





Australia's grape and wine industry welcomes the opportunity to provide comments to the Inspector General of Biosecurity Review. This submission has been written on behalf of the wine grape sector.

About Australian Grape and Wine

The Australian grape and wine sector is a driver of jobs, economic growth and prosperity across rural and regional Australia, contributing \$40 billion to Australia's economy from wine grape growing, winemaking and wine tourism annually. There are over 6000 growers of wine grapes across the nation, over 2000 entities that make and sell wine, and numerous allied businesses whose viability is closely linked to that of the sector. Australian Grape & Wine (AGW) was formed on the 1st February 2019 through the amalgamation of Wine Grape Growers Australia (trading as Australian Vignerons) and Winemakers' Federation of Australia. As the national association of grape and wine producers, AGW will focus on providing leadership, strategy, advocacy and support that serves Australian wine businesses now and into the future. Our vision is for a profitable, innovative and environmentally sustainable industry that has the capacity to respond to current and future challenges. With Parties consent, AGW intends to replace Wine Grape Growers Australia as signatory to the Emergency Plant Pest Response Deed (EPPRD) representing wine grapes.

Background

The wine sector is proud of Australia's biosecurity history. Tight quarantine measures both at our borders and State boundaries have prevented the entry of many serious pests and diseases that have had devastating impacts on grapevines elsewhere in the world. However, Australia must continue to evolve its efforts in a biosecurity landscape of increasing risk driven by climate change, an increase in risk pathways and skyrocketing global trade and tourism (the volumes of passenger, shipping and containerised cargo arrivals in Australia are set to increase by more than 70 per cent by 2025)¹. The wine sector welcomes the Federal Government's commitment to build a stronger national biosecurity system and its promise of \$313 million in new biosecurity spending over five years.

The wine sector holds concerns that within our borders the national biosecurity landscape is becoming increasingly complex and difficult to manage, due to trends such as agricultural expansion and intensification and urbanisation. The wine sector itself has specific trends that are driving biosecurity risk. These include:

- Increased consolidation of processing facilities importing higher volumes of grapes across regional and state boundaries;
- Increased international ownership of Australian wineries and vineyards, adding complexity to managing the system;
- Increased specialisation, with more contract vineyard management, pruning and harvesting, raising the risk of cross-state, cross-regional and cross-vineyard contamination;
- Increased wine tourism and improved transportation corridors.

¹ Littleproud, D (2018) Media Release sourced from <http://minister.agriculture.gov.au/littleproud/Pages/Media-Releases/igab-response.aspx>



Once established in Australia, an exotic pest outbreak such as BMSB will be complex to exclude from entering vineyards. Biosecurity in the wine industry extends beyond a standard agricultural risk matrix due to tourism, winery-based events that bring people into vineyard areas and the high demand for visitation to vineyards and wineries.

In response to an environment of increasing biosecurity risk, the grape and wine industry supports intervention early on in the biosecurity continuum. Prevention must be placed at the forefront of biosecurity efforts. The Department of Agriculture and Water Resources role in reducing the risk of exotic plant pest entry and establishment in Australia is critical.

The wine sector supports the following biosecurity principles be adopted by the Federal Government:

- Acknowledgment of the need for continued increase in biosecurity investment by both State and Federal Governments due to the escalating risk;
- Strategic prioritisation of funds that considers return on investment;
- Effective regulatory safeguards at the border and border processes that aim to, at the very least, maintain risk at existing levels;
- Adoption of the latest technologies in biosecurity risk management;
- Strategic biosecurity R, D and E to build a biosecurity system for the future.

The wine sector commits to its own role in managing biosecurity by supporting:

- Fair and equitable cost sharing arrangements between by State and Territory Governments, the Australian Government and industry groups;
- Collaboration with other industries and Government on becoming signatory to the Emergency Plant Pest Response Deed (EPPRD) and as members of Plant Health Australia;
- Fulfilling responsibilities of industry as outlined in the biosecurity statement of the EPPRD;
- Support for biosecurity research, development and extension and the use of latest technology.

Brown Marmorated Stink Bug (BMSB)

BMSB is a major horticultural, environmental and household pest that must be kept out of Australia. The pest is a concern to the wine sector for a number of reasons. Juveniles and adult bugs can feed on and damage grapes impacting both quality and yield. The volatile molecules excreted by BMSB have potential to be imparted to grape juice and at significantly high levels could potentially be transferable to wine. But more importantly, BMSB also has the propensity to infest many other crops causing economic crop losses and disruption to trade. The impact of a BMSB incursion to Australia in terms of homes and gardens, public amenity and nuisance value could be just as significant.

With increasing numbers of contaminated containers arriving into the country each year and a world-wide spread of BMSB, the ever-increasing threat of an incursion in Australia is front of mind within the wine sector.



The effectiveness of measures used by the department to manage the risks of BMSB entering Australia

AGW supports a timely, risk-based and well-resourced approach to inspection of cargo entering Australia. Inspections must be effective and efficient remaining cognisant to the impact of delays on Australian businesses, including wine producers. Assessing the risk of each container as high, medium or low based on recent history of detections is a logical approach however it is important not to exclude emerging risk countries from random surveillance. For example, it is of concern that a number of detections this year have come from China, a country not on the target risk list.

A comparison of the high risk countries identified by the New Zealand Government with those identified in Australia reveals some discrepancy; there are 10 countries in Australia identified as target high risk² whereas New Zealand lists 16 countries that are required to meet Minister for Primary Industry's biosecurity standards³. Additional to Australia's list are Austria, Bulgaria, Liechtenstein, Serbia, Slovenia, Spain and Switzerland.

