

EPPO Datasheet: *Heracleum persicum*

Last updated: 2026-04-09

The original datasheet covered *Heracleum mantegazzianum*, *Heracleum sosnowskyi* and *Heracleum persicum*. Only relevant parts of the datasheet is present for each species in this dynamic datasheet.

IDENTITY

Preferred name: *Heracleum persicum*

Authority: Fischer

Taxonomic position: Plantae: Magnoliophyta: Angiospermae:

Campanulids: Apiales: Apiaceae

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EPPO Categorization: A2 list

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EU Categorization: IAS of Union concern

EPPO Code: HERPE

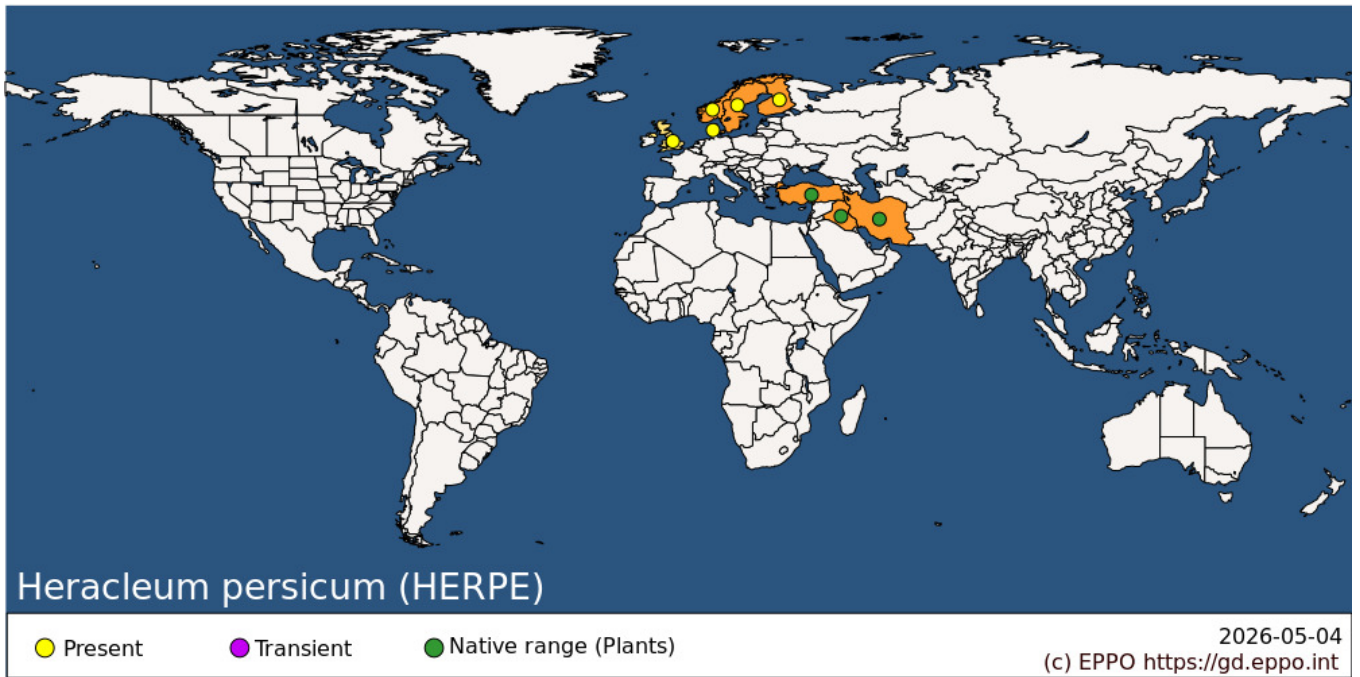
Notes on taxonomy and nomenclature

Heracleum persicum was described in 1841, and some subsequent identifications of *H. persicum* were probably mistaken for *H. mantegazzianum* and *H. sosnowskyi* (Nielsen *et al.*, 2005). In Norwegian, Danish and Swedish floras, the plant has been called *H. laciniatum*, but recent morphological and genetic analyses have shown that it is synonymous with *H. persicum* (Jahodová *et al.*, 2007b; Jahodová *et al.*, 2007a; Lars Fröberg, unpublished data).

