



GRAPE AND WINE INDUSTRY SUBMISSION TO THE NATIONAL XYLELLA FASTIDIOSA ACTION PLAN 27th December 2018

Australia's grape and wine industry welcomes the opportunity to provide comments to the National Xylella Fastidiosa Action Plan. As the signatory to the Emergency Plant Pest Response deed, and member of Plant Health Australia, Australian Vignerons (AV) is currently the organisation with national remit in addressing biosecurity issues in the wine industry. More recently the Winemakers' Federation of Australia (WFA) has joined as a member of Plant Health Australia. As of 1st February 2019, AV and WFA will amalgamate to form a single industry peak body, Australian Grape and Wine. This submission has been written on behalf of the wine industry and has received input and endorsement from the following national and state-based organisations:

- Australian Vignerons: peak industry body for winegrape growers across Australia;
- Winemakers' Federation of Australia: peak industry body for Australia's Winemaker; and
- Vinehealth Australia: SA statutory authority governed by the Phylloxera and Grape Industry Act 1995 to protect vineyards from pest and disease;

The Australian Wine Research Institute also reviewed the submission.

The Australia wine industry

The Australian wine industry supports the economic, environmental and social fabric of 65 rural and regional wine regions across the country.

It is the only agricultural industry that is quite so vertically integrated at the production and manufacturing enterprise level based in rural and regional Australia. Winemakers grow grapes, manufacture the wine, package, distribute, export and market their own product. A large grower community provides wineries a diverse supply base to meet product and market requirements.

Across Australia's plant industries, the wine industry is unique for its direct interactions with its customers via wine tourism. Wine tourism bridges the gap which traditionally separates and disconnects consumers from the 'where' and 'how' of production. Vineyards and cellar doors offer the consumer a unique opportunity to directly engage with several of the stages of wine production, starting with the growing of the grapes. Wine tourism has experienced significant growth over recent years. This growth is supported by the Australian Government's \$50 million Export and Regional Wine Support Package which aims to showcase the nation's wine tourism offering and draw more tourists to our wine regions.

A sentiment of cautious optimism is growing in the industry, with strong demand for Australian wine in Asia, opportunities in other emerging markets, solid presence in mature markets and continued growth forecasts here in Australia.

At a glance

- \$40.2 billion injected into the Australian economy from grapegrowing, winemaking and wine tourism each year
- \$1.11 billion annual crush
- 1.79 million tonnes annual crush production
- \$609/tonne average grape purchase price
- 1.3 billion litres wine production
- \$2.76 billion exports
- 4th most valuable agricultural export
- 61% of production exported
- 2,400 wineries in 65 distinct geographic regions
- Over 6,000 grape growers
- ~173,000 jobs in regional Australia

The Importance of Biosecurity

Australia has some of the oldest grapevines in the world because of tight quarantine measures that has prevented the entry of serious pests and diseases. Notably, Australia has managed the spread of phylloxera (a pest which caused devastation of vineyards in Europe in the 19th century) and many of our famous wine regions remain free from this significant pest. Our old vines simply can't be replaced. As Andrew Caillard MW wrote in *Gourmet Traveller Wine* recently, Australia's remarkable living heritage of old vines is an important symbol of our fine wine identity. There is no other country in the world that possesses so many surviving 19th century vineyards. This narrative is immensely powerful in building our wine credentials in a highly competitive global market. Additionally, this old vine stock supports the development of high- quality new vineyards today. This demonstrates the industry's strong case for protecting its most valuable asset, its vines, from significant pests and diseases.

Maintaining viable and sustainable grape and wine businesses is an essential precondition to preserving and Australia's biosecurity. Although wine industry engagement and awareness of biosecurity is improving, it is slowly rising from a low base in terms of both the level of engagement of industry, and in particular, engagement in the wine grape growing community. Industry is currently enjoying an increase in winegrape and export prices, however the supply and demand imbalance that has existed during most of the last decade has impacted upon business resources and possibly also biosecurity awareness and prioritisation. We recognise that there is further work to be done as an industry, however it should be acknowledged that the extent of this will depend on resourcing.

The wine industry biosecurity environment

The national biosecurity landscape is becoming increasingly complex and difficult to manage, driven by skyrocketing global trade and tourism, agricultural expansion and intensification, urbanisation and climate change, the wine industry also has specific trends that are driving up biosecurity risk. These include:

- Increased consolidation, with regional grape processing being replaced by ‘super’ processing facilities that import higher volumes of grapes across regional and state boundaries;
- Increased international ownership of Australian wineries and vineyards, adding complexity to 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.

The culmination of these factors means that the risk of an exotic or declared endemic outbreak in vineyards has never been greater. The risk imposed through increases in tourism, for one example, is one that extends beyond a standard agricultural risk matrix. While certain biosecurity threats outlined above may not contribute to the risk of a *Xylella* incursion at the borders, they will have important ramifications in planning for an incursion response.

