Response

to the Senate Inquiry into

Australia's Biosecurity and Quarantine

Arrangements

Horticulture Australia

Contents

1. **Introduction**

2. **Overview of the horticulture industry**

3. **Production Statistics**

4. **Trade Statistics**

5. **Horticulture Australia Limited**

6. **Biosecurity and quarantine for the horticultural industry**

7. **Response aligned to the TOR**

Appendices

Appendix 1 – Table of horticulture industry members of PHA & biosecurity levy arrangements

Appendix 2 - High priority plant pests for the horticulture industry

1. Introduction

Horticulture Australia Ltd (HAL) has prepared this submission following feedback from peak industry horticultural bodies on the Inquiry into Biosecurity Bill 2012 and Inspector-General of Biosecurity Bill 2012 by the Standing Committee on Rural and Regional Affairs and Transport. This submission represents the combined interests of the Australian horticulture industry and follows on as a late submission to those industry specific submissions as already received by the Senate Enquiry.

2. Overview of the horticulture industry

Australia's horticulture industry comprises fruit, vegetables, nuts, flowers, turf and nursery products. The industry is labour intensive and mostly seasonal. It comprises mainly small-scale family farms—however, there is a growing trend towards medium to larger scale operations. Australia's horticulture industry has long enjoyed a domestic and international reputation for quality—primarily due to our high standards across all stages of the supply chain, from farm to consumer.

In 2009-10 Australia's horticultural industry was the nation's third largest agricultural industry—based on gross value of production. The horticultural industry contributes significantly to the prosperity of people living in rural and regional Australia. There are 63,300 people employed in Australia to grow fruit, vegetables and nuts for the domestic and export markets. A further 9,800 are employed in fruit and vegetable processing (excluding wine manufacturing) (Source: DAFF Australian Food Statistics 2009-10).

The value of production for annual and perennial horticultural crops are approximately equal, with the total area under production in Australia around 250 000 hectares.

The major horticulture growing areas in Australia include the Goulburn Valley of Victoria; the Murrumbidgee Irrigation Area of New South Wales; the Sunraysia district of Victoria/NSW; the Riverland region of South Australia; northern Tasmania; southwest Western Australia and the coastal strip of both northern New South Wales and Queensland. Nursery production generally occurs close to the capital cities. Some horticultural produce from the southern states is directed to processing. Queensland vegetables typically supply the southern states during the cooler June to October period.

Banana, pineapple, mandarin, avocado, mango, fresh tomato, capsicum, zucchini and beetroot production is concentrated in Queensland; stone fruit, oranges and grapes in New South Wales, Victoria and South Australia; processing potatoes in Tasmania; fresh pears, canning fruit and processing tomatoes in Victoria; and apples and fresh vegetables in all states.

Australia has a significant tropical horticultural industry including large irrigation schemes in the Ord River in Western Australia and the Burdekin River in Queensland. Bananas, mangoes, avocados, papaya, lychees, cucurbits (rockmelons, watermelons, pumpkins) together with tropical nursery plants and vegetables are important industries. There is also a

growing "rare and exotic fruit" industry producing fruits such as: rambutans, durians, tamarillos, carambolas, jackfruit and mangosteens.

Key issues currently faced by the horticultural industries include market access (particularly fruit flies and the strong Australian dollar), water availability, labour costs, loss of RD&E agency capacity, loss of effective chemical control (fungicides/insecticides/herbicides) through regulation and/or development of resistance, evolution of new biotypes of pests and pathogens and a new quarantine and biosecurity system.

Trade and market access issues

Market access covers new or improved entry for horticulture products (fresh fruit, vegetables, nuts, cut-flowers and nursery production) into markets where terms and conditions of access need to be negotiated on an inter-governmental basis with those authorities responsible for the control of import, health and safety regimes. This broad definition of market access covers phytosanitary (quarantine), sanitary (contaminants e.g. pesticides) and non-quarantine (e.g. exclusion, duties, quotas, tariffs, licences) requirements which need to be addressed through the established channels for authorising or improving access.

The recent White Paper Australia in the Asian century highlights significant opportunities for Australia's agriculture and food producers as a result of Asia's rise. Population and income growth in the region is driving increased demand for food. That increased demand for food looks set to be strongest in the horticulture sector, with demand for fruit and vegetables predicted to outstrip demand for all other agriculture commodities, including beef, dairy and grains, in the period through to 2050. Australian horticulture exporters are keen to take full advantage of these opportunities in Asia and in other key export markets. To access most major markets requires the negotiation of a phytosanitary protocol. The length of time it takes to negotiate these protocols is a major impediment for exporters.

Phytosanitary market access is the greatest single obstacle to the expansion of the horticulture industry's export performance. Currently the overall extent of this constraint is probably of the order of half again (around $400 million) of the current level of fresh horticultural exports (around $800 million) i.e. Australia has an annual export potential for primary horticulture of $1.2 billion with appropriate market access. Considerable effort and attention is being given by the industry to this area and additional government support would add to the effectiveness of current efforts.

The challenge for the Australian horticulture sector will be to identify and embrace new market opportunities, to successfully gain access to new international markets and to drive competitiveness through innovation in production and processing, enhanced efficiency, improved economies of scale. Horticultural industries will need to attract greater returns through better understanding of markets, greater control of endemic plant pests to satisfy overseas markets through improved in-field and end-point pest and disease control as well as improved on-farm and regional biosecurity practice. Horticultural industries will also be

aiming for greater equity through the supply chain, and through differentiating and developing specialised products to satisfy end-user needs.

3. Production Statistics

In 2009-10 Australian horticulture had a gross value of production of $8.407 billion, ranking third behind the meat and grain industries. The major product groups had the following gross value of production in 2009-10: fruit and nuts $4,060 million; vegetables $3,023 million; nursery, flower and turf production $1,324 million (Source ABS 7503).

The GVP of major individual commodities in 2009-10 were: grapes $1,110 million; potatoes $614 million; bananas $488 million; apples $402 million; tomatoes $347 million; oranges $303 million; mushrooms $236 million; strawberries $212 million; onions $180 million; and carrots $176 million (source ABS 7503). ABS did not publish values for some crops for which values in 2008-09 were: lettuces $187 million; and melons $159 million.

4. Trade Statistics

Australia has a trade surplus in fresh vegetables (that is, the value of exports exceeds the value of imports). However, because of high imports in the processed, frozen and other sectors, overall Australia had a "trade deficit" in 2010-11 for fresh and processed fruit, nuts and vegetables of $697 million.