This year has seen a significant increase in border intervention over last season. Whilst the wine sector is supportive of the Federal Governments move to increase border interventions, it holds concerns that during the current season (2018-19), the number of detections occurring at the border and post-border remains high and has risen dramatically. As at 18 January 2019, 112 dead and 20 live BMSB had been detected at the border, with 31 live and 19 dead BMSB post-border. The Fremantle and Port Melbourne detections were of particular concern because they were not associated with any goods or conveyance. The Lytton detection was of concern due to the fact that it was not associated with a target high risk good and therefore not subject to treatment prior to shipment. The Clayton detection arrived with treatment certification but despite having undergone approved treatment, a live bug was detected. The three live bugs found in the Dandenong shipment survived under shrink wrap and then subsequently a live bug was found around an unrelated consignments in the warehouse. These examples demonstrate the diverse range of pathways where BMSB are eluding the system. The number of post biosecurity detections arriving on air cargo reveals a need to review the risk status of the air cargo pathway for possible inclusion in BMSB seasonal measures.

BMSB Approved Treatment Options

There are three treatment options approved by the Department of Agriculture and Water Resources:

- heat treatment
- methyl bromide fumigation
- sulfuryl fluoride fumigation

² Department of Agriculture and Water Resources (2018) *Seasonal Measures for Brown Marmorated Stink Bug* sourced from <http://www.agriculture.gov.au/import/before/brown-marmorated-stink-bugs>

³ Biosecurity New Zealand *Brown marmorated stink bug requirements* sourced from <https://www.biosecurity.govt.nz/importing/vehicles-and-machinery/requirements-documents-for-importing-vehicles-machinery-or-equipment/brown-marmorated-stink-bug-requirements/>



AGW is of the understanding that these methods have been tested to provide a 99% level of efficacy at the 95% level of confidence. However, laboratory studies conducted by Walse (2015)⁴ showed that 384 g.h/m³ over 12 hours provides 99% efficacy at the 95% level of confidence (no survivors in 100).

This would require a substantially higher starting dose rate than what is currently approved in Australia.

There are two approved rate for sulfuryl fluoride fumigation rates in Australia:

- 24 g/m³ or above, at 10°C or above, for 12 hours or longer, with a minimum end point concentration of 12 g/m³
- 16 g/m³ or above, at 10°C or above, for 24 hours or longer, with a minimum end point concentration of 8 g/m³

By comparison a rate of 16g/m³ at 10°C or above, for 12 hours or longer was noted as being equivalent of 135 g.h/m³, substantially less than the rate provided in the study.

The efficacy of the approved treatment rates may be contributing to the number of detections in goods that have been subject to treatment. A review of the approved rates for sulfuryl fluoride treatments is recommended.

Notwithstanding the importance of ensuring treatment providers are compliant during the season, The Department of Agriculture and Water Resources should also put in place tighter measures in the lead up to next season to ensure that companies are performing BMSB treatment to the high standard that is required for consignments entering Australia. During the season there have been four separate suspensions of offshore treatment providers. These suspensions raise concerns regarding the assessment methods for accreditation of offshore and on-shore treatment providers. AGW recommends suspension policies continue along with a stricter process for accreditation shifting focus to addressing the problem up front.

AGW is confident that this review will reduce the serious threat of BMSB entering Australia. However managing the increasing biosecurity risk environment will involve further work; AGW supports a strategic approach that considers the benefits of:

- Latest technology eg. further investment into robotic or other automated container inspection systems to detect biosecurity risk material as containers are unloaded or stored at wharves;
- Assessment of current processes including surveillance activities and a cost benefit analysis of increased investment;
- Benchmarking our practices and learning from overseas experiences such as New Zealand.

⁴ Walse S.S. (2015) *Sulfuryl fluoride fumigation to control brown marmorated stinkbug, Halyomorpha halys*, submitted for publication.



The department's engagement and consultation with industry in managing the risks

AGW is committed to continuing to raise awareness amongst members and the broader viticulture sector. However, the need to raise awareness amongst the general public is a priority that requires greater investment by Government.

The Department's engagement and consultation with industry in managing the risks is facilitated through the Consultative Committee on Emergency Plant Pests and this process is an effective means of industry engagement. The National Talking Points provide valuable information however fall short of providing a resource that's ready for dissemination to industry. Communication with industry during an emergency response is important and is effectively facilitated by each industry organisation. The Government should acknowledge the considerable time and effort provided by industry in meeting these commitments.

While AGW plans to continue promoting biosecurity awareness and report BMSB incursions to members, it is important that news of the problem is spread more widely than agricultural industries. Pre-border, border and post-border communications should be tailored with touchpoints that meet the needs of the broad range of biosecurity stakeholders. The general community could be better educated about the potential threat of a BMSB incursion in Australia, to understand the consequences and to be more aware of their own role in managing biosecurity. Most importantly risk creators should be well-informed, not just those sending shipments but the entire supply chain who can play an active role in surveillance and risk management.

Summary of recommendations

Review of the list of target high risk countries;

A review of the effectiveness of the approved treatment options;

Dissemination of research underpinning the approved treatment measures;

An assessment of the accreditation of offshore and on-shore treatment providers;

Greater incentives for offshore container risk management;

Effective and efficient regulatory conditions and appropriate penalties for lack of compliance;

Increase in public engagement effort by Government, with particular emphasis on educating and informing risk creators.