As the changing landscape continues to drive biosecurity risk, the likelihood that we may face a *Xylella* incursion in Australia increases. A well-resourced, co-ordinated and nationally-agreed approach is a critical risk mitigation strategy to safeguard the sustainability of our industry. This highlights the importance of a plan that can be practically implemented and remains relevant to industry practitioners. In response to an environment of increasing biosecurity risk, the wine industry is currently committed to the following:

- Advocating for effective regulatory safeguards at national and state borders
- Promoting awareness of and compliance with biosecurity regulations by industry and those across the supply chain
- Improving adoption of farm-gate hygiene practices by vineyard owners
- Investing in prioritised biosecurity research and development
- Enhancing the ‘healthy vine’ messaging by cellar door and wine tourism staff with tourists
- Developing technology powered by geospatial data to drive a relationship-rich digital biosecurity ecosystem
- Improving capability and capacity to respond effectively to an incursion
- Enhancing surveillance for exotic and significant endemics and capability to capture information to support area freedom status

There is always more that can be done and the recent announcement of a *Xylella* Co-ordinator position part-funded by Wine Australia and Hort Innovation is a significant step towards strengthening awareness, co-ordinating R, D and E activities and overseeing National priorities.

***Xylella fastidiosa* impact on grapevines (Pierce's Disease)**

Xylella fastidiosa, known to cause Pierce's disease in grapevines, devastated vineyards in the Los Angeles Basin in the 1880s, and again in the 1930s and 1940s. In the late 90's when the highly efficient vector the glassy-winged sharp shooter became established in California, it was reported that California faced its biggest threat to grapevines since phylloxera. The disease, costs California more than \$100 million per year¹. Outside the USA Pierce's disease effects grapevines in both Central and South America.

Symptoms in grapevines are similar to water stress including scorched leaves, browning and loss of leaves, stunted shoots, reduced fruit size, dieback, and death of the vine. Leaf scorching typically begins at the margins of leaves, or in the lobes of some varieties and moves inwards. Varieties vary in their susceptibility to Pierce's disease and the timing of infection is said to play an important role. Insecticide treatments to control the vector in areas adjacent to vineyards have provided some means of control however are not so effective in particularly susceptible varieties such as Chardonnay and Pinot Noir in vines of less than 3 years of age. Despite grapevines being a perennial crop, infections can survive the winter to cause chronic Pierce's disease. Although some rootstock species are resistant to Pierce's disease, a resistant rootstock does not confer resistance to the susceptible *Vinifera* varieties grafted on to it².

Submission Summary:

The grape and wine industry is dedicated to the need for this National *Xylella fastidiosa* Action Plan and is supportive of the actions outlined in the draft. Our vision is that Australia should maintain our status as *Xylella* free and this should be clearly stated in the plan.

The identification of *Xylella fastidiosa* as Australia's top National Priority Plant Pest in 2016 is reflective of its significance to Australia's plant industries and environment and the economic penalties that an incursion could impose on our agricultural sector. The ability to put in place a timely implementation plan for actions relating to this plan are therefore critical to managing this threat. The knowledge gaps that exist around incursion preparedness are a concern to our industry and we are comforted that efforts to address these gaps are featured throughout the plan.

The plan references ABARES report on the Economic impacts of *Xylella* on the Australian winegrape and winemaking industries suggesting that the potential economic impact of an incursion is over \$7.9 billion³. This figure was suggested as a maximum cost calculated as net present value of lost gross margins and replanting costs over a 50 year time frame; this scenario assumes that all Australia's vineyards are suitable to infestation. It is also worth noting that the ABARES report states that 'prevention activities are likely to cost less than an eradication campaign' and as such, the importance of the Department of Agriculture and Water Resources emergency quarantine measures implemented in late 2015 should be emphasised.

¹ <https://www.ucdavis.edu/news/new-insight-why-pierce's-disease-so-deadly-grapevines/>

² <http://ipm.ucanr.edu/PMG/r302101211.html>

³ ABARES (2017) sourced from

http://data.daff.gov.au/data/warehouse/9aab/2017/EcolImpactsXylella/EcolImpactsXylellaFastidiosa_20171123_v1.0.0.pdf

Although the report focused on the grape and wine industry, there are a range of other potentially susceptible crops that would suffer similarly devastating economic losses. The economic consequences of an incursion will almost certainly be significant for a range of agricultural industries and understanding the scale of their magnitude in order to better understand the benefits of national investment is imperative.

Further details of our support and suggestions are provided below with key suggestions highlighted in italics.

The plan outlines opportunities to gain knowledge from outbreaks in other countries. An analysis of existing literature is one way to gain such knowledge however travelling to a *Xylella* affected area would provide an even more valuable opportunity to gain further understanding of knowledge gaps. Reflective learning based on the experience of other countries will contribute to prevention and also response. Our industry strongly supports the development of national and international linkages and partnerships.

The plan should further emphasise the opportunities in seeking knowledge from overseas experience, especially those 'grass roots' level experiences; the plan should also be adaptive acknowledging that we will continue to learn from overseas experience.