Value (millions of dollars) of imports and exports of horticultural commodities

Imports	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
Fruit & Nuts	846	928	991	943	1022
Vegetables	621	731	842	744	786
Total	**1467**	**1659**	**1833**	**1687**	**1808**
Exports					
Fruit & Nuts	774	760	898	778	651
Vegetables	410	384	397	372	460
Total	**1184**	**1144**	**1295**	**1150**	**1111**

(Source: ABARES: Agricultural Commodity Statistics 2011, Table 134)

In 2010-11 Australia exported $1.111 billion of fresh and processed fruit, nuts and vegetables. Export of fresh produce (particularly fruit) is limited by quarantine restrictions in a number of countries including Japan, USA, mainland China, South Korea and Taiwan.

In 2010-11 Australia imported $1.808 billion of fresh and processed fruit, nuts and vegetables. A wide range of fresh produce is prohibited from entering Australia on the basis of quarantine restrictions. Produce is imported into Australia out of season or during periods of domestic shortage due to production failures, an inability to produce the commodity and/or production shortfalls relative to demand.

5. Horticulture Australia Limited

Horticulture Australia Ltd (HAL) was established in 2001 as a not-for-profit company that invests in research, development and marketing programs to provide benefit to horticultural industries and the wider community. HAL is owned by the peak industry bodies of 41 Australian horticultural industries covering fruits, vegetables, nuts, amenity and extractive crops.

As part of the Federal Government's commitment to rural research and development, horticultural industries can access matching Commonwealth funding through HAL for research and development activities.

HAL invests around $86 million of industry levies, voluntary contributions and matched federal Government funds annually in R&D programs designed to align with the strategic investment priorities of Australia's horticultural industries and the federal Government's Rural Research and Development priorities. An additional $15 million of industry levies is invested annually in strategic marketing programs.

The Australian Government matches statutory and voluntary industry contributions paid to HAL for R&D, up to 0.5% of the GVP of the horticultural industry (excluding the GVP for wine grapes). For more information visit HAL at www.horticulture.com.au

6. Biosecurity and quarantine for the horticultural industry

Australia's horticultural industries benefit by being relatively free of a number of serious plant pests that presently impact on a number of overseas countries. Freedom from these pests is primarily due to a combination of Australia's geographic isolation and a strong history of effective quarantine and biosecurity measures. To maintain this favourable position, Australia places a high priority on plant biosecurity, which in turn has driven the development of an internationally recognised plant biosecurity system.

The strength of the Australian quarantine and biosecurity system lies in its cooperative approach to ensure the biosecurity continuum is maintained and invasive plant pests are kept out, or impacts are minimised should the pest establish in Australia. Consequently, the horticulture industry remains committed to maintaining and improving Australia's quarantine and biosecurty system in an environment where; pest population levels and distribution are influenced by climate variability and increasing levels of trade and tourism; and where export markets and trade are taking a more stringent view of Australian's plant pest status.

Key features of the biosecurity strategy for horticulture

- Biosecurity is a shared responsibility; it is risk based and involves a number of partnerships between industry, government & other stakeholders
- Horticulture has 40 + industries and the challenge of protection against numerous invasive pests and disease
- Australia's borders are increasingly vulnerable to exotic pests and disease
- The horticultural industry strategy targets four areas - Prevention; Preparedness; Response and Recovery

Elements driving successful implementation of the strategy

- Industry commitment to protecting the viability of production & trade is by implementing measures to minimize the risk of serious pests becoming established in Australia
- An increasing number of horticultural industries (25) are now Plant Health Australia and EPPR Deed signatories
- There is an increased awareness of the threats invasive plant (and bee) pests and disease pose to industry profitability and market access

Elements constraining implementation of the strategy

- Smaller industries have limited resources to fully develop sound biosecurity strategies
- A lengthy consultation process is usually required to implement a new biosecuirty levy via PHA
- There is strong competition for available levy funds from competing R&D proposals and PIB priorities

Key directions for the strategy over the next six months

- Increased or ongoing biosecurity investment is planned by a number of larger industries (e.g. Banana, Nursery, Citrus & Vegetables)
- Ongoing stakeholder engagement will be required to ensure understanding of the new Federal Government Biosecurity & Quarantine Reform Process
- HAL will work closely with smaller industries to develop sound biosecurity strategies and Industry Biosecurity and Contingency Plans

The four main cornerstones of the horticulture biosecurity strategy are:

Prevention

The regulatory and physical measures to ensure that biosecurity incidents are prevented or their effects mitigated. Examples of horticultural research and development (R&D) in this area include;

<u>Understanding exotic plant pests and disease</u> – Study of the biology, ecology, detection methods, diagnostics, eradication and management of exotic plant pests and disease. Includes plant pest entry pathway analysis and overseas research.

<u>Surveillance</u> – The examination and testing of plant pest population or area to determine the presence or absence of pests, diseases or containments as part of the biosecurity continuum. Includes detection of plant or animal pests at the border or post-border.

<u>Regional pest management</u> – suppression, management and control or end-point-treatments of pests of quarantine concern to protect and maintain trade.

Preparedness
The arrangements to ensure that should a biosecurity incident occur, all resources and services needed to manage the response can be efficiently mobilised and deployed. Examples of horticultural R&D in this area include;

Industry / Government partnership – Industry membership of PHA, Emergency Plant Pest Response Deed (EPPRD) signatory and Incursion Levy agreed and in place with PHA. Participation in and understanding of the new national biosecurity and quarantine reform process.

Planning – Development of Industry Biosecurity Plans, Farm Biosecurity Manuals, Pest Specific or Pest Generic Incursion Management Plans or ensuring other preparatory actions are in place. Includes training for Peak Industry Bodies.

Awareness – Development of communications and awareness material on exotic plant pests or disease and training for awareness of existing or new invasive plant pests.

Response
Actions taken in anticipation of, during and immediately after a biosecurity incident to ensure that its effects are minimised. Examples of horticultural R&D in this area include;

Eradication – National program to eradicate incursion of specific exotic plant pest or disease when they impact on Australia's plant industries, trade, the economy, environment and the community.

Controlling the spread – Containment and movement controls, increased surveillance and interstate quarantine.

Managing the pest – The management of established pests and diseases or existing containments of significant risk.

Recovery
The reconstruction of physical infrastructure and restoration of emotional, social, economic and physical well-being after a biosecurity incident has been managed. Examples of horticultural R&D in this area include;

Re-establishment – Economic and scoping studies relating to production systems, planting new crops or trees, re-establishing production areas and facilities etc.

Improved varieties – Evaluation of new or superior plant varieties to increase future returns to producers.

