Chapter 3

Pre-border biosecurity

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 national agricultural production exported to overseas markets. The amount of exported product varies between industries, with some producing only for local markets while others, such as the grains and cotton industries, exporting the majority of the produce grown.

Australia also 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, some food is imported, commonly produce that is out of season in the Southern Hemisphere.

This movement of plant produce around the world poses biosecurity risks to the importing countries. In an effort to mitigate risk, the Australian Government performs a number of activities collectively known as pre-border biosecurity.

The Department of Agriculture and Water Resources has primary responsibility for pre-border biosecurity activities. These are focused on minimising the likelihood of exotic pests and diseases reaching our border, while still allowing the movement of people and goods into Australia. They provide assurance to the community and producers about the biosecurity status of commodities imported into Australia.

The Australian Government's efforts to support exports is covered later in this chapter.

Pre-border activities to mitigate the risks of imports

Pre-border activities include:

- Conducting risk assessments to consider the level of biosecurity risk that may be associated with imports and imposing relevant risk management measures.
- Conducting pre-border verifications, inspections and audits on imports.
- Conducting pest and disease surveillance in neighbouring countries.
- 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 potential biosecurity risks.
- Negotiating market access for Australian exports.

Image courtesy of Apple and Pear Australia

OBLIGATIONS UNDER INTERNATIONAL TRADE AGREEMENTS

Trade is covered by international agreements, known as phytosanitary agreements, that aim to prevent the spread of plant pests.

As an active trading nation, Australia has entered into a number of multilateral and bilateral trade agreements that influence its plant biosecurity system. Biosecurity risks are managed in keeping with Australia's legislative framework for biosecurity and 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 to inhibit trade where there is no danger to human, animal or plant health.

Members can specify the level of protection that they consider fitting to protect human, animal and plant life or health within their territory (this is known as the appropriate level of protection or acceptable level of risk) provided it is science-based, is applied consistently and considers the objective of minimising negative trade effects. Australia's appropriate level of protection (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 reduce biosecurity risk to this ALOP by using science-based risk assessments.

Australia has a number of bilateral free trade agreements with other countries, each of which deals with biosecurity issues in a slightly different way. However, all agreements are consistent with the SPS Agreement and 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 also set standards to help harmonise phytosanitary (plant health) measures.

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 pests by international trade, including diseases and invasive species. 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 is recognised by the SPS Agreement as the body responsible for the establishment of phytosanitary standards relating to plants and plant products in international trade, as well as to anything that can act as a vector for the spread of plant pests.

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 the Department of Agriculture and Water Resources, coordinates and provides input into four governance bodies:

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

Australia has contributed a number of technical resources to help other contracting parties better manage phytosanitary risks, including guidance on managing risks posed by sea containers and establishing and maintaining pest free areas. 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 pest status of parties, is available on the International Phytosanitary Portal at **ippc.int**.

Australia's membership of these IPPC bodies provides an important avenue for the Department of Agriculture and Water Resources to raise and address plant health matters in regard to international trade. The department consults with peak industry groups and state and territory governments to determine Australia's position on items for the IPPC agenda.

THE PLANT PROTECTION AGREEMENT FOR THE ASIA AND PACIFIC REGION

The Plant Protection Agreement is an intergovernmental treaty administered by the Asia and Pacific Plant Protection Commission (APPPC), a Regional Plant Protection Organisation (RPPO) recognised under the IPPC. 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.

Australia is involved in the following APPPC committees and regional working groups:

- Chair and member of the APPPC Standards Committee.
- Chair of the APPPC ePhyto Working Group.

Australia is also involved in leading a number of APPPC initiatives to enhance plant health and biosecurity capacity within the Asia Pacific including:

- A series of APPPC workshops over six years (2016–22) on surveillance management, methodologies and analysis.
- A workshop to be held in 2018 on irradiation as a phytosanitary measure.
- A workshop to be held in 2019 on risk categorisation and mitigation for semi-processed products under ISPM 32.

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.

CANBERRA AGREEMENT

Australia is also a member of a second Regional Plant Protection Body, the Pacific Plant Protection Organisation (PPPO), which 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 United States and French territories, together with Australia and New Zealand.

During 2016, the Pacific Plant Protection Organisation hosted an IPPC regional workshop to consider draft ISPMs and other IPPC activities funded under the Department of Foreign Affairs and Trade's Pacific Horticultural and Agricultural Market Access initiative. Australia currently holds the vice-chair position on the Pacific Plant Protection Organisation Executive Committee.

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 (EPBC) 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 product, the location of production and the shipping arrangements. The Department of Agriculture and Water Resources 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 allowed entry without a permit subject to standard conditions that are included in the *Biosecurity (Prohibited and Conditionally Non-prohibited Goods) Determination 2016*. Permits may also be required under the *EPBC Act 1999* for imports of internationally endangered species designated by CITES, the Convention on International Trade in Endangered Species 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.

