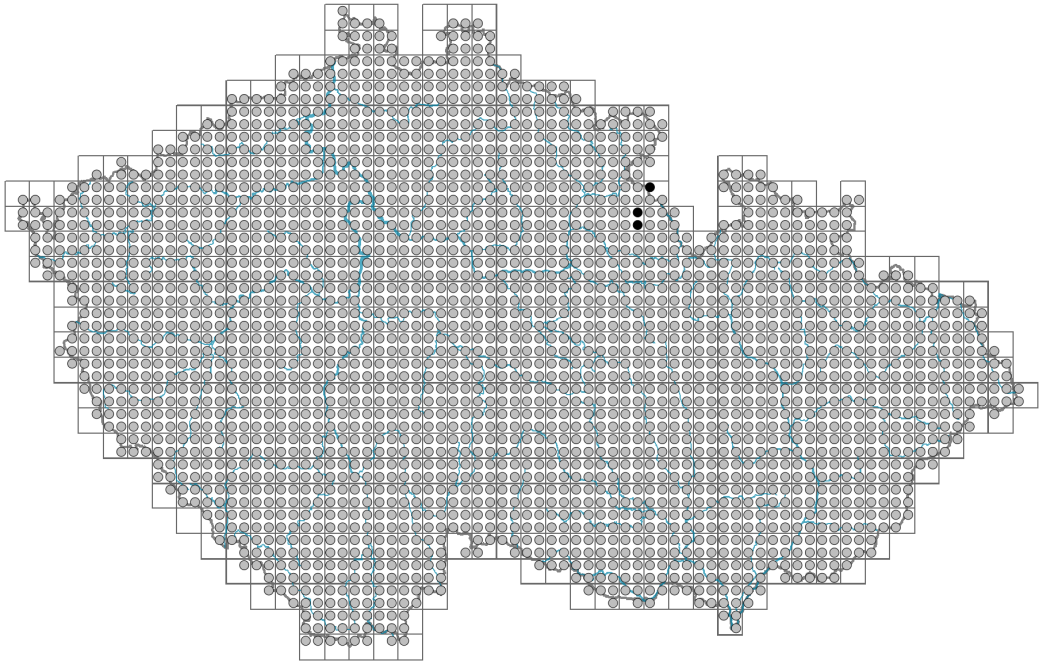
Urtica dioica

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]: **0.4–2.5**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **CR/CSR**
Life strategy (Pierce method, C-score): **44.8 %**
Life strategy (Pierce method, S-score): **18.2 %**
Life strategy (Pierce method, R-score): **37.1 %**

Leaf

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

Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**
Flower colour: **green**
Perianth type: **reduced**
Perianth fusion: **reduced**
Inflorescence type: **fasciculus**
Dicliny: **dioecious**
Generative reproduction type: **allogamy**
Pollination syndrome: **wind-pollination, insect-pollination**
Pollinator spectrum: **nitidulids (hoverflies, flies s. l.)**

Fruit, seed and dispersal

Fruit type: **dry fruit – achene/cypsela/samara**
Fruit colour: **brown, grey**
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**
Storage organ: **stolon**
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]: **3.7**
Number of clonal offspring: **5.4**
Lateral spreading distance by clonal growth [m]: **0.33**
Clonal index: **6**

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

Trophic mode

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

Karyology

Chromosome number (2n): **52, 78 (26)**
Ploidy level (x): **4, 5 (2)**
2C genome size [Mbp]: **2410.17**
1Cx monoploid genome size [Mbp]: **482.03**
Genomic GC content: **41.1 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **5x – semi-shade plant, only exceptionally occurring in full light, but usually at more than 10% of the diffuse radiation incident in an open area (generalist)**
Temperature indicator value: **5x – moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**
Moisture indicator value: **6 – transition between values 5 and 7**
Reaction indicator value: **7 – indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**
Nutrient indicator value: **9 – concentrated at very nutrient-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: **-1.43**
Herb layer disturbance frequency indicator value: **-0.67**
Whole-community disturbance severity indicator value: **0.42**
Herb layer disturbance severity indicator value: **0.38**
Whole-community structure based disturbance indicator value: **0.3**
Herb layer structure-based disturbance indicator value: **0.31**

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**
1C Walls: **1 – rare occurrence**
1D Mobile calcareous screes: **1 – rare occurrence**

2 Alpine and subalpine grasslands

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

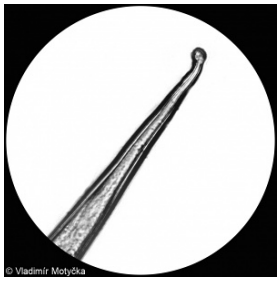
4 Wetland and riverine herbaceous vegetation

