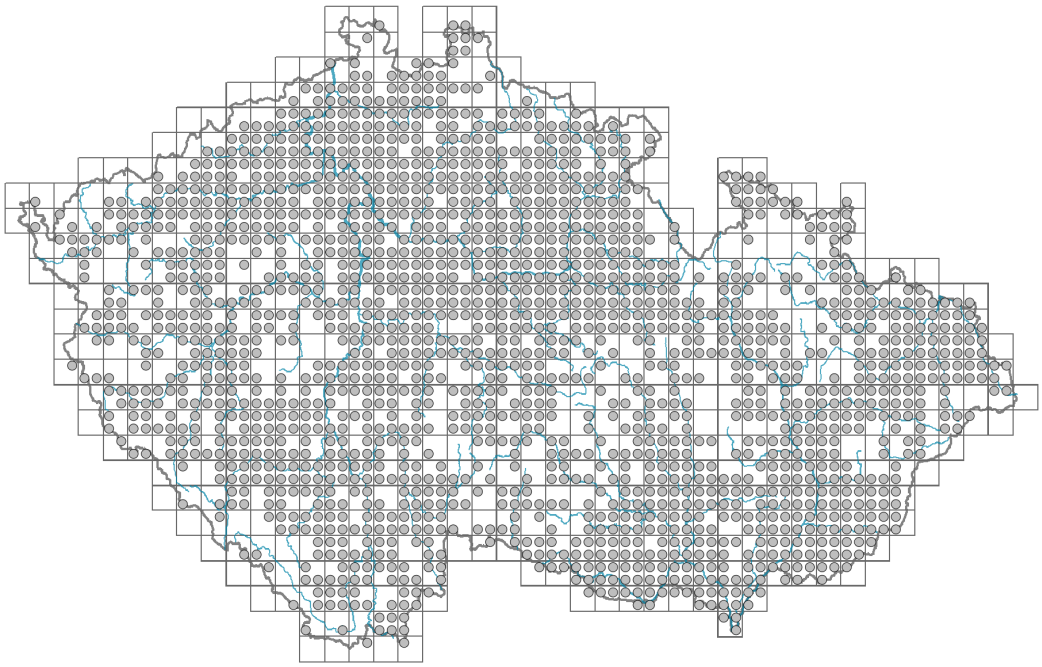
Humulus lupulus

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]: **2–10**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **C/CSR**
Life strategy (Pierce method, C-score): **47.3 %**
Life strategy (Pierce method, S-score): **30.1 %**
Life strategy (Pierce method, R-score): **22.7 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate, opposite**
Leaf shape: **simple – palmately divided**
Stipules: **present**
Petiole: **present**
Leaf life span: **summer green**
Leaf anatomy: **mesomorphic, helomorphic**

Flower

Flowering period [month]: **June–September**

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Flowering phase: **9 Hedera helix-Solidago (early autumn)**
Flower colour: **green**
Flower symmetry: **actinomorphic**
Perianth type: **homochlamydeous, sometimes reduced**
Perianth fusion: **free, reduced**
Inflorescence type: **capitulum e floribus masculis compositum, panicula e floribus masculis composita**
Dicliny: **dioecious**
Generative reproduction type: **allogamy**
Pollination syndrome: **wind-pollination**

Fruit, seed and dispersal

Fruit type: **dry fruit – achene/cypsela/samara**
Fruit colour: **yellow, brown**
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, rhizome-like pleiocorm**
Storage organ: **stolon, rhizome-like pleiocorm**
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]: **4**
Number of clonal offspring: **3**
Lateral spreading distance by clonal growth [m]: **0.35**
Clonal index: **5**
Position of root buds: **lateral roots**
Role of root buds in life-history of a plant: **additive**

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): **5**
Size of the belowground bud bank (root buds excluded): **25**
Depth of the belowground bud bank (root buds exluded) [cm]: **6**
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): **21**
Number of buds per shoot at a depth greater than 10 cm (root buds included): **15**
Size of the belowground bud bank (root buds included): **41**
Depth of the belowground bud bank (root buds included) [cm]: **8**