Re-establishment of markets – Research to demonstrate evidence of absence or control of pests of quarantine concern.

7. Horticulture response aligned to the TOR

For Australia to maintain industry profitability, present trading status and reputation as relative pest free country, Australian horticultural industries need to be involved in biosecurity process and to be aware of and prepared for unwanted invasive plant pests.

The whole of horticulture response addresses the Senate Enquiry into Australia's Biosecurity and Quarantine Arrangements. It contains segments of horticultural industry submissions to date and is aligned to the five Terms of Reference as follows:

Apple and Pear Industry

Apple and Pear Australia Ltd (APAL) support the definition of Australia's ALOP within legislation to improve transparency in its application when assessing biosecurity risk. They also support a broadening of the definition of the Appropriate Level of Protection (ALOP).

APAL acknowledges the importance of the Biosecurity Import Risk Analysis process and understands Chapter 3 of the Biosecurity Bill 2012 and regulations will replace the Import Risk Assessment process with the BIRA process. They support the new process within the legislation to improve levels of accountability and transparency.

APAL firmly believes that the Director of Biosecurity should publish any guidelines setting out matters to be taken into account when conducting a BIRA, including factors to be considered when deciding whether to commence a BIRA process and how the level of biosecurity risk identified should be assessed against Australia's ALOP. They also support industry consultation on the new process.

APAL still support the existing arrangements that allow the Eminent Scientists group (ESG) to review the draft IRA report prior to release as a final IRA. APAL urges the government to make provision for the ESG as part of the review process.
APAL also seek more clarity on the role the Inspector General of Biosecurity (IGB) would play in the new appeals process and his role relating to continued importing during an IRA/BIRA process.

APAL questions the implications and definition of food as a biosecurity risk and its possible impacts on human health. They also question the level of rigor required for import food sampling within the new bill.

APAL supports the thrust of Chapter 6 (Prevention and Control Measures) and believe it important that Commonwealth powers be extended to include the ability to manage plant pests and diseases on-shore.

APAL is concerned that the new legislation requirements may reintroduce the system of accredited overseas sources for testing of bud wood and similar plant material that is imported into Australia.

APAL support Chapter 8 of the Biosecurity Bill (Emergency Provisions) and they note the bill does not take into account the EPPRD and no mention is made of the Emergency Animal Response Agreement (EADRA) or the National Environmental Biosecurity Response Agreement (NEBRA) in the bill.

Banana Industry

The Australian Banana Growers Association (ABGA) for a number of years have been vigorous in their efforts to protect the viability of their industry and keep potential invasive plant pests out of the country. They roundly welcome legislation which enables more efficient biosecurity systems, but maintain that all decisions must be based on sounds scientific advice. ABGC welcomes the intent of the legislation in 'Chapter 6 – Prevention and control measures' to enable involvement by the Commonwealth government agencies in dealing with pest and disease issues that may pose a biosecurity risk but are already in an Australian territory.

They have however raised concerns regarding the Biosecurity Bill 2012, Managing Biosecurity Risk and the Biosecurity Import Risk Assessment (BIRA) process. As signatories to the Emergency Plant Pest Response Deed (EPPRD), ABGA also ask why there is no mention of the EPPRD in the Biosecurity Bill 2012.

ABGA note that because the BIRA regulations have not been released, they were unable to comment, however do make some valid, more general comments about the process and what should be considered when drafting the regulations. These are;

I. It is not clear from the currently available draft Bill if there is an obligation on the Director of Biosecurity to consult with stakeholders on the scope of the BIRA prior to the announcement on the department's website that a BIRA is to be undertaken. HAL and the ABGC would like to see consultation with stakeholders on the scope and process of the BIRA prior to the commencement of the process, and a mechanism in place whereby Australian industries are able to nominate people with good scientific knowledge to be part of a risk assessment panel.
II. HAL along with its membership strongly supports the Beale review recommendation that stakeholders should be given advance notice of a draft BIRA being released. This will enable industries to engage people with appropriate expertise to comment on BIRAs prior to the release of the draft BIRA. Sixty days notice ahead of the release of an impending draft BIRA would be suitable. This would then mean that the scientific experts would then have a full 60 days to comment on the BIRA once it is released. Ideally the import risk assessment model should be released at the same time as the draft import risk assessment.
III. HAL members would, at the completion of the BIRA process like to see an additional step whereby there is a process to notify the affected industry if

there is intent to proceed with importation. Under the current legislation this is unable to occur.

IV. The BIRA needs to be based on science. In order to ensure good scientific rigour HAL sees the retention of the independent Eminent Scientists Group (ESG) as critical to this end.

V. Similarly to ensure transparency and scientific integrity, HAL supports the Beale recommendation that requires the listing of the authors and reviewers of the BIRA are listed in the final BIRA, in the same way import risk assessments are presented by the United States Department of Agriculture Animal and Plant Health Inspection Service.

Cherry Industry

Cherry Growers Australia (CGA) are fully supportive of initiatives aimed at building a system to better manage the risks of pests and diseases entering, establishing and spreading in Australia and potentially impacting on people, profitability, sustainability and the environment. They are welcome the new Biosecurity Bill 2012.

CGA and HAL recognise the need to improve tree crop varieties from overseas and the risk posed by imported fruit trees (e.g. virus's or rootstock disease). To this end there is strong supports the issues raised in this area as put forward in submissions by Apple and Pear Australia Ltd (APAL) and Summerfruit Australia Ltd (SAL). Specifically these were: the new Biosecurity Import Risk Analysis Process; Prevention and Control Measures; Accreditation of Overseas Approved Facilities; Emergency provisions; Australia's appropriate levels of Protection (ALOP) and its WTO and SPS Obligations and the need for Australian horticultural industries to gain market access and build their export base for the future.

GROWCOM

GROWCOM believe the new Biosecurity Bill 2012 and the Inspector-General of Biosecurity Bill present a perfect opportunity to remedy many deficiencies in the current biosecurity legislation and regulations. Growcom make comment on chapters 1, 3,6,7,8 and 12 as well as the Inspector-General of Biosecurity Bill, and note that they have become apparent to during consultations related to the IRA process for a number of commodities. HAL acknowledges these concerns and request that they be given due consideration.

Chapter 1

Growcom believe that the definition of "Appropriate Level of Protection" (ALOP) is inadequate and leaves room for re-interpretation of an acceptable level of quarantine risk.

