

FORMAT FOR A PRA RECORD (version 3 of the Decision support scheme for PRA for quarantine pests)

	European and Mediterranean Plant Protection Organisation		
	Organisation Européenne et Méditerranéenne pour la Protection des Plantes		
	Guidelines on Pest Risk Analysis		
	Lignes directrices pour l'analyse du risque phytosanitaire		
	Decision-support scheme for quarantine pests Version N°3		
	PEST RISK ANALYSIS FOR <i>Heracleum mantegazzianum</i>		
Pest risk analyst:			
EPPO Secretariat			
Stage 1: Initiation			
1 What is the reason for performing the PRA?			<i>Heracleum mantegazzianum</i> is considered invasive in the EPPO region.
2 Enter the name of the pest			<i>Heracleum mantegazzianum</i>
2A Indicate the type of the pest			Plantae
2B Indicate the taxonomic position			Apiaceae
3 Clearly define the PRA area			EPPO region

4 Does a relevant earlier PRA exist?	No	
5 Is the earlier PRA still entirely valid, or only partly valid (out of date, applied in different circumstances, for a similar but distinct pest, for another area with similar conditions)?		/
Stage 2A: Pest Risk Assessment - Pest categorization		
6 Specify the host plant species (for pests directly affecting plants) or suitable habitats (for non parasitic plants) present in the PRA area.		Grasslands, forests, wetlands, riverbanks/canal sides, rail/roadsides, and urban areas.
7. Specify the pest distribution		<p>EPPO region: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Liechtenstein, Netherlands, Norway, Poland, Russia (Southern Russia) (native), Slovakia, Sweden, Switzerland, United Kingdom.</p> <p>Asia: Georgia (native)</p> <p>North America: Canada (British Columbia, Ontario, Newfoundland), USA (Connecticut, Illinois, Indiana, Maine, Maryland, Massachusetts, Michigan, New York, New England, Oregon, Pennsylvania, Vermont, Washington).</p> <p>Oceania: Australia, New Zealand.</p> <p>Note: the plant is listed as a noxious weed not occurring in North Carolina and Florida.</p>
8. Is the organism clearly a single taxonomic entity and can it be adequately distinguished from other entities of the same rank?	Yes	There have been confusions between <i>Heracleum mantegazzianum</i> , <i>H. sosnowskyi</i> and <i>H. persicum</i> , but recent genetical studies highlighted the fact that there are three distinct tall <i>Heracleum</i> species invading Europe. A close genetic relationship between the three invasive <i>Heracleum</i> species in Europe was also found (Jahodová <i>et al.</i> , 2007).
9. Even if the causal agent of particular symptoms has not yet been fully identified, has it been shown to produce consistent symptoms and to be transmissible?		

10. Is the organism in its area of current distribution a known pest (or vector of a pest) of plants or plant products?	Yes	Where present in the EPPO region, <i>H. mantegazzianum</i> is considered invasive in managed and unmanaged ecosystems, being a threat to biodiversity, eroding riverbanks, and posing a health risk - causing skin blistering on contact.
11. Does the organism have intrinsic attributes that indicate that it could cause significant harm to plants?	Yes	
12 Does the pest occur in the PRA area?	Yes	
13. Is the pest widely distributed in the PRA area?	Yes	It is present in 22 EPPO countries.
14. Does at least one host-plant species (for pests directly affecting plants) or one suitable habitat (for non parasitic plants) occur in the PRA area (outdoors, in protected cultivation or both)?		
15. If a vector is the only means by which the pest can spread, is a vector present in the PRA area? (if a vector is not needed or is not the only means by which the pest can spread go to 16)		
16. Does the known area of current distribution of the pest include ecoclimatic conditions comparable with those of the PRA area or sufficiently similar for the pest to survive and thrive (consider also protected conditions)?		
17. With specific reference to the plant(s) or habitats which occur(s) in the PRA area, and the damage or loss caused by the pest in its area of current distribution, could the pest by itself, or acting as a vector, cause		

<p>significant damage or loss to plants or other negative economic impacts (on the environment, on society, on export markets) through the effect on plant health in the PRA area?</p>		
<p>18. This pest could present a risk to the PRA area.</p>		
<p>19. The pest does not qualify as a quarantine pest for the PRA area and the assessment for this pest can stop.</p>		<p>The species is widely distributed and does therefore not qualify as a quarantine pest. Preventive international measures are not recommended, but national measures could be implemented in the countries at risk. See the EPPO Standard PM3/67, on <i>Guidelines for the management of invasive alien plants or potential invasive alien plants which are intended for import or have been intentionally imported.</i> See as well the PM9 on <i>Heracleum</i> spp.</p>

Bibliography

Jahodová Š, Fröberg L, Pyšek P, Geltman D, Trybush S & Karp A (2007) Taxonomy, Identification, Genetic Relationship and Distribution of Large *Heracleum* Species in Europe (Chapter 1). In Pyšek P, Cock MJW, Nentwig W, Ravn HP (eds) (2007) Ecology and management of Giant Hogweed (*Heracleum mantegazzianum*). CAB International. P. 1-19.