

PestPest Risk Analysis – *Xylella fastidiosa***Date**

14 February 2023

Location

Canberra, ACT

**Key Points**

- The Department of Agriculture, Fisheries and Forestry released the draft report for the pest risk analysis for bacterial pathogens in the genus *Xylella* on 16 December 2022.
- The draft report proposes risk management measures, combined with operational systems, and a period of post-entry quarantine in Australia prior to release, to ensure biosecurity standards are met.
- Stakeholders can submit comments on the draft report during a 75-calendar day public consultation period, closing on 1 March 2023.
- Download the draft report here: <https://www.agriculture.gov.au/biosecurity-trade/policy/risk-analysis/plant/xylella>
- To provide feedback, please contact John McDonald, Greenlife Industry Australia's (GIA) National Biosecurity Manager by COB on 27 February 2023 via email: John.McDonald@greenlifeindustry.com.au

Situation

The Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) initiated a pest risk analysis (PRA) in response to the introduction of emergency measures to manage the bacterium *Xylella fastidiosa* Wells *et al.* 1987 associated with the trade in commercially produced plants for planting (live plants, referred to in this PRA as nursery stock) and seeds for sowing in 2018. No *Xylella* species is known to occur in Australia and no known *Xylella* vectoring insects are present in Australia.

The draft PRA report also proposes a range of risk management measures that target *Xylella* species with the aim of preventing the bacteria's entry into Australia. The proposed measures are differentiated according to the assessed *Xylella* status of the country of origin, the host status of the plant taxonomic grouping, any offshore measures applied, and the form of the commodity imported: non-tissue culture (rooted plants, cuttings, budwood, corms and bulbs), tissue culture or seed.

Proposed requirements include mandatory laboratory testing for host nursery stock from **countries/regions** where *Xylella* is **known** to be present and seeds for sowing from any source location, as well as operational systems, and/or a period of Post Entry Quarantine (PEQ) in Australia for disease screening to confirm the imported material can be released.

The proposed measures are largely consistent with the current emergency measures, but some amendments are indicated. These proposed amendments include changing the taxonomic level of plant

regulation from the current target at **plant family** level to a proposal for regulating at **plant genus** level. That is, current regulation includes all plants within a family that has one or more species confirmed as a natural host of *Xylella* spp., and the proposal would instead regulate all plants within a genus of plants that has one or more species confirmed as a natural host of *Xylella* spp.

DAFF estimates that more than 10,000 plant genera and 20,000 plant species are currently regulated under the existing **family** level regulation of plant hosts of *Xylella* spp. For **genus** level regulation, the number of genera that contain one or more confirmed natural plant hosts of *Xylella* is 356, with a corresponding reduction in the number of species regulated. Three experimental host plant genera, *Phlox* (Polemoniaceae), *Simmondsia* (Simmondsiaceae) and *Linum* (Linaceae), are included as they have strong associations as host plants of competent *Xylella* vector species.

Amendments are also proposed to strengthen the regulation of imported tissue culture pathways. Laboratory test reports for the material that is tested offshore would be required. A program of assurance and verification of selected imported nursery stock and tissue cultures, including by conducting molecular testing for *Xylella* spp., is also proposed as another mitigation measure.

Importance to industry

Xylella fastidiosa is one of the most significant emerging plant pests worldwide causing a broad spectrum of diseases across a wide range of horticulturally important host plants. A second species in this genus has also been described, *Xylella taiwanensis* (Su *et al.* 2016), identified as the cause of pear leaf scorch in Taiwan. Both *Xylella* species have similar biology; the bacteria are transmitted from host to host by xylem-feeding insects in the sub-order Auchenorrhyncha (Hemiptera), commonly known as leafhoppers and sharpshooters, and seed to seedling transmission of *Xylella* has been confirmed in *Carya illinoensis* (pecan). Infected seeds will generally be asymptomatic and infected plants may show delayed symptom expression or be asymptomatic, presenting great risk when host seeds and live plants are imported into Australia.

Xylella is reported to cause hundreds of millions of dollars in production losses and high financial costs associated with attempts to manage the disease and its insect vectors in countries where it is present. In addition, some Australian native plants ubiquitous across the Australian landscape are known to be susceptible to the pest overseas, e.g. *Acacia* spp. and *Syzygium* spp.. This makes *Xylella fastidiosa* the highest ranked pest threat to Australian horticultural and plant-based industries, and the environment. Australia introduced emergency measures to manage these risks in 2015, and revised these measures in 2016, 2019, 2020, 2021 and 2022.

Once the consultation period closes, DAFF will consider stakeholder comments in preparing the final report. Responses to technical issues raised will be included in the final report. DAFF expect to release the final report in late 2023.

In the meantime, you can learn more about biosecurity risk analyses as follows:

Visit: <http://www.agriculture.gov.au/biosecurity-trade/policy/risk-analysis>

Email: imports@agriculture.gov.au

Phone: 1800 900 090 (Press option 1, then option 1)

Further information

Exotic Pest Hotline: 1800 084 881

Pest ID: www.pestid.com.au

Technical Info: www.nurseryproductionfms.com.au

Delivered under NY20001 – National biosecurity and sustainable plant production program.