Chapter 3

Growcom supports the reversal of the onus of proof for illegally imported goods. This simple change will result in a more efficient process and increase confidence in the biosecurity system. Growcom strongly supports the view expressed by DAFF at the Brisbane forum (18.7.2012) that the BIRA should be a purely scientific process. Growcom believes that this is a critical element of the new biosecurity legislation and argues that a significant overhaul is required to improve industry's confidence in the process.

The IRA process

A clear description of Growcom's position on the IRA process is provided in our Submission to Rural and Regional Affairs and Transport References Committee Inquiry into fresh pineapple imports from Malaysia and our submission to DAFF Biosecurity in response to the draft IRA for fresh pineapple imports from Malaysia. The BIRA process is described in only two pages of the new legislation. The legislation is unacceptably vague in its descriptions of key steps in the process. Growcom went on to suggest nine improvements in the IRA/BIRA process.

Chapter 6

Growcom supports the general goal to provide DAFF Biosecurity with broader powers to manage on-shore incursions of pests and diseases, as this will provide more options for the management of incursions. We do, however, have some concerns about some implications of these powers and believe that the legislation requires more detail to allow better analysis of these consequences. In particular, Growcom is concerned that the proposed powers may interact with the Emergency Plant Pest Response Deed (EPPRD, or "the Deed"). The EPPRD is a binding legal agreement between Plant Health Australia (PHA), the Commonwealth and state governments, and national plant industry body signatories. It details the management and funding of responses to Emergency Plant Pest (EPP) incursions, including the potential to reimburse costs of control measures to growers, and also formalises the roles played by plant industries in making management
decisions and contributing to costs. Growcom believes that it is currently unclear how a Biosecurity Control Order would affect compensation arrangements defined under an existing Deed. Growcom was surprised that the EPPRD does not seem to be mentioned in the legislation or supporting documentation.

Chapter 7

Growcom supports the main goal of providing a degree of shared responsibility and self-regulation through the development of approved arrangements with industry partners. Growcom also supports the goal of the new legislation to provide a simple and broad model for the arrangement to be established on a voluntary basis.

Growcom has two concerns about how these arrangements are described in the legislation. As described in our comments on chapter 6, we have concerns about how these arrangements may interact with the existing EPPRD in practice. We are also concerned about how shared responsibility may result in significant and disproportionate shifting of costs and there is no mention of any costs associated with applications and approvals. These areas need to be described in more detail.

Chapter 8
Growcom supports the goal to simplify the provisions for emergency responses within the biosecurity legislation.

Chapter 12
In discussing processes for cost recovery, this chapter must include a reference to The EPPR Deed. It should also include a description of how the legislation will interact with the Deed and any implications for producers.

Inspector-General
As mentioned above under chapter 3, it is essential that any review of a BIRA is fully independent of DAFF. Under the current arrangements, appeals and reviews of an IRA is limited to errors of process. There is no provision under current legislation or regulations to address poor quality or illogical analyses performed by DAFF Biosecurity. Any review of BIRA decision must also assess the quality and rigour of DAFF Biosecurity's assessment. This is essential to improve the level of accountability and transparency of the BIRA process.

Summerfruit Industry

Summerfruit Australia Ltd indicated they sent a submission in response to the Senate Biosecurity Enquiry; however HAL on checking found that their submission was to the Senate Committee for Better Regulation of Agricultural and Veterinary Chemicals. Summerfruit Australia's concern is that the Australian horticultural industry is being increasingly being asked to co-fund biosecurity risk, surveillance, trapping and pest control at both state and regional level. HAL acknowledges their perspective that, in this case the role of and responsibility for border protection lies with the Australian Federal Government, and that DAFF manages quarantine controls at our borders to minimise the risk of exotic pests and diseases entering the country.

The perennial issue for a number of horticultural industries is that to have Plant Health Australia (PHA) Biosecurity Levy in place to protect against invasive plant pests into Australia, many industries do not have the financial capacity required to fund large biosecurity preparedness, surveillance and pest monitoring programs on an ongoing basis. (Refer Appendix 1).

Apple and Pear Industry

APAL support initiatives aimed at creating a more responsive and flexible regulatory environment and believe the new Biosecurity Bill 2012 provides an opportunity to rectify existing deficiencies. They also believe while biosecurity risk must be managed efficiently and at a minimum cost, it is important that adequate resources are allocated to the task. HAL endorses their perspective.

Cherry Industry

Production of cherries and the requirement to access new export markets is expected to grow rapidly in the next few years. CGA and HAL believe that the framework which underpins our quarantine and biosecurity system must be based on sound science and sensible policy. CGA believe the Federal government should consider injection of funds into these areas, not by way of cutting back resources and moving to a full user pays system as they have seen in the export inspection area.

The cherry industry also believes the Australian Government should:

- Fully fund and increase staff and resourcing over the next 10-20 years to manage new quarantine and biosecurity systems.
- Look to use the highest level of ALOP's and even consider Tasmania's ALOP's as the level to review import requirements.
- Declare regions that have special quarantine measures and regional difference due to pest freedom etc and to restrict movement of produce grown outside the regions through these pest free regions to protect the trade generated from the pest free regions.
- Recognise that one size does not fit all in such a large continent as Australia, allowances need to be made to for different regional and climatic production areas and provision made for flexibility in the system.
- Continue to consult and communicate on import and export issues with the horticultural industry and all affected stakeholders, particularly as new quarantine and biosecurity technologies become a reality.

Nursery and Garden Industry

The Australian nursery industry is not a large importer of green life and has had a traditionally small export focus; however the current activities of the industry and access to improved plant varieties are vital to its survival and ongoing expansion. The recent changes to Plant Exports Operations, incorporating Horticulture Exports Program with regards to prescribed fees has already impacted on future opportunities for export among several nursery businesses.

Nursery & Garden Industry Australia like other HAL members is supportive of the broad goals to provide flexibility to efficiently and responsively manage biosecurity risks across the continuum, better manage risks that threaten Australia's human, animal and plant health and help Australian businesses by being more flexible. There is alignment on the approach taken with this legislation will better manage risks in a growing global environment through a streamlined and simpler to understand framework as established in the draft legislation. The Nursery industry understands it is imperative that the proposed framework maintains and indeed strengthens partnerships with relevant stakeholders. More importantly, the proposed framework must focus on decision making based on sound science. The key to this is maintaining and strengthening resourcing at state and national levels to demonstrate genuine investment into and shared responsibility of biosecurity.

Nursery & Garden Industry Australia and HAL believe that the independent review of quarantine and biosecurity arrangements as outlined in the Beale Review, which concluded that export certification functions should return to 100 per cent cost recovery as scheduled on 30 June 2009, should be accepted.

