

# **Quarantine and Biosecurity Review**

**Submission by the Australian Grains Industry Alliance**

28 April 2008

Secretariat  
Quarantine and Biosecurity Review  
GPO Box 858  
Canberra ACT 2601

To Whom It May Concern:

**Re: Submission to the Biosecurity and Quarantine Review**

The Australian Grains Industry Alliance (AGIA) appreciates the opportunity to make a submission to the Federal Government's *Biosecurity and Quarantine Review*.

The AGIA considered the current status and practice of biosecurity and quarantine in Australia, and have provided some preliminary recommendations to some of the issues identified specifically within the grains industry.

Should you have any questions arising from this submission, or would like to seek further clarification about any point made within this paper, then please contact either myself (on 03 5385 5089 or [weidpast@wimmera.com.au](mailto:weidpast@wimmera.com.au)) or the AGIA Secretariat on 02 6273 3000.

Yours sincerely

Mr Andrew Weidemann  
**Australian Grains Industry Alliance**

## Contents

Introduction.....	page 4
Background.....	page 4
Biosecurity and Quarantine issues for the Grains Industry:	
Increase in trade and use of cargo containers – Issues B3, C1 and C4.....	page 5-6
Surveillance and evidence for Phytosanitary declarations–Issues C1, C2, C3 and C4.....	page 7
Capacity and resourcing – Issues C4 and C5.....	page 8-9
Importation of plant material and risk assessment – Issues B3, C1 and C2.....	page 9-10
Border Quarantine - Issues C4, C5 and C7.....	page 10-11
Quarantine Research - Issues C1 and C6.....	page 11
Traceability through the grains supply chain – Issue B3 and C4.....	page 11
Key recommendations.....	page 11-12

## **Introduction**

This submission is provided by the Australian Grains Industry Alliance in response to specific biosecurity issues within the grains industry. References have been included to relevant sections within the Quarantine and Biosecurity Review Issues Paper provided by the Quarantine and Biosecurity Review Panel, 14 March 2008.

The Australian grains industry has recognised the need for a unified alliance to represent all aspects of the supply chain and to look at areas of common issues including biosecurity and quarantine. In 2008 the Australian Grains Industry Alliance (AGIA) was formed following two Australian Grains Industry Summits hosted by the Grains Council of Australia (GCA) in October '07 and February '08.

The AGIA is lead by a steering committee with broad representation reflecting the changed business environment in which our industry now operates. This includes representatives from organisations including; research and development, grain storage and handling, industry/crop production bodies, grain processors, grain marketers, and grain growers.

## **Background**

The Australian grains industry is a significant contributor Australia's economy with grain exports worth over A\$5 billion annually and Australian wheat and barley exports accounting for 14% and 18% of the world's traded grain respectively. Australia's geographic isolation has assisted with maintaining freedom from many serious plant pests found in grain growing regions in other parts of the world. The entry and establishment of two such pests, Karnal Bunt and Khapra Beetle, would have significant impact on the ability to trade Australian grain. This would result in closure of some markets, downgrading of grain prices and/or increased costs in testing and segregation to ensure pests are known not to occur in Australian grain exports.

Economic modelling has estimated that an outbreak of Karnal Bunt in Western Australia would have a national impact costing \$1.3 billion in reduced trade, eradication and control measures. Many other plant pests that are not currently present in Australia may not have such significant effect on trade, but would impact production by decreasing yield and/or, increasing production and management costs.

The Grains industry has recognised and responded to the importance of these plant pest threats through several preparedness and risk mitigation activities including:

- Development of the Grain Industry Biosecurity Plan.
- Strong support and involvement in the CRC National Plant Biosecurity.
- Initiation of the Grains On-farm Biosecurity Program.
- Development of awareness material for biosecurity plant pest threats.
- Developing contingency plans for key pest threats.
- Pre-breeding research and germplasm development to provide plant material with resistance to exotic plant pests.

