



Australian Government
Department of Agriculture,
Fisheries and Forestry

CSIRO
Australia's National
Science Agency

The Menu of Measures

A framework for managing
phytosanitary risks



The [Menu of Measures](#) is a resource developed by Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO). The Menu classifies the 41 risk-reducing measures that are currently in use in Australia and internationally, based on how each contributes to reducing biosecurity risks (Figure 1).

The Menu is structured around the phytosanitary risk framework. This framework identifies the four ways (Risk Reduction Objectives) through which measures can mitigate plant biosecurity risks. It also identifies the consignment stages each measure can be applied to. Within each Risk Reduction Objective, the 41 individual measures are further grouped into 10 measure categories.

Figure 1 Overview of the Menu of Measures

Four Risk Reduction Objectives	Production	Post-production	At- or post-border
	Minimise exposure to pests when the commodity is vulnerable		Reduce likelihood of entry and establishment
	Pest freedom or low pest prevalence <ul style="list-style-type: none"> Pest Free Area (PFA) Area of Low Pest Prevalence (ALPP) Pest Free Site (PFS) Low Pest Prevalence Site (LPPS) 	Pest management <ul style="list-style-type: none"> Pesticides Attract and kill Biological control Hygiene Sanitation Integrated Pest and Disease Management (IPDM) Other pest management tools 	Limit propagule pressure <ul style="list-style-type: none"> Trade volume Consignment and packaging size Prevent escape
	Pest avoidance <ul style="list-style-type: none"> Limit seasonal overlap Limit exposure time to pest Restricted to poor pest habitat Geographical isolation Habitat manipulation 	Pest exclusion <ul style="list-style-type: none"> Protected facilities Safeguarding Protected units Maintain buffer zone Segregation Pest-free inputs 	Limit import destinations or use <ul style="list-style-type: none"> Poor destination habitat Seasonality of imports Restricted end-use
	Minimise vulnerability to infestation		
	Minimise vulnerability Host or carrier; Developmental stage; Quality specifications; Prohibit parts of commodity; Modify vulnerability		
	Reduce infestation rates		
	Reduce pests in consignment <ul style="list-style-type: none"> Treatment (to kill or inactivate the pest): heat, cold, drying, irradiation, agrochemicals, high pressure, cold + modified atmosphere; combination kill treatment; Other Physical disturbance and processing Surface cleaning Remove contaminants 	Remove infested commodity or carrier units <ul style="list-style-type: none"> Symptom grading Risk-based grading 	Remove infested consignments or high-risk pathways <ul style="list-style-type: none"> Inspection with remedial action Quarantine with remedial action

More detailed information on each measure is available here:
<https://www.agriculture.gov.au/biosecurity-trade/policy/menu-of-measures>

Risk Reduction Objective 1: Minimise exposure to pests when the commodity is vulnerable



Measures that provide confidence in pest freedom or low pest prevalence, or that reduce exposure to pests and the risk of infestation when the commodity is vulnerable.

Pest freedom or low pest prevalence

Measures that provide confidence in pest freedom or low pest prevalence in a designated area or registered site.

- [Pest free area](#): Provides the required confidence that a target pest does not occur within a designated area, thereby allowing trade to occur from within that area.
- [Area of low pest prevalence](#): Provides the required confidence in low pest prevalence within the designated area, thereby allowing trade to occur from within that area.
- [Pest free site](#): Provides confidence that there are no pests on the registered site when the commodity is vulnerable to infestation.
- [Low pest prevalence site](#): Provides the required confidence that pest prevalence is acceptably low within the registered site, when the commodity is vulnerable to infestation.

Pest management

Measures that suppress pest populations at times when the commodity is vulnerable to infestation.

- [Pesticides](#): Pesticides kill the target pest, reducing pest abundance in the designated area or site.
- [Attract and kill](#): This measure reduces pest abundance in the designated area or site by attracting and killing the pest.
- [Biological control](#): Biological control kills or sterilises the target pest, thereby reducing its abundance within the designated site or area.
- [Hygiene](#): Hygiene measures reduce pest populations by controlling or removing sources of infestation risk.
- [Sanitation](#): Sanitation involves cleaning, washing, or disinfecting equipment and facilities to minimise the risk that pests could transfer onto the commodity.
- [Integrated Pest and Disease Management](#): Integrated pest and disease management (IPDM) involves coordinated application of multiple pest management options to sustainably manage pest populations.
- [Other pest management tools](#): A diverse range of other pest management tools are available to manage pest populations.

Pest avoidance

Measures that limit overlap in time or space between active pest populations and commodities vulnerable to infestation.

- [Limited seasonal overlap](#): Production and post-production of the commodity limited to seasonal periods when the target pest is rare or inactive.
- [Limit exposure time to pest](#): Risk is reduced by limiting the time that the commodity is exposed to the pest.
- [Restricted to poor pest habitat](#): Sites registered for trade must be located in areas where pest populations are naturally low because of unfavourable habitat conditions.
- [Geographical isolation](#): Exposure to the pest is reduced by ensuring that the commodity is geographically isolated from the pest.
- [Habitat manipulation](#): Exposure to the pest is reduced by manipulating the habitat and making it less suitable for pests.