HAL supports the Nursery & Garden Industry Australia tabling of a number of concerns that attest to the legislation not affirming that the highest level of precautions should be taken in regard to biosecurity where reasonably practical by business, government and individuals and feels that the statement should be made in relation to this in Chapter 1.

Chapter 3 - Managing risks – goods brought into Australia

Paragraph 124 of this chapter details the process for a biosecurity officer in relation to requiring documents relating to goods to be produced. Under this clause, the nursery industry does not support the removal of any document from the place at which it was produced, however does not support the provision of copies or abstracts. The Nursery industry also seeks clarification on what constitutes 'reasonable grounds' for the destruction of goods and definition of a high value item.

The Biosecurity Import Risk Analysis (BIRA)

The Nursery and Garden Industry is greatly concerned that the current proposed import process does not include a strong independent and scientific reference group which will ensure impartiality and integrity. Furthermore, the proposed legislation does not provide industry with an independent appeal process which is based on science. This is of considerable concern to the nursery industry as the proposed biosecurity legislation has omitted the use of the Eminent Scientists Group (ESG) who is currently responsible for reviewing submissions and research in relation to Import Risk Assessment's. They also have concerns about the lack of industry consultation within this process.

Under Paragraph 172, the Director of Biosecurity may require security to be given in relation to conditionally non-prohibited goods. Industry is concerned that this will see unnecessary costs being borne to individuals. At present under the recent changes to Plant Export charging, all charges that rely on the Department of Agriculture, Fisheries and Forestry are charged including pre inspection, inspection, post inspection and 'other' activities. What will the implications be on 'security' and will the business have recourse for these decisions?

Chapter 6 - Prevention and control measures

The proposed legislation enables the Commonwealth to monitor and, where necessary, manage biosecurity risks when they emerge on-shore. On one hand, this is favourable to expedite the process following an incursion. However, the nursery industry is concerned that the decision pathway to implement the control measures is left to the discretion of the Director of Biosecurity. It is unclear if the Director of Biosecurity will be the sole individual responsible for managing matters relating to a pest response. In addition, a reference to agreements such as the Emergency Plant Pest Response Deed (EPPRD) should be qualified in this Chapter.

Chapter 7 - Approved arrangements

While NGIA supports the introduction of Approved Arrangements that provide for the person covered by the arrangement (the biosecurity industry participant) to carry out activities (biosecurity activities) to manage biosecurity risks associated with specified goods, premises or other things, serious concern is raised about how this change will alter existing Approved Arrangements surrounding approved private post entry quarantine facilities. There is concern regarding the level of costs required to embark on the training to undertake and implement these Approved Arrangements. The Nursery & Garden Industry would like to see the proposed introduction of new Approved Arrangements be accompanied with support systems to enable industry to transition to the new system.

Chapter 8 - Emergency provisions

No mention of the current EPPRD is made in relation to Emergency procedures. NGIA desires reference to be made to such industry agreements, in the Act or reference made in the Act to the applicable regulation where the EPPRD is acknowledged. This would also apply for the National Environmental Biosecurity Response Agreement (NEBRA) which sets out emergency response arrangements, including cost-sharing arrangements, for responding to biosecurity incidents that primarily impact the environment and/or social amenity and where the response is for the public good.

Chapter 11 - Governance & Officials

The proposed legislation provided an extensive list of Reviewable Decisions; however it fails to detail how to appeal an import decision from the perspective of stakeholders who are appealing against a decision from the Department to allow imports of particular products. There needs to be some flexibility within the legislation to add other categories of appeals to the list of Reviewable Decisions.

Inspector General of Biosecurity Bill

The process detailed under Part 5 in relation to handling appeals does not provide rigour behind the assessment approach. It is unclear from the legislation whether the Eminent Scientists Group (ESG), independent of Biosecurity Australia will be called upon to provide external scientific and economic scrutiny of BIRAs. The detail of the ESG in this process would be crucial in order to maintain true independence for all international appeals being brought against Australia.

Other

HAL acknowledges that a number of smaller horticultural exporters have complained about the present high cost of exporting and have stated the new AQIS reform cost structure will lead to their operation been uncompetitive in the global market.

Some of the smaller horticultural members of HAL have been slow in progressing their understanding of the implementation of the Beal Review recommendations. One of the problems they face is the need to better resource their biosecurity strategy to ensure they are aware of and prepared for any invasive plant pests and disease. The larger more mature industries are well advanced in this regard, however some of the medium and

smaller industries still struggle to resource such a strategy. One of the challenges faced by all industries is the sheer number of potential plant pests (some 305 categorised plant pests or diseases are listed in the EPPR Deed and 181 specifically impact on horticulture - Refer Appendix 2) and development of a sound system to prioritise investment towards high priority pests that may impact on their industry.

Vegetable Industry

Of the 12 chapters that comprise the Biosecurity Bill 2012 plus the Inspector-General of Biosecurity AUSVEG believe comment is needed on chapters 1, 3, 7 and 12 as well as the role of the Inspector-General of Biosecurity. HAL supports the airing of these queries.

Chapter 1

The placing of policy and also references to international agreements as part of the definitions appears risky. We are concerned that this exposes Australia to excess scrutiny from the World Trade Organisation (WTO) as well as placing our legislation at the mercy of unelected personnel who negotiate and make International Agreements. It is our belief that this is abrogating our independence to other authorities and potentially placing the country at the whim of bodies over which we have no control.

Chapter 3

(a) Import Risk Analysis

The area of Import Risk Analysis is of great concern. The legislation will merely enshrine current practice which has been shown to have many flaws. There appears to be nothing in this chapter that ensures any change to the current system or process. The issue of risk determination is not covered and thus the current system is apparently to be continued.

The ability to have independent reviews only extends to the process not the content. Thus, the position of Inspector-General is little more than window dressing in this context.

The review of decisions etc. rests within the body that made the decision in the first place. This is unacceptable and is out of step with both legal and scientific practice relating to review and appeal.

(b) Importation Decisions

The same comments apply here as for BIRA. Thus, the current status quo would appear to be largely maintained. There appears to be nothing in the proposed legislation that would bring any change to the current situation.

Chapter 7 - Approved arrangements

No definition is provided as to what is fit and proper person. AUSVEG seek clarification on this matter.

Chapter 12 - Miscellaneous including costs

The issue of cost recovery makes no mention of the EPPR Deed or how this or a similar instrument would be covered under the new legislation. This needs to be addressed.

