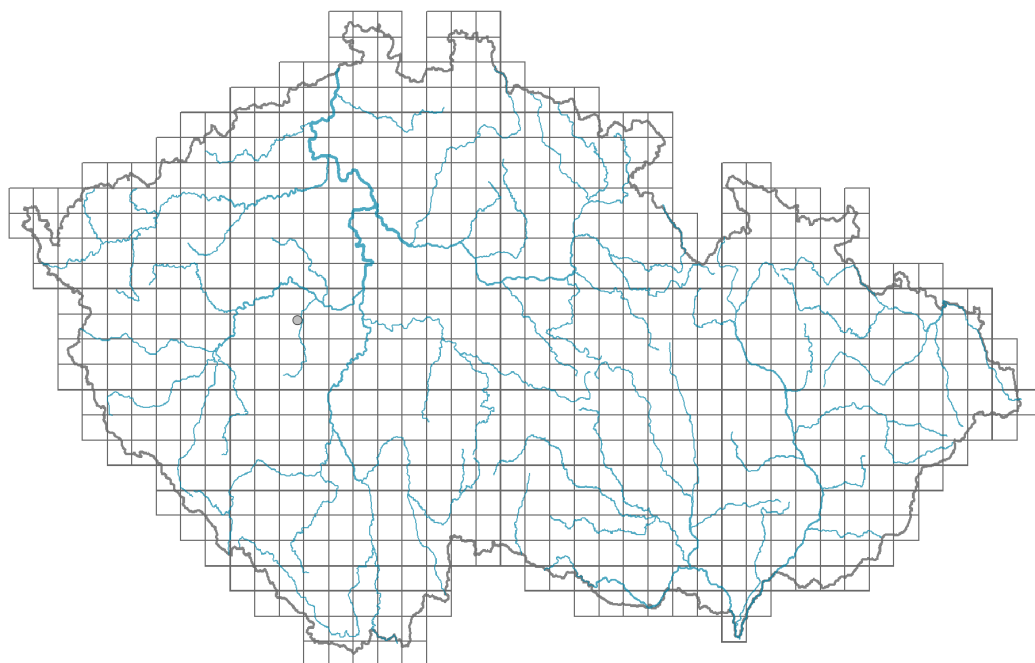


# *Vincetoxicum hirundinaria* subsp. *hirundinaria*

## 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]: **0.2-1.2**

Growth form: **clonal herb**

Life form: **hemicryptophyte (geophyte)**

Life strategy: **CS - competitor/stress-tolerator**

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

Life strategy (Pierce method, C-score): **31.3 %**

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

Life strategy (Pierce method, R-score): **68.7 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer 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**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **rotate**

Calyx fusion: **fused at the base**

Inflorescence type: **pseudumbrella**

Dicliny: **synoecious**

Generative reproduction type: **alogamy self-incompatibility**

Pollination syndrome: **insect-pollination**



## Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of follicles**

Fruit colour: **brown**

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

Dispersal unit (diaspore): **seed**

Dispersal strategy: **Epilobium (mainly anemochory and autochory)**

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



## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome**

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

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: **2.7**

Lateral spreading distance by clonal growth [m]: **0.01**

Clonal index: **3**

### 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): **15**

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): **20**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

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): **0**

Size of the belowground bud bank (root buds included): **20**

Depth of the belowground bud bank (root buds included) [cm]: **4**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

## Karyology

Chromosome number (2n): **22**

Ploidy level (x): **2**

2C genome size [Mbp]: **615.95**

1Cx monoploid genome size [Mbp]: **307.98**

Genomic GC content: **36.8 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

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

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

Moisture indicator value: **3 - missing on damp soil**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic 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: **-1.72**

Herb layer disturbance frequency indicator value: **-0.8**

Whole-community disturbance severity indicator value: **0.23**

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

Whole-community structure based disturbance indicator value: **0.23**

Herb layer structure-based disturbance indicator value: **0.26**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

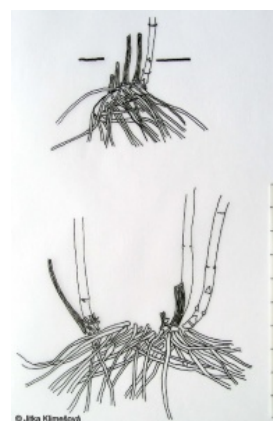
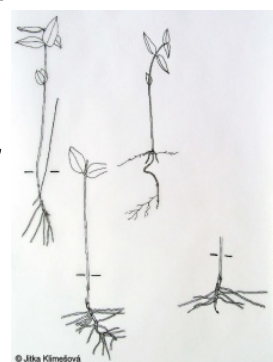
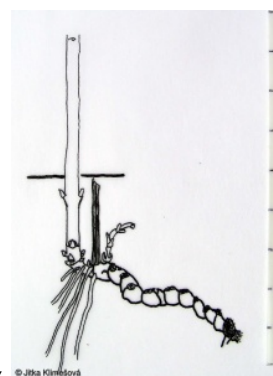
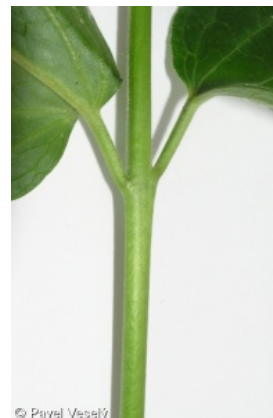
1B Siliceous cliffs and block fields: **1 - rare occurrence**