### **Biosecurity and Quarantine issues for the Grains Industry**

#### **Increase in trade and use of cargo shipping containers – Issues B3, C1 and C4**

The total cargo shipping container market is projected to increase from a total of 5.2 million containers per annum in 2005 to 14.9 million containers by 2025. The impact of the partial de-regulation of bulk wheat exports is not expected to hinder this growth as containers provide small scale exporters with financially accessible market entry.

The continuing and projected increase in use of cargo containers and shortage of containers worldwide is placing considerable pressure on the ability of AQIS to inspect, treat and assess appropriate verification in a timely, effective and consistent manner. This greater use of containers for shipping export grain and pressure to process larger numbers of containers will increase the risk of both contamination of outgoing shipments or entry and infestation of new pests into Australia from trace amounts of grain or soil which can carry fungal spores or insects.

The current quarantine requirements for cargo containers include profiling to indicate risk of potential contamination [i.e. the country of origin and previous consignments], inspection for obvious signs of soil or plant contamination, and fumigation for containers with wall linings. While the current AQIS inspection for export containers seems adequate, this process is primarily designed to meet export phytosanitary requirements and does little to protect the Australian grain industry from exotic pest

diseases. Imported containers are visually checked for soil and debris prior to release from the wharf however, in the majority of cases, the cargo itself is not or can not be screened for pests and diseases.

Although it is recognised that inspections will only meet an Appropriate Level Of Protection (ALOP) rather than providing zero risk, the grains industry believes the lack of information provided with cargo container movement currently represents a risk to the industry. This risk flows to the end user / receiver of the container who would be unaware of the previous contents or country the container has come from.

There have been a number of cases in the last year where pests such as Khapra Beetle have been introduced into Australia by domestic importers. It is proposed that a prominent and identifiable risk management notification is clearly visible on all container imports. An example of this notification could be a colour coded sticker with low/ medium / high risk based on a matrix of commodity / country of origin / potential pest.

Another option for the industry could be to assess the adoption of a colour coded tag similar to the NLIS program used in stock movement for containers in and out of Australia to identify regions of importation and export approved points within Australia. An education campaign would be required to highlight the meaning of this notification to all container importers and to be aware that monitoring for plant pests is required.

Continued and improved surveillance and inspection at high risk sites such as wharves and ports is also needed to ensure that risk of establishment of key pest threats or contamination of pests into grain being exported through these areas is minimised.

The increase in private packers has also led to further penetration of containers into the agricultural areas, with some West Australian packers located in grain accumulation areas several hours inland from the port facilities. This creates additional risk with respect to the potential spread, detection and notification of the pest or disease. It is anticipated that this situation will increase as growers or grower co-operatives improve on farm storage capacity with a view to export. Therefore surveillance is critical around these high risk sites.

## Surveillance and evidence for Phytosanitary declarations – Issues C1, C2, C3 and C4

Since the inception of the World Trade Organisation (WTO) and the development of the Sanitary and Phytosanitary (SPS) agreement, plant health has become a major trade-policy issue. The basis on which Australia claims its area freedom from particular plant pests and diseases is extremely important both for ensuring market access and for managing trading partners concerns regarding unfair trade barriers.

While SPS Agreement provisions have enabled Australia to facilitate negotiations and gain new market access and improved access conditions, there is a perception amongst members of the WTO that Australia has a disproportionate number of complaints raised against it, and the time taken to resolve these issues takes far too long. More importantly, there is the perception that quarantine decisions in Australia are being used to protect domestic markets and are not based on science (Stanton, 2008<sup>1</sup>).

To ensure that these perceptions are corrected, scientific evidence to support area freedom claims should be transparent and result in high confidence levels that any given pest or disease can be detected. Of concern is that, for some pests, current data may be insufficient to prove area freedom, and it therefore would not be possible to provide a statement of area freedom or “known not to occur”.

Implementation of cost recovery has seen a decrease in the number of surveillance activities, sample submission to diagnostic facilities and identification of interceptions. This has led to a decrease in data collected by passive surveillance activities i.e. data from the submission of samples from grain growers, the community and from interceptions, as there is little perceived benefit for individuals in paying for unknown samples to be identified. There has been a subsequent reduction in both the expertise available as laboratories are down-sized, and in the quality of both surveillance and interception data. This in turn has affected the rigour of data collection and analysis and the ability to produce information for risk assessment.