The Deed is an important instrument and we believe this needs to be acknowledged in the legislation and certainly as various International Agreements are referenced in Chapter then so should the appropriate domestic agreements also be integrated. There is also no mention as to how cost-recovery for additional on-shore biosecurity will be covered or dealt with.

Inspector-General of Biosecurity Bill

An opportunity to seriously address current deficiencies in the system is being lost with the Bill in its present form. This position should be independent of DAFF and should be provided with powers to permit investigation not only of process but also content and rigour of DAFF work. Precedent would suggest that his type of position should be located within the Ombudsman's office. It should not be within DAFF. Lastly, there is nowhere in this Bill or the legislation that provides for comprehensive audit of DAFF performance. Whilst the Inspector-General Bill goes part of the way to address this function we believe a stronger and more comprehensive process is required.

Appendix 1

Table of horticulture industry members of PHA & biosecurity levy arrangements

Industry	**EPPRD Signatory**	**EPPRD Levy** Levy set at zero	**EPPRD PHA Sub Levy**
Almond Board of Australia	Yes	Yes	
Apple and Pear Australia Ltd	Yes	Yes	Yes
Australian Banana Growers Council	Yes	Funding sourced through alternate means	
Australian Lychee Growers Association			
Australian Macadamia Society Ltd	Yes	Yes	
Australian Mango Industry Association	Yes	Yes	
Australian Olive Association Ltd	Yes		
Australian Processing Tomato Research Council	Yes		
Australian Table Grape Association	Yes	Yes	
Australian Walnut Industry Association	Yes		
AUSVEG	Yes		Yes
Avocado Australia Ltd	Yes	Yes	
Canned Fruits Industry Council of Australia	Yes		
Cherry Growers of Australia Ltd	Yes	Yes	Yes
Chestnuts Australia Ltd	Yes		
Citrus Australia Ltd	Yes	Yes	Yes
Dried Fruits Australia	Yes	Yes	
GROWCOM (Pineapple)	Yes	Yes	Yes
Hazelnut Growers of Australia	Yes		
Nursery & Garden Industry Australia	Yes		
Onions Australia	Yes		
Passionfruit Australia			
Pistachio Growers Association Inc	Yes		
Strawberries Australia	Yes	Yes	Yes
Summerfruit Australia	Yes	Yes	Yes

Appendix 2

High priority plant pests for the horticulture industry (taken from Industry Biosecurity Plans)

Common Name	Life Form	EPPRD Category	High Priority Pest of Industry	High Priority Pest of Horticulture
Abaca bunchy top virus	Vir		Banana	Yes
Strawberry tortrix	Lep	4	Strawberry	
Summer fruit tortrix	Lep	2	Fruit	
Turnip moth	Lep		Grains	
Sugarcane whitefly	Bug	3	Sugarcane	
Leaf blight	Fun		Grains	
Cotton jassid	Bug		Cotton	
Navel orangeworm	Lep	3	Nuts	Yes
South American fruit fly	Fly		Citrus	Yes
Mexican fruit fly	Fly		Citrus	Yes
Hazelnut blight	Fun	3	Nuts	Yes
Strawberry bud weevil	Btle	3	Strawberry	
Boll weevil	Btle	3	Cotton	
Cotton aphid	Bug		Cotton	
Black knot	Fun	3	Plum and Prune	
Apple proliferation	Bac		Apple and Pear	Yes
Lychee longicorn beetle	Btle		Lychee	Yes
Sorghum shoot fly	Fly		Grains	
Avocado sunblotch	Vir		Avocado	Yes
Avocado sunblotch	Vir		Avocado	Yes
Tomato/potato psyllid	Bug	3	Tomato and Potato	
Carambola fruit fly	Fly		Avocado, Mango, Tropicals, Papaya	Yes
Melon fruit fly	Fly		Avocado, Summerfruit, Tropicals, Vegetables, Papaya	Yes
Oriental fruit fly	Fly	2	Apple and Pear, Avocado, Citrus, Summerfruit, Tropicals, Lychee, Papaya	Yes
Tropical fruit fly	Fly		Avocado	Yes

Fruit fly	Fly		Citrus	Yes
Fruit fly	Fly		Avocado	Yes
Fijian fruit fly	Fly		Avocado	Yes
Fruit fly	Fly		Avocado	Yes
Chinese citrus fly	Fly		Citrus	Yes
Fruit fly	Fly		Citrus, Tropicals	Yes
Olive fly	Fly		Olives	Yes
Papaya fruit fly	Fly	2	Avocado, Citrus, Mango, Summerfruit, Tropicals, Papaya	Yes
Fijian fruit fly	Fly		Avocado, Tropicals, Papaya	Yes
Philippine fruit fly	Fly	2	Avocado, Citrus, Tropicals, Papaya	Yes
New Guinea fruit fly	Fly		Citrus, Tropicals	Yes
Japanese orange fly	Fly		Citrus	Yes
Pacific fruit fly	Fly		Avocado	Yes
Peach fruit fly	Fly		Tropicals	
Banana bract mosaic disease	Vir	3	Banana	Yes
Banana bunchy top virus	Vir		Banana	Yes
Bean common mosaic virus	Vir		Grains	
Silverleaf whitefly	Fly		Cotton	
Blood disease	Bac	2	Banana	Yes
Leaf blight	Fun		Onion	Yes
Panicle blight	Bac		Rice	
Pinewood nematode sp complex	Nem		Plantation timber	
Huanglongbing (african strain)	Bac		Citrus	Yes
Huanglongbing (american strain)	Bac		Citrus	Yes
Huanglongbing (asiatic strain)	Bac	2	Citrus	Yes
Zebra chip	Bac	2	Potato	
European wheat stem sawfly	Bug		Grains	
Mango sudden death syndrome	Fun		Mango	Yes
Mango sudden death syndrome	Fun		Mango	Yes
Mango sudden death syndrome	Fun		Mango	Yes
Dutch elm disease	Fun	1	Nursery and Amenity	
Sugarcane woolly aphid	Bug		Sugarcane	
Brown spot	Fun		Sugarcane	
Cabbage seedpod weevil	Btle		Grains	
Blackline	Vir	3	Cherry	Yes

