



Group pest risk analysis for mealybugs

Biosecurity

January 2019



Key points

- On 31 January 2019, the Department of Agriculture and Water Resources released the *Final group pest risk analysis for mealybugs, and the viruses they transmit on fresh fruit, vegetable, cut-flower and foliage imports*
- This is the second group PRA. The first group PRA, for thrips and orthotospoviruses, was completed in 2017.

Rationale for the group pest risk analysis

We are developing a new approach to conducting pest risk analyses (PRA). A PRA is the process of evaluating biological or other scientific and economic evidence to determine whether an organism is a pest, whether it should be regulated, and the phytosanitary measures required to manage its biosecurity risk.

A group PRA approach assesses groups of pests with shared common biological characteristics. This new approach helps to improve the effectiveness and consistency in managing the biosecurity risks associated with imported goods.

Group PRAs will make the risk analysis process for imported goods more effective and consistent for the department, whilst maintaining a robust system to protect against pests and diseases establishing in Australia.

The development of group PRAs is supported by the Agricultural Competitiveness White Paper to strengthen biosecurity surveillance and analysis.

A group PRA on scale insects is currently underway.

About the group pest risk analysis

The group PRA considers the biosecurity risk posed by plant-eating insects called mealybugs (the insect families Pseudococcidae, Putoidae and Rhizoecidae in the insect order Hemiptera) associated with fresh fruit, vegetables, cut flowers or foliage imported into Australia as commercial consignments. It also assesses the risks posed by viruses transmitted by mealybugs.

The report identifies 169 mealybug quarantine pests and nine viruses of biosecurity concern for Australia.

The group PRA identifies measures for mealybug quarantine pests, and alternative risk management options that may be considered on a case-by-case basis when developing new import conditions for specific commodities, or when reviewing existing import conditions for commodities that are currently traded. These measures are consistent with long-standing established import requirements for mealybug quarantine pests.

Measures are applied to ensure that goods in consignments are free from mealybug quarantine pests. Verification measures, such as inspection, are required to provide assurance that Australia's import conditions have been met and the appropriate level of protection achieved. Additional operational procedures may be required on a case-by-case basis for specific plant import pathways, such as a system of traceability, registration of packing house and treatment providers and auditing of procedures, packaging and labelling requirements and specific conditions for storage and movement.

Imported goods that are frequently found to be infested with mealybug quarantine pests may be subject to mandatory treatment, which may be required pre-export rather than as a remedial action on arrival.

Mealybugs

Mealybugs are small, soft-bodied sap-sucking insects that feed on plants. Around 2,300 species have been described, of which 169 species are identified as quarantine pests for Australia. These species have the potential to be on the plant import pathway and cause damage to plants. These insects are regarded as major plant pests and are found in every part of the world. Mealybugs, and the viruses they transmit, can cause damage across a range of crops by reducing yield, quality and marketability, requiring ongoing field management and control.

Some mealybug species can transmit viruses. However, mealybugs can only transmit viruses for a short period of time (this is known as semi-persistent transmission) and the nine viruses of quarantine concern to Australia also have a limited host plant range compared to their mealybug vectors. For this reason, mealybugs present on imported fresh fruit, vegetable, cut-flowers and foliage are unlikely to be able to transmit exotic viruses to a host plant in Australia.



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