

BIOSECURITY BULLETIN

FOR WINE INDUSTRY TRANSPORTERS

WHAT IS BIOSECURITY?

Biosecurity is a system to reduce the risk of entry, establishment and spread of pests, diseases and weeds (pests) that threaten the economy, communities and environment. It's also a system for managing and recovering from a pest incursion by minimising its impact through eradication, containment and ongoing asset protection.

Biosecurity is a shared responsibility between government, industry and communities and requires a truly hands-on approach.

THE BIOSECURITY LANDSCAPE

Protecting vineyards against pests has never been more challenging. From a global viewpoint, we are seeing increased trade and tourism, agricultural expansion and intensification, urbanisation and climate change – all factors which are increasing our biosecurity exposure. From a national perspective, in the five years between 2012 and 2017, the number of pest and disease interceptions at the Australian border rose 46%. Grape phylloxera also continues to be detected in vineyards in Victoria with existing quarantine boundaries expanding. Trends specific to our wine industry include wine companies consolidating their crushing and winemaking facilities into fewer, larger sites, which means more movement of grapes, grape products and machinery

across regional and state borders than ever before. There is also increased use of contractors by all grape and wine businesses, providing additional pathways for pest and disease movement.

WHAT'S AT RISK?

Biosecurity in our grape and wine industries is about securing the health of our vines so that they are productive and our businesses are sustainable and profitable in the long term.

Pests can be picked up through the movement of soil, grapevine material (such as leaves, stems, roots, cuttings, rootlings, potted vines, grapes, grape juice, grape marc), clothing, footwear, machinery, equipment, vehicles and cargo.

Our vineyards are particularly vulnerable to the entry and spread of pests due to the strong connectivity within our industry. People, equipment, grapes and grape products, planting material, vehicles and machinery commonly move from vineyard to vineyard, within regions, between regions and between states.

A SHARED RESPONSIBILITY

Winegrapes are grown alongside other horticultural crops in many areas of Australia. Consequently, the wine industry plays an important role to help protect market access of these horticultural commodities and vice versa.



Image courtesy Sagasser Transport.

PESTS OF CONCERN THAT DIRECTLY AFFECT TRANSPORTERS

There are three key pests established in parts of Australia of which grapevines are a host, and which affect grapevines from a regulatory perspective – grape phylloxera, Queensland fruit fly and Mediterranean fruit fly. Legal requirements documented in state Plant Quarantine Standards or equivalent, exist for the movement of items that can harbor and spread these pests. Outbreaks of these pests in new areas result in the establishment of quarantine zones that impact vineyards and wineries, which in turn can impact transporters. For fruit fly, the wine industry will also be caught up in quarantine zones, whether the original detection was in a vineyard or other horticultural situation. The wine industry also keeps a watching brief on a range of harmful pests not yet in Australia, known as exotic pests. Refer here for further information (<https://vinehealth.com.au/pests/pests-and-diseases/exotic-pests-diseases-to-australia/>). Activities undertaken across the wine supply chain to manage current pests will also help to manage future pests.

Grape phylloxera is a devastating soft bodied insect pest of grapevines worldwide which feeds on grapevine roots and leaves. Adults are around 1mm in size (Figure 1) and are therefore very difficult to see. Approximately 70% of grapevines in Australia are own-rooted and extremely susceptible to attack by phylloxera, which will cause grapevine death within 5-6 years. Phylloxera populations peak between November and March and this is the time when insects come to the soil surface and move into the vine canopy. They can be picked up and spread easily on clothing and in grapes and grape products, as well as inside soil clods by machinery, equipment, vehicles and footwear. In Australia, grape phylloxera is currently confined to parts of Victoria and New South Wales, however phylloxera continues to be detected in more vineyards in Victoria and phylloxera management zone boundaries are changing. Strict quarantine laws apply between management zones (Figure 2) and in all states to limit its spread.



Figure 1. Phylloxera adults, nymphs and eggs. Image courtesy Agriculture Victoria Research.

Queensland and Mediterranean fruit flies are naturally present in different parts of Australia (Figures 3 and 4). Movement of these flies into new areas leads to quarantine zones being established and eradication programs enacted to maintain and restore market access of affected horticultural crops. State biosecurity department websites will advise of current outbreaks. For example, in South Australia: <https://fruitfly.sa.gov.au/>.