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Trophic mode

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

Karyology

Chromosome number (2n): **20**
Ploidy level (x): **2**
2C genome size [Mbp]: **4987.8**
1Cx monoploid genome size [Mbp]: **2493.9**
Genomic GC content: **41.1 %**

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: **7 – humidity indicator, focus on well moistened, but not wet soils**
Reaction indicator value: **6 – transition between values 5 and 7**
Nutrient indicator value: **8 – pronounced nutrient indicator**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.42**
Herb layer disturbance frequency indicator value: **-0.82**
Whole-community disturbance severity indicator value: **0.35**
Herb layer disturbance severity indicator value: **0.31**
Whole-community structure based disturbance indicator value: **0.25**
Herb layer structure-based disturbance indicator value: **0.26**

Habitat and sociology

Occurrence in habitats

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**
4D Riverine reed vegetation: **1 – rare occurrence**
4K Petasites fringes of montane brooks: **1 – rare occurrence**
4L Nitrophilous herbaceous fringes of lowland rivers: **2 – optimum**

11 Heathlands and scrub

11I Willow carrs: **1 – rare occurrence**
11J Willow galleries of loamy and sandy river banks: **2 – optimum**

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11L Tall mesic and xeric shrub: **2 – optimum**
11R Scrub and pioneer woodland of forests clearings: **2 – optimum**

12 Forests

12A Alder carrs: **2 – optimum**
12B Alluvial forests: **2 – optimum**
12T Robinia pseudacacia plantations: **2 – optimum**
12U Plantations of broad-leaved non-native trees: **2 – optimum**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 – rare occurrence**
13D Perennial thermophilous ruderal vegetation: **1 – rare occurrence**
13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 – optimum**
13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 – rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **1.2 – taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**
Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.2 – taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**

Diagnostic taxon

Diagnostic taxon of classes: **KA *Salicetea purpureae***
Diagnostic taxon of alliances: **KAC *Salicion albae***, **XDA *Senecionion fluviatilis***
Diagnostic taxon of associations: **KAC01 *Salicetum albae***, **KBB05 *Rhamno catharticae-Cornetum sanguineae***, **KBD03 *Sambuco nigrae-Aceretum negundo***, **LBA05 *Pruno padi-Fraxinetum excelsioris***, **MCF02 *Thelypterido palustris-Phragmitetum australis***, **XDA01 *Cuscuto europaeae-Calystegietum sepium***

Constant taxon

Constant taxon of associations: **KAC01 *Salicetum albae***, **KBB05 *Rhamno catharticae-Cornetum sanguineae***, **KBD03 *Sambuco nigrae-Aceretum negundo***, **MCF02 *Thelypterido palustris-Phragmitetum australis***, **XDA01 *Cuscuto europaeae-Calystegietum sepium***

Dominant taxon

Dominant taxon of associations: **XDA01 *Cuscuto europaeae-Calystegietum sepium***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4**
Ecological specialization index for non-forest vegetation: **3.8**
Ecological specialization index for forest vegetation: **4.9**

Colonization ability

Index of colonization success (ICS): **5**
Index of colonization potential (ICP): **7**
Optimum successional age [years]: **35**

Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional**
Floristic region: **Europe, Western Asia**
Distribution range extension along the continentality gradient: **6**

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Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt**
Expansive taxon in the region: **Bohemian Thermophyticum, Bohemian Moravian Mesophyticum, Pannonian Thermophyticum, Carpathian Mesophyticum**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 604
taxon.data.freq_in_quad: 1782

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.1 %**
Occurrence frequency in vegetation plots with a cover above 5%: **16 %**
Occurrence frequency in vegetation plots with a cover above 25%: **3.7 %**
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: **46 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **17**
Number of narrow habitats in which the taxon has its optimum: **9**
Number of broad habitats in which the taxon occurs: **4**
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**

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