

Prioritization process report¹ for: *Arundo donax* Linnaeus (ABKDO)

Arundo donax was prioritized as part of a horizon scanning exercise conducted by the EPPO Panel on Invasive Alien Plants in 2024/25. The output of the prioritization process is that *Arundo donax* is added to the EPPO List of Invasive Alien Plants. This report was reviewed and approved by the Panel on Invasive Alien Plants in 2025.

25-30296

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***Arundo donax***Init2. Indicate the taxonomic position and synonyms**Preferred name: *Arundo donax* Linnaeus

Common names: италианска тръстика [bg], canya [ca], canya comuna [ca], Pfahlrohr [de], Pfeilrohr [de], Riesenschilf [de], spanisches Rohr [de], gewöhnliches Pfahlrohr [de], italienisches Pfahlrohr [de], Riesenpfahlrohr [de], καλάμι [el], bamboo reed [en], giant reed [en], carizo [es], caña común [es], caña de Castilla [es], caña india [es], cañaverl [es], caña [es], caña gigante [es], cañizo [es], kanabera [eu], canne de Provence [fr], roseau canne [fr], grand roseau [fr], roseau à quenouilles [fr], arondo donax [fr], canneville [fr], quenouille [fr], roseau de Fréjus [fr], roseau des jardins [fr], roseau donax [fr], avkaneh shachiach [he], עֲבֵקָה עֲבֵקָה [he], obični trst [hr], canna commune [it], canna gargana [it], canna [it], canna domestica [it], canna gentile [it], danchiku [ja], yoshitake [ja], ダンチク [ja], ヨシタケ [ja], 물대 [ko], mul dae [ko], pijlriet [nl], zaairiet [nl], canavèra [oc], cannabère [oc], lasecznica trzciniowata [pl], cana [pt], cana-comum [pt], cana-de-roca [pt], canamilha [pt], canas [pt], cana-vieira [pt], caninha [pt], cano-do-reino [pt], trestie italiană [ro], арундо тростниковый [ru], тростник гигантский [ru], trst' obrovská [sk], navadna kanela [sl], kallami [sq], италијанска трска [sr], kargı [tr], lú zhú [zh], 芦竹 [zh]

- Plantae
 |-- Magnoliophyta
 |--- Angiospermae
 |---- Commelinids
 |----- Poales
 |----- Poaceae
 |----- Panicoideae
 |----- Arundo
 |----- Arundo donax

Init3. Clearly define the area for prioritization

The 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, Macedonia, Malta, Moldova, Montenegro, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tunisia, Türkiye, Ukraine, United Kingdom, Uzbekistan)

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

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

The species was identified by the EPPO Panel on Invasive Alien plants through a horizon scanning exercise for assessment. It was agreed that the species will be prioritized in 2024/25.

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

Yes

The species is native to eastern Asia.

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.

The species is established in most EPPO countries and being cultivated for thousands of years throughout Asia (native), southern Europe, northern Africa and the Middle East (McWilliams, 2004; Hardion et al., 2014).

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

High

Arundo donax does not produce viable seeds in most areas where it is apparently well-adapted. The species is traded and can escape from commercial plantations and horticultural propagation.

Population expansion thus occurs almost exclusively through vegetative reproduction in most reported cases, either from underground rhizome extension of a colony or from plant fragments carried downstream, to become rooted and form new clones (Else, 1996).

Long distance dispersal can occur when propagules are transferred throughout a river catchment.

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

The species is expanding rapidly along riparian habitats in Mediterranean-climate habitats where it can have negative impacts on native plants. Riparian habitats are extremely endangered and are prone to invasion by *Arundo donax*. The species can grow rapidly and form mono-specific stands that alter the habitat structure. Dense *Arundo donax* stands negatively impact fauna (birds, fish, frogs, mammals etc.) through a reduction in food resources, alteration in structure for nesting, and the creation of a physical barrier for movement within and through riparian habitats to upland areas. Widespread species in the Mediterranean, invasive in Spain, Portugal, Malta, Greece, also in southern California (USA).

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>).

Medium

Arundo donax is not usually a weed of crops. However, it has been reported as invasive in pastures and croplands (Yahaya et al., 2014). It can also block drainage channels and different waterways.

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

Can have a negative impact on recreational activities like fishing, swimming or rowing.

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: **Medium**
- The answer provided to question A.8 on additional impacts was: **Low**

According to the ratings provided, the assessed species falls into the:

List of Invasive Alien Plants

The assessment stops here. The Panel on Invasive Alien Plants consider the species is too widespread to be considered for a PRA.

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?

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?

Selected References

- Arianoutsou M, Bazos I, Delipetrou P, Kokkoris Y (2010) The alien flora of Greece: taxonomy, life traits and habitat preferences. *Biological Invasions* DOI 10.1007/s10530-010-9749-0.
- CABI (2025) <https://www.cabidigitallibrary.org/doi/full/10.1079/cabicompndium.1940>
- EPPO Global Database (2025) <https://gd.eppo.int/taxon/ABKDO/categorization>
- Else, JA, P Zedler. 1996. Dynamics of the flood disturbed zone of a riparian system: vegetative establishment and resprouting of woody native species and the exotic, *Arundo donax*. *Bull Ecol Soc Am.* 77:129
- Hardesty-Moore M, Orr D, McCauley DJ (2020) Invasive plant *Arundo donax* alters habitat use by carnivores, *Biological Invasions* **22**, 1983-1995.
- Hardion, L., Verlaque, R., Saltonstall, K., Leriche, A., Vila, B., 2014. Origin of the invasive *Arundo donax* (Poaceae): a trans-Asian expedition in herbaria. *Annals of Botany*, 114(3):455-462.

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- McWilliams, J., 2004. *Arundo donax*. In: Fire Effects Information System (FEIS). U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer).
- Malta Environment and Planning Authority, Guidelines on alien plant species. <http://www.mepa.org.mt/guidelines-alienplants>
- Malta Environment and Planning Authority (2013) Guidelines on managing non-native plant invaders and restoring native plant communities in terrestrial settings in the Maltese Islands. 88 p.
- Ministerio de agricultura, alimentación y medio ambiente, Boletín Oficial de Estado, Lunes 12 de diciembre de 2011, Núm. 29, Sec. I., 25 pp
<http://www.boe.es/boe/dias/2011/12/12/pdfs/BOE-A-2011-19398.pdf>
- Yahaya, A., Dangora, D.B., Khan, A.U., Zangoma, M.A., 2014. Detection of Sugarcane Mosaic Disease (SCMD) in crops and weeds associated with sugarcane fields in Makarfi and Sabon Gari Local Government Areas of Kaduna State, Nigeria. *International Journal of Current Science*, 4(1):99-104