Figure 3. Queensland fruit fly. Image courtesy G.T. O'Loughlin, Department of Agriculture, Bugwood.org



Figure 4. Mediterranean fruit fly. Image courtesy Scott Bauer, USDA Agricultural Research Service, Bugwood.org

PHYLLOXERA MANAGEMENT ZONES FOR SOUTH AUSTRALIA'S PLANT QUARANTINE STANDARD

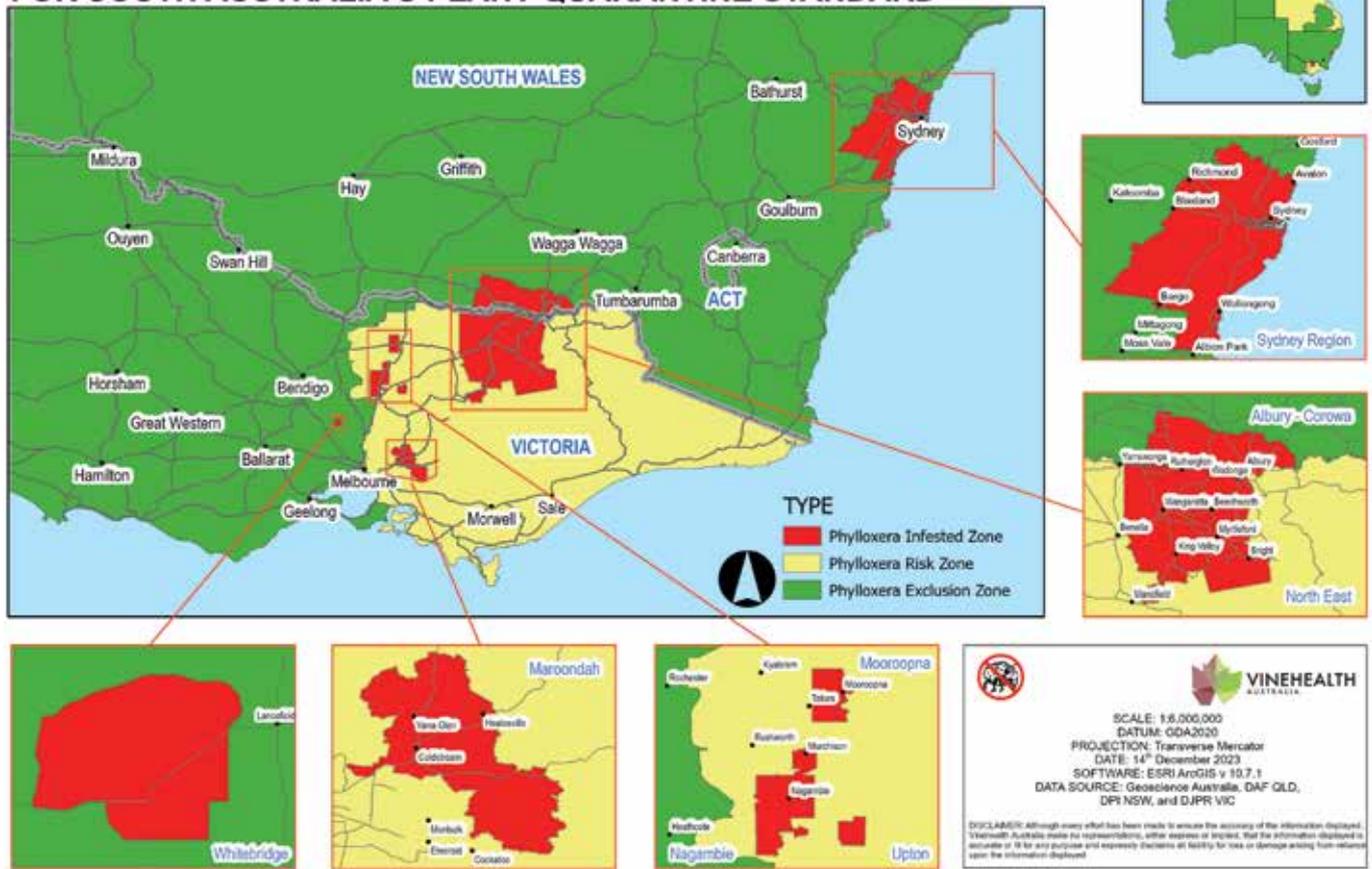


Figure 2. Phylloxera Management Zones in Australia as at December 2023.

Note: This map is periodically updated. Refer to <https://vinehealth.com.au/tools/maps/phylloxera-management-zones/> for the most current map version.

IMPACTS OF A PEST INCURSION TO A GRAPE OR WINE BUSINESS OWNER

The introduction and spread of a significant plant pest can have major consequences for grape and wine business owners, as well as flow on effects to communities, contractors and suppliers. These may include:

For a vineyard

- Decreased productivity or death of vines;
- Restrictions on movement of grapes, machinery and equipment and the possibility of not being able to harvest or move winegrapes for processing; and
- Increased quarantine measures adding to cost of production.

