

## Summary of EPPO Prioritization process<sup>1</sup> for: *Trianthema portulacastrum*

### **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: *Trianthema portulacastrum* is considered to have a wide native range including the Americas, Asia and Africa (Plants of the World Online, 2023).

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

Yes. *Trianthema portulacastrum* is established in Israel and Jordan where it occurs in Ruderal habitats, roadside, lakes, riverbanks, creeks, coastal areas, agricultural habitats (EPPO, 2023).

#### **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:** A number of reports highlight that *Trianthema portulacastrum* spreads rapidly in crop fields in the area where it occurs (Thomas et al., 2016). Seeds are dispersed by water and near the plant (autochory). Agricultural practices may act to spread seeds within and between fields.

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

**Low with a low uncertainty.** There are no known studies that have evaluated the impact of the species on native biodiversity or habitats or ecosystems.

#### **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 moderate uncertainty:** Significant yield losses attributed to the weed have been reported in maize, soybean, peanut and mung bean. In Israel, in the Galilee Valleys yield reduction in summer crops (peanut, tomato and watermelon) has been observed (pers. comm. D. Cafri, 2022). In Saudi Arabia, the

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

species is regarded as a highly invasive species. In Pakistan, the species has been shown to have negative impacts on *Zea mays* yields (Saeed, 2009).

**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)?**

**Low with a low uncertainty:** There are no potential additional impacts reported or predicted for this species.

**Outcome of Section A: *Trianthema portulacastrum* 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

The process stops.

***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?**

**Yes.** *Trianthema portulacastrum* is available via e commerce. Plants for planting is an international pathway.

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

**Yes.** Horticulture trade will be a pathway superior to natural spread.

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

It is not clear if the species has the potential for spread in a significant area in the area under assessment. Further analysis is required. It is recommended that the species is maintained on the EPPO List of Invasive Alien Plants and as and when new data is published, the species will be reconsidered for priority for PRA.

**Outcome of section B: *Trianthema portulacastrum* is not a priority for PRA**

## Selected references

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