Sugarcane internode borer	Lep		Sugarcane	
Yellow top borer of sugarcane	Lep		Sugarcane	
Spotted stalk borer	Lep		Grains	
Sugarcane internode borer	Lep		Sugarcane	
Sugarcane stem borer	Lep		Sugarcane	
Oblique banded leafroller	Lep		Cherry	Yes
Leafminer	Fly		Grains	
Camellia petal blight	Fun	3	Vegetables	
South African maize leafhopper	Bug		Sugarcane	
Citrus fruit borer	Lep		Citrus	Yes
Citrus leprosis disease	Vir		Citrus	Yes
Mandarin stem-pitting	Vir		Citrus	Yes
Pecan scab	Fun		Nuts	Yes
Bacterial ring rot	Bac	3	Potato	Yes
Post bloom fruit drop	Fun		Citrus	Yes
Lentil anthracnose	Fun		Grains	
Lychee fruit borer	Lep		Lychee	Yes
Small avocado seed weevil	Btle		Avocado	Yes
Plum curculio	Btle	2	Apple and Pear, Cherry, Summerfruit	Yes
Small seed weevil	Btle		Avocado	Yes
Subterranean termites	Iso		Plantation timber	
Cotton leaf curl disease	Vir	3	Cotton	
Chestnut blight	Fun	2	Nuts	Yes
False codling moth	Lep	2	Pineapple, Summerfruit	Yes
Brown headed leafroller	Lep		Cherry	Yes
Plum fruit moth	Lep		Summerfruit	Yes
Filbertworm	Lep		Nuts	Yes
Grape phylloxera type B	Bug	3	Grape	
Grapevine phylloxera	Bug		Viticulture	Yes
Red-banded mango caterpillar	Lep	3	Mango	Yes
Onion fly	Fly		Onion	Yes
Bean seed maggot	Fly		Onion	Yes
Citrus whitefly	Bug		Citrus	Yes
Asian citrus psyllid	Bug	3	Citrus	Yes
Russian wheat aphid	Bug	3	Grains	

Sugarcane longhorn stem borer	Lep		Sugarcane	
Spotted winged drosophila	Fly		Apple and Pear, Cherry, Summerfruit	Yes
Rosy apple aphid	Bug		Apple and Pear	Yes
Grey pineapple mealybug	Bug		Pineapple	Yes
Western gall rust	Fun		Plantation timber	
Yellow vine mite	Mite		Viticulture	Yes
Banana skipper butterfly	Lep	4	Banana	Yes
Fire blight	Bac	2	Apple and Pear	Yes
Bacterial fruit collapse	Bac		Pineapple	Yes
Avocado blast	Bac		Avocado	Yes
Bacterial crown rot	Bac		Papaya	Yes
Mushy canker	Bac		Papaya	Yes
Lesser bulb fly	Fly		Onion	Yes
European stone fruit yellows	Bac	3	Cherry, Summerfruit	Yes
Oriental sugar cane thrips	Thri		Sugarcane	
Pitch canker	Fun		Plantation timber	
Fusariosis	Fun		Pineapple	Yes
Mango malformation disease	Fun	3	Mango	Yes
Mango malformation disease	Fun		Mango	Yes
Mango malformation disease	Fun		Mango	Yes
Mango malformation disease	Fun		Mango	Yes
Fusarium wilt of chickpea	Fun		Grains	
Fusarium wilt of canola	Fun		Grains	
Panama disease, Tropical race 4	Fun	2	Banana	Yes
Fusarium wilt of lentil	Fun		Grains	
Fusarium wilt of lupin	Fun		Grains	
Fusarium wilt	Fun		Cotton	
Bakanae	Fun		Rice	
Potato cyst nematode	Nem		Potato	Yes
Potato cyst nematode	Nem	3	Potato	
Flavescence dorée	Bac		Viticulture	Yes
Tospovirus	Vir		Vegetables	Yes
Black rot	Fun	3	Viticulture	Yes
Banana freckle	Fun	3	Banana	Yes
Cedar apple rust	Fun		Apple and Pear	Yes

Large seed weevil	Btle		Avocado	Yes
Cereal cyst nematode	Nem		Grains	
Carrot cyst nematode	Nem		Vegetables	Yes
Cereal cyst nematode	Nem		Grains	
Soybean cyst nematode	Nem		Grains	
Cereal cyst nematode	Nem		Grains	
High plains virus	Vir	4	Grains	
Glassy-winged sharpshooter	Bug		Citrus, Summerfruit, Viticulture	Yes
Sunflower moth	Lep		Grains	
Tropical nut borer	Lep		Nuts	Yes
Blanchard's canegrub	Btle		Sugarcane	
Canegrub	Btle		Sugarcane	
Pruinose canegrub	Btle		Sugarcane	
Ramu canegrub	Btle		Sugarcane	
White canegrub	Btle		Sugarcane	
Colorado potato beetle	Btle	3	Potato	Yes
Canegrub	Btle		Sugarcane	
Olive thrips	Thri		Olives	Yes
Tomato leaf miner	Fly		Vegetables	Yes
Potato/Pea/Serpentine leafminer	Fly		Vegetables	Yes
American leafminer	Fly	3	Onion, Vegetables	Yes
American serpentine leafminer	Fly		Grains, Vegetables	Yes
Rice water weevil	Btle	3	Rice	
Little cherry virus 1	Vir		Cherry	Yes
Little cherry virus 2	Vir		Cherry	Yes
Witches' broom disease	Unknown		Lychee and Longan	Yes
Blue disease	Vir		Cotton	
Powder post beetle	Btle		Plantation timber	
Western plant bug	Bug	4	Strawberry	Yes
Tarnished plant bug	Bug		Cotton, Strawberry	Yes
Asian gypsy moth	Lep		Apple and Pear, Plantation timber	Yes
Rice blast	Fun	2	Rice	
Maize dwarf mosaic virus	Vir		Grains	
Hessian fly	Fly	3	Grains	
Barley stem gall midge	Fly		Grains	

Wheat stem maggot	Fly		Grains	
Brown rot	Fun	3	Cherry, Summerfruit	Yes
Asiatic brown rot	Fun		Summerfruit	Yes
Longhorn beetles	Btle		Plantation timber	
Eumusae leaf spot	Fun		Banana	Yes
Black sigatoka	Fun	2	Banana	Yes
Armyworm	Lep	4	Grains	
European canker	Fun		Apple and Pear	Yes
European canker	Fun		Cherry	Yes
Pear fruit moth	Lep	3	Pear	
Powdery mildew	Fun		Citrus	Yes
Powdery mildew	Fun		Citrus	Yes
Persea mite	Mite		Avocado	Yes
Rough strawberry weevil	Btle	3	strawberry	
Cherry brown tortrix	Lep		Cherry	Yes
Papaya mealy bug	Bug		Papaya	Yes
	Bug		Lychee	Yes
Blue-striped nettle grub	Lep		Mango	Yes
Peach rosette mosaic virus	Vir		Summerfruit	Yes
Variegated cutworm	Lep	4	Vines and fieldcrops	
Sugarcane sidewinder	Bug		Sugarcane	
Sugarcane sidewinder	Bug		Sugarcane	
Sugarcane sidewinder	Bug		Sugarcane	
Sugarcane sidewinder	Bug		Sugarcane	
Sugarcane sidewinder	Bug		Sugarcane	
Sugarcane sidewinder	Bug		Sugarcane	
Sugarcane sidewinder	Bug		Sugarcane	
Sugarcane sidewinder	Bug		Sugarcane	
Brown blight	Fun		Lychee	Yes
Philippine downy mildew of maize	Fun		Grains, Sugarcane	
Sugarcane downy mildew	Fun	3	Sugarcane	
Sorghum downy mildew	Fun		Grains	
Downy mildew	Fun		Sugarcane	
Grapevine leaf rust	Fun	3	Viticulture	Yes
Mal Secco	Fun	3	Citrus	

