EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

23-28396

Summary of EPPO Prioritization process¹ for: *Ageratina adenophora*

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: *Ageratina adenophora* is a perennial herb or a subshrub native to Mexico (Luis Villasenor, 2016; Catálogo Español de Especies Exóticas Invasoras, 2013).

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

Yes. *Ageratina adenophora* is established in France, Greece, Italy, Morocco, Portugal and Spain. It is transient in Germany. Suitable habitats occur for the establishment of *A. adenophora* in the EPPO region (e.g. wetlands, grassland, forest habitats).

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: *Ageratina adenophora* propagates by seed and stem or rhizome fragments. Seeds are wind dispersed. It can produce ca. 7 000– 10 000 seeds per plant (Parsons and Cuthbertson, 2001). The plant can also be moved for horticultural purposes within the EPPO region.

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

High with a moderate uncertainty: Ageratina adenophora can have negative impacts on native biodiversity by competing for space, light and nutrients. It has allelopathic properties. Once A. adenophora invades an area, it can develop into a single predominant plant community in a short period of time by displacing native plant species and altering local nutritional cycles and hydrological conditions. A. adenophora can reduce biodiversity and endanger native plant species, particularly rare species, ultimately causing serious ecosystem degeneration and altering the local natural landscape (Wan *et al.*, 2010).

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

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

High with a medium uncertainty: In other regions of the world, *A. adenophora* is a serious weed in agriculture, especially in rangelands where it often replaces either the more-desirable vegetation or native species (Bess & Haramoto, 1958), but also in forests (Sharma & Chhetri, 1977).

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)?

High with a medium uncertainty: Ageratina adenophora has a poisonous effect on domestic animals, such as horses and cattle (Ren *et al.* 2021). The plant is more toxic in its flowering stage compared to its juvenile stages (O'Sullivan, 1985).

Outcome of Section A: Ageratina adenophora is included on the EPPO List of Invasive Alien Plants

		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

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?

Potential pathways include plants for planting. The species has been traded and grown in private gardens and botanical gardens.

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

Yes.

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

Yes. *Ageratina adenophora* has a local distribution in the EPPO region and it is likely that the species can spread and establish in a wider part of the EPPO region.

Outcome of section B: Ageratina adenophora is a high priority for an EPPO PRA

Selected references

Bess, H. A. and Haramoto, F. H. (1958). Biological control of pamakani, *Eupatorium adenophorum*, in Hawai'i by a tephritid gall fly, *Procecidochares utilis*. 1. The life history of the fly and its effectiveness in the control of the weed. Proceedings of the Tenth International Congress of Entomology, Vol. 4, ed. E. C. Becker. Ottawa, Canada: Mortimer, 543–548.

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