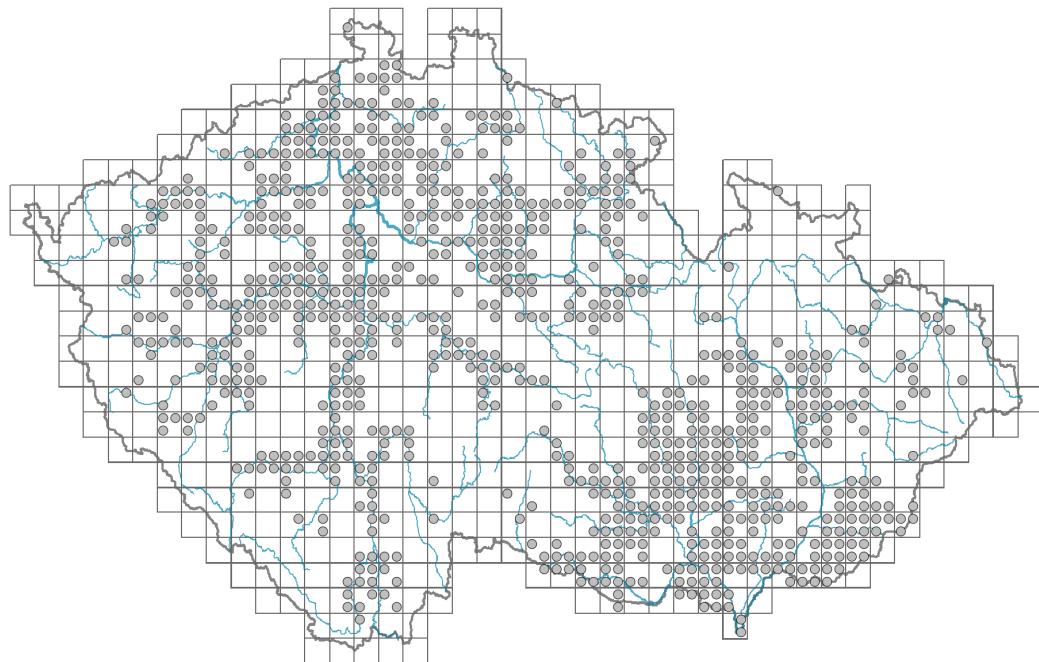


# *Vincetoxicum hirundinaria*

## 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**

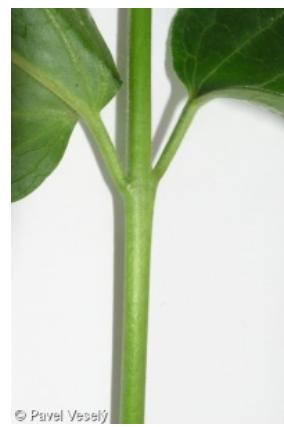
Leaf shape: **simple - entire**

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: **allogamy 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 (cyclicity): **monocyclic shoots prevailing**

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

Primary root: **absent**

Persistence of the clonal growth organ [year]:

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):

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

Number of buds per shoot at a depth greater than 10 cm (root buds excluded):

Size of the belowground bud bank (root buds excluded):

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

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):

Number of buds per shoot at a depth greater than 10 cm (root buds included):

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

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



## 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**

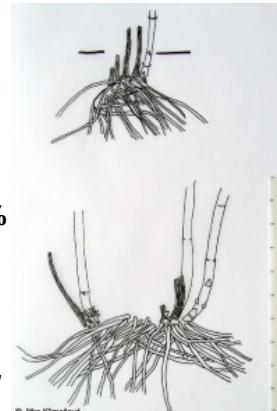
1Cx monoploid genome size [Mbp]: **307.98**

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**

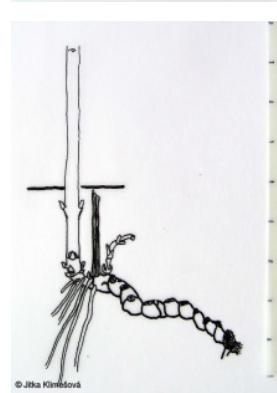
Herb layer disturbance frequency indicator value: **-0.8**

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 albicanis-Tilietum cordatae\*\*](#), [\*\*LCA02 Lithospermo purpurocaerulei-Quercetum pubescens\*\*](#), [\*\*LCB01 Quercetum pubescenti-roboris\*\*](#),  
[\*\*LCB02 Carici fritschii-Quercetum roboris\*\*](#), [\*\*LCC01 Sorbo torminalis-Quercetum\*\*](#),  
[\*\*LCC02 Genisto pilosae-Quercetum petraeae\*\*](#), [\*\*LFA01 Festuco-Pinetum sylvestris\*\*](#),  
[\*\*THC03 Saxifrago paniculatae-Seslerietum caeruleae\*\*](#)  
 Constant taxon

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

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[\*\*\*LCC02 Genisto pilosae-Quercetum petraeae\*\*\*](#), [\*\*\*LFA01 Festuco-Pinetum sylvestris\*\*\*](#),  
[\*\*\*THC03 Saxifrago 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**

Continentiality 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: 838

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**