GEOGRAPHICAL DISTRIBUTION

History of introduction and spread

Heracleum persicum is native to Türkiye, Iran and Iraq (EPPO, 2020). Its non-native distribution is restricted to northern countries of the EPPO region (e.g. Denmark, Finland, Norway, Sweden). Genetic analyses of plants from the native and introduced range show that European populations originated from different sources (Falahati-Anbaran *et al.*, 2021).



EPPO Region: Denmark, Finland, Norway, Sweden, Türkiye, United Kingdom

Asia: Iran, Islamic Republic of, Iraq

MORPHOLOGY

Plant type

H. persicum is a herbaceous, polycarpic (it blooms several times during its life) and perennial seed-propagated herb (EPPO, 2020).

Seeds of the three species are illustrated in Figure 1.

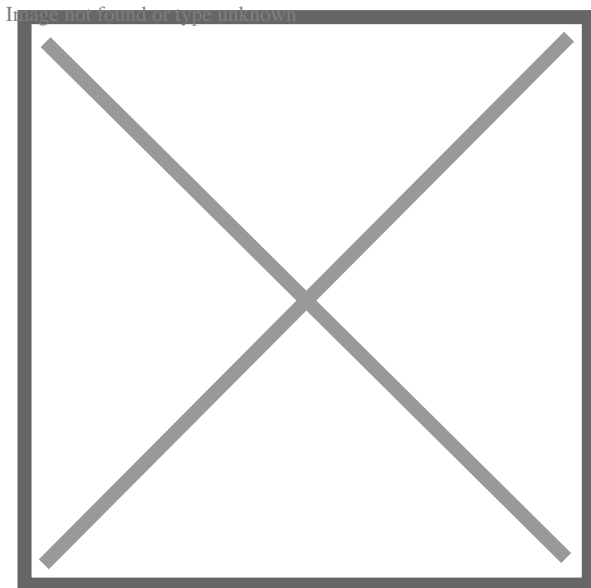


FIGURE 1

Drawings of *H. mantegazzianum*, *H. sosnowskyi* and *H. persicum* seeds by J. C. Schou (in Nielsen *et al.*, 2005).

Heracleum persicum can easily be confused with *H. mantegazzianum*.

Plants are most often 1–2?m in height, especially for newly established plants, but can reach 3–4?m. Plants often have more than one stem. Stems are purple, 1.5–2?cm thick, with large even areas of purple to purple-red colour at the base. Leaves are more divided than for *H. mantegazzianum*. They may be up to 2?m in length and deeply incised with very sharp points, with 2–3 pairs of lateral leaf segments and less deeply serrate. The whole plant smells of aniseed.

Umbels of *H. persicum* are more convex than those of *H. mantegazzianum*, which has flat umbels. Whereas *H. mantegazzianum* has especially large umbels with side umbels as well developed as the main umbel, and all umbels develop fruit, the side umbels of *H. persicum* are rather small compared with the main umbel and often do not develop fruit. According to Lars Fröberg (Fremstad & Elven, 2006), another characteristic, which may be used in distinguishing the two species, is the shape and placement of hairs on the two plants. *Heracleum mantegazzianum* has transparent, very curly hairs that stand out at 45 degrees from the stem. *Heracleum persicum* has somewhat stiffer and whiter hairs, which stand straight out from the stem.

The morphological characteristics of *H. persicum* vary according to the environmental conditions in which it grows, making identification difficult. Compared to *H. mantegazzianum* and *H. sosnowskyi*, there is a lack of studies on *H. persicum* (but see e.g. Zakhochiy *et al.*, 2022, Falahati-Anbaran *et al.*, 2021).

Heracleum spp. hybridize easily, thus causing confusion in identification. The common *Heracleum* species in Europe, *H. sphondylium*, *H. sibiricum* and the corresponding common species in the USA, *H. montanum* Bartr. (= *H. lanatum* Michx.) are not easily confused with the invasive hogweeds, being much smaller, rarely over 2?m high, with grey-green, pubescent and less acutely toothed leaves.

