Biosecurity and viticulture

Ask the AWRI

Australia has a fortunate status as an island nation that is free of many pests and diseases found in other countries, but from time to time new issues are discovered. Most of these are not of major concern, but are nevertheless dealt with seriously to protect Australia’s valuable agricultural industries. This column presents answers to some common questions about Australia’s biosecurity management system.

What is biosecurity?
Biosecurity can be defined as the measures taken to reduce the risk of transmission of pests and diseases and invasive species. In Australia, the government-industry partnership for plant biosecurity is coordinated by Plant Health Australia (PHA). Australian Vignerons is an industry member of PHA, representing the wine-grapes industry.

What are exotic pests?
Exotic pests and diseases are those that are not currently present in Australia. Endemic pests and diseases are those that are established in Australian vineyards, such as powdery and downy mildew and some viruses. There are also some endemic pests and diseases (e.g. phylloxera) that are isolated to particular locations in Australia, and these are subject to strict regulatory and quarantine protocols. Plant Health Australia has identified a list of high priority exotic pests of grapevines, based on their potential to enter, establish and spread in Australia and the cost of control measures. This list includes Pierce’s disease (Xylella), Oriental fruit fly and Black rot. For a full list of high priority exotic pest threats to viticulture, including photographs, visit the Plant Health Australia website (http://www.planthealthaustralia.com.au/industries/wine-grapes/).

What happens if an exotic pest incursion is confirmed?
The Australian wine industry manages biosecurity incursions via the Emergency Plant Pest Response Deed (EPPRD), a formal, legally binding agreement between PHA, the Australian Government, all state and territory governments and plant industry signatories. Australian Vignerons (AV) is the wine industry signatory to the EPPRD. All signatories are committed to implementing risk mitigation activities and promoting reporting of suspected emergency plant pests (EPPs). If a biosecurity incursion occurs, AV represents the wine industry in discussions regarding response strategies. The AWRI provides technical support to AV in conducting its biosecurity activities.

In the event of a biosecurity incursion, the new pest, disease or fungal threat is dealt with by the Consultative Committee for Emergency Plant Pests (CCEPP), an expert group of state, national and industry representatives. This group discusses ways in which the new pest, disease or fungus can be managed, and importantly, ways that Australian vineyards can be protected from any threat of spread. The primary focus of the CCEPP is to ensure that Australian vineyards remain free from any potential pest, disease and pathogen, wherever possible.

The details of exotic pest incursions are strictly confidential and are not released until the extent of the issue is well understood. Confidentiality is maintained to ensure that growers continue to report suspicious symptoms, to assist containment and eradication strategies and to avoid the potential for unjustified interruption to trade. The immediate concern in an incursion is to prevent the pest from spreading. Depending on the pest, quarantine measures may be implemented.

What should I do if I see suspicious symptoms in the vineyard?
Regularly monitoring vines throughout the year is a critical part of the annual cycle of a vineyard. If you see any suspicious symptoms, tag the shoots and vines, take photographs and make note of the location of the vines. Phone the exotic pest hotline on 1800 084 881 and you will be put through to a biosecurity expert in your state who will discuss the identification and management options with you. Depending on the time of year and/or the suspected pest, you may be asked send photos or to collect samples for diagnostics and confirmation.

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How do I keep my vineyard safe from exotic pest incursions?

1. Awareness and monitoring
   The best defence against exotic pest threats is to familiarise yourself and your workers with the symptoms of high priority pests. As described above, any unusual symptoms should be reported to the Exotic Plant Pest hotline 1800 084 881.

2. Clean material
   It is important to ensure that all planting and grafting material is pest-free. All propagation material imported from overseas must undergo inspection, treatment, screening and testing in a post-entry quarantine (PEQ) facility. This process is overseen by the Department of Agriculture and Water Resources. Nurseries and suppliers can supply records from PEQ or the results of their own routine testing.

3. Limit vineyard access
   Biosecurity is the responsibility of all property owners and managers. Steps taken at the farm gate can limit the introduction and spread of pests by workers, visitors, vehicles and equipment. It is important to know the history of any visitors and equipment entering a property and a log of visitors should be maintained. Washdown facilities must be provided for all equipment and personnel, including footwear disinfection stations. Practical guidance on farm-gate hygiene and disinfection protocols can be found on the Vinehealth Australia website: http://www.vinehealth.com.au/biosecurity-in-practice/posters/

Where can I find out more?
A range of biosecurity resources can be found on the websites of the Australian Government Department of Agriculture and Water Resources, Plant Health Australia and Vinehealth Australia. For answers to specific queries, please contact the AWRI helpdesk on 08 8 313 6600 or helpdesk@awri.com.au.

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