



Chapter 4

Biosecurity supporting
market access and trade



Biosecurity supporting market access and trade

Australia benefits from importing a range of goods and produce from overseas. Imports provide access to a wide range of products, technology and services that enable economic growth in multiple sectors. While Australians consume mostly local products, the food that is imported is commonly produce, which is out of season in the southern hemisphere.

The movement of plant produce and other goods around the world poses biosecurity risks to importing countries. To mitigate the risks, the Australian Government performs a number of activities pre-border, border and post-border to safeguard our biosecurity status and maintain trade.

The Department of Agriculture, Water and the Environment (DAWE) has primary responsibility for pre-border and border biosecurity activities. These activities focus on minimising the likelihood of exotic pests and diseases reaching our border or arriving through the movement of people and goods into the country. Australia depends on imports of plant propagative material from overseas, for example, importing large quantities of vegetable seeds annually.

International trade is important to Australia in a global economy. Australia gains significant economic benefits as a net exporter of agricultural products, with around two-thirds of agricultural production exported to overseas markets. The amount of exported product varies between industries, with some such as the grains and cotton industries exporting much of the produce grown, and others such as the horticulture industry gradually increasing exports. The Australian Government's efforts to support exports is also covered in this chapter.

Pre-border biosecurity

OBLIGATIONS UNDER INTERNATIONAL TRADE AGREEMENTS

As an active trading nation, Australia has entered into multilateral and bilateral trade agreements that influence the plant biosecurity system. Biosecurity risks are managed in keeping with Australia's legislative framework for biosecurity and its international obligations.

On a multilateral level, Australia's rights and obligations in relation to plant biosecurity are set out under World Trade Organization agreements, particularly the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), although others, such as the General Agreement on Tariffs and Trade 1994, may apply in certain circumstances.

The SPS Agreement provides World Trade Organization member countries with the right to use sanitary and phytosanitary measures to protect human, animal and plant life or health. The agreement also imposes obligations, including that sanitary and phytosanitary measures cannot be used as a barrier to trade.

Members can specify the level of protection that they consider fitting within their territory. This is known as the appropriate level of protection (ALOP) or acceptable level of risk, provided it is science-based, is applied consistently, and considers the objective of minimising negative trade effects. Australia's ALOP is defined in section 5 of the *Biosecurity Act 2015* as providing "a high level of sanitary and phytosanitary protection aimed at reducing biosecurity risk to a very low level, but not to zero".

All Australian state and territory governments have agreed to this statement as the basis for the national biosecurity system. Consistent with these requirements, Australia's policy is to undertake science-based risk assessments to determine the level of risk, and if the risk does not achieve the ALOP for Australia, to determine the measures that need to be applied to reduce risk to achieve ALOP.

Australia has a number of bilateral free trade agreements with other countries, each of which deals with biosecurity issues and are consistent with the SPS Agreement as Australia does not negotiate on specific biosecurity measures within its free trade agreements.

There are also multilateral agreements on plant protection, to which Australia is a party, that outline the responsibilities and obligations to members. These agreements help harmonise phytosanitary (plant health) measures.





Image courtesy of AUSVEG

The International Plant Protection Convention

The International Plant Protection Convention (IPPC) was established to protect the world's plant resources from the spread of serious plant pests, diseases and invasive species by international trade. The IPPC is an Article XIV statutory body of the Food and Agriculture Organization (FAO) of the United Nations, from which it receives program funding, sourced from FAO assessed contributions and donations and supplemented by voluntary contributions of contracting parties.

The IPPC has over 180 contracting parties and is recognised in the SPS Agreement as the body responsible for the establishment of phytosanitary standards relating to pests associated with plants and plant products in international trade, as well as to anything that can act as a vector for plant pests and diseases.

These standards, known as International Standards for Phytosanitary Measures (ISPMs), set specific requirements for the management of biosecurity issues, such as the development of pest risk analyses or guidelines for surveillance. Importantly, these standards are a means by which governments can harmonise their phytosanitary regulations. The standards not only reduce the number of pests moved through international trade, but also help facilitate safe trade. Australia, through DAWE, coordinates and provides input into four international governance bodies:

- Commission on Phytosanitary Measures, the governing body that oversees implementation of the IPPC
- IPPC Strategic Planning Group, which determines strategic priorities for IPPC activities
- IPPC Standards Committee (SC) and associated working groups responsible for the development of ISPMs
- IPPC Implementation and Capacity Development Committee (IC) responsible for facilitating implementation of the convention and its standards and recommendations.

Australia contributes through membership of the SC (one of three members from the FAO's South West Pacific region) and IC, with one expert member. Australia also supports the development of Phytosanitary Treatments and Diagnostic Protocols through membership on the Technical Panel for Phytosanitary Treatments and the Technical Panel on Diagnostic Protocols. In addition to these longer-term roles, Australia strongly contributes to the development and use of ISPMs by providing nominees to the Expert Working Groups to develop new and revised standards and implementation materials.

Australia also continues to contribute a number of technical resources and expertise to support other contracting parties better manage biosecurity risks, including guidance on managing risks posed by sea containers and internet trade of plants and plant products. Australia has also taken a lead role in the development and implementation of the electronic generation and transmission of phytosanitary certification through the IPPC ePhyto program. Reporting and exchange of information, including the pest status of contracting parties, is available on the International Phytosanitary Portal at ippc.int

Australia's membership of these IPPC bodies provides an important avenue for DAWE to raise and address plant health matters related to international trade. The department consults with peak industry groups and state and territory governments on documents released for global consultation to determine Australia's position on items for the IPPC agenda.

Canberra Agreement

The Pacific Plant Protection Organisation (PPPO), a Regional Plant Protection Organisation (RPPO) recognised under the IPPC, is an auxiliary body established under the then South Pacific Commission of the Canberra Agreement. The PPPO provides advice and support to its members on phytosanitary measures to facilitate international trade whilst protecting the plant health status of parties. The Pacific region covers Pacific island countries and territories of the United States and France as well as Australia and New Zealand.

In 2020, the annual PPPO Executive Committee meeting was held face-to-face, with Australian participation. Australia also presented training seminars, alongside New Zealand and the PPPO Secretariat, to PPPO Executive Committee members and Biosecurity Authority of Fiji staff. Due to Covid-19 restrictions later in the year, the annual PPPO IPPC regional workshop to consider draft ISPMs and other materials was held virtually.

The Plant Protection Agreement for the Asia and Pacific region

Australia is also a member of a second RPPO, the Asia and Pacific Plant Protection Commission (APPPC). The Plant Protection Agreement is an intergovernmental treaty administered by the APPPC. The APPPC covers phytosanitary issues relating to the movement of pests in trade, pesticide use and regulation, and integrated pest management.

Through its Standards Committee, the APPPC develops Regional Standards for Phytosanitary Measures (RSPMs) that deal with specific regional issues, support the region's trade and may form the basis of an international standard. Australia is an active participant in the APPPC assisting with the development of standards and their implementation in the region. In late 2019, the RSPM for the movement of fresh mango fruit was adopted by the APPPC Session forum. This commodity standard was a first for the region and helped to inform development of the draft concept ISPM on commodity standards, at the international level. Australia holds the Chair – currently Mr Bertie Hennecke, Assistant Secretary at DAWE – and is a member of the APPPC Standards Committee. These opportunities allow Australia to enhance its plant health engagement with the 28 member countries of the APPPC. This strengthens regional plant health and biosecurity capacity and implementation of international plant health standards.

Due to Covid-19, the annual APPPC IPPC regional workshop was held virtually, and a number of other activities planned for the region are being augmented to be delivered virtually or have been delayed. This includes workshops four and five of the surveillance workshop series (2016–22) on surveillance management, methodologies and analysis, the workshop on risk categorisation, and that proposed on the topic of risk categorisation and mitigation for semi-processed products under ISPM 32.

PRE-BORDER ACTIVITIES TO MITIGATE THE RISKS FROM IMPORTS

The DAWE has primary responsibility for pre-border activities to mitigate the risk of exotic pests and diseases reaching our border or arriving through the movement of people and goods into Australia.