For a winery

- Decreased fruit quality as a result of delays in accessing quarantined fruit;
- Decreased continuity of grape supply for wine brands;
- Loss of marketing edge if old vines die; and
- Increased quarantine measures adding to cost of production.

IMPACTS OF A PEST INCURSION TO TRANSPORTERS

The key impacts of a significant pest incursion to transporters servicing grape and wine businesses may include:

- Under utilisation of trucks (assets) through changes in logistics and longer turnaround times;
- Trucks quarantined;
- Greater scrutiny on spillage management;
- Greater scrutiny on the cleanliness of both the vehicle and items being transported from soil and plant material;
- Higher administrative burden including potential involvement in certification assurance systems of regulated items such as grapes, grape products, juice, must and grape bins;
- Requirement to adhere to specified routes of travel which may result in increased trucking times; and
- Potential to have to cover loads.

Transporters: Your biosecurity responsibilities

As a key supplier to our grape and wine industries, we ask transporters for their assistance to help keep our grapevines healthy and protected from a significant plant pest incursion, by doing the following:

STANDARD PRACTICES	1. Be prepared for spills	<ul style="list-style-type: none"> Ensure all drivers transporting grapes, grape juice, must, wine and marc have been trained in spill management and keep state government contact numbers in their phones for reporting a spill (refer https://vinehealth.com.au/regulation/movement-regulations/). Work with your customers to ensure all consignments of grapes, grape juice, must, wine and marc are packed so as to prevent a spill. 	
	2. Know existing quarantine zones	<ul style="list-style-type: none"> Know where Phylloxera Management Zones are nationally. Given that zone boundaries change, check these maps frequently (https://maps.vinehealth.com.au/mapguide/virtual/pmz/). Speak to state biosecurity departments about current fruit fly outbreaks and any specific requirements for transporters. Do not backload or unload the consignment inside a quarantine area if you are transiting through the area. Where possible, travel via a route that avoids a quarantine area. 	
	3. Know legal movement requirements	<ul style="list-style-type: none"> Speak to state biosecurity departments about the legal requirements for moving regulated items (including winegrapes, table grapes, grape juice, must, grape marc, machinery and equipment) between states and phylloxera management zones (https://vinehealth.com.au/regulation/movement-regulations/). 	
	4. Stay clean	<ul style="list-style-type: none"> Ensure your vehicle is clean of soil and plant material before you arrive at a customer's property and upon leaving. Ensure the external surface of any machinery or equipment you're transporting is also clean of any soil and plant material. 	
	5. Stay on hard pack surfaces	<ul style="list-style-type: none"> When loading and unloading, stay on hard pack surfaces where possible and ensure you adhere to designated parking areas. Don't walk or drive down vine rows. 	
	6. Carry documentation	<ul style="list-style-type: none"> Transport every load with appropriate documentation to describe what's on board, where it's come from and where it's going to, and have it ready to present to inspectors. Commonly this documentation would be provided by the consignor. 	
	7. Look out for pests	<ul style="list-style-type: none"> For transporters moving shipping containers and cargo to and from ports to our wine regions, look out for hitchhiker pests and report to the Exotic Plant Pest Hotline on 1800 084 881. 	
	8. Stay informed	<ul style="list-style-type: none"> Sign up to receive Vinehealth Australia's monthly electronic newsletter and also Biosecurity Alerts which are issued when significant biosecurity events take place (https://vinehealth.com.au/news/e-news-and-sign-up/). 	
ACCREDITATION/ QUARANTINE ZONE	IN ADDITION TO THE ABOVE:	a. Confirm any additional cleaning requirements	<ul style="list-style-type: none"> Complete in addition to standard practice as required.
	9. Contact your customers to confirm whether consignments are being transported under an accreditation system AND/OR if they originate from inside a quarantine zone. IF YES, then:	b. Confirm whether the load must be covered	<ul style="list-style-type: none"> If there is a requirement to cover the load during transport, verify the types of acceptable covers. Keep all covers clean of soil and plant material. Be mindful of occupational health and safety issues.
		c. Confirm any stipulated routes of travel	<ul style="list-style-type: none"> Adhere to any designated routes of travel.
		d. Confirm what extra documentation you must carry	<ul style="list-style-type: none"> Complete all sections of documents that require your details. Carry any additional documentation provided by your customer and present it to the receiving business on arrival. Retain any 'transporter' or 'carrier' copies of documents for a minimum of two years.