BIOLOGY AND ECOLOGY

General

The plant has a growth and development similar to those of *H. mantegazzianum*. Pollination by insects is common, but self-pollination also occurs. The species is spread by seeds and does not reproduce vegetatively. Because the side umbels of the plant are often poorly developed and do not always produce ripe fruits, the potential of *H. persicum* for seed production is thought to be inferior to that of *H. mantegazzianum*. The leaves of *H. persicum* wilt in the autumn, but the plant overwinters with buds below the soil surface. The plant needs one or more years to build up a nutrient reserve in its root system to be able to flower.

Habitats

Heracleum persicum colonizes the same habitats as *H. mantegazzianum*: areas strongly influenced by anthropogenic factors, urban areas (along roadsides and railroads), grasslands and wetlands (Klingenstein, 2006). It is common in meadows, pasturelands or agricultural fields that are no longer in use and in ruderal areas or wastelands, as well as in riparian habitats, growing along streams and rivers. It has been reported growing on mountainsides and on mountain slopes and in cracks where the soil layer is quite thin, but it is not known whether it will flower in this habitat. It has also been found in coastal habitats (beaches) where *H. mantegazzianum* has not been found. In Tromsø, Norway, *H. persicum* has been found growing among the seaweed vegetation on beaches. Its presence on unpopulated islands indicates that it may be spread with seawater (Alm, 1988; Alm & Jensen, 1993). In Norway it is becoming more common, growing at the edge of forests and has been reported as growing in birch forest (*Betula* spp.), probably because of the high light conditions of this ecosystem (Fremstad & Elven, 2006). It does not flower in the forest but survives for a long time in the shade under the trees.

Environmental requirements

Climatic preferences include temperate and cold climatic regions without a dry season, characterized by reasonable moisture and cold winters. Cold winters are required to ensure germination. Moist conditions are favoured for much of the year, but moderate summer droughts can be tolerated (Tiley *et al.*, 1996). Recently, several studies focused on climate modelling were published, but most of the data come from GBIF or iNaturalist, so they predict a restricted

spread to the east of Europe as a result of biased source data (Cuddington *et al.*, 2022).

Uses and benefits

Heracleum persicum has also been used as an ornamental.

PATHWAYS FOR MOVEMENT

The main pathway of introduction for all three species was plants for planting for use as ornamentals (especially for *H. mantegazzianum*) or as fodder crops or honey plants (especially for *H. sosnowskyi* in Russia and in the Baltic countries) (Laivīnš & Gavrilova, 2003). Seeds may also be introduced involuntarily, as contaminants of soil and growing media, from used machinery, vehicles, plants for planting or footwear (EPPO, 2020).

Once introduced, *Heracleum* spp. reproduce very efficiently from seed, which are spread by wind (e.g. 4?m), water (up to several kilometres) and human activities (Laivīnš & Gavrilova, 2003). Seeds can float along rivers for up to 3? days before they sink (Pyšek, 1994). In Latvia, seed has been observed to spread on frozen snow, where it forms a thin ice layer on the surface, and then wind can blow seeds over several kilometres (EPPO, 2020).

IMPACTS

Heracleum mantegazzianum, *H. sosnowskyi* and *H. persicum* have negative impacts on biodiversity and on the environment in general, on human health and tourism.

Effects on plants

There are no records of direct impact on crops. *Heracleum mantegazzianum* is not normally a weed of crops but there are reports of its encroachment into crop fields, for example in potatoes in Sweden, and it has also been seen invading pastures. In Latvia alone, the total cost of the 2006–2012 control program of this species was estimated at 12 million EUR (Cabinet of Ministers Order No. 426, 2006).

Heracleum persicum, as well as the two other *Heracleum* spp., block sunlight from penetrating to the undergrowth and suppress other vegetation. The leaves of *H. persicum* contain allelopathic substances which may act as growth inhibitors on other plants as the leaves decompose (Myras, 1978).

For these species, significant costs are incurred by the measures taken to control the weed in amenity and other areas and to turn the land back to agriculture, and this activity is also likely to increase soil erosion along stream banks where they occur.

