

Prioritization process report¹ for: *Xanthium spinosum* L.

During the 2026 meeting of the Panel on Invasive Alien Plants, *Xanthium spinosum* was suggested as a candidate for the EPPO Alert List. However, the Panel noted the species is too widespread in the EPPO region for consideration on the Alert List. The Panel agreed that the species should be prioritized and considered for listing on the Observation List or the EPPO List of Invasive Alien Plants. The output of the prioritization process is that *Xanthium spinosum* is added to the EPPO List of Invasive Alien Plants. This report was reviewed and approved by the Panel on Invasive Alien Plants in 2026.

26-31228

Section A - Prioritization process scheme for the elaboration of different lists of invasive alien plants (pests or potential pests) for the area under assessment**Init1. Enter the name of the pest***Xanthium spinosum***Init2. Indicate the taxonomic position and synonyms**Preferred name: *Xanthium spinosum* LinnaeusOther scientific names: *Acanthoxanthium ambrosioides*, *Acanthoxanthium spinosum*, *Xanthium ambrosioides*, *Xanthium canescens*, *Xanthium spinosum* var. *ambrosioides*

Common names: بول الفار [ar], حسيكة [ar], شوك [ar], казашки бодил бодлив [bg], aferragós [ca], cadells [ca], catxurros [ca], coscorros [ca], enganzadones [ca], enganzagossos [ca], espina-xoca [ca], floravia [ca], gafets [ca], gafets petits [ca], gossets [ca], herba de les spines [ca], herba del fetge [ca], herba de los punzes [ca], herba de tres claus [ca], llagastes [ca], llapasa petita [ca], obriülls [ca], rioles espinoses [ca], xoca [ca], řepěň trnitá [cs], dornige Spitzklette [de], Dornspitzklette [de], ασπράγκαθο [el], prickly burweed [en], spiny cocklebur [en], Bathurst burr [en], Argentina cocklebur [en], clotbur [en], spiny cocklebur [en], spiny xanthium [en], cadillo [es], floravia [es], cebo caballo [es], abrojo chico [es], cepa-caballo [es], cardo francés [es], abreojos [es], abrojilla [es], abrojos [es], arranca-moños [es], cachurrera menor [es], cadillos [es], cardo de la virgen [es], cardo de tres puntas [es], cardo garbancero [es], cardo picón [es], cardo sacatrapos [es], floravia [es], garbanzo de cura [es], pegotes [es], pegotes [es], peseta [es], pico garbancero [es], picos [es], piojos de señorita [es], rosete [es], tres-pies [es], tudela [es], astel-väärtakjas [et], piikkisappiruoho [fi], lampourde épineuse [fr], lampourde [fr], glouteron [fr], petite bardane [fr], arzola [gl], lachid kotzani [he], לִיָּד קִזְזִי [he], čičak [hr], trnovita dikica [hr], szúrós szerbtövís [hu], lappola spinosa [it], spina d'asino [it], nappola spinosa [it], togeonamomi [ja], トゲオナモミ [ja], 바늘도꼬마리 [ko], ba neul do kko ma ri [ko], dygliuotasis dagišius [lt], dzelonainais smaildadzis [lv], холерэ цэпоасэ [mo], stekende stekelnoot [nl], tistelkrokfrø [no], rzepień ciernisty [pl], rzepień kolczasty [pl], gatinhos [pt], carrapichão [pt], pica-três [pt], arzola [pt], bardana-espinhosa [pt], carrapicho-de-carneiro [pt], carrapicho-de-Santa-Helena [pt], donzela [pt], erva-de-Santa-Helena [pt], espinho-de-carneiro [pt], floravia [pt], zântio [pt], holeră [ro], дуршинник игольчатый [ru], дуршинник колючий [ru], voškovník tñistý [sk], trnati bodič [sl], ksanta me giemba [sq], grodhe gjembake [sq], sybardhi [sq], бела боца [sr], боца [sr], дикица [sr], трновита боца [sr], tistelgullfrö [sv], pıtrak [tr], нетреба колюча [uk], cì cāng ěr [zh], 刺苍耳 [zh]