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**

4D Riverine reed vegetation: **2 – optimum**
4E Reed vegetation of brooks: **1 – rare occurrence**
4F Mesotrophic vegetation of muddy substrata: **1 – rare occurrence**
4G Tall-sedge beds: **1 – rare occurrence**
4H Vegetation of low annual hygrophilous herbs: **1 – rare occurrence**
4I Vegetation of nitrophilous annual hygrophilous herbs: **2 – optimum**
4J River gravel banks: **1 – rare occurrence**
4K Petasites fringes of montane brooks: **2 – optimum**
4L Nitrophilous herbaceous fringes of lowland rivers: **3 – dominant**

5 Vegetation of springs and mires

5A Hard-water springs with tufa formation: **1 – rare occurrence**
5B Lowland to montane soft-water springs: **2 – optimum**



6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 – rare occurrence**
6B Montane mesic meadows: **1 – rare occurrence**
6C Pastures and park grasslands: **1 – rare occurrence**
6D Alluvial meadows of lowland rivers: **1 – rare occurrence**
6E Wet Cirsium meadows: **1 – rare occurrence**
6F Intermittently wet Molinia meadows: **1 – rare occurrence**
6G Vegetation of wet disturbed soils: **1 – rare occurrence**

8 Dry grasslands

8B Submediterranean dry grasslands on rock outcrops: **1 – rare occurrence**
8F Thermophilous forest fringe vegetation: **1 – rare occurrence**

10 Saline vegetation

10I Inland saline meadows: **1 – rare occurrence**

11 Heathlands and scrub

11D Subalpine acidophilous Pinus mugo scrub: **1 – rare occurrence**
11H Subalpine deciduous scrub: **1 – rare occurrence**
11I Willow carrs: **2 – optimum**
11J Willow galleries of loamy and sandy river banks: **4 – constant dominant**
11L Tall mesic and xeric shrub: **3 – dominant**
11N Low xeric scrub: **1 – rare occurrence**
11R Scrub and pioneer woodland of forests clearings: **4 – constant dominant**

12 Forests

12A Alder carrs: **2 – optimum**
12B Alluvial forests: **4 – constant dominant**
12C Oak-hornbeam forests: **2 – optimum**
12D Ravine forests: **2 – optimum**
12E Herb-rich beech forests: **2 – optimum**
12F Limestone beech forests: **1 – rare occurrence**
12G Acidophilous beech forests: **1 – rare occurrence**
12H Peri-Alpidic basiphilous thermophilous oak forests: **1 – rare occurrence**
12I Sub-continental thermophilous oak forests: **1 – rare occurrence**
12J Acidophilous thermophilous oak forests: **1 – rare occurrence**
12K Acidophilous oak forests: **1 – rare occurrence**
12L Boreo-continental pine forests: **1 – rare occurrence**
12R Acidophilous spruce forests: **1 – rare occurrence**

12S Basiphilous spruce forests: **1 – rare occurrence**
12T Robinia pseudacacia plantations: **4 – constant dominant**
12U Plantations of broad-leaved non-native trees: **4 – constant dominant**
12V Spruce plantations: **2 – optimum**
12W Pine and larch plantations: **1 – rare occurrence**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **2 – optimum**
13B Annual vegetation of arable land: **1 – rare occurrence**
13C Annual vegetation of trampled habitats: **1 – rare occurrence**
13D Perennial thermophilous ruderal vegetation: **2 – optimum**
13E Perennial nitrophilous herbaceous vegetation of mesic sites: **4 – constant dominant**
13F Herbaceous vegetation of forests clearings and Rubus scrub: **2 – optimum**

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: **KA *Salicetea purpureae***, **XD *Galio-Urticetea***
Diagnostic taxon of alliances: **KAC *Salicion albae***, **KBD *Aegopodio podagrariae-Sambucion nigrae***, **LBA *Alnion incanae***, **MCD *Phalaridion arundinaceae***, **XCE *Arction lappae***, **XDA *Senecionion fluviatilis***, **XDD *Geo urbani-Alliarion petiolatae***, **XDE *Aegopodion podagrariae***