Heracleum spp. can create stands that may range in extent from square metres to hectares; small patches, linear stands or fringes can be found. The density of populations may also vary: in large stands, it ranges from sparse growth (1–3 adult individuals/10?m²) to almost entire ground cover (more than 20 adult individuals/10?m²) (Nielsen *et al.*, 2005). The cover of *H. mantegazzianum* in the vegetation sampled in a German study varied between 1% and 95% (Thiele & Otte, 2007). In 31% of sampled plots, it was dominant, with cover exceeding 50%. The enormous height and leaf area of *H. mantegazzianum* are assumed to overgrow most (indigenous) plant species and hence to be in competition with them for light, absorbing up to 80% of incoming light in dense stands. A strong decline in species richness has been observed in abandoned grasslands and ruderal habitats in Latvia due to the presence of *H. sosnowskyi* (Nielsen *et al.*, 2005). In amenity areas, established colonies compete strongly with and rapidly replace most other plants except trees. Along riverbanks, it can almost totally replace the natural vegetation and threaten biodiversity, including fauna associated with (native) plants, building a ‘giant hogweed landscape’ (Nielsen *et al.*, 2005).

Nevertheless, since many stands of the species are linear, the biodiversity effects are often overestimated, as light can filter in from the sides (Starfinger & Kowarik, 2003). According to the study conducted in Germany by Thiele and Otte (2007), observed impacts on plant communities and local plant species richness are largely driven by successional changes following abandonment of land use or after large-scale disturbance. In the course of

succession, competitive native tall herbs, such as *Urtica dioica*, have similar impacts on resident vegetation. Therefore, these impacts could be seen as symptoms of human-driven changes rather than a particular effect of *H. mantegazzianum*. Moreover, although *H. mantegazzianum* affects up to 10% of the area of suitable habitats in the study area, it appears that regional populations of native plant species have not been endangered until now, as these co-occurring species are very common.

Heracleum mantegazzianum can lead to riverbank erosion through the suppression or exclusion of native species, which play an important role in riverbank stabilization. When *H. mantegazzianum* plants in dense stands die off in winter, they leave bare soil that can be eroded by rainfall or winter floods. Deposition of eroded silt can alter substrate characteristics in rivers and, for example, render gravel substrates unsuitable for salmonid spawning (Thiele & Otte, 2007).

Environmental and social impact

Hybrids are possible in the genus *Heracleum* (Gavrilova, 2003). Hybrids between *H. mantegazzianum* and native *H. sphondylium* are reported from Great Britain (McClintock, 1975) and Germany (Ochsmann, 1996). They are found in sites where the two species grow together, although they are not numerous (Grace & Nelson, 1981; Stewart & Grace, 1984). Hybridization of both *H. mantegazzianum* and *H. sosnowskyi* with the native *Heracleum sibiricum* is expected in Lithuania (pers. comm. Z. Gudžinskas). Hybridization between *H. mantegazzianum* and *H. sosnowskyi* is possible (Klingenstein, 2006).

Heracleum mantegazzianum, *H. sosnowskyi* and *H. persicum* contain photosensitizing furanocoumarins. In contact with the human skin and in combination with ultraviolet light, a toxic reaction can occur 15 min after contact, with a sensitivity peak between 30 min and 2 h causing burning of the skin. After about 24 h, flushing or reddening of the skin (erythema) and excessive accumulation of fluid in the skin (edema) appear, followed by an inflammatory reaction after 3 days. Approximately 1 week later, a hyper-pigmentation (usually darkening of the skin) occurs, which can last for months. The affected skin may remain sensitive to ultraviolet light for years. Although such photosensitized toxic reactions can be caused by other plants in the EPPO region, these *Heracleum* sp. are particularly dangerous because of the high intensity of the reactions and the large size of the plants. The public is not generally aware that such risks exist, so these plants present a real hazard, especially to children.