Import risk assessment is an important part of Australia's biosecurity protection. Assessments are conducted by technical and scientific experts and can take several forms, such as import risk analyses (IRAs), pest risk assessments and policy reviews. IRAs have a timeframe for completion which is regulated by legislation and the process includes mandated public consultation periods and a formal appeal process.

Assessments 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 40 (on the next page) details policy advice finalised by December 2017, as well as draft policy advice that is currently in progress.

Review of import conditions database

AGRICULTURAL COMPETITIVENESS WHITE PAPER

A review of existing import conditions is underway, with funding from the Agricultural Competitiveness White Paper, to ensure that consistent risk management options and measures have been included in policies in the Australian Government's Biosecurity Import Conditions database, BICON.

The system, available on the Department of Agriculture and Water Resources website, contains the Australian import conditions for more than 20,000 plant, animal, mineral and human commodities.

About a third of the commodities in the BICON database have been reviewed, and already a number of pathways have been identified that require further intervention to ensure risks are addressed pre-border, including for cut flowers, asparagus and leafy vegetables.

Also with White Paper funding, the department is assessing import conditions for vegetable seeds from the following families in light of known and emerging risks: Apiaceae (carrot), Cucurbitaceae (including cucumber and melons), Brassicaceae (including cabbage and broccoli) and Solanaceae (tomato, capsicum).

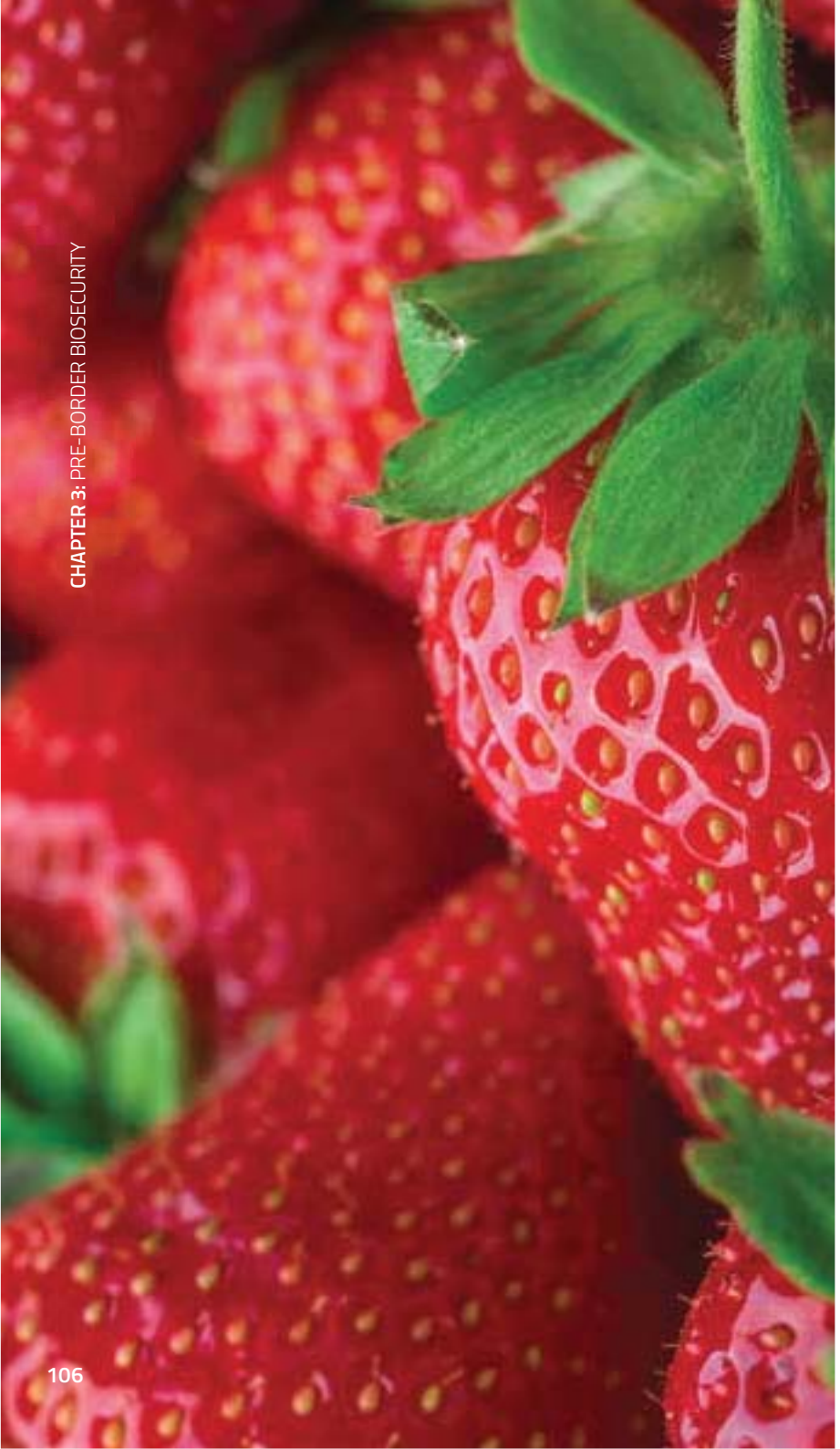
See Chapter 4 for more on BICON.

