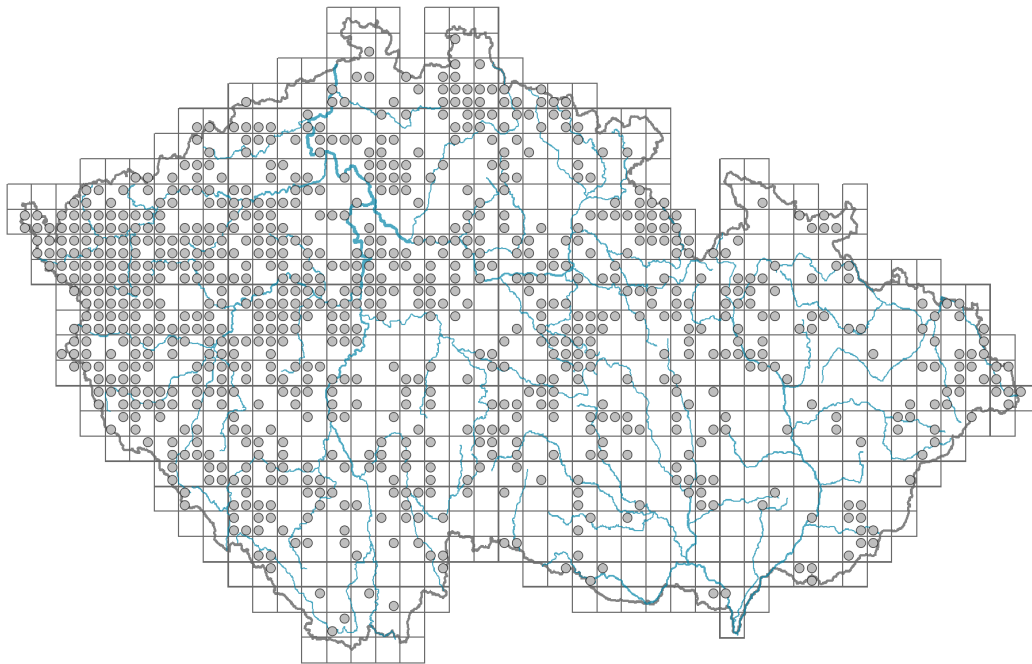


Heracleum mantegazzianum

Distribution



© Štěpán Kovač

Map info

● revised records

○ unrevised records

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



© Petr Vobořil



© Dana Michalčová

Habitus and growth type

Height [m]: **1-5**

Growth form: **monocarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

Life strategy (Pierce method based on leaf traits): **C**

Life strategy (Pierce method, C-score): **83 %**

Life strategy (Pierce method, S-score): **1.8 %**

Life strategy (Pierce method, R-score): **15.2 %**

Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **compound - ternate, compound - imparipinnate**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**

Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**
 Flower colour: **white**
 Flower symmetry: **actinomorphic, zygomorphic**
 Perianth type: **calyx reduced, corolla present**
 Perianth fusion: **free**
 Calyx fusion: **aposepalous**
 Inflorescence type: **umbrella composita**
 Dicliny: **synoecious**
 Generative reproduction type: **facultative allogamy**
 Pollination syndrome: **insect-pollination, geitonogamy**



Fruit, seed and dispersal

Fruit type: **dry fruit - cremocarp**
 Fruit colour: **brown**
 Reproduction type: **only by seed/spores**
 Dispersal unit (diaspore): **fruit, infrutescence or its part**
 Dispersal strategy: **Allium (mainly autochory)**
 Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Root metamorphosis: **primary storage root**
 Storage organ: **primary storage root**
 Shoot life span (cyclicality): **dicyclic or polycyclic shoots prevailing**
 Primary root: **present**

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**

Taxon origin

Origin in the Czech Republic: **neophyte**
 Invasion status: **invasive**
 Geographic origin: **Europe**

Year of the first record in the wild: **1877**

Period of introduction: **Late Modern Period (1800-1950)**

Introduction pathway: **intentional - ornamental, intentional - other**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**

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

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

Reaction indicator value: **6x - transition between values 5 and 7 (generalist)**

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: **-0.79**

Herb layer disturbance frequency indicator value: **-0.51**

Whole-community disturbance severity indicator value: **0.48**

Herb layer disturbance severity indicator value: **0.49**

Whole-community structure based disturbance indicator value: **0.4**

Herb layer structure-based disturbance indicator value: **0.45**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4D Riverine reed vegetation: **1 - rare occurrence**

4K Petasites fringes of montane brooks: **1 - rare occurrence**

5 Vegetation of springs and mires

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **2 - optimum**

6B Montane mesic meadows: **2 - optimum**

6C Pastures and park grasslands: **2 - optimum**

6F Intermittently wet Molinia meadows: **1 - rare occurrence**

6G Vegetation of wet disturbed soils: **1 - rare occurrence**

11 Heathlands and scrub

11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**

11R Scrub and pioneer woodland of forests clearings: **2 - optimum**

12 Forests

12B Alluvial forests: **1 - rare occurrence**

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

13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **3 - dominant**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 - taxon that does not**

spontaneously occur in Czech forests

Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Diagnostic taxon

Diagnostic taxon of associations: [XDE08 *Urtico dioicae-Heracleetum mantegazziani*](#)

Constant taxon

Constant taxon of associations: [XDE08 *Urtico dioicae-Heracleetum mantegazziani*](#)

Dominant taxon

Dominant taxon of associations: [XDE08 *Urtico dioicae-Heracleetum mantegazziani*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.3**

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

Ecological specialization index for forest vegetation: **4.9**

Distribution and frequency

Floristic zone: **submeridional**

Floristic region: **Caucasus**

Continentality degree: **5**

Distribution range extension along the continentality gradient: **1**

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: 433

taxon.data.freq_in_quad: 870

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **68.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **65.6 %**

Occurrence frequency in vegetation plots with a cover above 50%: **46.9 %**

Mean percentage cover in vegetation plots: **48.4 %**

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: **14**

Number of narrow habitats in which the taxon has its optimum: **5**

Number of broad habitats in which the taxon occurs: **6**

Number of broad habitats in which the taxon has its optimum: **3**

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**