Dense infestations can seriously interfere with access to amenity areas, riverbanks, etc., and along roadsides, large stands can reduce visibility and result in road safety hazards. Obstruction of lake shores and riverbanks by stands of *H. mantegazzianum* affects anglers, water sports enthusiasts, swimmers, bird watchers, hikers and those working along river systems (Thiele & Otte, 2007). The costs of maintenance of roads may increase due to *H. sosnowskyi* (A. Garkaje, pers. comm., 2008).

A German study from 2003 assessed the economic impact of *H. mantegazzianum* to be more than 12 million EUR annually in the country, distributed among the health system (1 050 000 EUR), nature reserves (1 170 000 EUR), road management (2 340 000 EUR), municipal management (2 100 000 EUR) and district management (5 600 000 EUR) (Reinhardt *et al.*, 2003).

CONTROL

The EPPO Standard PM 9/9 (2) *Heracleum mantegazzianum*, *H. sosnowskyi* and *H. persicum* describes the control procedures aiming to contain and eradicate the three species.

Additional information can be found in Pergl (2017) and Rajmis *et al.* (2017).

Some countries developed dedicated legislation acts specifying control measures for these *Heracleum* species (e.g. Czech Republic <https://invaznidruhy.aopk.gov.cz/zasady-regulace>).

REGULATORY STATUS

In the United Kingdom, legislation requires that landowners should control the plant and prevent further spread

(Willoughby, 1996).

Heracleum persicum is on the EPPO A2 list of pests recommended for regulation and is listed as (EU) species of Union concern.

PHYTOSANITARY MEASURES

All three *Heracleum* species are listed as (EU) species of Union concern, and as such their sale is prohibited and their movement in the EU is restricted. Phytosanitary measures for existing populations and preventing spread include managing the pathways. This can include preventing spread via unintentional transport of seeds or contaminated soils. Early detection is required to prevent the establishment of new populations and allow rapid eradication. Management practices can follow those detailed in the control section.

REFERENCES

All websites were accessed in April 2026.

Alm T (1988) Floaraen i Tromsø by. Floristisk sluttrapport prosjektet Planteliv i Tromsø. *Polarflokken* **12**(1), 1–156.

Alm T & Jensen C (1993) Tromsøpalmen (*Heracleum lacinatum* auct. Scand.) noen kommentarer till artens innkomst og ekoansjon i Nord-Norge. *Blyttia* **51**, 61–69.

Andersen UV & Calov B (1996) Long-term effects of sheep grazing on giant hogweed (*Heracleum mantegazzianum*). In: *Management and Ecology of Freshwater Plants* (Ed. Caffrey JM, Barrett PRF, Murphy KJ & Wade PM), Proceedings, 9th International Symposium on Aquatic Weeds, European Weed Research Society, Dublin, 1994. *Hydrobiologia* **340**, 277–284.

Arepieva LA, Arepiev EI, Kazakov SG (2021) Distribution of Sosnowsky's Hogweed (*Heracleum sosnowskyi* Manden.) at the southern border of its secondary range in European Russia. *Russian Journal of Biological Invasions* **12**, 233–243.

Cabinet of Ministers Order No. 426 (2006) On Distribution Control Program of Giant Hogweed for the Period of 2006–2012.

Cock MJW & Seier MK (2007) The scope for biological control of Giant Hogweed, *Heracleum mantegazzianum* (chapter 16). In: *Ecology and management of Giant Hogweed (Heracleum mantegazzianum)* (Ed. Pysek P, Cock MJW, Nentwig W & Ravn HP), pp. 255–271. CAB International, Wallingford (GB).

Cuddington K, Sobek-Swant S, Drake J, Lee W, Brook M (2022) Risks of giant hogweed (*Heracleum mantegazzianum*) range increase in North America. *Biological Invasions* **24**, 299–314

Daehler CC (1998) Variation in self-fertility and the reproductive advantage of self-fertility for an invading plant (*Spartina alterniflora*). *Evolutionary Ecology* **12**, 553–568.