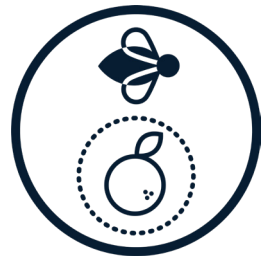
Pest exclusion

Measures that apply physical, temporal or spatial barriers between the pest and the commodity when vulnerable to infestation.

- [Protected facilities](#): Production and post-production facilities are designed and managed to physically exclude pests.
- [Safeguarding](#): Physical barriers are used to exclude pests at the scale of the packed commodity or consignment.
- [Protected units](#): Physical barriers are used to exclude pests at the scale of individual commodity units.
- [Maintain buffer zone](#): Buffer zones around designated areas or sites reduce the likelihood of pest entry.
- [Segregation](#): Practices prevent infestation by preventing regulated and unregulated commodity from mixing.
- [Pest-free inputs](#): Ensuring inputs used in production, processing, and packaging are free from pests.



Risk Reduction Objective 2: Minimise vulnerability of the commodity or carrier to infestation



Measures that reduce the vulnerability or susceptibility of the commodity (host or carrier) to pest infestation.

Minimise vulnerability

Trade is restricted to commodities that are not hosts (or carriers), or that are modified to make them less vulnerable to infestation.

- [Host or carrier](#): Trade is restricted to commodities that are not hosts or carriers, or those hosts or carriers that are less vulnerable to infestation.
- [Developmental stage](#): Trade is restricted to specific stages of development or harvest maturity where the risk of infestation is low.
- [Quality specifications](#): Infestation risk is reduced through imposing quality specifications on the traded commodity.
- [Modify vulnerability](#): Requiring physical or chemical modifications to the commodity that make it less vulnerable to infestation.
- [Prohibit parts of commodity](#): Prohibiting parts of the commodity that may carry pests.



Risk Reduction Objective 3: Reduce infestation rates



Measures that reduce infestation rates, if there is a risk that pests are present in a consignment.

Reduce pests in consignment

Measures that kill, inactivate, or directly remove pests from the commodity in a consignment.

- [Treatment to kill or inactivate the pest](#): Chemical and physical phytosanitary treatments that kill or inactivate pests in the consignment.
- [Physical disturbance and processing](#): Physical processing or disturbance of the commodity that also kills or removes pests.
- [Surface cleaning](#): Physical or chemical cleaning to remove pests or sterilise the surface of the commodity.
- [Remove contaminants](#): Removing contaminants of biosecurity concern from the commodity or carrier.

Remove infested commodity or carrier units

Measures that inspect individual commodity units and remove any that show evidence of being infested.

- [Symptom grading](#): Inspection of the entire consignment, and remove commodity units that show evidence of being infested.
- [Risk-based grading](#): Inspect commodity units that are profiled as being at greater risk of being infested, and remove or treat those with evidence of being infested.

Remove infested consignments or high-risk pathways

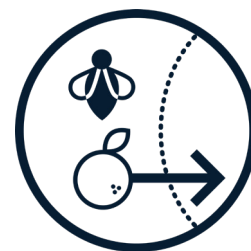
Measures that inspect a representative sample of a consignment, with remedial action applied to the consignment or pathway if pests are detected.

- [Inspection with remedial action](#): Inspection of a representative portion of the consignment, with remedial action applied to the consignment or pathway if a pest threshold is exceeded.
- [Quarantine with remedial action](#): Post-entry quarantine (PEQ) containment of consignments for further inspection, screening and remedial action if pest detection thresholds are exceeded.



Risk Reduction Objective 4.

Reduce likelihood of pest entry and establishment



Factors that reduce the likelihood of pest entry and establishment. These can be considered when conducting a pest risk assessment, or in some cases be applied as measures.

Limit propagule pressure

Factors that limit the potential number or frequency of introductions of the pest and its distribution and transfer to a susceptible host within an area.

- [Trade volume](#): Predicted trade volume can be considered when assessing the likelihood of entry.
- [Consignment and packaging size](#): Smaller consignment and packaging sizes make it less likely that enough pests will enter the environment together to establish a new population.
- [Prevent escapes](#): The likelihood of entry is reduced by physically preventing the introduction and release of pests in the importing jurisdiction.

Limit import destinations or use

Factors that affect the ability of the pest to establish and survive within an area.

- [Poor destination habitat](#): Only approving imports to areas that are unfavourable for the establishment of the pest.
- [Poor time of year](#): Approved imports are limited to times of the year when conditions are unfavourable for pest establishment.
- [Restricted end-use](#): Imports are approved only for specific purposes that limit the likelihood of pest establishment.

References

Kaye, L., Muller, J., Gibbons, R., Calvert, B., Hull, C., van Klinken, R.D. (2024). *A Menu of Measures Resource to manage trade-related plant pest risks*. {<https://www.agriculture.gov.au/biosecurity-trade/policy/menu-of-measures>}. 29 October 2025.

More information

Learn more about [The Menu of Measures Resource](#) and [Phytosanitary risk tools](#).

Web <https://www.agriculture.gov.au/biosecurity-trade/policy/menu-of-measures>

<https://research.csiro.au/prs/phytosanitary-risk-tools>

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Acknowledgement of Country

We acknowledge the continuous connection of First Nations Traditional Owners and Custodians to the lands, seas and waters of Australia. We recognise their care for and cultivation of Country. We pay respect to Elders past and present, and recognise their knowledge and contribution to the productivity, innovation and sustainability of Australia's agriculture, fisheries and forestry industries.

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