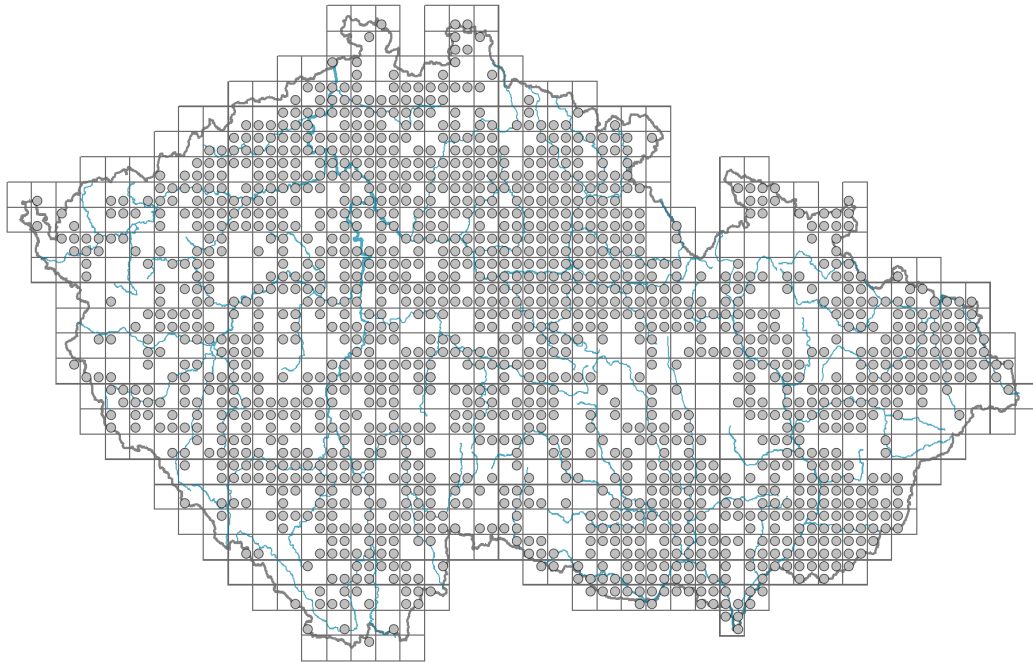


Humulus lupulus

Distribution



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Map info

● revised records

○ unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



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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**

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, panícula 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 excluded) [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**



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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**

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 *Cuscuta 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 *Cuscuta europaeae-Calystegietum sepium*](#)

Dominant taxon

Dominant taxon of associations: [XDA01 *Cuscuta 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**

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: 570

taxon.data.freq_in_quad: 1506

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**