1D Mobile calcareous screes: **3 - dominant**

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

6 Meadows and mesic pastures



6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

## 8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**

8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

8C Narrow-leaved sub-continental steppes: **1 - rare occurrence**

8D Broad-leaved dry grasslands: **1 - rare occurrence**

8E Acidophilous dry grasslands: **1 - rare occurrence**

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

## 9 Sand grasslands and rock-outcrop vegetation

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

9C Festuca grasslands on 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**

## 11 Heathlands and scrub

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

11H Subalpine deciduous scrub: **1 - rare occurrence**

11L Tall mesic and xeric shrub: **2 - optimum**

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

## 12 Forests

12C Oak-hornbeam forests: **1 - rare occurrence**

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

12F Limestone beech forests: **2 - optimum**

12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**

12I Sub-continental thermophilous oak forests: **2 - optimum**

12J Acidophilous thermophilous oak forests: **2 - optimum**

12K Acidophilous oak forests: **1 - rare occurrence**

12L Boreo-continental pine forests: **1 - rare occurrence**

12O Peri-Alpidic pine forests: **2 - optimum**

12T Robinia pseudacacia plantations: **1 - rare occurrence**

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

12W Pine and larch plantations: **1 - rare occurrence**

## 13 Anthropogenic vegetation

13F Herbaceous vegetation of forests clearings and Rubus scrub: **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 classes: [LC Quercetea pubescentis](#)

Diagnostic taxon of alliances: [KBG Euphorbio cyparissiae-Robinion pseudoacaciae](#), [LCA Quercion pubescenti-petraeae](#), [LCB Aceri tatarici-Quercion](#), [LCC Quercion petraeae](#), [LFA Festuco-Pinion sylvestris](#)

Diagnostic taxon of associations: [KBG01 Melico transsilvanicae-Robinietum pseudoacaciae](#), [LBF04 Seslerio albicantis-Tilietum cordatae](#), [LCA02 Lithospermo purpureo-aerulei-Quercetum pubescentis](#), [LCB01 Quercetum pubescenti-roboris](#), [LCB02 Carici fritschii-Quercetum roboris](#), [LCC01 Sorbo torminalis-Quercetum](#),

[LCC02 Genisto pilosae-Quercetum petraeae](#), [LFA01 Festuco-Pinetum sylvestris](#),  
[THC03 Saxifraga paniculatae-Seslerietum caeruleae](#)

Constant taxon

Constant taxon of classes: [LC Quercetea pubescentis](#)

Constant taxon of alliances: [KBG Euphorbio cyparissiae-Robinion pseudoacaciae](#),  
[LCA Quercion pubescenti-petraeae](#), [LCB Aceri tatarici-Quercion](#), [LCC Quercion petraeae](#), [LFA Festuco-Pinion sylvestris](#)

Constant taxon of associations: [KBG01 Melico transsilvanicae-Robinietum pseudoacaciae](#), [LBF04 Seslerio albicantis-Tilietum cordatae](#), [LCA02 Lithospermo purpureocaerulei-Quercetum pubescentis](#), [LCB01 Quercetum pubescenti-roboris](#), [LCB02 Carici fritschii-Quercetum roboris](#), [LCC01 Sorbo torminalis-Quercetum](#), [LCC02 Genisto pilosae-Quercetum petraeae](#), [LFA01 Festuco-Pinetum sylvestris](#), [THC03 Saxifraga paniculatae-Seslerietum caeruleae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.8**

Ecological specialization index for non-forest vegetation: **3.9**

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

Colonization ability

Index of colonization success (ICS): **5**

Index of colonization potential (ICP): **3**

Optimum successional age [years]: **37.5**

## Distribution and frequency

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

Floristic region: **Europe, Western Asia**

Continentality degree: **6**

Distribution range extension along the continentality gradient: **5**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **367**

taxon.data.freq\_in\_quad: **837**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.7 %**

Occurrence frequency in vegetation plots with a cover above 5%: **16 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.2 %**

Mean percentage cover in vegetation plots: **4.4 %**

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: **32**

Number of narrow habitats in which the taxon has its optimum: **12**

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

Number of broad habitats in which the taxon has its optimum: **4**

## **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**