¹ Using EPPO (2012) PM 5/6 EPPO prioritization process for invasive alien plants. *EPPO Bulletin*, **42**, 463-474.

| - Plantae
 |-- Magnoliophyta
 |--- Angiospermae
 |---- Campanulids
 |----- Asterales
 |----- Asteraceae
 |----- Asteroideae
 |----- Xanthium
 |----- Xanthium spinosum

Init3. Clearly define the area for prioritization

EPPO region (Albania, Algeria, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Guernsey, Hungary, Ireland, Israel, Italy, Jersey, Jordan, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, The Republic of North Macedonia, Malta, Moldova, Montenegro, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tunisia, Türkiye, Ukraine, United Kingdom, Uzbekistan).

Init4. Provide the reasons for performing this prioritization, and detail any prioritization reports available for the assessed species.

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A.1. Is the plant species known to be alien in all, or a significant part, of the area under assessment?

Yes

Xanthium spinosum is native to the Americas (EPPO, GD, 2026).

A.2. Is the plant species established in at least a part of the area under assessment?

Yes, use the justification tab to describe the area where the species is established, and the area of potential establishment, considering major factors such as climatic conditions and soil conditions.

Xanthium spinosum is widely established in the EPPO region.

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

High

Xanthium spinosum spreads by seed which can be dispersed from the parent plant by water (moving along the water body) and by animals and human activity. The fruit has hooked spines which can connect with wool of livestock and animal fur. The fruit can also connect on clothes, bags, tools and vehicles.

Fruit can also spread via agricultural practices and movement of seed and grain.

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

List natural and semi-natural habitats where the species is known to occur based on the EUNIS habitat categorization (<http://eunis.eea.europa.eu/habitats-code-browser.jsp>),

High

Xanthium spinosum can grow in a variety of different habitats where it can have negative impacts on biodiversity and ecosystem services. Many studies have shown that with the increase of percentage cover of *X. spinosum*, native plant species and community stability decreases.

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

The habitats and the situations in which the species has negative impact on agriculture, horticulture or forestry should be listed. It includes EUNIS habitats (<http://eunis.eea.europa.eu/habitats-code-browser.jsp>).

High

Xanthium spinosum can compete with crops (e.g. soybean and cotton) where it can significantly reduce yields, in some cases up to 70 % (e.g. Auld et al., 1999; Mirshekari & Sharma, 2013).

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

Xanthium spinosum can be poisonous to livestock, especially in the seedling form.

Conclusion.

- The answer provided to question A.5 on the spread potential of the species assessed was: **High**
- The answer provided to question A.6 on negative impact on native species, habitats and ecosystems was: **High**
- The answer provided to question A.7 on negative impact on agriculture, horticulture or forestry was: **High**
- The answer provided to question A.8 on additional impacts was: **High**
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According to the ratings provided, the assessed species falls into the:

List of invasive alien plants (GO TO Section B)

Section 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?

List the pathway(s) as justification.

Yes, at least one international pathway is identified.

International pathways can include as a contaminant of grain and seed for planting.

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

No

In the EPPO region, *X. spinosum* has spread rapidly through natural mechanisms. The risk of international pathways is not superior to natural spread.

The prioritization stops here. *X. spinosum* is not a priority for PRA.

Key references

Andrews JA, 1993. Control of Bathurst burr (*Xanthium spinosum*) in irrigated soybeans in southern New South Wales. Plant Protection Quarterly, 8(1):15-18.

Auld BA, Say MM, 1999. Comparison of isolates of *Colletotrichum orbiculare* from Argentina and Australia as potential bioherbicides for *Xanthium spinosum* in Australia. Agriculture, Ecosystems & Environment, 72(1):53-58.

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