Table 40. Australian Government import policy advice, final and in draft

Policy	Country (from)	Year released
Finalised policy advice		
Apple and pear (budwood)	Generic	2002
Apples	New Zealand	2007
Apples	China	2010
Apples	New Zealand (review)	2011
Apples (Fuji)	Japan	1998
Avocado (revision)	New Zealand	2007
Baeodromus eupatorii for the biological control of the weed *Ageratina adenophora*	Source country	2014
Bananas	Philippines	2009
Candidatus Liberibacter psyllaurous (capsicum, nursery stock, potato tubers, tamarillo fruit, tomato)	New Zealand, USA	2009
Candidatus Liberibacter spp. and their vectors associated with Rutaceae	All countries	2011
Candidatus Liberibacter solanacearum (apiaceous crops, including carrot and celery)	All countries	2017
Capsicum	Korea	2009
Cherries (into Western Australia)	New Zealand	2003
Citrus	Egypt	2002
Citrus (revision)	Israel	2003
Cucumber green mottle mosaic virus pest risk analysis (host cucurbit seeds)	All countries	2017
Dactylopius tomentosus (fulgida) for the biological control of coral cactus *Cylindropuntia fulgida* var. *mamillata*	All countries	2015
Dragon fruit	Vietnam	2017
Drosophila suzukii (spotted wing drosophila)	All countries	2013
Durian	Thailand	1999
Durian (supplement)	Thailand	2000
Eueupithecia cisplatensis for the biological control of Parkinsonia, *Parkinsonia aculeata*	Source country	2012
Eueupithecia sp. 2 for the biological control of the weed *Parkinsonia aculeata*	Source country	2014
Fresh ginger	Fiji	2015
Ginger	Fiji	2013
Grains	Various	2006, 2007, 2008
Grapes (table)	India	2016
Grapes (table)	USA	2002
Grapes (table)	Chile	2005
Grapes (table)	Korea	2011
Grapes (table)	China	2011
Grapes (table)	Japan	2014
Grapes (table, revisions)	USA	2003, 2006
Grapes (table)	Sonora, Mexico	2016
Grapes (table, into Western Australia)	USA	2016
Grapevine propagative materials	All countries	2013
Hazelnut	Chile	2011
Hops propagative materials	All countries	2010
Island cabbage	Cook Islands, Fiji, Samoa, Tonga, Vanuatu	2013
Lentil (seed and human consumption)	All countries	2002
Lettuce (reinstatement)	New Zealand	2007
Lilium spp.	Taiwan	2013
Limes (Tahitian)	New Caledonia	2006
Lychee	Taiwan, Vietnam	2013
Lychee and longan	China, Thailand	2004
Maize (bulk)	USA	2003
Mandarin (Unshu)	Japan	2009
Mangoes	Philippines	1999
Mangoes	Taiwan	2006
Mangoes	India	2008
Mangoes	Philippines (additional areas)	2010
Mangoes (revisions)	India	2011
Mangoes	Pakistan	2011

Table 40. Australian Government import policy advice, final and in draft (continued)

