

Summary of EPPO Prioritization process¹ for: *Verbesina encelioides*

The 2022/23/24, a number of species from the EPPO Observation List were re-prioritized with current information to assess if they should remain on the Observation List or moved to another List. This is the 2024 prioritization summary for *Verbesina encelioides* where the outcome is the species should remain on the Observation List.

Section A. Prioritization process scheme for the elaboration of different lists of invasive alien plants (pests or potential pests) for the area under assessment**A.1 Is the plant species known to be alien in all, or a significant part, of the area under assessment?**

Yes: *Verbesina encelioides* is native to North America (POWO, 2024).

A.2 Is the plant species established in at least a part of the area under assessment? (if yes goto A5)

Yes, the species is established in the EPPO region. It is present in Austria, Denmark, Germany, Israel, Morocco, Romania, Spain, Sweden, Switzerland, United Kingdom (EPPO, 2024).

A.3 Is the plant species known to be invasive outside the area under assessment?

A yes for question A.2 means this question is skipped.

A.4 Based on ecoclimatic conditions, could the species establish in the area under assessment?

A yes for question A.2 means this question is skipped.

A.5 How high is the spread potential of the plant in the area under assessment?

High spread potential with moderate uncertainty: Seed are spread by wind and water. In addition, seed can also be spread by used vehicles and equipment (EPPO, 2012). Birds may act to spread seed. Seeds may also be spread as contaminants in pasture hay and cereal grain, and they are reported as being introduced with wool from Australia in the British Isles.

A.6 How high is the potential negative impact of the plant on native species, habitats and ecosystems in the area under assessment?

Medium with a moderate uncertainty: *V. encelioides* displays allelopathic effects inhibiting native plants growth. Its aggressive and dominant growth abilities outcompete native plants. In the North-Western Hawaiian Islands, the plant also presents a significant problem due to habitat degradation for seabirds nesting directly on the ground. Where growth of *V. encelioides* is particularly thick, some bird species can even become entangled amongst the weed.

A.7 How high is the potential negative impact of the plant on agriculture, horticulture or forestry in the area under assessment?

Medium with a moderate uncertainty: The species is reported as a weed in rice fields in Asia and peanut fields in the USA. The species could have impact on agricultural production in Italy and some other areas of the EPPO region. It can also block drainage and irrigation systems.

¹ EPPO (2012) EPPO Prioritization process for invasive alien plants. EPPO Bulletin 42, 463-474.

A.8 How high are the potential additional impacts (e.g. on animal and human health, on infrastructures, on recreational activities, other trade related impacts such as market losses)?

Medium with a moderate uncertainty: The plant contains a toxic component called galegine which poisons livestock (sheep). The plant is not a preferred source of feed for the livestock, but it will be eaten when feed is limited. Studies made in Argentina showed that animals ingesting 5 g of *V. encelioides* per kg of body weight might show lethargy and anorexia. In Morocco, the plant is also reported to be a host of whiteflies such as *Bemisia tabaci* (EPPO A2 List) and *Trialeurodes vaporariorum* (Taleb, 2006).

Outcome of Section A: *Verbesina encelioides* included on the EPPO Observation List

		A5 -Spread potential		
		Low	Medium	High
Adverse impacts (maximum rating from questions A6, A7 and A8.	Low	List of minor concern	List of minor concern	List of minor concern
	Medium	List of minor concern	Observation List	Observation List
	High	Observation List	Observation List	List of invasive alien plants

Verbesina encelioides is not considered further. The assessment stops here.

B. Prioritization process scheme for the identification of invasive alien plants for which a PRA is needed

B.1 Is the plant species internationally traded or are there other existing or potential international pathways?

B.2 Is the risk of introduction by these international pathways identified to be superior to natural spread?

B.3 Does the plant species still have a significant area suitable for further spread in the area under assessment?

Outcome of section B: -

Selected references

EPPO (2012) Mini data sheet on *Verbesina encelioides* (Asteraceae). Available at: <https://gd.eppo.int/taxon/VEEEN/documents>

EPPO (2024) EPPO Global Database. <https://gd.eppo.int/>

Farris R, Gray C, Murray D, Verhalen L (2017): Time of Removal of Crownbeard (*Verbesina encelioides*) on Peanut Yield, Weed technology,19 (2) 380 – 384

POWO (2024) Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.plantsoftheworldonline.org/> Retrieved 04 March 2024.

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Taleb A, Bouhache M (2006) Etat actuel de nos connaissances sur les plantes envahissantes au Maroc. In Brunel S. (eds) Proceedings of the International Workshop on invasive plants in Mediterranean type regions of the world. Mèze (France), 25-27 May 2005. The Council of Europe. Environment encounters n°59. 99-107.