Pre-border activities include:

- conducting risk assessments and risk analyses to consider the level of biosecurity risk that may be associated with imports and imposing relevant risk management measures
- regulating imports to manage risks
- conducting pre-border verifications, inspections and audits on imports
- monitoring imports to ensure they meet all import conditions and managing non-compliance through engagement with importers and exporting country NPPOs as appropriate
- revise import conditions to manage emerging risk and/or changes in pest status, where necessary
- conducting pest and disease surveillance in neighbouring countries
- participating in international plant health agreements
- collaborating with international partners on multilateral or bilateral plant health issues and the development of standards
- building regional capacity through collaborative activities
- gathering intelligence to determine and address emerging biosecurity risks
- negotiating market access for Australian exports
- establishing pre-border risk management schemes in partnership with industry and National Plant Protection Organisations (NPPOs)
- education and awareness activities.

Plate it. Don't plant it.

The biosecurity risks posed by planting fruits, vegetables or seeds from plant food products intended for eating are explained in the 'Plate it. Don't plant it.' campaign.

With an increased focus on sustainable practices, home gardeners have been encouraged to be practical and plant seeds and planting material from food items like fruit and vegetables, and seed from herbs and spices. While this may seem to be a cost effective and resourceful option, there is a risk that people could unwittingly introduce exotic pests and diseases into their garden, which could then spread further, threatening Australia's agricultural industries, unique natural environment and biodiversity.

Instead, 'Plate it. Don't plant it' encourages gardening enthusiasts to visit reputable suppliers such as nurseries to source plants and seeds either certified as free of pests and diseases or grown from healthy propagation material.

Unlike the conditions imposed on imported goods (based on end-use and the potential high risk of introducing plant pests and diseases with seed imported for growing), eating goods have a lower risk of introducing pests and diseases and therefore have less strict import conditions on them. This creates a problem if people plant things meant to be eaten.

Locally, planting fruit and vegetable scraps and seeds saved from Australian-grown food may also unintentionally help spread pests and diseases that are found only in certain parts of the country. An example is bacterial wilt of potato, which could spread further within Australia by planting old potatoes.

More information is on the 'Plant it. Don't Plate it.' webpage agriculture.gov.au/pests-diseases-weeds/protect-animal-plant/dont-plant-it



The food you buy is for eating, not planting

REGULATING IMPORTS TO MANAGE RISK

Since imported plant products could bring exotic pests into the country, the importation of plants and plant products into Australia is strictly regulated. The Australian Government has responsibility for regulation under the *Biosecurity Act 2015*, the *Environment Protection and Biodiversity Conservation Act 1999*, and where relevant, the *Gene Technology Act 2000* and any subordinate legislation.

Import conditions are imposed to ensure that goods entering the country do not introduce new pests and diseases to Australia. Import conditions are determined on a case-by-case basis, depending on the pest risks associated with the commodities and intended uses. DAWE verifies that imported goods meet these conditions and compliant goods are allowed entry.

Some imported goods require an import permit, and these are issued under the *Biosecurity Act 2015*. Other goods may be permitted entry without a permit subject to meeting alternative conditions that are outlined in the Biosecurity (Prohibited and Conditionally Non-prohibited Goods) Determination 2016. Permits may also be required under the *Environment Protection and Biodiversity Conservation Act 1999* for imports of internationally endangered species designated by the Convention on International Trade in Endangered Species (CITES) of Wild Fauna and Flora, and live specimens.

In establishing import conditions, Australia must be confident that the required risk management measures are properly implemented and can be maintained. Pre-border site visits or audits may be required.

Assessing import risks

Import risk assessment is an important part of Australia's biosecurity protection. Assessments consider the level of biosecurity risk posed by pests that may be associated with imports and impose relevant risk management measures.

Assessments are conducted by technical and scientific experts and can take several forms, such as Biosecurity Import Risk Analyses (BIRAs), pest risk assessments, policy reviews and technical advice. BIRAs have a timeframe for completion which is regulated by legislation and the process includes mandated public consultation periods and a formal appeal process.

A BIRA under the *Biosecurity Act 2015* may be conducted where relevant risk management measures have not been established, or where they exist for a similar product and pest or disease combination, but the likelihood or consequences of entry, establishment or spread of pests or diseases could differ significantly from those previously assessed. Otherwise, other forms of risk assessments can be used.

Risk analyses are conducted in accordance with Australia's rights and obligations under the SPS Agreement and following the guidance of relevant international standards including ISPM 2 (Framework for Pest Risk Analysis) and ISPM 11 (Pest Risk Analysis for Quarantine Pests) of the IPPC.

Table 48 details policy advice finalised by December 2020, as well as draft policy advice that is currently in progress.

Regulated risk analyses conducted before 16 June 2016 were completed under the *Quarantine Act 1908* and were called an Import Risk Analysis.

DAWE is responsible for conducting each BIRA as well as other risk analyses, but the process can involve other stakeholders including:

- departmental officers with expertise in science and regulation, pests and diseases, commercial processes or other relevant disciplines
- a Scientific Advisory Group, comprising external scientific and economic experts
- a BIRA Liaison Officer, acting as the first point of contact for stakeholders
- other external experts, government agencies and domestic and international stakeholders.

A review of existing biosecurity policy can be undertaken when there is a change in biosecurity risk, and when there are technological advancements or process improvements that remove or minimise the biosecurity risk associated with a particular commodity.

These 'non-regulated' risk reviews are usually undertaken because of a change in biosecurity risk such as a change in pest status or new scientific information. The reviews can also be initiated by requests from an industry body or country, and usually result in more treatment options for importers to meet biosecurity requirements.

Similar methodology can be used to conduct a scientific review of existing policy, with specific adjustments and modifications to methods being explained in the individual reports.

Information about the assessment of plant imports for weed potential is in Chapter 7.

Pre-border verifications, inspections and audits on imports

A range of verifications, inspections and audits are undertaken offshore to manage risks prior to import into Australia to ensure that exporting countries can meet Australia's biosecurity requirements, to provide export systems for safe trade, and prevent the arrival of non-compliant consignments at the border.

Regular verifications and audits are undertaken to ensure compliance of specified plant material with prescribed risk management procedures. Controls could also extend to production areas and stock feed processing facilities.

The Australian Government works with national plant protection organisations in exporting countries to increase confidence in their systems' ability to effectively manage biosecurity risks pre-border. This reduces the pressure on mitigating risks at the border and provides opportunities to reduce post-border intervention.

Table 48. Australian Government import policy advice, final and in progress*

Year	Commodity	Country (from)
Finalised policy advice		
1998	Apples (Fuji)	Japan
1998	Pears (Ya)	China
1999	Durian	Thailand
1999	Mangoes	Philippines
1999	Pears	Korea
2000	Durian (supplement)	Thailand
2000	Seed contaminants (review of tolerances)	All countries
2002	Apple and pear (budwood)	Generic
2002	Citrus	Egypt
2002	Grapes (table)	USA
2002	Lentil (seed and human consumption)	All countries
2002	Papaya	Fiji
2002	Pineapple	Philippines, Solomon Islands, Sri Lanka, Thailand
2002	Tomato (truss, review)	New Zealand
2003	Cherries (into WA)	New Zealand
2003	Citrus (revision)	Israel
2003	Grapes (table, revisions)	USA
2003	Maize (bulk)	USA
2003	Olive (plants from approved sources)	Generic
2003	Pears (Asian)	China
2003	Pineapple (modification)	Philippines, Solomon Islands, Sri Lanka, Thailand
2003	Pome fruit testing	China, Japan, Korea
2003	Sweet corn (seed)	USA
2003	Tomato (truss)	Netherlands
2004	Lychee and longan	China, Thailand
2004	Mangosteen	Thailand
2004	Persimmon	Israel, Japan, Korea
2005	Grapes (table)	Chile
2005	Oranges (sweet)	Italy
2005	Pears	China

Table 48. Australian Government import policy advice, final and in progress (continued)