Policy	Country (from)	Year released
Mangoes	Indonesia, Thailand, Vietnam	2015
Mangosteen	Thailand	2004
Mangosteen	Indonesia	2012
Mastrus ridens for the biological control of codling moth, *Cydia pomonella*	Source country	2013
Nectarines	China	2016
Olive (plants from approved sources)	Generic	2003
Oranges (sweet)	Italy	2005
Papaya	Fiji	2002
Peaches, plums and apricots (extention to nectarine IRA)	China	2017
Pears	Korea	1999
Pears	China	2005
Pears (Asian)	China	2003
Pears (Ya)	China	1998
Permitted seeds	All countries	2006
Persimmon	Israel, Japan, Korea	2004
Phalaenopsis orchids (nursery stock)	Taiwan	2010
Phytophthora spp. host propagative material	All countries	2015
Pineapple	Philippines, Solomon Islands, Sri Lanka, Thailand	2002
Pineapple (de-crowned)	Malaysia	2012
Pineapple (modification)	Philippines, Solomon Islands, Sri Lanka, Thailand	2003
Plectonycha correntina for the biological control of Madeira vine	Source country	2010
Pome fruit testing	China, Japan, Korea	2003
Poppy straw for processing	Turkey, Hungary, Portugal	2016
Potato propagative material (*Solanum tuberosum*)	All countries	2013
Pseudomonas syringae pv. *actindae*	New Zealand	2011
Salacca	Indonesia	2014
Seed contaminants (review of tolerances)	All countries	2000
Stone fruit	USA	2010
Stone fruit (into Western Australia)	New Zealand	2006
Strawberries	Korea	2017
Sweet corn (seed)	USA	2003
Tachardiaephagus somervillei for the biological control of yellow lac scale	All countries	2015
Taro corms (fresh)	Generic	2011
Thrips and Orthotospoviruses	All countries	2017
Tomato (truss)	Netherlands	2003
Tomato (truss, review)	New Zealand	2002
Tortricid moth, *Cydia succedana*, for the biological control of gorse, *Ulex europaeus*	Source country	2014
Wood packaging	Generic	2006
Zantedeschia spp. propagative material	All countries	2016
Draft policy advice (in progress)		
Apiaceous crop seeds (review of import conditions)	All countries	2017
Apples	USA	2009 (stop the clock provisions have been activated on this policy)
Cucurbitaceous crop seeds (review of import conditions)	All countries	2017
Dates	Middle East, North Africa	2016
Dragon fruit	Indonesia	2017
Fresh strawberries	Japan	2017
Fresh decrowned pineapple (*Ananas comosus*)	Taiwan	2017
Fresh breadfruit	Fiji, Samoa, Tonga	2017
Pest risk analysis for brown marmorated stink bug (*Halyomorpha halys*)	All countries	2017
Potatoes for processing	New Zealand	2012
Tahitian limes	Cook Islands, Niue, Samoa, Tonga, Vanuatu	2016



THE BIOSECURITY RISK ANALYSIS PROCESS

Risk analyses conducted by the Department of Agriculture and Water Resources are consistent with Australia's international biosecurity obligations to establish a balance between our international trade obligations and risks posed by goods.

Conducting a Biosecurity Import Risk Analysis

A Biosecurity Import Risk Analysis, under the *Biosecurity Act 2015* may be conducted where relevant risk management measures have not been established, or where they exist for a similar good 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.

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

The department is responsible for conducting each Biosecurity Import Risk Analysis (BIRA) as well as other risk analyses but the process can involve other stakeholders. Some covered in the BIRA guidelines, include:

- 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 during a BIRA.
- Other external experts, other government agencies and domestic and international stakeholders.

Improving industry liaison on import risk analysis

AGRICULTURAL COMPETITIVENESS WHITE PAPER

With White Paper funding, the Department of Agriculture and Water Resources has appointed a dedicated plant stakeholder engagement team. These officers work with stakeholders from the beginning of the risk analysis process to ensure they are kept well informed of the process and technical issues.

Two risk analyses published in 2017 – for dragon fruit from Vietnam and strawberries from Korea – were done trialling this new approach, with a Biosecurity Liaison Officer working successfully with industry and other stakeholders for the import risk analysis for the strawberry case.

Conducting a non-regulated risk analysis

A non-regulated risk analysis is a review of existing biosecurity measures that can be conducted when there is a change in biosecurity risk, and when there are technological advancements or process improvements that removes or minimises the biosecurity risk associated with a particular commodity.

These reviews are often driven by industry requests and usually result in more treatment options that importers can undertake to meet biosecurity requirements.

Non-regulated risk analyses are undertaken through an administrative process to meet Australia's international rights and obligations.

The department uses a similar technical methodology to conduct a scientific review of existing policy as it does to conduct BIRAs. As with BIRAs, specific adjustments and modifications to methods are explained in the individual reports.

Verifications, inspections and audits

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), 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 also extend to production areas and stock feed processing facilities to ensure compliance with Australia's import permit requirements.

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.

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 any 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, limit their spread, and reduce 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.

Analysing pest groups improves risk assessment efficiency

In 2017, the Department of Agriculture and Water Resources completed the first pest risk analysis for a group of pests, as part of an improved pest risk analysis process to improve effectiveness and consistency.

The group pest risk analysis considers the biosecurity risk posed by groups of pests across numerous import pathways. It applies the significant body of available scientific knowledge, including pest interception data and previous pest analyses, to provide an overarching analysis of the risks posed by the group.

The first group pest risk analysis considers the biosecurity risk posed by plant-feeding thrips insects (from the insect order Thysanoptera) that are, or are likely to be, associated with fresh fruit, vegetables, cut flowers and foliage imported into Australia as commercial consignments.

The emerging risks posed by all members of the virus genus *Orthotospovirus* (formerly *Tospovirus*) that are transmitted by some thrips was also assessed. The resulting policy supports the review of import conditions for asparagus and will aid other market access requests.