The plan conveys the need for shared responsibility between horticulture industries and government. Whilst we acknowledge that this is fundamental to the success of plan, buy in from industry participants at an 'on the ground' level requires industry engagement and this remains a challenge that requires resourcing consideration. The plan would be significantly strengthened if it went further to considering roles, responsibilities and resourcing.

The plan states part 3.2 Structure of the Plan that 'Implementation of actions will need to be assessed in terms of current work programs, resourcing and funding'. This undermines the importance of the plan. Communication with industry is another key to the success of the plan. The grape and wine industry would like to continue to maintain an active role in monitoring progress against the plan.

Reconsider this statement and add a section under each action outlining KPIs relating to the actions and details of a project reporting framework (such as monitoring, evaluation reporting and improvement). Summarise actions, not just by priority but by target year of completion. Add a section that refers to funding mechanisms.

Provide further clarity as to where the roles and responsibilities lie between - Industry, Australian Government, State and local Government, research organisations, representative bodies and individuals. Strengthen the requirement for effective communication between these parties.

Opportunities that exist for developing overseas partnerships are a theme throughout, and this should be prioritised.

Communication with industry along with programs that effectively inform the community more broadly require considerable funding, but are critical components of preparedness and detection.

The plan should be a living document adaptive to new information.

The plan refers to the Jurisdictional legislation relevant to *Xylella* spp. South Australia's Phylloxera and Grape Industry Act 1995 contains legislative provisions for the protection of vineyards in South Australia from disease.

Suggest inclusion of the Phylloxera and Grape Industry Act 1995 Act in Table 2

Prevention

The Plan successfully highlights the key issues in terms of prevention of a *Xylella* incursion in the Actions 1.1 through to 1.5. Testing the pathogenicity of Australian native plants and gaining further knowledge of potential insect vectors are important knowledge gaps to address.

The significant concern that once established, eradication of *Xylella* will be unlikely highlights the importance of prevention as the most important set of actions on the biosecurity continuum. Increasing preparedness through the Horticulture Innovation and Wine Australia *Xylella* project is strongly supported and our industry reiterates the importance of actions that minimise the threat of *Xylella* entering into Australia, especially at our borders.

Detection

The grape and wine industry supports the need to increase diagnostic capacity including field based diagnostic tools as outlined in sections 2.1, 2.2 and 2.3. As an industry we are encouraged to see that some of this work has already been initiated. We also strongly support the use of early detection surveillance as outlined in 2.4.

While the industry supports a cost benefit approach to national surveillance strategy in 2.5, this section of the plan requires greater clarity in its wording. It should be cognoscente to resourcing requirements and acknowledge any synergies that may exist with existing surveillance strategies (eg citrus) and those currently in development (eg temperate fruits).

Response

The wine industry supports the development of a National contingency plan with supporting operational procedures as a high priority.

The *Xylella* simulation in November 2018 highlighted that there was a lack of knowledge relating to incursion management related decisions such as appropriate host free periods and buffer zones for containment. These knowledge gaps will need to be addressed before a meaningful response plan can be developed.

As an industry we are supportive of a national data information system and/ or an app that allows for a range of pests to be reported as outlined in 3.2 as a simple short-term action that would assist in response. This action could potentially afford benefits to the Australian biosecurity landscape more broadly than *Xylella* alone. The grape and wine industry has the ability to promote the uptake of such a system amongst our grape growing community.

Drawing upon overseas experience to identify control and management options relevant to Australia will be important, as will ensuring that we have access to adequately skilled individuals to manage a response.

Cross-cutting issues

The plan highlights a range of cross cutting issues all of which are supported.

In particular, the high prioritisation of international collaboration and developing overseas partnerships is strongly supported as being of high priority. Habitat and climate suitability for the establishment of *Xylella* in various crops is a significant factor in determining the potential spatial distribution and is an important knowledge gap that should be addressed as part of the plan.

Industry supports the need for effective communication and can potentially take an active role in an industry engagement strategy. However it is important that the plan acknowledges that such activities require resourcing.

Targeted communication programs to peri-urban and backyard gardeners has the potential to assist in prevention and detection and our industry would be encouraging of any investment by the Federal Government in order to achieve this action.

An overarching communication strategy should be elevated in terms of its priority status and suitably resourced.

Implementation

The plan acknowledges that 'success will depend on a high level of cooperation between a horticultural industries, all levels of government, non-government organisations and individuals, experts and research agencies' and that 'success will depend on all participants understanding and assessing their roles and responsibilities'.

An implementation plan should either form part of this plan or be developed within 6 months of the plan being endorsed. The plan will be far more effective if roles and responsibilities are clearly understood, and reference is made to funding mechanisms.

Monitoring Evaluation and review

This section of the plan falls short of providing detail as to how progress towards implementation of the plan is reported back to industry. The plan should be a living document that acknowledges the need to incorporate and adapt to new learnings throughout the life of the plan.

Given the changing environment, the plan should be reviewed on an ongoing basis to allow for incorporation of new information. Time frames (short -term and long-term) do not portray any sense of urgency.

The plan would be strengthened by the inclusion of KPIs, time-frames and a reporting framework that includes reporting back to industry.