Constant taxon

Constant taxon of classes: **KA *Salicetea purpureae***, **KB *Rhamno-Prunetea***, **LA *Alnetea glutinosae***, **XC *Artemisietea vulgaris***, **XD *Galio-Urticetea***
Constant taxon of alliances: **KAA *Salicion triandrae***, **KAB *Salicion elaeagno-daphnoidis***, **KAC *Salicion albae***, **KBC *Sambuco-Salicion capreae***, **KBD *Aegopodio podagrariae-Sambucion nigrae***, **KBE *Chelidonio majoris-Robinion pseudoacaciae***, **LAA *Alnion glutinosae***, **LBA *Alnion incanae***, **LBF *Tilio platyphylli-Acerion***, **MCD *Phalaridion arundinaceae***, **XCE *Arction lappae***, **XDA *Senecionion fluviatilis***, **XDB *Petasition hybridi***, **XDC *Impatienti noli-tangere-Stachyion sylvaticae***, **XDD *Geo urbani-Alliarion petiolatae***, **XDE *Aegopodion podagrariae***, **XDF *Rumicion alpini***
Constant taxon of associations: **ADD05 *Chaerophyllo hirsuti-Cicerbitetum alpinae***, **ADE01 *Daphno mezerei-Dryopteridetum filicis-maris***, **KAA01 *Salicetum triandrae***, **KAB01 *Salicetum elaeagno-purpureae***, **KAB02 *Salicetum purpureae***, **KAC01 *Salicetum albae***, **KAC02 *Salicetum fragilis***, **KBB05 *Rhamno catharticae-Cornetum sanguineae***, **KBB06 *Carpino betuli-Prunetum spinosae***, **KBC02 *Rubetum idaei***, **KBC03 *Senecioni fuchsii-Sambucetum racemosae***, **KBC04 *Senecioni fuchsii-Coryletum avellanae***, **KBC05 *Salicetum capreae***, **KBD01 *Sambucetum nigrae***, **KBD03 *Sambuco nigrae-Aceretum negundo***, **KBE01 *Chelidonio majoris-Robinietum pseudoacaciae***, **LAA02 *Carici elongatae-Alnetum glutinosae***, **LAA03 *Carici acutiformis-Alnetum glutinosae***, **LAB02 *Salicetum pentandro-auritae***, **LBA01 *Alnetum incanae***, **LBA02 *Piceo abietis-Alnetum glutinosae***, **LBA03 *Carici remotae-Fraxinetum excelsioris***, **LBA04 *Stellario nemorum-Alnetum glutinosae***, **LBA05 *Pruno padi-Fraxinetum excelsioris***, **LBA06 *Ficario vernae-Ulmetum campestris***, **LBA07 *Fraxino pannonicae-Ulmetum glabrae***, **LBB02 *Stellario holosteae-Carpinetum betuli***, **LBC02 *Mercuriali perennis-Fagetum sylvaticae***, **LBC05 *Galio rotundifolii-Abietetum albae***, **LBF01**

Aceri-Tilietum, **LBF02** ***Mercuriali perennis-Fraxinetum excelsioris***, **LBF03** ***Arunco dioici-Aceretum pseudoplatani***, **MBA04** ***Polygono brittingeri-Chenopodietum rubri***, **MCD01** ***Rorippo-Phalaridetum arundinaceae***, **MCD02** ***Caricetum buekii***, **RAA02** ***Cardamino-Chrysosplenietum alternifolii***, **SCA01** ***Gymnocarpietum robertiani***, **XBG02** ***Chenopodietum urbici***, **XBG12** ***Ivaetum xanthiifoliae***, **XBI02** ***Malvetum pusillae***, **XBI05** ***Matricario discoideae-Anthemidetum cotulae***, **XCA03** ***Potentillo argenteae-Artemisietum absinthii***, **XCB07** ***Tanaceto vulgaris-Artemisietum vulgaris***, **XCB08** ***Artemisio vulgaris-Echinopsietum sphaerocephali***, **XCB09** ***Rudbeckio laciniatae-Solidaginetum canadensis***, **XCB10** ***Buniadetum orientalis***, **XCB11** ***Asclepiadetum syriacae***, **XCC03** ***Convolvulo arvensis-Brometum inermis***, **XCE01** ***Urtico urentis-Chenopodietum boni-henrici***, **XCE02** ***Arctietum lappae***, **XCE03** ***Hyoscyamo nigri-Conietum maculati***, **XCE04** ***Sambucetum ebuli***, **XDA01** ***Cuscuto europaeae-Calystegietum sepium***, **XDA02** ***Calystegio sepium-Epilobietum hirsuti***, **XDA03** ***Calystegio sepium-Impatientetum glanduliferae***, **XDA04** ***Sicyo angulatae-Echinocystietum lobatae***, **XDB01** ***Petasitetum hybridi***, **XDB02** ***Petasitetum hybrido-kablikiani***, **XDC01** ***Stachyo sylvaticae-Impatientetum noli-tangere***, **XDC02** ***Epilobio montani-Geranietum robertiani***, **XDC03** ***Arunco vulgaris-Lunarietum redivivae***, **XDC05** ***Urtico dioicae-Parietarietum officinalis***, **XDD01** ***Alliario petiolatae-Chaerophylletum temuli***, **XDD02** ***Torilidetum japonicae***, **XDE01** ***Elytrigio repentis-Aegopodietum podagrariae***, **XDE02** ***Symphyto officinalis-Anthriscetum sylvestris***, **XDE03** ***Chaerophylletum aromatici***, **XDE04** ***Chaerophylletum aurei***, **XDE05** ***Chaerophylletum bulbosi***, **XDE06** ***Anthrisco nitidae-Aegopodietum podagrariae***, **XDE07** ***Oenothero biennis-Helianthetum tuberosi***, **XDE08** ***Urtico dioicae-Heracleetum mantegazziani***, **XDE09** ***Asteretum lanceolati***, **XDE10** ***Reynoutrietum japonicae***, **XDF01** ***Rumicetum alpini***, **XEA02** ***Digitali purpureae-Epilobietum angustifolii***, **XEA03** ***Rubo idaei-Calamagrostietum arundinaceae***, **XEA05** ***Digitali-Senecionetum ovati***