Year	Commodity	Country (from)
Finalised policy advice (continued)		
2006	Grapes (table, revisions)	USA
2006	Grains	Various
2006	Limes (Tahitian)	New Caledonia
2006	Mangoes	Taiwan
2006	Permitted seeds	All countries
2006	Stone fruit (into WA)	New Zealand
2006	Wood packaging	Generic
2007	Apples	New Zealand
2007	Avocado (revision)	New Zealand
2007	Grains	Various
2007	Lettuce (re-instatement)	New Zealand
2008	Grains	Various
2008	Mangoes	India
2009	Bananas	Philippines
2009	<i>Candidatus</i> Liberibacter psyllaourus (capsicum, nursery stock, potato tubers, tamarillo fruit, tomato)	New Zealand, USA
2009	Capsicum	Korea
2009	Mandarin (Unshu)	Japan
2010	Apples	China
2010	Hops propagative material	All countries
2010	Mangoes	Philippines (additional areas)
2010	Phalaenopsis orchids (nursery stock)	Taiwan
2010	<i>Plectonycha correntina</i> for the biological control of Madeira vine	Source country
2010	Stone fruit	USA
2011	Apples	New Zealand (review)
2011	<i>Candidatus</i> Liberibacter spp. and their vectors associated with Rutaceae	All countries
2011	Grapes (table)	China

Year	Commodity	Country (from)
Finalised policy advice (continued)		
2011	Grapes (table)	Korea
2011	Hazelnut propagative material	Chile
2011	Mangoes (revisions)	India
2011	Mangoes	Pakistan
2011	<i>Pseudomonas syringae</i> pv. <i>actindae</i>	New Zealand
2011	Taro corms (fresh)	Generic
2012	<i>Eueupithecia cisplatensis</i> for the biological control of the weed <i>Parkinsonia aculeata</i>	Source country
2012	Mangosteen	Indonesia
2012	Pineapple (de-crowned)	Malaysia
2013	<i>Drosophila suzukii</i> (spotted wing drosophila)	All countries
2013	Ginger	Fiji
2013	Grapevine propagative material	All countries
2013	Island cabbage	Cook Islands, Fiji, Samoa, Tonga, Vanuatu
2013	<i>Lilium</i> spp.	Taiwan
2013	Lychee	Taiwan, Vietnam
2013	<i>Mastrus ridens</i> for the biological control of codling moth, <i>Cydia pomonella</i>	Source country
2013	Potato propagative material (<i>Solanum tuberosum</i>)	All countries
2014	<i>Baeodromus eupatorii</i> for the biological control of the weed <i>Ageratina adenophora</i>	Source country
2014	<i>Cydia succedana</i> for the biological control of gorse (<i>Ulex europaeus</i>)	Source country
2014	<i>Eueupithecia</i> spp. for the biological control of the weed <i>Parkinsonia aculeata</i>	Source country
2014	Grapes (table)	Japan
2014	Salacca	Indonesia

Table 48. Australian Government import policy advice, final and in progress (continued)

Year	Commodity	Country (from)
Finalised policy advice (continued)		
2014	Tortricid moth, <i>Cydia succedana</i> , for the biological control of gorse, <i>Ulex europaeus</i>	Source country
2015	<i>Dactylopius tomentosus</i> (fulgida) for the biological control of coral cactus <i>Cylindropuntia fulgida</i> var. <i>mamillata</i>	All countries
2015	Fresh ginger	Fiji
2015	Mangoes	Indonesia, Thailand, Vietnam
2015	<i>Phytophthora</i> spp. host propagative material	All countries
2015	<i>Tachardiaephagus somervillei</i> for the biological control of yellow lac scale	All countries
2016	Grapes (table)	India
2016	Grapes (table)	Sonora, Mexico
2016	Grapes (table, into WA)	USA
2016	Nectarines	China
2016	Poppy straw for processing	Turkey, Hungary, Portugal
2016	<i>Zantedeschia</i> spp. propagative material	All countries
2017	<i>Candidatus Liberibacter solanacearum</i> (apiaceous crops, including carrot and celery)	All countries
2017	<i>Cucumber green mottle mosaic virus</i> pest risk analysis (host cucurbit seeds)	All countries
2017	Dragon fruit	Vietnam
2017	Peaches, plums and apricots (extention to nectarine IRA)	China
2017	Strawberries	Korea
2017	Thrips and Orthotospoviruses	All countries
2018	<i>Cecidochares connexa</i> for the biological control of <i>Chromolaena odorata</i>	Source country
2018	Dragon fruit	Indonesia
2018	<i>Kordyana brasiliensis</i> for the biological control of <i>Tradescantia fluminensis</i>	Source country

Year	Commodity	Country (from)
Finalised policy advice (continued)		
2018	Limes	Cook Islands, Niue, Samoa, Tonga, Vanuatu
2019	Avocado	Chile
2019	Brassicaceous vegetable seeds	All countries
2019	Breadfruit	Fiji, Samoa, Tonga
2019	Brown marmorated stink bug (<i>Halyomorpha halys</i>)	All countries
2019	Dates	Middle East and North Africa region
2019	Longan	Vietnam
2019	Mealybugs and viruses they transmit	All countries
2019	Pineapple (de-crowned)	Taiwan
2020	Chinese jujubes	China
2020	Cucurbitaceous crop seeds (review of import conditions)	All countries
2020	<i>Listronotus appendiculatus</i> for the biological control of <i>Sagittaria platyphylla</i> and <i>Sagittaria calycina</i>	Source country
2020	Pomegranate	India
2020	<i>Puccinia spegazzinii</i> for the biological control of <i>Mikania micrantha</i>	Source country
2020	Strawberries	Japan
2020	<i>Venturia paralias</i> for the biological control of <i>Euphorbia paralias</i>	Source country

Table 48. Australian Government import policy advice, final and in progress (continued)

Year	Commodity	Country (from)
Draft policy advice (in progress)		
2009	Apples (stop the clock provisions have been activated on this policy)	USA
2012	Potatoes for processing	New Zealand
2017	Apiaceous crop seeds (review of import conditions)	All countries
2018	<i>Capsicum</i> spp.	Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga, Vanuatu
2018	Cut flower and foliage (extension of consultation period for another six weeks)	All countries
2018	Limes	Mexico
2018	<i>Pepino mosaic virus</i> and <i>pospiviriods</i> in tomato seeds	All countries
2018	<i>Xylella</i> bacterial pathogens	All countries
2020	Oriental melons and rockmelons	Korea

* Australian Government Department of Agriculture, Water and the Environment. Plant risk analyses. agriculture.gov.au/biosecurity/risk-analysis/plant



OTHER INTERNATIONAL ACTIVITIES

Participating in international plant health systems

Australia engages in international activities to gather national and international plant pest information. The information is made available to regional plant health practitioners through a variety of sources including published records, surveillance data, insect and herbarium collections and networks. Intelligence assessments of High Priority Pests informs pre-border risk management and early detection of pests that may enter and establish in Australia.

Australia also participates in setting standards for both international and regional bodies. This cooperative approach boosts Australia's ability to actively monitor pests pre-border, limits their spread, and reduces their impact on the agricultural systems of regional neighbours and trading partners. Significant effort is also invested in gaining intelligence and promoting Australia's interests in the evolution of trade regulations, codes and standards.

Building capacity in the Asia-Pacific region

Activities to build capacity are delivered for Asia-Pacific countries that are close to Australia and for important and emerging trading partners. Commonly, these activities are coordinated through regional bodies, such as the Association of Southeast Asian Nations (ASEAN) or the Asia-Pacific Economic Cooperation (APEC) group of countries. Activities are often delivered with the assistance of funding from the Department of Foreign Affairs and Trade.

Capacity building activities yield a better understanding of the plant pest risks in the region, improve regional biosecurity, build diagnostic networks and capabilities, and foster links among plant health and biosecurity agencies and experts. These programs also help Australia to meet its formal international obligations to assist developing countries.

Increasingly, capacity building activities promote approaches to managing phytosanitary risk that safeguard existing trade or create opportunities for expanding markets.

Anticipating exotic plant pest threats

A range of sophisticated technologies and approaches including research, shared international resources and intelligence are used to anticipate exotic plant pest threats and to help prevent their introduction and spread. Work is undertaken with domestic and international partners to inform responses to emerging risks and to risks associated with deliberate or inadvertent non-compliance.