In addition, surveillance activities for plant pests within the grains industry are conducted in an *ad hoc* fashion and procedures for providing information vary considerably between states. Furthermore, surveillance data are either collected manually or in regional/state databases and few records are

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<sup>1</sup> Stanton G. (2008).. Safe Trade or Safety Trade-off. Farm Policy Journal 5(1): 11-19.

consistently provided to the National Plant Surveillance Reporting Tool database developed by DAFF for the national collection of summary surveillance data.

There is considerable inconsistency in standards and methodologies for obtaining and providing information for phytosanitary certificates for grain export. For seed testing, not all testing laboratories are NATA accredited, and expertise and facilities differ between regions resulting in inconsistencies in data provided within declarations. Where area freedom is required within phytosanitary declarations, differences between expertise and resources also result in inconsistencies or differences in interpretation in the scientific evidence provided. Information is rarely scrutinised or audited and may be based on historical or insufficient data.

In the past, most surveillance and diagnostic activities were undertaken by state and federal agencies, and where competing priorities for funding allocations have seen activities withdrawn, there has been little coordinated handover to grains industry partners. Roles and responsibilities for different agencies and groups are often not clearly defined.

#### **Capacity and resourcing – Issues C4 and C5**

The grains industry is facing increasing difficulty in attracting and maintaining skilled personnel in all aspects of biosecurity through the grain supply chain. This is impacting on the provision of data for completion of phytosanitary certificates, emergency response management and diagnostic support for identification of plant pests.

Training of students in plant pathology and entomology is required to ensure the continuity of specialised knowledge and skills. Currently, many experienced staff are nearing retirement and this will lead to significant gaps in knowledge and skills. The use of short term contracts in the workforce creates difficulty in training and retaining specialists in specific areas and in maintaining continuity in surveillance data sets.

Training of personnel including government staff, scientists, agronomists, grain company staff, consultants and growers is needed to ensure that they are better able to recognise and report exotic pests and diseases. Training is also needed for diagnostic laboratories and for emergency response to manage incursions.

Another factor that has contributed to the reduction in capacity is the change to cost recovery in many diagnostic and data collection activities. This has eroded the quantity and quality of evidence of absence data and in diagnostic expertise as where time, resources and capacity are limited, collection and maintenance of biosecurity information has not been undertaken. Where diagnostic services have been subsidised, there is a large increase in the number of samples received resulting in greater confidence that biosecurity activities will successfully identify an exotic plant pest.

In addition, the provision of a free or low cost diagnostic service provides a source of training for new personnel within the grains industry. This is particularly important where staff turnover is high and new staff may be based in regional areas with limited access to training facilities.

Market drivers for biosecurity are not clearly defined for growers resulting in biosecurity being either unknown or considered as a secondary issue at best. Incentives to conduct surveillance and biosecurity risk mitigation activities are not well defined and while they can include financial, (e.g. the ability for grain companies to sell grain to new markets or for growers to receive increased premiums), legal (e.g. regulations or policy to require surveillance to be undertaken and recorded) or social (e.g. increased biosecurity awareness leading to a desire to improve the industry or community), these are not well identified or communicated.

### **Importation of plant material and risk assessment – Issues B3, C1 and C2**

The current process of open quarantine particularly for canola and pasture seed production presents some significant risks to Australian agricultural industries and in particular, risks associated with transmission of exotic virus diseases. Recent increased impacts of Tobacco Streak virus which is affecting the grains, cotton and horticultural industries is an example of significant cross industry impacts from an endemic viral disease.

The impacts of wheat streak mosaic virus have been significant in the Australian grains industry and the transmission of this disease through seed has highlighted the potential for viral diseases to escape the current quarantine process for cereals as this is based solely on visual assessment of imported material through the growth period.

