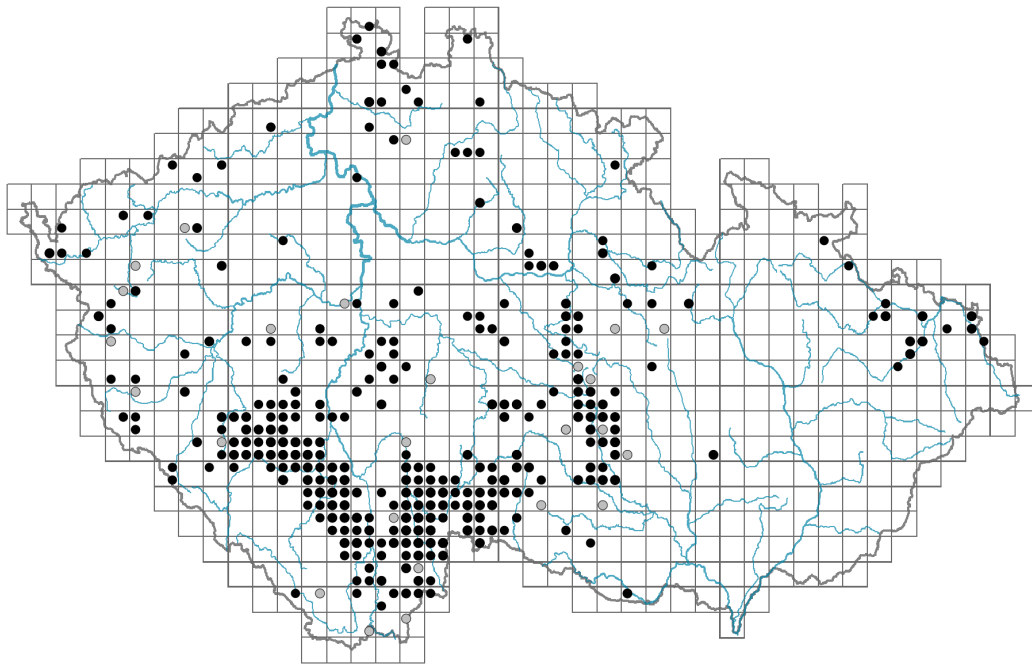


# *Elatine hydropiper* agg.

## 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]: **0.01-0.02**

Growth form: **annual herb**

Life form: **hydrophyte, therophyte**

Life strategy: **SR - stress-tolerator/ruderal**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **present**

Petiole: **present**

Leaf life span: **overwintering green, summer green**

Leaf anatomy: **helomorphic**

## Flower

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

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **green, pink**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**



© Davidka Šárková Štěpánková

200 µm



© P. W. Novak

Perianth fusion: **free**  
 Calyx fusion: **synsepalous**  
 Inflorescence type: **flores solitarii**  
 Dicliny: **synoecious**  
 Generative reproduction type: **facultative autogamy**  
 Pollination syndrome: **selfing, cleistogamy**

## Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**  
 Fruit colour: **brown**  
 Reproduction type: **by seed/spores and vegetatively**  
 Dispersal unit (diaspore): **seed**  
 Dispersal strategy: **Sparganium (mainly autochory and hydrochory)**  
 Myrmecochory: **non-myrmecochorous (b)**

## Belowground organs and clonality

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

Primary root: **absent**

### 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): **0**  
 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): **5**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **1**  
 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): **0**  
 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): **5**  
 Depth of the belowground bud bank (root buds included) [cm]: **1**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **36, 40, 72, 108**

Ploidy level (x): **4, 8, 12**

2C genome size [Mbp]: **663.04**

1Cx monoploid genome size [Mbp]: **140.48**

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

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

Nutrient indicator value: **5 - occurring at moderately nutrient-rich sites, and less frequently at poor and rich sites**

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: **-0.38**

Herb layer disturbance frequency indicator value: **-0.38**

Whole-community disturbance severity indicator value: **0.44**

Herb layer disturbance severity indicator value: **0.45**

Whole-community structure based disturbance indicator value: **0.63**

Herb layer structure-based disturbance indicator value: **0.63**

## Habitat and sociology

### Occurrence in habitats

#### 3 Aquatic vegetation

3C Macrophytic vegetation of oligotrophic lakes and pools: **2 - optimum**

#### 4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **1 - rare occurrence**

4B Halophilous reed and sedge beds: **1 - rare occurrence**

4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**

4H Vegetation of low annual hygrophilous herbs: **2 - optimum**

4I Vegetation of nitrophilous annual hygrophilous herbs: **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**

### Ecological specialization indices

Ecological specialization index for all vegetation types: **6**

Ecological specialization index for non-forest vegetation: **6.1**

## Distribution and frequency

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

Floristic region: **Europe, circumpolar**

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: 207

taxon.data.freq\_in\_quad: 363

### 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%: **23.6 %**

Occurrence frequency in vegetation plots with a cover above 25%: **3.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **5.9 %**

Maximum percentage cover in vegetation plots: **88 %**

### Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **6**

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

Number of broad habitats in which the taxon occurs: **2**

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