Information and intelligence are shared between partners through legislative requirements, memoranda of understanding and agreements with international bodies. The intelligence is used to develop cargo profiles and targeted campaigns, and to support identification and management of non-compliance, enabling resources to be focused on the areas of greatest risk. See also High Priority Pests and National Priority Plant Pests in Chapter 2.

Ensuring exports meet required standards

Many Australian plant industries export a proportion of the food and fibre that they produce. A few, notably grains, sugar and cotton, export almost everything that is grown. Just as imports are subject to restrictions to protect plant health, exports must also meet conditions, such as evidence of pest freedom in the area where the produce was grown. Export trade is therefore heavily reliant on plant biosecurity.

The *Export Control Act 1982* and its subordinate legislation provides the legal framework by which Australian producers can export their products. Exporters must meet the requirements of the act and any quarantine requirements of the importing country.

DAWE regulates the provision of phytosanitary export inspection, verification, and certification services for plants and plant products, to meet the importing country requirements and Australia's international obligations.

The department also negotiates technical market access for Australian export produce and has responsibility for the Australian Wood Packaging Certification Scheme, which enables Australia to provide ISPM 15 compliant wood packaging material for export.

The Export Control (Plant and Plant Products) Orders 2011 provide criteria for the export of fresh fruits, fresh vegetables, hay and straw, specific prescribed grains, and other plants or plant products for which a phytosanitary certificate, or any other official certificate, is required by an importing country authority.

More specific legislation relating to the export of plants and plant products is listed in Table 49. Strong linkages are maintained with exporters through industry consultative committees (e.g. the Grain and Plant Products Export Industry Consultative Committee and Horticulture Export Industry Consultative Committee) which are instrumental in developing effective and efficient operational responses to government policy and legislation.

The *Export Control Act 1982* will be replaced with the *Export Control Act 2020* on 28 March 2021. Australia's agricultural export legislation continues to underpin our reputation as a supplier of safe and reliable food and other products, and the assurances to our trading partners that Australian exports meet their requirements. However, the new legislation will consolidate and streamline existing export-related requirements and ensure the legislation is more relevant, responsive and efficient for exporters, farmers and other primary producers.

Biosecurity Bite video series

In August 2020, DAWE released the Biosecurity Bite series. The seven animated videos in the series are aimed at the general public and explain key biosecurity principles and show how plant pest and disease risks are managed pre-border, at the border and post-border in Australia.

The videos cover a range of topics, from the key role biosecurity plays in ensuring safe trade, to explaining the import risk analysis process, and highlighting how biosecurity is everyone's responsibility. Although focused on plant biosecurity, the key messages apply to biosecurity in general and offer a great behind the scenes look at Australia's biosecurity system.

The full video series is available online agriculture.gov.au/biosecurity/australia/biosecurity-bite



Table 49. Australia's export legislation, administered by the Department of Agriculture, Water and the Environment

Legislation
<i>Export Charges (Collection) Act 2015*</i>
Export Charges (Collection) Regulation 2015*
<i>Export Charges (Imposition – Customs) Act 2015</i>
Export Charges (Imposition – Customs) Regulation 2015
<i>Export Charges (Imposition – Excise) Act 2015</i>
<i>Export Charges (Imposition – General) Act 2015</i>
Export Charges (Imposition – General) Regulation 2015
<i>Export Control Act 1982*</i>
Export Control (Fees) Order 2015*
Export Control (Hardwood Wood Chips) Regulations 1996*
Export Control (Orders) Regulations 1982*
Export Control (Organic Produce Certification) Orders*
Export Control (Plants and Plant Products) Order 2011*
Export Control (Plants and Plant Products – Norfolk Island) Order 2016 *
Export Control (Prescribed Goods – General) Order 2005*
Export Control (Regional Forest Agreements) Regulations*
Export Control (Unprocessed Wood) Regulations*
<i>Export Inspection Charges Collection Act 1985*</i>
<i>Export Inspection (Establishment Registration Charges) Act 1985*</i>
<i>Export Inspection (Quantity Charge) Act 1985*</i>
<i>Export Inspection (Service Charge) Act 1985*</i>
<i>Primary Industries (Customs) Charges Act 1999</i>
Primary Industries (Customs) Charges Regulations 2000
<i>Horticulture Marketing and Research and Development Services Act 2000</i>
Horticulture Marketing and Research and Development Services (Export Efficiency) Regulations 2002

* Will be repealed when the *Export Control Act 2020* commences on 28 March 2021

Meeting biosecurity conditions of importing countries

To assist Australia's exporters, the Manual of Importing Country Requirements (MICoR) provides information on the specific requirements of importing countries that must be met to export plants and plant products from Australia. This includes requirements for import permits, phytosanitary certificates, additional declarations and treatments, and other relevant export information and documentation. Information in Micor Plants is a guide only and exporters are advised to also check with the importing country before exporting.

For plant industries, the Export Documentation (EXDOC) system supports the preparation and issue of export documentation for primary produce prescribed under the *Export Control Act 1982* and associated legislation.

The system provides certification for plant and plant product exports, as well as for animal products. EXDOC accepts details of proposed exports from exporters. This is linked to endorsements and results in inspections as required, and where applicable, an export permit and phytosanitary certificate is issued.

The Plant Export Management System (PEMS) is an IT system that is used by the department to capture and store information relating to the export of plants and plant products from Australia, including plant export Authorised Officer (AO) inspection and calibration results for product and transport units.

The availability of PEMS for industry aims to streamline the plant export inspection documentation process for clients and external AOs, by eliminating the need for manual submission of inspection and calibration documentation.

With funding from the Busting Congestion for Agricultural Exporters budget announcement, DAWE is looking to further enhance PEMS and develop alternative methods of providing assurance that plant export entities are meeting their obligated requirements.

Negotiating market access

There is a high level of investment in negotiating protocols and building export systems that increase the value of plant exports.

Australia negotiates technical market access with its trading partners for the benefit of Australia's producers. These activities are conducted in close consultation with industry stakeholders, while taking into consideration the required phytosanitary requirements.

Changes in pest status, the emergence of new or improved treatment technologies, and reviews by trading partners of their import conditions mean that negotiations surrounding market improvement and market maintenance are increasingly the focus of activities to ensure Australia can continue to export its plant products.

When prioritising activities, the department consults with industry to ensure its processes select market pathways with the highest likelihood of technical and commercial success, with a strong focus on evidence-based analyses.

The Grains Industry Market Access Forum provides a conduit between government and industry to ensure market access decisions are informed and prioritised in line with overall industry benefit.

For the horticulture industry, advice to DAWE on the industry's priorities for new or improved market access requests is provided through Hort Innovation's Trade Assessment Panel.

Table 50 (see page 138) details market access achievements since 2000, including access to new markets, improving opportunities in existing markets, and preserving existing market access.

Plant pest surveillance supports market access

Governments and industries conduct systematic checks for pests within our borders to provide evidence that Australia does not have certain exotic pests of concern for market access. Outcomes are collated to provide evidence of absence of a pest from the country, state or region. Better surveillance information gives confidence of claims of pest absence and area freedom.

The Australian Government invested in improving biosecurity surveillance and analysis through the Agricultural Competitiveness White Paper which concluded in June 2019, strengthening surveillance arrangements in Australian industry groups and governments.

Australia's plant pest surveillance programs are detailed in Chapter 5.

National Minimum Dataset Specifications for surveillance

To ensure consistency in the collection and sharing of surveillance data, Australia uses the National Minimum Dataset Specifications (NMDS), introduced in 2017 following agreement of the National Biosecurity Committee. Within the NMDS, each record has its own unique identifier code, with data captured on the location and type of surveillance activity, as well as the name and jurisdiction of the organisation capturing the data.

With the use of the NMDS and real time data tools such as AUSPestCheck™, Australia will continue to be amongst a handful of countries able to fully comply with the International Standards for Phytosanitary Measures on recording and reporting of plant health surveillance information.

A new Export Plan for fresh produce to New Zealand

November 2020, saw Australia's DAWE and New Zealand's (NZ) Ministry for Primary Industries (MPI) meet virtually for the annual Australia–New Zealand Biosecurity Cooperation meeting.