The International Plant Protection Convention (IPPC) defines pest risk analysis as "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 strength of any phytosanitary measures to be taken against it".

International Standard for Phytosanitary Measures (ISPM) 2: Framework for Pest Risk Analysis states that "Specific organisms may … be analysed individually, or in groups where individual species share common biological characteristics".

This is the basis for the group pest risk analysis, in which organisms are grouped if they share common biological characteristics – and as a result also have similar likelihoods of entry, establishment, spread and comparable consequences – thus posing a similar level of biosecurity risk.

Each group risk analysis is a building block that can be used to review existing trade pathways and can also be applied to prospective pathways for which a specific pest risk analysis is required. If the trade-dependent factors relating to the likelihood of entry on specific pathways have been verified, the group analysis can be applied.

This is the first group pest risk analysis to be finalised, with others to follow.

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 and inadvertent non-compliance.

Information and intelligence is shared between partners through legislative requirements, memoranda of understanding and agreements with international bodies. The intelligence is used to develop cargo profiles and campaigns, and to support identification and management of non-compliance, enabling resources to be targeted at the areas of greatest risk. See also High Priority Pests and National Priority Pests in Chapter 4.

Building biosecurity capacity in the Solomon Islands

The Department of Agriculture and Water Resources is working with Biosecurity Solomon Islands to deliver the Solomon Islands Biosecurity Development Program.

Phase one of the program ran from 2013 to 2016 and focused on developing middle management for Biosecurity Solomon Islands. Activities enhanced key operational, organisational, institutional, scientific and trade related functions.

Beginning in 2017 phase two of the program focuses on strengthening biosecurity for the coffee, cocoa and coconut industries. The program, running until 2019, aims to contribute to international efforts to combat damage to the country's palm species by the exotic coconut rhinoceros beetle.

Funding for the program is provided by the Department of Foreign Affairs and Trade.

Regional allies join us to fight Australia's top plant pests

AGRICULTURAL COMPETITIVENESS WHITE PAPER

Australia has long placed an importance on working with our nearest neighbours to better manage the risk of exotic biosecurity pests and diseases.

With funding from the Agricultural Competitiveness White Paper the Department of Agriculture and Water Resources is collaborating with biosecurity agencies in Papua New Guinea (PNG) and Timor-Leste to establish an 'early warning' mechanism for exotic plant pests and diseases.

Surveillance in these countries aims to detect the Australian Government's 'top 40' National Priority Plant Pests as well others that pose a risk to crops in nearby northern Australia.

Through White Paper funding, biosecurity specialists from the department's Northern Australia Quarantine Strategy (NAQS) and PNG's National Agriculture Quarantine and Inspection Authority (NAQIA) have carried out the first major plant health surveys in more than 17 years. Plant pest checks have been carried out in 'treaty' villages in coastal PNG, which are close to the Torres Strait Islands at the north eastern tip of Australia.

'Treaty' villages are covered by the Torres Strait Treaty, which regulates the movement of people, plants, animals and cargo. The treaty allows Torres Strait Islanders and coastal peoples from PNG to move freely for traditional activities, without the need for visas or passports.

These surveys have found no new evidence of exotic pests or diseases, providing reassurance to both PNG and Australia.

Plant health surveys have also been undertaken in Timor-Leste, again with no findings of major new pests or disease reported.

Importantly the surveys supported community engagement and improved knowledge of biosecurity amongst the governments and people of PNG and Timor-Leste, with capacity building critical to the success of managing biosecurity risks.

White Paper funding also allowed plant scientists from PNG and Timor-Leste to come to Australia in 2017 for training and collaboration with their NAQS counterparts, as well as industry, state government and research stakeholders.

Plant health surveys and community engagement work will also be undertaken in Australia's Indian Ocean Territories of Christmas and Cocos (Keeling) Islands through White Paper funding.

Lynne Jones (NAQS, Australia) and Marilyn Apa (NAQIA, PNG) join forces to detect plant pests. Image courtesy of the Department of Agriculture and Water Resources

Ensuring Australian exports meet required standards

Many Australian plant industries export a proportion of the food and fibre that they produce. A few, notably grains and cotton, export almost everything that is grown. Just as imports are subject to restrictions to protect plant health, exports must also meet conditions, including 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.

The Department of Agriculture and Water Resources provides 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, dried fruits, prescribed grain, and plants or plant products for which a phytosanitary certificate, or any other official certificate, is required by an importing country authority.

More specific export legislation is listed in Table 41. Strong linkages are maintained with exporters through industry consultative committees (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.