EPPO (2020) PM 9/9 (2) *Heracleum mantegazzianum*, *H. sosnowskyi* and *H. persicum*. *EPPO Bulletin* **50** (3), 515–524

Falahati-Anbaran M, Rijal DP, Lundemo S, Alsos IG, Stenøien HK (2021) Disentangling the genetic origin of *Heracleum persicum* (Apiaceae) in Europe: multiple introductions from multiple source populations. *Biological Invasions* **23**(12), 3871–3890

Fremstad E & Elven R (2006) The alien giant species of *Heracleum* in Norway. *NTNU Norges teknisk-naturvetenskaplige universitet Vitenskapsmuseet Rapport botanisk serie* **2**, 1–35.

Gavrilova G (2003) *Report on investigation of Heracleum* in Latvia in 2003. Institute of Biology, Rija (LV).

Grace J & Nelson M (1981) *Insects and their pollen loads at a hybrid Heracleum site*. *New Phytologist* **87**, 413–423.

- Gudžinskas Z, Kazlauskas M (2022) The first record of *Heracleum mantegazzianum* Sommier & Levier (Apiaceae) in Lithuania. *BioInvasions Records* **11**(2), 320–329
- Jahodová Š, Trybush S, Pyšek P, Wade W, Karp A (2007a) Invasive species of *Heracleum* in Europe: an insight into genetic relationships and invasion history. *Diversity & Distributions* **13**(1), 99–114.
- Jahodova S, Froberg L, Pysek P, Geltman D, Trybush S, Karp A (2007b) Taxonomy, identification, genetic relationship and distribution of large *Heracleum* species in Europe (Chapter 1). In: *Ecology and Management of Giant Hogweed (Heracleum mantegazzianum)* (Ed. Pysek P, Cock MJW, Nentwig W & Ravn HP), pp. 1–19. CAB International, Wallingford (GB).
- Krivosheina MG, Ozerova NA, Petrosyan VG (2020) Distribution of seeds of the Giant Hogweed (*Heracleum sosnowskyi* Manden.) in the winter period. *Russian Journal of Biological Invasions* **11**, 318–325.
- McClintock D (1975) *Heracleum* L. In: *Hybridization and the Flora of the British Isles* (Ed. Stace CA), pp. 270. Academic Press, London (GB).
- Moravcova L, Pysek P, Krinke L, Pergl J, Perglova I & Thompson K (2007) Seed germination, dispersal and seed bank in *Heracleum mantegazzianum* (chapter 5). In: *Ecology and Management of Giant Hogweed (Heracleum mantegazzianum)* (Ed. Pyšek P, Cock MJW, Nentwig W & Ravn HP), pp. 74–91. CAB International, Wallingford (GB).
- Myras H (1978) Interaksjon mellom planter med saerlig vekt paallelapati. Undersøkning av interaksjon mellom *Heracleum lacinatum* Horn Tromsøpalme og andra planter. Hovedfagsoppgave Universitetet i Tromsø 226 s.
- NAPIS (2004) *Heracleum mantegazzianum*, giant hogweed reported surveys. The Center for Environmental and Regulatory Information Systems, Purdue University (US).
- Neiland MRM (1986) *The distribution and ecology of Giant Hogweed (Heracleum mantegazzianum) on the river Allan, and its control in Scotland*. Thesis, University of Stirling (GB).
- Nielsen C, Ravn HP, Nentwig W & Wade M (Ed.) (2005) *The Giant Hogweed Best Practice Manual. Guidelines for the management and control of an invasive weed in Europe*. Forest and Landscape Denmark, Hoersholm, 44pp.
- Ochsmann J (1996) *Heracleum mantegazzianum* Sommier & Levier (Apiaceae) in Germany. Studies on biology, distribution, morphology and taxonomy. *Feddes Repertorium* **107**(7–8), 557–595.
- Often A & Ericsson S (1996) Tromsoloka, *Heracleum 'lacinatum'*, naturalised i Sverige. *Heracleum lacinatum*, naturalized in Sweden. *Svensk Botanisk Tidskrift* **90**, 17–19.
- Otte A & Thiele J (2007) *Heracleum mantegazzianum* in its primary distribution range of the Western Greater Caucasus. In: *Ecology and Management of Giant Hogweed (Heracleum mantegazzianum)* (Ed. Pysek P, Cock MJW, Nentwig W & Ravn HP), pp. 20–41. CAB International, Wallingford (GB).
- Pergl J (2017) Information on measures and related costs in relation to species included on the Union list: *Heracleum mantegazzianum*. Technical note prepared by IUCN for the European Commission. <https://circabc.europa.eu/sd/a/a174ceae-558c-4aa1-8437-e28cb310275d/TSSR-2016-003%20Heracleum%20mantegazzianum.pdf>
- Pergl J, Perglova I, Pyšek P & Dietz H (2006) Population age structure and reproductive behaviour of the monocarpic perennial *Heracleum mantegazzianum* (Apiaceae) in its native and invaded distribution ranges. *American Journal of Botany* **93**(7), 1018–1028.
- Pergl J, Pyšek P, Perglová I & Jarošík V (2012) Low persistence of a monocarpic invasive plant in historical sites biases our perception of its actual distribution. *Journal of Biogeography* **39**, 1293–1302. <https://doi.org/10.1111/j.1365-2699.2011.02677.x>