Dominant taxon

Dominant taxon of associations: **KAA01** ***Salicetum triandrae***, **KAC01** ***Salicetum albae***, **KAC02** ***Salicetum fragilis***, **KBB06** ***Carpino betuli-Prunetum spinosae***, **KBC03** ***Senecioni fuchsii-Sambucetum racemosae***, **KBC05** ***Salicetum capreae***, **KBD01** ***Sambucetum nigrae***, **KBE01** ***Chelidonio majoris-Robinietum pseudoacaciae***, **LAA02** ***Carici elongatae-Alnetum glutinosae***, **LBA03** ***Carici remotae-Fraxinetum excelsioris***, **LBA04** ***Stellario nemorum-Alnetum glutinosae***, **LBA05** ***Pruno padi-Fraxinetum excelsioris***, **LBA07** ***Fraxino pannonicae-Ulmetum glabrae***, **LBF03** ***Arunco dioici-Aceretum pseudoplatani***, **MCD01** ***Rorippo-Phalaridetum arundinaceae***, **SCA01** ***Gymnocarpietum robertiani***, **XBG08** ***Descurainietum sophiae***, **XCB09** ***Rudbeckio laciniatae-Solidaginetum canadensis***, **XCC01** ***Convolvulo arvensis-Elytrigietum repentis***, **XCE01** ***Urtico urentis-Chenopodietum boni-henrici***, **XCE02** ***Arctietum lappae***, **XDA01** ***Cuscuto europaeae-Calystegietum sepium***, **XDA02** ***Calystegio sepium-Epilobietum hirsuti***, **XDA03** ***Calystegio sepium-Impatientetum glanduliferae***, **XDA04** ***Sicyo angulatae-Echinocystietum lobatae***, **XDB01** ***Petasitetum hybridi***, **XDC01** ***Stachyo sylvaticae-Impatientetum noli-tangere***, **XDC05** ***Urtico dioicae-Parietarietum officinalis***, **XDD01** ***Alliario petiolatae-Chaerophylletum temuli***, **XDD02** ***Torilidetum japonicae***, **XDE01** ***Elytrigio repentis-Aegopodietum podagrariae***, **XDE02** ***Symphyto officinalis-Anthriscetum sylvestris***, **XDE03** ***Chaerophylletum aromatici***, **XDE04** ***Chaerophylletum aurei***, **XDE05** ***Chaerophylletum bulbosi***, **XDE08** ***Urtico dioicae-Heracleetum mantegazziani***, **XDE09** ***Asteretum lanceolati***, **XDE10** ***Reynoutrietum japonicae***, **XDF01** ***Rumicetum alpini***

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.2**
Ecological specialization index for non-forest vegetation: **3.1**
Ecological specialization index for forest vegetation: **4.6**

Colonization ability

Index of colonization success (ICS): **8**
Index of colonization potential (ICP): **5**
Optimum successional age [years]: **25**

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional**
Floristic region: **circumpolar**
Distribution range extension along the continentality gradient: **8**
Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane belt**
Expansive taxon in the region: **Bohemian Thermophyticum, Bohemian Moravian Mesophyticum, Bohemian Moravian Oreophyticum, Pannonian Thermophyticum, Carpathian Mesophyticum, Carpathian Oreophyticum**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 674
taxon.data.freq_in_quad: 2519

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **16.9 %**
Occurrence frequency in vegetation plots with a cover above 5%: **26.8 %**
Occurrence frequency in vegetation plots with a cover above 25%: **9.7 %**
Occurrence frequency in vegetation plots with a cover above 50%: **2.8 %**
Mean percentage cover in vegetation plots: **8.4 %**
Maximum percentage cover in vegetation plots: **99 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **60**
Number of narrow habitats in which the taxon has its optimum: **21**
Number of broad habitats in which the taxon occurs: **10**
Number of broad habitats in which the taxon has its optimum: **5**

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**