At the meeting, the parties signed a new Export Plan replacing the 30-year-old Bilateral Quarantine Arrangement to come into effect in February 2021. The agreement removes the need for NZ specific requirements, often duplicated within Australia's system, provides a template for future market access negotiations and improvements and streamlines export requirements for those sending produce to multiple overseas markets.

Australia exports \$170 million of horticultural produce to NZ each year. The new Export Plan is expected to reduce red tape and ease regulatory burden. The key changes that will save money and time in the horticultural export supply chain include:

- easier compliance with clearer requirements
- easier market entry for new entities
- removal of nominated inspectors, packhouse or growers each year, and being able to use whoever is approved by NZ
- no need for packhouses to be Registered Establishments if they are not undertaking treatments or Authorised Officer inspections, a cost saving of over \$6,000 a year in registration fees and audits
- perpetual treatment provider registration, removing the need for annual re-applications
- reduced audit costs due to the move to a compliance-based assurance model with less audits on compliant entities
- only one inspection of a consignment, provided it has been completed by an Authorised Officer on a grower basis.

Relieving agricultural export congestion is part of the Australian Government's Ag2030 plan to reach \$100 billion in farmgate value by 2030 and is welcomed by exporters.

Table 50. Market access achievements for pollinator and plant product exports from Australia since 2000

Year achieved	Commodity	Country
Market access gained and restored		
2000	Lemons	South Korea
2000	Oranges	South Korea
2003	Multiple products (from Goulburn Valley) – pest free area	New Zealand
2003	Olives, rooted cuttings	Peru
2003	Tomatoes, greenhouse	USA
2004	Lychees, nursery stock	Brazil
2004	Mangoes	China
2004	Mangoes, irradiated	New Zealand
2004	Olives, rooted cuttings	Morocco
2005	Cherries (from TAS)	Japan
2005	Citrus	China
2005	Citrus (unspecified)	South Korea
2005	Mangoes	South Korea
2005	Seed potatoes, microtubers	South Africa
2006	Apples	Japan
2006	Bananas – resumption of trade	New Zealand
2006	Papaya	New Zealand
2006	Potatoes, brushed ware	Thailand
2006	Seed potatoes (from VIC and WA)	Thailand
2007	Mangoes	South Korea
2007	Multiple products	South Korea
2008	Cherries (mainland)	USA
2008	Lupins	South Korea
2008	Lychees	New Zealand
2009	Citrus (from Sunraysia) – seasonal freedom	Japan
2009	Peanuts, processed	India
2010	Cherries – access reinstated for non pest free areas	Taiwan
2010	Cherries (from TAS)	South Korea

Year achieved	Commodity	Country
Market access gained and restored (continued)		
2010	Citrus	European Union
2010	Citrus (grapefruit)	Japan
2010	Kiwifruit	India
2010	Table grapes	China
2011	Lentils	Saudi Arabia
2012	Carrots	Taiwan
2012	Chia seed, sowing	Peru
2012	Cotton seed, stock feed	USA
2012	Grapevine, nursery stock	Chile
2012	Hemp seeds, sowing	Uruguay
2012	Honey	Egypt
2012	Paulownia, rooted cuttings	Peru
2012	Pearl millet seed, sowing	India
2012	Sorghum seed, sowing	Peru
2012	Sunflower seed, sowing	Bolivia
2012	Table grapes, summerfruits and cherries	Indonesia
2012	Wax flower, rooted cuttings	Peru
2012	Whole lupins, processing	Taiwan
2013	Apples	USA
2013	Bana grass cuttings	Philippines
2013	Barley – for consumption following a technical submission in 2008	Ecuador
2013	Canola – re-opening of trade after resolving quarantine issues preventing exports since 2009	China
2013	Cherries	Philippines
2013	Cherries – access after initiating a protocol and meeting Chinese requirements	China
2013	Citrus	Philippines
2013	Creeping signal grass, sowing	Malaysia
2013	Pome fruit	Philippines

Table 50. Market access achievements for pollinator and plant product exports from Australia since 2000 (continued)

Year achieved	Commodity	Country
Market access gained and restored (continued)		
2013	Macadamia nuts – access gained for macadamia nuts in-shell for consumption	Ecuador
2013	Teak seed, sowing	Peru
2013	Soybeans	Indonesia
2013	Summerfruit	Philippines
2013	Table grapes	Philippines
2014	Cherries	Thailand
2014	Eucalyptus seed	Paraguay
2014	Forage legume seed, sowing	Chile
2014	Grape seed	China
2014	Lupins	India
2014	Mahogany logs	India
2014	Maize grain	Mexico
2014	Sandalwood	India
2014	Summerfruit (apricots, plums, nectarines and peaches)	Thailand
2014	Table grapes	Japan
2014	Table grapes	South Korea
2015	Blueberries	India
2015	Citrus – market access restored following import suspensions for Australian fruit	Vietnam
2015	Lentils – market access restored	Saudi Arabia
2015	Mangoes and lychees	USA
2015	Onion seed, sowing	Mexico
2015	Table grapes – market access restored following suspension for all Australian fruit	Vietnam
2016	Honey and other apiculture products	French Polynesia
2016	Honey bees (live queens)	Fiji
2016	Melon (<i>Cucumis melo</i>)	Japan
2016	Nectarines	China
2016	Split broad beans	Iran

Year achieved	Commodity	Country
Market access gained and restored (continued)		
2016	Watermelons	Japan
2016	Wheat seed, sowing	Bolivia
2017	Apricots	China
2017	Cherries	Vietnam
2017	Lentils	Iran
2017	Logs without bark and sawn timber	Iran
2017	Plants and plant products	Myanmar
2017	Honey	Saudi Arabia
2017	<i>Medicago sativa</i> seed	Iran
2017	Peaches	China
2017	Plant-based horse feed	China
2017	Plums	China
2017	Queen bees	Solomon Islands
2017	Vegetable seeds, sowing	Chile
2017	Willow clefts	India
2018	All melons	Kuwait
2018	Dried, shelled almonds	Chile
2018	Hard mature avocados	Japan
2018	<i>Phaseolus vulgaris</i> (bean) seed	Iran
2018	Strawberries	United Arab Emirates
2019	Almonds	Chile
2019	Beet seeds	Ecuador
2019	Beet seeds	Mexico
2019	Carrots – restored	Taiwan
2019	Carrot seeds	Ecuador
2019	Radish seeds	Mexico
2018	Raw cotton bales	Iran
2019	Walnuts	India
2020	Bean seeds (black beans, faba beans and mung beans), sowing	Argentina

Table 50. Market access achievements for pollinator and plant product exports from Australia since 2000 (continued)

Year achieved	Commodity	Country
Market access gained and restored (continued)		
2020	Brussel sprout seeds, sowing	Mexico
2020	Cherries (mainland Australia)	Korea
2020	Citrus – restored	European Union
2020	Grains	Iran
2020	Industrial or medicinal plants	Iran
2020	Oilseeds and oleaginous fruits	Iran
2020	Seeds and fruit	Iran
2020	Seeds, sowing	Argentina
2020	Straw and fodder	Iran
Improvements in market access		
2005	Citrus – 2–3 degree cold disinfestation	Thailand
2005	Zucchini – removal of Queensland fruit fly from the pest list	New Zealand
2006	Carrots – freedom from nematode	South Korea
2006	Citrus – 3 degree cold disinfestation	South Korea
2006	Mangoes – new phytosanitary requirements	Malaysia
2006	Multiple products (from TAS) – reinstatement of Queensland fruit fly area freedom	Taiwan
2006	Tomatoes – improved conditions	New Zealand
2007	Citrus – 2–3 degree cold disinfestation	Japan
2008	Cherries (from TAS) – revised protocol	Japan
2008	Citrus – in-transit cold disinfestation	Indonesia
2008	Mangoes, irradiated	India
2008	Mangoes – reduced inspection rate	Japan
2008	Multiple products – 2–3 degree cold disinfestation	Taiwan
2008	Multiple products – removal of Standard Operating Policy and Procedure requirement	United Arab Emirates
2008	Oats	India
2008	Table grapes – in-transit cold disinfestation	Indonesia