- Perglova I, Pergl J & Pyšek P (2007) Reproductive strategy of *Heracleum mantegazzianum* (chapter 4). In: *Ecology and Management of Giant Hogweed (Heracleum mantegazzianum)* (Ed. Pyšek P, Cock MJW, Nentwig W & Ravn HP), pp. 55–73. CAB International, Wallingford (GB).
- Pyšek P (1994) Ecological aspects of invasion by *Heracleum mantegazzianum* in the Czech Republic. In: *Ecology and Management of Invasive Riverside Plants* (Ed. De Waal LC, Child EL, Wade PM & Brock JM), pp. 45–54. John Wiley & Sons, Chichester (GB).
- Pyšek P, Kopecký M, Jarošík V & Kotková P (1998) The role of human density and climate in the spread of *Heracleum mantegazzianum* in the Central European landscape. *Diversity and Distributions* **4**, 9–16.
- Pyšek P & Prach K (1993) Plant invasions and the role of riparian habitats: a comparison of four species alien to central Europe. *Journal of Biogeography* **20**(4), 413–420.
- Pyšek P & Pyšek A (1995) Invasion by *Heracleum mantegazzianum* in different habitats in the Czech Republic. *Journal of Vegetation Science* **6**(5), 711–718.
- Pyšek P, Müllerová J & Jarošík V (2007) Historical dynamics of *Heracleum mantegazzianum* invasion at regional and local scales. In: *Ecology and Management of Giant Hogweed (Heracleum mantegazzianum)* (Ed. Pyšek P, Cock MJW, Nentwig W & Ravn HP), pp. 42–54. CAB International, Wallingford (GB).
- Pyšek P, Sádlo J, Chrtek J Jr, Chytrý M, Kaplan Z, Pergl J, Pokorná A, Axmanová I, Ůuda J, Doležal J, D?evojan P, Hejda M, Ko?ár P, Kortz A, Lososová Z, Lustyk P, Skálová H, Štajerová K, Ve?e?a M, Vítková M, Wild J & Danihelka J (2022) Catalogue of alien plants of The Czech Republic (3rd edition): species richness, status, distributions, habitats, regional invasion levels, introduction pathways and impacts. *Preslia* **94**, 477–577. <https://doi.org/10.23855/preslia.2022.447>
- Rajmis S, Thiele J, Marggraf R (2016) A cost-benefit analysis of controlling giant hogweed (*Heracleum mantegazzianum*) in Germany using a choice experiment approach. *NeoBiota* **31**, 19–41. [\[MS1\]\[MS2\]](https://doi.org/10.3897/neobiota.31.8103)
<https://doi.org/10.3897/neobiota.31.8103>
- Rejmánek M, Richardson DM, Higgins SI, Pitcairn MJ, Grotkopp E (2005) Ecology of invasive plants: state of the art. In: *Invasive Alien Species: Searching for Solutions* (Ed. Mooney HA, Mack RM, McNeely JA, Neville L, Schei P & Waage J), pp. 104–161. Island Press, Washington, DC (US).
- Reinhardt F, Herle M, Bastiansen F & Streit B (2003) *Economic Impact of the Spread of Alien Species in Germany*. Environmental Research of the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety, Research Report 201 86 211 UBA-FB 000441e, Texte Nr. 80 ? 2003. Federal Environmental Agency (Umweltbundesamt), Berlin (DE), 229p.
- Seier MK, Wittenberg R, Ellison CA, Djeddour DH & Evans HC (2003) Surveys for natural enemies of giant hogweed (*Heracleum mantegazzianum*) in the Caucasus region and assessment for their classical biological control potential in Europe. In: *Proceedings XI International Symposium on Biological Control of Weeds, Canberra, Australia* (Ed. Cullen JM, Briere DT, Kritikos DJ, Lonsdale WM, Morin L & Scott JK), pp. 149–154. CSIRO, Melbourne (AU).
- Sell P & Murrell G (2009) *Flora of Great Britain and Ireland Vol. 3, Mimosaceae – Lentibulariaceae*. Cambridge University Press, Cambridge (GB).
- Starfinger U & Kowarik I (2003) *Heracleum mantegazzianum* Sommier & Levier (Apiaceae), Riesen-Barenklau. In: *NeoFlora* (Ed. Bundesamt f. Naturschutz).
- Stewart F & Grace J (1984) An experimental study of hybridization between *Heracleum mantegazzianum* Somm & Levier and *H. sphondylium* (Umbelliferae). *Watsonia* **15**, 73–83.
- Tkachenko KG (1989) Peculiarities and seed productivity in some *Heracleum* species grown in Leningrad area. *Rastitelnye Resursy* **1**, 52–61. [In Russian.]