Table 41. Australia's export legislation, administered by the Department of Agriculture and Water Resources

Legislation
Export Control Act 1982
Export Control (orders) Regulations 1982
Export Control (Plants and Plant Products) Order 2011
Export Control (Prescribed Goods—General) Order 2005
Export Control (Hardwood Wood Chips) Regulations 1996
Export Control (Organic Produce Certification) Orders
Export Control (Regional Forest Agreements) Regulations
Export Control (Unprocessed Wood) Regulations
Export Control (Plants and Plant Products – Norfolk Island) Order 2016
Export Charges (Collection) Act 2015
Export Charges (Imposition – Customs) Act 2015
Export Charges (Imposition – Excise) Act 2015
Export Charges (Imposition – General) Act 2015
Export Control (Fees) Order 2015
Export Charges (Collection) Regulation 2015
Export Charges (Imposition – Customs) Regulation 2015
Export Charges (Imposition – General) Regulation 2015
Primary Industries (Customs) Charges Act 1999
Primary Industries (Customs) Charges Regulations 2000
Export Inspection Charges Collection Act 1985
Export Inspection (Establishment Registration Charges) Act 1985
Export Inspection (Quantity Charge) Act 1985
Export Inspection (Service Charge) Act 1985

Meeting biosecurity conditions of importing countries

To assist Australia's exporters, the Manual of Importing Country Requirements (MICoR) provides information on export conditions required to export plants and plant products from Australia. This includes details on 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 of export documentation for primary produce prescribed under the *Export Control Act 1982* and associated legislation.

The system provides certification for grain and horticulture 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.

With funding from the Agricultural Competitiveness White Paper the Department of Agriculture and Water Resources is also working to standardise instructional material across the export certification system. This includes packages for cold treatment, fumigation, irradiation and vapour heat treatment and processes to manage and audit accredited properties.

Negotiating market access

There is a high level of investment by the Department of Agriculture and Water Resources to negotiate protocols and build 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 done 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 technical market access 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.

For dried bulk commodities, 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 the Department of Agriculture and Water Resources on the industry's priorities for new or improved market access requests is provided through Hort Innovation's Trade Assessment Panel.

Table 42 details market access achievements since 2000, including access to new markets, improving opportunities in existing markets and preserving existing market access.

Table 42. Market access achievements for pollinator and plant product exports from Australia since 2000

Country	Commodity	Year achieved
Market access gained and restored		
South Korea	Oranges	2000
South Korea	Lemons	2000
New Zealand	Multiple products (from Goulburn Valley) – pest free area	2003
Peru	Olives, rooted cuttings	2003
USA	Tomatoes, greenhouse	2003
Brazil	Lychees, nursery stock	2004
China	Mangoes	2004
Morocco	Olives, rooted cuttings	2004
New Zealand	Mangoes, irradiated	2004
China	Citrus	2005
Japan	Cherries (from Tasmania)	2005
South Africa	Seed potatoes, microtubers	2005
South Korea	Mangoes	2005
South Korea	Citrus (unspecified)	2005
Japan	Apples	2006
New Zealand	Bananas – resumption of trade	2006
New Zealand	Papaya	2006
Thailand	Seed potatoes (from Victoria and WA)	2006
Thailand	Potatoes, brushed ware	2006
South Korea	Multiple products	2007
South Korea	Mangoes	2007
New Zealand	Lychees	2008
South Korea	Lupins	2008
United States	Cherries (mainland)	2008
India	Peanuts, processed	2009
Japan	Citrus (from Sunraysia) – seasonal freedom	2009
China	Table grapes	2010
European Union	Citrus	2010
India	Kiwifruit	2010
Japan	Citrus (grapefruit)	2010
South Korea	Cherries (from Tasmania)	2010
Taiwan	Cherries – access reinstated for non pest free areas	2010
Saudi Arabia	Lentils	2011
Bolivia	Sunflower seed, sowing	2012
Chile	Grapevine, nursery stock	2012
Egypt	Honey	2012
India	Pearl millet seed, sowing	2012
Indonesia	Table grapes, summerfruits and cherries	2012
Peru	Wax flower, rooted cuttings	2012
Peru	Paulownia, rooted cuttings	2012
Peru	Sorghum seed, sowing	2012
Peru	Chia seed, sowing	2012
Taiwan	Carrots	2012
Taiwan	Whole lupins, processing	2012
USA	Cotton seed, stock feed	2012
Uruguay	Hemp seeds, sowing	2012
China	Cherries – access after initiating a protocol and meeting Chinese requirements	2013
China	Canola – re-opening of trade after resolving quarantine issues preventing exports since 2009	2013
Ecuador	Macadamia nuts – access gained for macadamia nuts in-shell for consumption	2013
Ecuador	Barley – for consumption following a technical submission in 2008	2013
Malaysia	Creeping signal grass, sowing	2013
Peru	Teak seed, sowing	2013
Phillipines	Bana grass cuttings	2013
USA	Apples	2013
China	Grape seed	2014
Japan	Table grapes	2014
South Korea	Table grapes	2014