Year achieved	Commodity	Country
Improvements in market access (continued)		
2009	Citrus – revised protocol	China
2009	Mangoes – revised protocol	China
2010	Apples (from TAS) – improved conditions	China
2010	Cherries (from mainland) – stand alone cold treatment	USA
2010	Citrus	South Korea
2010	Grapefruit	Japan
2011	Citrus – 3 degree cold disinfestation	USA
2011	Citrus – in-transit cold disinfestation from non pest free areas	Indonesia
2011	Macadamia nuts	India
2011	Table grapes – in-transit cold disinfestation from non pest free areas	Indonesia
2012	Apples	USA
2012	Avocado – in-transit cold treatment	New Zealand
2012	Citrus (unspecified) – 3 degree in-transit cold treatment	India
2012	Citrus (unspecified) – in-transit cold treatment	New Zealand
2012	Citrus (unspecified) – more favourable temperatures and flexible conditions	India
2012	Pears – in-transit cold treatment	New Zealand
2012	Table grapes – in-transit cold treatment	New Zealand
2013	All products – FTA negotiations concluded in December 2013	South Korea
2013	Apples	Taiwan
2013	Canola	China
2013	Citrus – some import limitations removed by Thailand	Thailand
2013	Fruit – revised protocol including favourable cold treatment conditions	Phillipines
2013	Grain and seed	Iran

Table 50. Market access achievements for pollinator and plant product exports from Australia since 2000 (continued)

Year achieved	Commodity	Country
Improvements in market access (continued)		
2013	Grain and seed	Libya
2013	Hay	Qatar
2013	Plants and plant products	Hong Kong
2013	Soybeans – removal of a five per cent tariff	Indonesia
2013	Wheat	Kenya
2014	Grain and seed	Thailand
2015	Cherries – improved inspection rates	Korea
2015	Cherries – new temperature for cold treatment	Thailand
2015	Citrus – more varieties approved for export from non pest free area districts	Thailand
2015	Persimmons – irradiation for fruit fly control	Thailand
2015	Table grapes – new temperature for cold treatment	Thailand
2015	Wheat and barley – access improved with new protocol	China
2016	Blood oranges and other sweet orange varieties	Korea
2016	Kangaroo paw nursery stock	Colombia
2016	Lychees	USA
2016	Mango	USA
2016	Pumpkins	Japan
2016	Walnuts	Japan
2017	Cherries	China
2017	Chickpeas	Iran
2017	Chickpeas	Pakistan
2017	Citrus	China
2017	Lentils	Bangladesh
2017	Table grapes	China
2017	Wheat	Iran
2018	De-hulled kiln dried oats	India

Year achieved	Commodity	Country
Improvements in market access (continued)		
2018	Persimmons	Thailand
2018	Rolled oats and oat flakes	Iran
2018	Seed potatoes	Indonesia
2018	Citrus	Vietnam
2018	Table grapes	Vietnam
2019	Seeds, sowing	Malaysia
2019	Table grapes	New Zealand
2019	Timber and logs	Malaysia
2020	Malting barley	India
2020	Pome fruit	India
2020	Summerfruit	India
2020	Table grapes	India
Maintained in market access		
2004	Citrus	Thailand
2004	Citrus	Various
2004	Cut and dried flowers	Malaysia
2004	Potatoes	South Korea
2006	Multiple products	Indonesia
2007	Citrus	Mauritius
2007	Citrus (unspecified)	China
2007	Grain	India
2007	Summerfruit	Canada
2008	Potatoes	Mauritius
2009	Multiple products	Thailand
2010	Lychees	New Zealand
2010	Mangoes	New Zealand
2010	Papaya	New Zealand
2011	Citrus	Thailand
2011	Multiple products	Thailand
2011	Multiple products	Vietnam
2011	Summerfruit (peaches and nectarines)	Taiwan
2011	Table grapes	Thailand

Table 50. Market access achievements for pollinator and plant product exports from Australia since 2000 (continued)

Year achieved	Commodity	Country
Maintained in market access (continued)		
2012	Barley (malting), processing	South Korea
2012	Multiple products	Indonesia
2012	Multiple products	Vietnam
2012	Pome fruit	India
2012	Summerfruit (plums)	Taiwan
2013	All products – implementation of a new security paper for export health certificates	All markets
2013	Apples	Thailand
2013	Apples – revised improved export protocol	Taiwan
2013	Avocado	Thailand
2013	Cottonseed, for stock feed – re-instated methyl bromide fumigation and new tolerance levels	USA
2013	Kiwifruit	Thailand
2013	Pears	Thailand
2013	Persimmon	Thailand
2013	Strawberries	Thailand
2014	Table grapes	China
2015	Grains, consumption	Vietnam
2015	Nuts, consumption	Vietnam
2015	Plant based stockfeed	Vietnam
2015	Seed, sowing	Vietnam
2015	Wheat – access maintained for grain for consumption	Indonesia
2016	Mangoes	Korea
2016	Wheat flour	India
2017	Fruit fly host commodities	New Zealand
2017	Plants and plant products	Myanmar
2019	Cherries, summerfruits, table grapes – treatment options	China
2019	Citrus, <i>Mangifera</i> , <i>Prunus</i> spp., Solanaceae	European Union
2019	Ware potatoes	Korea

Border biosecurity

Live animals and plants, packaging, plant material, animal products and certain food from overseas have the potential to introduce some of the world's most damaging pests into Australia. Pests, weeds and diseases can also hitchhike a ride on containers, machinery, vehicles, equipment and various non-plant and animal-based products. This could devastate our valuable agriculture and tourism industries and unique environment.

With increasing levels of international trade and travel, the detection of threats at the border remains an important element of the biosecurity system. Australia has strict laws relating to the importation of certain goods, including goods brought back from overseas by travellers, to reduce the chance of an exotic pest incursion.

The DAWE has primary responsibility for international border biosecurity activities, to restrict the import of items that pose a risk to Australia. The department undertakes a range of measures at the border to reduce and detect biosecurity risks, including:

- raising awareness of Australia's biosecurity requirements among importers, industry operators, travellers, and senders of mail
- screening and inspecting international vessels, travellers and baggage, cargo, mail, animals, plants and plant products arriving in Australia
- managing the high biosecurity risks of live plants and animals through containment, observation, testing and/or treatment at post-entry quarantine facilities
- identifying and evaluating the specific biosecurity risks facing northern Australia through the Northern Australia Quarantine Strategy.

Activities at the border are risk-based, informed by evidence and subject to review and continual improvement.

The Australian border restrictions, implemented in March 2020 due to Covid-19, significantly reduced international arrivals. For much of the year, travellers were not arriving from the typical range of countries from which they would ordinarily arrive. Similarly, the numbers of biosecurity risk items intercepted at the airports were not typical of the numbers that would ordinarily occur. Between January and October 2020, 80,372 biosecurity risk items were intercepted at Australia's international airports: 18,364 at Melbourne, 11,888 at Perth and 27,097 at Sydney.

In 2020, around 79 million mail items moved through mail centres compared to 87 million in 2019. The most commonly intercepted items in both years were seeds, meat and other animal products, such as pet supplements.

COLLABORATIONS TO REDUCE BORDER BIOSECURITY RISKS

Activities to deal with risks posed by cargo imports

The Australian Government works with the cargo and shipping industries to prevent pests and diseases being imported with cargo. Biosecurity restrictions on imported goods can be complex. People who wish to import goods are advised to check whether the goods will be allowed to enter. Sometimes the treatments will be more costly and time consuming than the goods are worth. All importers are encouraged to use the services of a licensed customs broker to facilitate the process.

BICON, the Australian Government's Biosecurity Import Conditions database, holds information on import conditions for plant, animal, mineral and human commodities which must be met to be brought or imported into Australia. People wishing to bring in goods can check the conditions of entry at agriculture.gov.au/import/online-services/bicon

The information available on BICON is the same information that biosecurity officers use when inspecting goods arriving in Australia. Import conditions within BICON are regularly reviewed, so importers need to check the conditions each time they travel or send goods. More information on import risk assessment is on page 130.

Upon requests through import permit applications, goods may be allowed to be brought or imported into Australia under permit conditions that are different from import conditions specified on BICON. Where permit conditions are different from import conditions on BICON, the permit conditions must be met.