Thiele J, Otte A & Lutz Eckstein R (2007) Ecological needs, habitats preferences and plant communities invaded by *Heracleum mantegazzianum*. In: *Ecology and Management of Giant Hogweed (Heracleum mantegazzianum)* (Ed. Pysek P, Cock MJW, Nentwig W & Ravn HP), pp. 126–143. CAB International, Wallingford (GB).

Thiele J & Otte A (2007) Impact of *Heracleum mantegazzianum* on invaded vegetation and human activities. In: *Ecology and Management of Giant Hogweed (Heracleum mantegazzianum)* (Ed. Pysek P, Cock MJW, Nentwig W & Ravn HP), pp. 144–156. CAB International, Wallingford (GB).

Tiley GED, Dodd FS & Wade PM (1996) *Heracleum mantegazzianum* Sommier & Levier. *Journal of Ecology* (Oxford) **84**(2), 297–319.

USDA-NRCS (2026) *Heracleum mantegazzianum* Sommier & Levier. Accessed Date: February 2026.

<https://plants.usda.gov/plant-profile/HEMA17/noxious-invasive>

Westbrooks RG (1991) *Heracleum mantegazzianum* Sommier & Levier. Federal USDA PPQ Noxious Weed Inspection Guide. Purdue University, West Lafayette, Indiana, USA.

Willis SG & Hulme PE (2002) Does temperature limit the invasion of *Impatiens glandulifera* and *Heracleum mantegazzianum* in the UK? *Functional Ecology* **16**(4), 530–539.

Willoughby I (1996) Noxious weeds. *Research Information Note – Forestry Authority Research Division* **274**, 8.

Zakhozhiy IG, Dalke IV, Chadin IF, Kanev VA (2022) Ecogeographical analysis of the *Heracleum persicum*, *H. mantegazzianum*, and *H. sosnowskyi* distribution at the northern limit of their secondary ranges in Europe. *Russian Journal of Biological Invasions* **13**, 203–214. <https://doi.org/10.1134/S2075111722020138>

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EPPO (2009) Datasheets on pests recommended for regulation. *Heracleum mantegazzianum*, *Heracleum sosnowskyi* and *Heracleum persicum*. *EPPO Bulletin* **39**, 489-499 <https://doi.org/10.1111/j.1365-2338.2009.02313.x>

EPPO (2026) Datasheets on pests recommended for regulation. *Heracleum mantegazzianum*, *Heracleum sosnowskyi* and *Heracleum persicum*. *EPPO Bulletin* **56**(1), 108-119 <https://doi.org/10.1111/epp.70049>