



Biosecurity Workshop

24 April 2012

National Wine Centre - The Vines room

On Tuesday 24 April 2012, GWRDC facilitated a workshop on Biosecurity – one of the four high-priority investment areas for GWRDC for 2012–13. More than 30 people participated in the workshop, which included representation from the research community, wine sector and other relevant agencies.

The purpose of the workshop was to help identify gaps and potential researchable questions in the area of biosecurity, particularly around how the *wine sector can best prepare itself for an exotic pest incursion*. A [discussion paper](#) was circulated to all participants before the workshop to provide an overview of the current situation and to promote constructive discussion in this area.

At the workshop, participants heard presentations from:

- Rodney Turner – General Manager Programs, Plant Health Australia (the presentation is available [here](#))
- Professor John Lovett – Chairman, CRC for National Plant Biosecurity (the presentation is available [here](#))

Participants were presented with four questions and worked in small groups to consider potential researchable activities:

1. How can the wine sector best prepare itself for an exotic pest incursion?
2. What information or research and development is required to ensure we are best prepared for an exotic pest incursion?
3. How do we best approach this topic collaboratively?
4. How can we best deliver and extend this information to the sector so that risk management strategies are in place at the grassroots level?

The suggestions and ideas of the working groups were captured and are summarised at the end of this document.

Drawing on the workshop discussion, GWRDC Management has summarised the following points, gaps and potential researchable questions to help guide researchers and the sector in developing expressions of interest submissions.

Facts / gaps and potential researchable questions

- The Industry Biosecurity Plan needs updating
- New information exists on pests and diseases
- The list of priority exotic plant pests for viticulture needs revision
- Developing diagnostics / analytical tools for priority exotic plant pests is a priority
- The viticulture sector does not have a Farm Biosecurity Manual
- What are the risks of incursion of priority plant pests?
- What are the life cycles of our priority plant pests?
- What strategies can help mitigate/eradicate a potential pest incursion?

Biosecurity | Discussion summary

1. How can the wine sector best prepare itself for an exotic pest incursion?

- Update our biosecurity plan
- Know what we are looking at e.g. threats, priority pests
- Identify pathways e.g. identify likely sources, susceptibility, weak spots
- Understand life cycles, establishment, and virulence of key pests
- Identify gaps in current knowledge
- Identify risks
- Identify and define experts, laboratories, industry coordinators
- Have diagnostics/analytical tools
- Rapid, accurate and cheap diagnostics
- Utilise existing networks better and build relationships
- Look abroad to get information or experience
- Learn from others
- Leverage off existing knowledge
- Collaborative research
- Raise the profile of biosecurity in the sector
- Engage the entire value chain and community
- Link in and collaborate with other industries, existing structures, industry organisations
- Coordination across industries
- Knowledge transfer and education
- Awareness material made available
- Harness observations by growers
- Invest in surveillance awareness networks/monitoring for key threats
- Run simulated incursion exercise
- Investment into response (eradication) technologies
- Think about control if eradication is not an option
- Have a response plan
- Investigate non-chemical controls
- Field specialists/trained staff
- Capacity building
- Develop farm biosecurity arrangements for growers e.g. know health status, don't allow contractors on farm without instruction
- Quarantine procedures
- Regulate so we have traceability
- National coordinated workshops, extension material
- Application of remote microscopes / smart phone APPS
- Have arrangements in place to minimise downtime

Additional questions/comments raised:

- How do we get people to think biosecurity is important?
- How do we really know what pests are here?
- An industry biosecurity plan should be as effective and given the same profile as other industry plans.
- How does the sector best prepare itself for non-exotic species?
- What works for endemics that will probably work for exotic?
- How do you capture the difference between exotics and endemics with altered virulence to the common strains?
- It is not just about planning – there appears to be a gap between vineyard, regional and state level around biosecurity implementation
- How will germplasm be maintained and distributed to deal with exotic incursion?