First point of entry biosecurity operators

First point of entry (FPoE) refers to seaports and airports where international arrivals are permitted. FPoE operators and staff are in a unique position to notice biosecurity risks and respond to them. The Australian Government works with FPoE authorities, operators and workers to reduce biosecurity risks. Operators and authorities are required to have facilities, arrangements and systems in place to manage the risk of pests and diseases entering, spreading and establishing.

The requirements for FPoE authorities and operators are listed in the First Point of Entry Biosecurity Standards for both landing places and ports. For example, operators at seaports must manage vegetation to ensure weed species do not flower and spread seed.

A map of the points of entry for vessels is available from agriculture.gov.au/biosecurity/avm/vessels/first-point-entry-and-non-first-point-entry

The See. Secure. Report. Hotline (1800 798 636) is for FPoE workers to report any biosecurity risks they find during day-to-day operations. The special responsibilities of FPoE authorities, operators and staff are an example of the biosecurity responsibilities of every Australian (see Figure 88).

Figure 88. Entity responsibility for biosecurity risks, first points of entry (ports)



Biosecurity at ports and other first points of entry is shared between stakeholders.
Image courtesy of the Department of Agriculture, Water and the Environment

SEE. SECURE. REPORT.
1800 798 636
agriculture.gov.au/report

Look for pests in shipping containers and imported goods

GOVERNMENT SCREENING AND INSPECTION

DAWE employs more than 7,000 staff,⁴² some of whom contribute to the inspection of international vessels and travellers, cargo and mail for biosecurity risks as they arrive at airports, seaports and mail centres. Officers operate in conjunction with the Department of Home Affairs and the Australian Border Force, which regulate people movements and intercept illegal goods, such as drugs and weapons.

Some goods need to be declared at the border, whether they are being brought back from overseas or arriving in the mail. The department's risk assessment and intelligence tools are used to assess biosecurity risk and respond appropriately.

Screening passengers

Passengers travelling to Australia are provided with an Incoming Passenger Card by the aircraft or cruise vessel crew. Similarly, the crew complete a Crew Declaration Form. The Incoming Passenger Card and Crew Declaration Form are legal documents and must be completed truthfully. Travellers must declare if they are carrying certain food, plant or animal products. Declared goods are assessed by a biosecurity officer and, if the import conditions are met, released to the traveller.

The department applies automated risk assessments to all international travellers to target high biosecurity risks. Biosecurity officers assess the risk and select travellers for screening based on both the declaration and the automated and physical risk assessment outcomes.

Baggage is screened for undeclared goods by x-rays, detector dogs or physical inspection. Based on risk assessments, biosecurity officers may inspect baggage regardless of whether travellers declare goods or do not declare any goods.

Depending on the item and its biosecurity risk, you may:

- pay for the goods to be treated to mitigate the biosecurity risk (for example, fumigation, gamma irradiation)
- pay to export the goods from Australia
- forfeit the goods for destruction.

The first two options are subject to fees and special conditions may apply. Biosecurity officers can also inspect baggage when passengers do not declare any goods.

Alternatively, goods such as food, plant material or animal items that pose an unacceptable biosecurity risk can be voluntarily disposed of in bins located in the terminal. Goods that present an unacceptable level of biosecurity risk will be managed in accordance with the *Biosecurity Act 2015*. If arriving passengers are found to have made a false declaration on the Incoming Passenger Card, they can be penalised. A stronger approach to enforcement of the *Biosecurity Act 2015* may cause a visitor's visas to be cancelled for failing to declare food concealed in luggage, or knowingly providing false or misleading information.

Screening mail

When goods arrive at the Australian border, they are assessed for biosecurity risk and a decision is made on whether they can enter Australia.

When sending mail to Australia, the contents of packages must be accurately declared on the mail article declaration. The department applies risk profiles to all international mail to target high biosecurity risks. Biosecurity officers assess the risk based on the declaration and use detector dogs and x-ray to screen packages.

Some goods may require treatment (at the importer's expense) before they are permitted into Australia. Goods that are not permitted will either be exported back to the sender overseas or destroyed. If any attempt has been made to conceal goods, the importer may be subject to an investigation and possible criminal prosecution.



Detector dogs are trained to find items that could bring pests or diseases into Australia such as certain food, plant material and animal products. Image courtesy of the Department of Agriculture, Water and the Environment

⁴² Australian Government. Transparency Portal. Accessed online 31 March 2020 transparency.gov.au

Use of detector dogs

Detector dogs are used by DAWE and play a key role in helping to protect Australia from exotic pests and diseases. They are used in combination with other biosecurity strategies and detection technologies.

There are approximately 40 detector dog teams operating in international airports, seaports, mail centres and courier depots throughout Australia. Detector dogs are currently sourced exclusively from the Australian Border Force Detector Dog Breeding program and undergo rigorous testing to ensure they possess the ideal characteristics for the job. They need to have an extraordinary sense of smell, be cooperative and gentle with people, and possess extreme hunt, food and retrieve drives.

Detector dogs are trained to find items that could bring pests or diseases into Australia such as certain food, plant material and animal products. They have a working life of about six to eight years, and on average, detector dogs intercept up to 9,000 biosecurity risks during their working life. In 2020 the detector dog fleet intercepted approximately 13,500 risk items and screened 15,706,488 million mail items nationally.⁴³ The three most common items the detector dogs find are seeds and nuts, fruit and meat. Some unusual finds included concealed seeds that were taped to the inside of a booklet, brown marmorated stink bugs on an imported forklift and cactus seeds declared as window decorations.

The department's dogs are multipurpose and deploy across a wide range of environments. They will offer a different behaviour when target material is detected, based on the type of item they are screening. When screening at international passenger terminals they will sit beside the item or person of interest to indicate that they have found something. This is called a passive response and is a safe, non-intrusive method of indicating to people. When screening mail or cargo items, dogs will offer a focused dig at the source of the target odour. This is called an active response and allows the team to pinpoint the exact item from amongst many.

Use of 3D x-ray technology

DAWE has established itself as the world leader in biosecurity innovation by being the first biosecurity agency in the world to deploy 3D x-ray capability in airport and mail environments. The department has also developed and deployed the world's first biosecurity algorithms to automatically detect biosecurity risk material. Algorithms to identify fruit, vegetable, plant material, meat and seafood are deployed on the 3D x-ray units enabling automatic detection of these risk items more accurately and faster than ever before.

The department has 3D x-ray units permanently installed in the Melbourne International Airport and Melbourne and Sydney International Mail Centres and has plans to further expand the use of 3D x-ray. Additional algorithm development projects are also underway as well as research and development of technologies to automatically identify seeds.

⁴³ The Hon David Littleproud. Media release: Super sleuth Ulf shows why he's top dog. Accessed online 17 May 2021 <https://minister.awe.gov.au/littleproud/media-releases/super-sleuth-ulf>

NATIONAL BORDER SURVEILLANCE PROGRAM

The National Border Surveillance (NBS) Program commenced in late 2016 and operates under the policy direction of Border Controls Branch, Biosecurity Operations Division, within DAWE. NBS staff are located in the ports of Brisbane, Sydney, Melbourne, Adelaide, Perth and Darwin.

The teams' scope of work includes site assessments and plant health surveillance at all of Australia's biosecurity entry points. These include first points of entry (seaports and airports), and premises of businesses handling imported goods of biosecurity interest or biosecurity risk material (so-called Approved Arrangements⁴⁴), plus associated or surrounding areas.

An assessment is made of the biosecurity risk a site poses based on a number of factors. These include the type, quantity and origin of the goods received, the presence of vegetation, dunnage or other rubbish piles, and the level of weed control and maintenance of surfaces.

NBS surveillance activities include general surveillance for any potential exotic pests in addition to targeted surveillance for a range of national high priority plant and environmental pests. The aim is to detect exotic pests that may have escaped from conveyances, containers, goods or passengers at the border and before they establish and to contribute to Australia's area freedom determinations.

NBS staff have a growing track record of detecting exotic plant pests with more than 60 detections since the program's establishment. They also maintain Australia's most extensive exotic ant surveillance program. When significant exotic plant pests are detected, NBS staff will delimit the extent of the infestation before conducting a response to complete its eradication. If the infestation is found to go beyond the biosecurity entry point, response activities are carried out together with state or territory counterparts.

