

Summary of EPPO Prioritization process¹ for: *Zizania latifolia*

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: *Zizania latifolia* is native to China, Japan, Mongolia, Myanmar, Taiwan (see EPPO Global Database, 2023).

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

Yes: *Zizania latifolia* is considered established in Belarus, Belgium, Kazakhstan, Lithuania, Russia (Central Russia, European Russia), Ukraine, United Kingdom (see EPPO Global Database, 2023). *Zizania latifolia* is an aquatic plant species which can tolerate fresh, brackish and saline water. It can be found at the margins of ponds and canals, wetlands and tidal flats. It is also found along ditches or any slow flowing water body.

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 high uncertainty: Although the species is not known to flower in the EPPO region, it can spread via fragments moved via water. Human mediated spread, drainage machinery, boats and trailers can all act to spread rhizome fragments.

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 high uncertainty: In Lithuania "This new species was aggressive in outcompeting the other species as the largest patches of *Z. latifolia* had only very few small spots of other species. *Z. latifolia* forms monodominant community *Zizanietum* Akht. 1987 (Liatukas & Stukonis, 2009)". In Lithuania, *Zizania latifolia* forms monodominant stands and covers an area of ca. 2500 m². In Russia, the species is naturalized in nine regions and is reported to have invasive behavior in six of them (Morozova, 2014).

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?

Moderate with a high uncertainty: There are reports (e.g. ISSG, 2023) that ‘there are concerns that the spread of *Z. latifolia* could seriously affect the use of farmland’, It has the potential to invaded wet meadows (as in New Zealand) where it could lower yields and compete with desired plant species. It can grow in irrigation ditches and reduce water delivery and access.

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)?

Moderate with a medium uncertainty: *Z. latifolia* can grow in irrigation ditches and reduce water delivery and access.

Outcome of Section A: *Zizania latifolia* 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. *Zizania latifolia* is thought to have been introduced into New Zealand via soil ballast from ships. It has been introduced into several countries as a food crop (cultivated throughout Asia), a fodder crop and as an ornamental pond plant.

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. *Zizania latifolia* 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. As the species is available in trade, further areas for its establishment are likely.

Outcome of section B: *Zizania latifolia* is a high priority for an EPPO PRA

Selected references

Dubovik DV, Sauchuk SS, Zavalove LV (2021) The current status of the plant invasions in Belarus. *Environmental and Socio-economic studies* **9**, 14-22.

Leostin A, Pergl J (2021) Alien flora in a boreal region of European Russia: an example of Kostroma oblast. *Biological Invasions* **23**, 3337–3350.

Liatukas Z, Stukonis V (2009) *Zizania latifolia* – a new alien plant in Lithuania. *Botanica Lithuanica* **15**, 17-24.