Table 42. Market access achievements for pollinator and plant product exports from Australia since 2000 (continued)

Country	Commodity	Year achieved
Market access gained and restored		
Thailand	Cherries	2014
Thailand	Summerfruit (apricots, plums, nectarines and peaches)	2014
USA	Mangoes and lychees	2015
India	Blueberries	2015
Vietnam	Table grapes – market access restored following suspension for all Australian fruit	2015
Vietnam	Citrus – market access restored following import suspensions for Australian fruit	2015
Saudi Arabia	Lentils – market access restored	2015
Mexico	Onion seed, sowing	2015
French Polynesia	Honey and other apiculture products	2016
China	Nectarines	2016
Japan	Melon (*Cucumus melo*)	2016
Japan	Watermelons	2016
Fiji	Honey bees (live queens)	2016
Vietnam	Cherries	2017
Chile	Vegetable seeds, sowing	2017
Myanmar	Plants and plant products	2017
Solomon Islands	Queen bees	2017
Saudi Arabia	Honey	2017
Iran	Lentils	2017
Iran	Logs without bark and sawn timber	2017

Country	Commodity	Year achieved
Improvements in market access		
New Zealand	Zucchini – removal of Queensland fruit fly from the pest list	2005
Thailand	Citrus – 2–3 degree cold disinfestation	2005
Malaysia	Mangoes – new phytosanitary requirements	2006
New Zealand	Tomatoes – improved conditions	2006
South Korea	Carrots – freedom from nematode	2006
South Korea	Citrus – 3 degree cold disinfestation	2006
Taiwan	Multiple products (from Tasmania) – reinstatement of Queensland fruit fly area freedom	2006
Japan	Citrus – 2–3 degree cold disinfestation	2007
India	Oats	2008
India	Mangoes, irradiated	2008
Indonesia	Table grapes – in-transit cold disinfestation	2008
Indonesia	Citrus – in-transit cold disinfestation	2008
Japan	Cherries (from Tasmania) – revised protocol	2008
Japan	Mangoes – reduced inspection rate	2008
Taiwan	Multiple products – 2–3 degree cold disinfestation	2008
United Arab Emirates	Multiple products – removal of Standard Operating Policy and Procedure requirement	2008
China	Citrus – revised protocol	2009
China	Mangoes – revised protocol	2009
China	Apples (from Tasmania) – improved conditions	2010
Japan	Grapefruit	2010
South Korea	Citrus	2010
USA	Cherries (from mainland) – stand alone cold treatment	2010
India	Macadamia nuts	2011
Indonesia	Table grapes – in-transit cold disinfestation from non pest free areas	2011
Indonesia	Citrus – in-transit cold disinfestation from non pest free areas	2011
USA	Citrus – 3 degree cold disinfestation	2011
India	Citrus (unspecified) – more favourable temperatures and flexible conditions	2012

Table 42. Market access achievements for pollinator and plant product exports from Australia since 2000 (continued)

Country	Commodity	Year achieved
Improvements in market access		
India	Citrus (unspecified) – 3 degree in-transit cold treatment	2012
New Zealand	Citrus (unspecified) – in-transit cold treatment	2012
New Zealand	Pears – in-transit cold treatment	2012
New Zealand	Table grapes – in-transit cold treatment	2012
New Zealand	Avocado – in-transit cold treatment	2012
United States	Apples	2012
China	Canola	2013
Hong Kong	Plants and plant products	2013
Indonesia	Soybeans – removal of a five per cent tariff	2013
Iran	Grain and seed	2013
Kenya	Wheat	2013
Libya	Grain and seed	2013
Phillipines	Fruit – revised protocol including favourable cold treatment conditions	2013
Qatar	Hay	2013
South Korea	All products – FTA negotiations concluded in December 2013	2013
Taiwan	Apples	2013
Thailand	Citrus – some import limitations removed by Thailand	2013
Thailand	Grain and seed	2014
China	Wheat and barley – access improved with new protocol	2015
Thailand	Citrus – more varieties approved for export from non pest free area districts	2015
Thailand	Table grapes – new temperature for cold treatment	2015
Thailand	Cherries – new temperature for cold treatment	2015
Thailand	Persimmons – irradiation for fruit fly control	2015
Korea	Cherries – improved inspection rates	2015
Japan	Walnuts	2016
Korea	Blood oranges and other sweet orange varieties	2016
Japan	Pumpkins	2016
USA	Mango	2016
USA	Lychees	2016
Colombia	Kangaroo paw nursery stock	2016
Bangladesh	Lentils	2017
Pakistan	Chickpeas	2017
Iran	Wheat	2017
Iran	Chickpeas	2017