2. What information or research and development is required to ensure we are best prepared for an exotic pest incursion?

- Diagnostics
 - Need protocols
 - Need usable forms for industry
 - Need to be able to allow easy diagnosis in the vineyard
 - Diversity of symptoms in different conditions
 - Genotype, strain, virulence
 - Build capability in Australia
 - Train people in diagnostics in all states
 - Collaboration with overseas
 - Validate overseas protocols in Australia
- Surveillance
 - Monitoring
 - Technology applications e.g. remote microscope
 - Multiple tools – traditional and innovative
 - Tools need to be extended to growers
 - Aerial surveillance
 - improve sensitivity – ground truthing
 - expand to other exotics
 - Good models exist
 - Need to identify sampling
 - Opportunity to extend technology to other diseases
 - Use of pheromone based surveillance
- Response
 - Early detection
 - Germplasm
 - Resistant rootstocks
 - Identifying new sources of germplasm and having them in the country ready to use
 - Biocontrol as an option to eradication e.g. use of natural enemies
 - Maintaining tools post-eradication

Additional questions/comments raised:

- Research target pests and proactive implementation strategies
- Understand pathways, sources of potential incursions, route to Australia, life cycles etc
- Identify points of vulnerability
- Identify gaps in knowledge, and prepare an action plan / strategy to address these
- National sampling protocols
- Clear information on requirements to eradicate
- Consider impact of predicted future climate change on exotics and endemics
- Import resistant sources
- Target enterprises
- Generic pest incursion guide
- Simulation exercises
- Area freedom
- Use of local knowledge as a means for feedback
- Regulations on reporting
 - Adoptability of existing management systems to Australia and different climate zones e.g. one size may not fit all

3. How do we best approach this topic collaboratively?

- Need a mechanism for consultation
- National Vine Health Steering Committee is part of the solution but needs revitalising
- Strong sector involvement needed in review of IBP, also technical input, especially around categorisation
- Options through PHA, Domestic Quarantine?
- Foster relationships with parties in CRC. How to get into this if not already?
- ID strength of each organisation (capability audit)
- Linkages with researchers, CRC
- Understand existing networks and use them
- Interaction between disciplines
- Build collaborative research teams to enhance capacity and exchange of info. Have regular workshops to exchange info
- What's happening in other industries? ID opportunities.
- Build on what has been developed overseas
- Coordinate with nursery and garden; table grape; dried grape industries
- PISC RD&E biosecurity – what's happening? And our link with this?
- Harmonisation
- National Phylloxera Strategy e.g. Fruit Fly Strategy
 - Broaden current protocol out to a strategy
- Improve AQIS i.e. systems, reporting, protocols, responsiveness to industry request, alerts from near incursions
- On farm biosecurity – have practical tools
- Regional biosecurity plan – each region is different – not one size fits all
- Diagnostic capabilities
- Use multiple communication methods e.g. posters, web, collaboration with AQIS
- Sampling protocols tested in different regions – raises awareness, different climates, soils, management etc
- Consider membership of CRC for Plant Biosecurity and Plant Health Australia

4. How can we best deliver and extend this information to the sector so that risk management strategies are in place at the grassroots level?

- Farm Biosecurity manual
- Needs to be a national manual
- Educational campaign
- Drive at national/regional level?
- Regional engagement – industry, community and government
- Regional coordinators / champions
- Use of regional tech / grower groups
- Use endemics as a mechanism to promote awareness of exotics
- Simulation exercise
- List experts – for labs with expertise in exotic pests/diseases/weeds
- Local reporting system; signage
- Encourage reporting, increase awareness
- Link biosecurity with on-farm OHS requirements
- Utilise range of communication methods
- Website
- Consider summary of all activities at national, state and regional level
- Need national body with focus on wine industry biosecurity issues including technical expertise
- Reactivate research to practice to increase awareness

Lodging an expression of interest (EOI) submission

All proposals must be submitted through the GWRDC's online project management system CIMS by **Friday 8 June 2012**.

If you are considering lodging an application, you must email applications@gwrdc.com.au well before 8 June 2012 to obtain access to a CIMS template link. In the email, please provide the following details:

- Researcher name, email address and organisation
- Project title
- Project start and end date
- GWRDC program and sub-program area (program area details can be found in *GWRDC investments 2012–13* under the 'strategic plan' tab on the GWRDC website)

Once this information has been provided, GWRDC will send a CIMS EOI template link. A CIMS login will be required. If you do not already have access to CIMS, please contact GWRDC to arrange access.

The EOI template is similar to a Final Project Application.

If you wish to discuss a researchable question with GWRDC, please contact Elise Heyes, GWRDC R&D Program Manager, elise@gwrdc.com.au or 08 8273 0500.