The use of open quarantine also increases the potential risks of viral disease impacts, as visual differentiation of viral compared with abiotic symptoms in plants growing in field plots is extremely difficult. Improved processes within open quarantine are required to mitigate these risks.

The pasture industry in particular is not well supported in strategic biosecurity research and exotic plant pest contingencies and several pasture species are able to be imported as bulk seed with no post entry plant quarantine. This presents a potential biosecurity threat to other industries including grains and horticulture as, with the current appropriate level of protection limits for soil and weed seed contamination, there are risks of pests entering as contaminants, particularly with bulk seed sown directly into grain producing areas, as no additional quarantine procedures are in place. It is proposed that a system of open quarantine and monitoring for these crops for contaminants would significantly reduce this risk.

There are particular trans-Tasman risks to Australia due the significant level of agricultural research and seed increase for out of season northern hemisphere programs carried out in New Zealand. The amount of seed and plant material transfer and people travelling to New Zealand from northern hemisphere regions to carry out research activities, provides a gateway for incursion of a number of plant pests to Australia. The level of direct trans-Tasman travel and alignment of seasonal conditions is a significant risk to Australia and there have potentially been unconfirmed precedents with incursion to Australia of cereal rusts from New Zealand. The biosecurity review should particularly consider the risks of the trans-Tasman gateway for potential incursions to Australia.

### **Border Quarantine - Issues C4, C5 and C7**

There are issues for the grains industry in relation to monitoring of the biosecurity continuum primarily at the border. There are increasing threats for the Australian grains industry from incursions of exotic fungal pathogens such as the stem rust Ug99 and potential impacts on agricultural regions and the general environment from exotic eucalypt rust from South America. These fungal spores can travel on baggage, clothing and human hair and it is difficult to manage the risk of incursion for these microscopic organisms.

A process of border risk assessment, based on the travel destination where the exotic pests are endemic and location of return in Australia, can be combined with a strategic targeted advisory approach on precautions to take to reduce the risk to Australia. This strategy could potentially be used

to improve biosecurity culture and efficiency of programs in meeting an appropriate level of protection. This culture would increase the state of awareness and support the reporting post quarantine of unusual pests and diseases as currently promoted through the 'Spotted anything unusual?' program.

### **Quarantine Research - Issues C1 and C6**

There is a need to develop a robust and transparent evaluation framework for quarantine and biosecurity research. This will ensure that assessment of risk and economic impacts are evaluated in a consistent manner across industries.

Most grains industry research focus is currently through investments with the CRC for National Plant Biosecurity (NPB), Plant Health Australia (PHA), and the CRC for Australian Weed Management. Weeds biosecurity research is currently managed through the Weeds CUC which will be terminating at the end of June 2008.

There is good collaboration between the CRCNPB and PHA, however, weeds biosecurity research is not integrated into these programs. This is a major deficiency not only for grains, but the wider agricultural industry. There is clearly an opportunity to incorporate weeds biosecurity research and development priorities while improving institutional arrangements to deliver these programs.

### **Traceability through the grains supply chain – Issue B3 and C4**

In recognising the changing environment with expanding international trade and need for increased evidence of product integrity, components of the grains industry are developing and implementing tracing and testing systems through Quality Assurance and HACCP. These systems will also be useful in improving biosecurity information for tracing and record keeping and are best driven by industry and market demands.

## **Key recommendations**

The AGIA would like to propose the following key recommendations:

- That a prominent and identifiable risk management notification is clearly visible on all container imports.
- That we (the industry) implement improved surveillance and inspection at high risk sites such as wharves and ports.
- That we (both industry and Government) increase training of personnel including government staff, scientists, agronomists, grain company staff, consultants and growers to ensure they are better able to recognise and report exotic pests and diseases. Training is also needed for diagnostic laboratories and for emergency response to manage incursions.
- That we conduct a more thorough education program about the incentives to conduct surveillance and biosecurity risk mitigation activities.
- That a robust and transparent evaluation framework for quarantine and biosecurity research is developed.
- That we incorporate weeds biosecurity research and development priorities while improving institutional arrangements to deliver these programs.