When visiting sites, NBS staff engage with the industry participants and distribute information material to raise awareness of key exotic priority plant pests.

Data from border surveillance is used to inform policy when reviewing import conditions and requirements for Approved Arrangements. More about pest surveillance is in Chapter 5.

⁴⁴ Approved Arrangements, previously Quarantine Approved Premises and Compliance Agreements, are voluntary arrangements entered into with the Department of Agriculture, Water and the Environment. These arrangements allow operators to manage biosecurity risks and/or perform the documentary assessment of goods in accordance with departmental requirements, using their own sites, facilities, equipment and people, and without constant supervision by the department and with occasional compliance monitoring or auditing.

PROTECTING OUR NORTHERN COASTLINE

The unique biosecurity threats in Australia's north – stretching from Cairns in QLD to Broome in WA and including the Torres Strait – are managed by DAWE's Northern Australia Quarantine Strategy (NAQS).

The northern coastline is vast and sparsely populated. It faces biosecurity risks from countries close to Australia including Indonesia, Timor-Leste and Papua New Guinea. These countries have many pests, plant diseases and weeds that are not present in Australia, which could spread to Australia by human activities or natural pathways.

There are three main components to NAQS: surveillance, Torres Strait operations or regulation, and community engagement.

Officers carry out surveillance for exotic pests, diseases and weeds on horticultural plants as well as native and cultivated alternative hosts. Pest checks are made for nationally agreed target species as well as those identified as High Priority Pests during biosecurity planning for industries. Reports of damage on host plants are also investigated. Increasingly, surveillance is conducted in partnership with industry and other government partners.

Each year NAQS staff notify relevant authorities when a pest, disease or weed is found that is a new record for Australia or is an extension to a pest's known range or host.

This intelligence improves national and local incursion responses and aids in determining plant pest status across the north.

In the Torres Strait, department officers manage risks associated with the southward movement of people, vessels, aircraft and goods through the Strait to mainland Australia. This includes traditional visitors from Papua New Guinea under the Torres Strait Treaty – up to 30,000 movements per year.

Officers regulate plant risks associated with the movement of goods and conveyances from Papua New Guinea and through the islands. Regulated pathways are from Papua New Guinea into Torres Strait, and from the Torres Strait Protected Zone to the Permanent Biosecurity Monitoring Zone, and from either zone to mainland Australia, as shown in Figure 89.

Importantly, the success of activities is due to the cooperation and good will of people in northern Australia. The strategy invests heavily in community engagement including the well-known campaign 'Top Watch' to create strong community support. As a result, biosecurity awareness is high and local communities comply with requirements in the Torres Strait, report unusual pests and diseases, and provide access to land and country for surveillance.

Figure 89. Biosecurity risk pathways regulated by NAQS

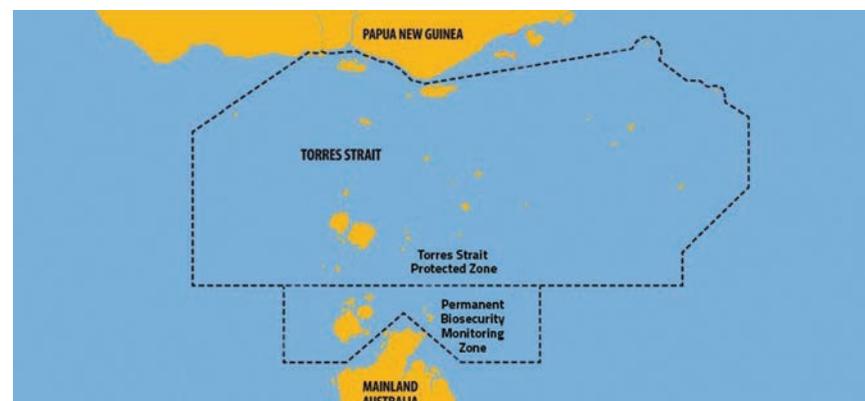


Image courtesy of the Department of Agriculture, Water and the Environment

Exotic fruit fly surveillance and eradication

Exotic fruit fly species – including Oriental fruit fly and melon fly – are present in Papua New Guinea and are one of the biggest biosecurity risks to Australia's horticultural industries. Annual incursions into the Torres Strait by these pests are associated with monsoonal weather patterns moving over Papua New Guinea. Incursions are detected by permanent traps placed throughout the Torres Strait islands that are monitored by the NAQS team.

These seasonal incursions are being eradicated under the Exotic Fruit Fly in Torres Strait Response Plan 2018–21. The response is managed by the Queensland Department of Agriculture and Fisheries and falls under the auspices of the Emergency Plant Pest Response Deed.

That means that the 15 potentially affected industry Parties pay a share of the cost of keeping these pests out of Australia. See Chapter 6 for more on emergency responses.



Oriental fruit fly (left) and melon fly (right) are persistent biosecurity risks to Australia's horticultural industries. Images courtesy of Scott Bauer (left) and Florida Division of Plant Industry Archive, Florida Department of Agriculture and Consumer Services (right), Bugwood.org

POST-ENTRY PLANT QUARANTINE

While imported live plant material can introduce foreign plant pests and diseases, it can be advantageous at times for growers to import new varieties, to help maintain the competitiveness and productivity of Australian agribusiness. As a result, live plants can be imported, subject to specific import conditions. These include imported plant material spending time in post-entry quarantine facilities, allowing for growth and disease screening and testing to ensure only material free from pests and diseases of biosecurity concern to Australia can be released.

Live plant material is defined as all live plants or plant material, other than seeds, that is imported for the purposes of growth or propagation. Import conditions vary, depending on the genus and species of the plant and the form of the imported plant material.

Plant importers begin the process by checking import conditions using the import database BICON and, if the species is allowed to enter Australia, applying for an import permit.

The national plant protection organisation of the country of export will inspect the plants and issue a phytosanitary certificate prior to export. New plant species that have not previously been imported and have no import conditions, will be subject to a weed risk assessment. A new plant genus will also require a disease risk assessment. Subject to the outcomes of the weed risk assessment and/or the disease risk assessment, the department may develop import conditions for the new species or genus which are added to BICON. High-risk nursery stock undergoes disease screening and testing at the government post-entry quarantine facility at Mickleham in VIC. Medium-risk nursery stock can undergo post-entry quarantine disease screening at a department's approved facility (see Table 51).

The amount of time the plants spend in a post-entry quarantine facility depends on the biosecurity risks they pose, and the specific screening and testing required. Once all required testing and screening procedures have taken place and the plants are deemed to be free of any biosecurity concern, the department will release the goods to the importer, who covers all associated costs for services.

Some restricted seeds are also required to undergo post-entry quarantine disease screening. A subset of the department's approved facility listed in Table 51 that operate under a 'process management system' are permitted to undertake quarantine for restricted seeds, and some high-risk nursery stock. For restricted seeds, only the progeny seeds of the plants grown from imported seed that are free from diseases of biosecurity concern to Australia can be released.

Table 51. Australia's post-entry plant quarantine facilities*

	ACT	NSW	QLD	SA	TAS	VIC	WA	NT
Australian Government facilities	–	–	–	–	–	1	–	–
State government facilities approved for high-risk plant material**	–	1	2	1	–	2	1	–
Scientific (S) and private (P) facilities approved for high-risk plant material**	1 S 1 P	2 P	2 P	1 S	1 P	–	2 P	–
Private Approved Arrangement sites for medium-risk plant material***	–	11	15	7	7	53	10	–
Scientific (S) and state government (SG) Approved Arrangement sites for medium-risk plant material***	11 S	4 S 2 SG	3 S 1 SG	7 S 3 SG	3 S	2 S 2 SG	6 S 2 SG	–

* Note the table represents Australia's post-entry plant quarantine facilities as at 21 December 2020, however the number of approved facilities is subject to change over time.

** Note these figures represent facilities and organisations as a whole and does not include the individual Approved Arrangement sites that may be associated with them.

*** Note these figures represent individual Approved Arrangement sites and not facilities or organisations as a whole.