Sunflower stem canker	Fun		Grains	
Texas root rot	Fun	2	Cherry, Cotton	Yes
Allium leaf miner	Fly		Onion	Yes
Red steele root rot	Fun	3	Strawberry	Yes
Potato late blight	Fun		Potato	Yes
	Fun		Avocado	Yes
Bark canker	Fun		Avocado	Yes
Sudden oak death	Fun	1	Avocado, Plantation timber	Yes
Vine mealybug	Bug		Viticulture	Yes
Green headed leafroller	Lep		Cherry	Yes
Sunflower downy mildew	Fun		Grains	
Omnivorous leafroller	Lep		Viticulture	Yes
Plum pox virus	Vir	2	Cherry, Summerfruit	Yes
Powdery mildew of cherry	Fun		Cherry	Yes
Golden apple snail	Gast	2	Rice	
Japanese beetle	Btle		Summerfruit	Yes
Potato mop top virus	Vir		Potato	Yes
Potato spindle tuber viroid	Vir	3	Potato	Yes
Olive moth	Lep		Olives	Yes
Mango gall midge	Fly		Mango	Yes
Grape mealybug	Bug		Viticulture	Yes
Bacterial canker/Avocado blast	Bac		Avocado	Yes
Angular leaf scorch	Fun		Viticulture	Yes
Rotbrenner	Fun		Viticulture	Yes
Coconut bug	Bug		Lychee	Yes
Carrot rust fly	Fly		Vegetables	Yes
Rust of allium	Fun		Onion	Yes
Rust of allium	Fun		Onion	Yes
	Fun		Onion	Yes
Asparagus rust	Fun	4	Asparagus	
Crown rust of barley	Fun		Grains	
	Fun		Onion	Yes
Barley stem rust	Fun		Grains	
Stem rust of wheat	Fun		Grains	
Rust of allium	Fun		Onion	Yes

	Fun		Onion	Yes
	Fun		Onion	Yes
Guava rust	Fun		Plantation timber	
Durum leaf rust	Fun		Grains	
	Fun		Onion	Yes
	Fun		Onion	Yes
Barley stripe rust	Fun		Grains	
Wheat stripe rust	Fun		Grains	
Leaf rust	Fun		Grains	
Pulvinaria scale	Bug		Sugarcane	
Sugarcane pyrilla	Bug		Sugarcane	
Laurel wilt	Fun		Avocado	Yes
Moko	Bac	2	Banana	Yes
Ramu stunt disease	Bac	2	Sugarcane	
Raspberry ringspot virus	Vir		Strawberry	Yes
Red clover vein mosaic virus	Vir		Grains	
Walnut husk fly	Fly		Nuts	Yes
Black cherry fruit fly	Fly		Cherry	Yes
Western cherry fruit fly	Fly		Cherry	Yes
Apple maggot	Fly		Apple and Pear, Cherry	Yes
Bulb mite	Mite		Onion	Yes
Bulb mite	Mite		Onion	Yes
Grape root rot	Fun	3	Grape	
Top shoot borer	Lep		Sugarcane	
South African citrus thrips	Thri	3	Citrus	Yes
Avocado thrips	Thri		Avocado	Yes
Stem borer	Lep	2	Sugarcane	
Pink stem borer	Lep		Sugarcane	
Wheat aphid	Bug		Grains	
Sorghum mosaic virus	Vir		Sugarcane	
Avocado scab	Fun		Avocado	Yes
Stubborn	Bac		Citrus	Yes
Leaf scorch	Fun	3	Sugarcane	
Avocado seed moth	Lep		Avocado	Yes
Mango pulp weevil	Btle	3	Mango	Yes

Strawberry latent ringspot virus	Vir		Strawberry	Yes
Drywood longicorn beetle	Btle		Plantation timber	
Pineapple fruit borer	Lep		Pineapple	Yes
Grassy shoot	Bac		Sugarcane	
Sugarcane mosaic virus	Vir		Sugarcane	
Sugarcane streak mosaic	Vir	4	Sugarcane	
White leaf	Bac	3	Sugarcane	
Potato wart	Fun		Potato	Yes
Sugarcane shoot borer	Lep		Sugarcane	
Spider mite	Mite	4	Banana	Yes
Strawberry spider mite	Mite		Cotton	
Kernel smut of rice	Fun	3	Rice	
Karnal bunt	Fun	2	Grains	
Tomato black ring virus	Vir		Strawberry	Yes
Tomato ringspot virus	Vir		Strawberry	Yes
Papaya fly	Fly		Papaya	Yes
Rust red flour beetle	Btle	3	Grains	
Khapra beetle	Btle	2	Grains, Rice	
Myrtle rust	Fun	1	Nursery and Amenity	
Onion smut	Fun		Onion	Yes
Lentil rust	Fun		Grains	
Verticillium wilt	Fun	3	Cotton, Olives	Yes
Canola verticillium wilt	Fun		Grains	
Watermelon bud necrosis	Vir		Vegetables	Yes
Watermelon silver mottle virus	Vir		Vegetables	Yes
Wheat spindle streak mosaic virus	Vir	4	Grains	
Peach X disease	Bac	3	Cherry, Summerfruit	Yes
Bacterial spot	Bac		Citrus	Yes
Bacterial blight	Bac		Viticulture	Yes
Bacterial canker	Bac		Avocado	Yes
Citrus canker	Bac	2	Citrus	Yes
Angular leaf spot	Bac	3	Cotton	
Strawberry angular leaf spot	Bac	3	Strawberry	Yes
Pierce's disease	Fun	2	Cherry, Citrus, Nuts, Summerfruit, Viticulture	Yes
Black twig borer	Btle		Mango	Yes

		305		181