Table 42. Market access achievements for pollinator and plant product exports from Australia since 2000 (continued)

Country	Commodity	Year achieved
Maintained in market access		
Malaysia	Cut and dried flowers	2004
South Korea	Potatoes	2004
Thailand	Citrus	2004
Various	Citrus	2004
Indonesia	Multiple products	2006
Canada	Summerfruit	2007
China	Citrus (unspecified)	2007
India	Grain	2007
Mauritius	Citrus	2007
Mauritius	Potatoes	2008
Thailand	Multiple products	2009
New Zealand	Mangoes	2010
New Zealand	Papaya	2010
New Zealand	Lychees	2010
Taiwan	Summerfruit (peach and nectarine)	2011
Thailand	Multiple products	2011
Thailand	Table grapes	2011
Thailand	Citrus	2011
Vietnam	Multiple products	2011
China	Table grapes	2014
India	Pome fruit	2012
Indonesia	Multiple products	2012
South Korea	Barley (malting), processing	2012
Taiwan	Summerfruit (plums)	2012
Vietnam	Multiple products	2012
Thailand	Apples	2013
Thailand	Pears	2013
Thailand	Avocado	2013
Thailand	Kiwifruit	2013
Thailand	Strawberries	2013
Thailand	Persimmon	2013
All markets	All products – implementation of a new security paper for export health certificates	2013
Taiwan	Apples – revised improved export protocol	2013
USA	Cottonseed, for stock feed – reinstated methyl bromide fumigation and new tolerance levels	2013
Indonesia	Wheat – access maintained for grain for consumption	2015
Vietnam	Seed, sowing	2015
Vietnam	Grains, consumption	2015
Vietnam	Nuts, consumption	2015
Vietnam	Plant based stockfeed	2015
India	Wheat flour	2016
Korea	Mangoes	2016
Myanmar	Plants and plant products	2017
New Zealand	Fruit fly host commodities	2017

PLANT PEST SURVEILLANCE SUPPORTS MARKET ACCESS

Governments and industries make systematic checks for exotic pests within our borders in order to have evidence that Australia does not have certain exotic pests, particularly those that could preclude market access for exporters. Nil findings are recorded and collated to provide evidence of absence of a pest from the country, state or region. These activities are part of Australia's plant pest surveillance system.

In recent years Australia's trading partners and international organisations have asked for more robust and quantitative evidence of Australia's plant health status to both justify import requirements and defend export certification. It is no longer sufficient to state a pest is 'not known to occur', or rest on the assurance of Australia being historically free of a particular pest. Consequently, surveillance is vitally important to market access.

Australia's ability to collect and analyse surveillance data is being improved through the Agricultural Competitiveness White Paper. Better access to more surveillance data will provide our trading partners with confidence in claims of pest absence and area freedom. This will make things easier for exporters, minimising delays and allowing producers to get a better price for their quality produce overseas.

Australia's plant pest surveillance programs are detailed in Chapter 7.

National Minimum Dataset Specifications for surveillance

An important step in building an improved national plant health surveillance system was taken in 2017, with the National Biosecurity Committee (NBC) endorsing national minimum dataset specifications (NMDS) for national sharing of surveillance data.

Agreement on the new standards enhances Australia's ability to collate, share, analyse and report national surveillance data on plant pests, including fruit fly. Reporting on the likely presence or absence of pests at a particular location and time is crucial to supporting market access negotiations.

To comply with NMDS, each record has its own unique identifier code, with comprehensive data captured on the location and type of surveillance activity, as well as the name and jurisdiction of the organisation entering the data.

The use of real time data tools such as AUSPest*Check*, and the introduction of the NMDS, will ensure that Australia continues 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.

AUSPest*Check* to provide a real-time picture of Australia's plant health status

AGRICULTURAL COMPETITIVENESS WHITE PAPER

The Australian Government funds a National Plant Health Surveillance Program for exotic pests of agriculture that is carried out by state agencies at points of entry and other high risk sites.

With funding from the White Paper, PHA is piloting the use of the national data tool AUSPest*Check* to improve the collection and collation of data from that program.

AUSPest*Check*, developed by PHA, can provide a real-time picture of pest numbers and spread, as well as information collected from surveillance activities in agricultural and environmental settings.

The trial will see the collection and analysis of data for the National Plant Health Surveillance Program move from a task involving manual 'number crunching' to one that is fully automated, allowing more rapid sharing of accurate plant pest data by industry, state and territory governments and the Australian Government.

As well as the benefits for market access, improved real-time data would also support a faster detection, eradication or containment response should one of the Australian Government's 'top 40' exotic and unwanted plant pests or diseases enter the country.

This is particularly important as the level of biosecurity risk continues to increase with rising volumes of passengers and cargo entering Australia.