

Final Report

Review of the national biosecurity plan for the cherry industry and development of a biosecurity manual for cherry producers

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Review of the national biosecurity plan for the cherry industry and development of a biosecurity manual for cherry producers (CY16010)

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Summary

Australia's freedom from many of the exotic pests that affect production overseas provides the cherry industry with both a yield advantage as well as real cost of production benefits. Biosecurity planning provides a mechanism for the cherry industry, governments, and other stakeholders to assess current biosecurity practices and future biosecurity needs. The identification, prioritisation, and management of key biosecurity risks, through development and implementation of a biosecurity plan, are critical industry biosecurity preparedness activities. When coupled with Cherry Growers Australia Inc. (CGA) being a Plant Health Australia (PHA) member and signatory to the Emergency Plant Pest Response Deed, biosecurity planning provides the cherry industry with the framework for risk mitigation and management of the impact of potential incursions.

Biosecurity planning in the cherry industry was initiated through the review of the Biosecurity Plan (version 2.0) for the Cherry Industry and development of a revised Biosecurity Plan (version 3.0). Through this process the cherry industry identified:

- the highest risk pests to the industry (high priority pests)
- risk mitigation activities required to reduce the biosecurity threat, including farm level activities
- available surveillance and diagnostic activities and capabilities

For the review of the biosecurity plan:

- industry members and scientific experts met via teleconference to identify high priority pests (exotic and established) for the industry in June 2017
- a post border biosecurity capability assessment was undertaken for all high priority pests to inform the development of a biosecurity implementation table of activities to mitigate risk and prepare for response (undertaken by Plant Health Australia in consultation with industry and government)
- a shared approach to implementing a cherry biosecurity plan was developed through a meeting of the Biosecurity Implementation Group (BIG) comprising industry representatives and technical experts and the relevant delegates of the State Plant Health Managers in September 2017

The Biosecurity Plan (v3.0) was published in February 2019, following endorsement by the industry, through CGA and Plant Health Committee (PHC).

The project also developed a new Biosecurity Manual for Cherry Producers which was launched in April 2019.

This project also facilitated the Cherry Biosecurity Reference Panel (BRP) with regular meetings held during the life of the project, although the travel restrictions imposed by Covid 19 did disrupt the frequency of meetings. The purpose of the BRP was to review the plan regularly to ensure information contained in the plan was current and amended when appropriate. The BRP also monitored the progress of actions outlined in the BP.

Keywords

Cherry; biosecurity plan; exotic pests; risk; preparedness

Introduction

In global terms, the Australian cherry industry is fortunate to experience relative freedom from many pests (invertebrates, pathogens [diseases] and weeds) that can adversely affect production. Maintenance of the industries plant health status is vital to ensure the profitability and viability of the industry.

Biosecurity planning is a key risk mitigation strategy that gives the industry the best opportunity of future viability and sustainability. This project will review the biosecurity plan for the cherry industry and support the industry in satisfying their biosecurity obligations under the Emergency Plant Pest Response Deed.

The Australian cherry industry is free from a range of exotic pests and diseases, which cause significant impact on production where they are present. The industry has a strong export focus, and it is critical the industry maintains its freedom from a range of exotic pests as well as being able to manage and monitor key established pests.

The review and development of this new biosecurity plan provides the opportunity to bring both industry and government together in a collaborative framework where knowledge and ideas are freely shared. As a part of this project, exotic pests (invertebrates, nematodes, and pathogens [diseases]) are regularly assessed by technical experts and prioritised to identify high priority exotic pests for the cherry industry, as well as established pests and weeds of biosecurity significance. Having identified the pests that pose the greatest threat to the industry, an expert group was convened from government and industry to agree to mitigation measures to protect against them. This implementation plan has been reviewed regularly over the life of the project through the efforts of the Cherry Biosecurity Reference Panel (BRP).

Methodology

The Cherry Biosecurity Plan has been developed based on National Industry Biosecurity Guidelines developed by PHA and is consistent with other biosecurity plans developed or reviewed recently. Additions or modifications to the generic template were determined through the development process in consultation with industry and government.

The Cherry Biosecurity Plan covers the following sections:

- Introduction
- Threat identification, pest risk reviews and incursion management funding arrangements
- Risk mitigation plan
- Contingency plans and response management procedures
- Awareness material

The process of reviewing and developing this BP involved:

1. Identification of representatives from the cherry industry, governments, and scientific experts to form a Technical Expert Group (TEG) to consider risks associated with exotic and established pests of biosecurity significance.
2. Compilation and review of exotic pest threats to cherries into Threat Summary Tables.
3. Development of a High Priority Pest (HPP) list from the Threat Summary Tables. The HPP list is developed based on the assessment by the TEG on the entry potential, establishment potential, spread potential and economic impact of each exotic pest. These ratings are then assessed to provide an overall risk rating. Those pests with a high or extreme overall risk rating are included in the list of HPP's.
4. Analysis of biosecurity capacity for each high priority pest in terms of both preparedness and response.
5. Consultation with industry on the potential inclusion of an impact assessment on high priority pest incursions on current markets.
6. Development and review of core components of the biosecurity plan by PHA, in association with the Biosecurity Implementation Group (BIG). These components include the HPP list, list of established pests and weeds, Biosecurity Implementation Table, and the Gap Analysis, which identifies available resources and gaps in resources.
7. Development of a shared approach to implementing biosecurity through a meeting of a Biosecurity Implementation Group (BIG) for the cherry industry, comprising industry and state/territory government representatives.
8. Development of a Biosecurity Implementation Table in consultation with the appropriate industry and government representatives.
9. Endorsement of the biosecurity plan by the industry (through the Cherry Growers Australia (CGA) and government, through Plant Health Committee (PHC).
10. Launch at an appropriate industry event, supported by media releases.
11. Review of implementation activities by industry and state government representatives through the biosecurity reference panel process. Biosecurity Reference Panel meetings will be held to review emerging pests, determine biosecurity priorities, and ensure that activities recommended in the cherry industry biosecurity plan are being accomplished.

The project will link into the Biosecurity Preparedness Portal which was recently developed by PHA. The Cherry industry will have a site within the portal which will act as a repository for the:

- Biosecurity plan
- High priority pest list
- Biosecurity implementation table
- Information on tasks for completion and meetings
- Pest gap analysis table
- Established pests of biosecurity significance

The Biosecurity Preparedness Portal is an on-line support tool that will assist in coordinating and monitoring the activities of each Biosecurity Reference Panel.

Consultation with the cherry industry, government departments and scientific experts was sought throughout the development process to ensure that stakeholders have input into the document. While ownership of this document resides with the cherry industry and PHA, all efforts will be made to ensure stakeholders will be satisfied with the final outcomes.

Table 1. Members of the Cherry Technical Expert Group (TEG)

Name	Organisation
Adam Coleman	NSW DPI
Alison Saunders	Plant Health Australia
Andrea Magiafoglou	Cherry Industry Association
Charlotte Brunt	Cherry Industry Association
Cliff Kinoti	Agriculture Victoria
David Williams	Vic DEDJTR
Jenny Shanks	Plant Health Australia
Karen Barry	University of Tasmania
Kevin Dodds	NSW DPI
Liz Minchinton	Agriculture Victoria
Mandy Christopher	QDAF
Mark Blacket	AgriBio
Peter Morrison	Roberts Limited (Tas. agronomist)
Robert Nissen	University of Tasmania
Russel Fox	IK Caldwell (Vic./NSW agronomist)

Table 2. Members of the Cherry Biosecurity Implementation Group (BIG)

Name	Organisation	Area of expertise
Andrea Magiafoglou	Cherry Growers Association	Industry
Charlotte Brunt	Cherry Growers Association	Industry
Cliff Kinoti	DEDJTR	Virology
Fiona Constable	DEDJTR	Virology
Jenny Shanks	PHA	Biosecurity

Name	Organisation	Area of expertise
Justin Tiller	E. E. Muir & Sons	Agronomy
Karen Barry	University of Tasmania	Pathology
Mandy Christopher	QDAF	Biosecurity
Simon Rouget	Koala Cherries	Industry
Rod Turner	PHA	Biosecurity
Robert Nissen	University of Tasmania	Researcher
Adam Upton	Cherry Hill	Industry
Kevin Dodds	NSW DPI	Industry Extension

The Biosecurity Reference Panel was formed to undertake the regular review of the Biosecurity Plan. The review process was a valuable addition to the normal Biosecurity Plan development process, as it added an additional layer of monitoring and evaluation to the project and biosecurity planning process. Members of the Cherry Biosecurity Reference Panel are listed in Table 3.

Table 3. Biosecurity Reference Panel members*

Name	Organisation	Area of expertise
Charlotte Brunt	Cherry Growers Australia	Industry
Tom Eastlake	Cherry Growers Australia	Industry, Production
Jacky Edwards	Agriculture Victoria	Pathology
Kyla Finlay	Agriculture Victoria	Entomology
Fiona Constable	Agriculture Victoria	Virology
Liz Minchinton	Agriculture Victoria	Pathology
Cathryn Todd	PIRSA - SARDI	Pathology
Kala Bhandari	PIRSA - SARDI	Biosecurity
Leonie Martin	NSW DPI	Biosecurity
Jessica Fernley	NSW DPI	Biosecurity
Elsie Kinnaird	WADPIRD	Entomology
Fucheng Shan	WA DPIRD	Biosecurity
Greg Chandler	Hort Innovation	R,D&E, Biosecurity
Trevor Dunmall	PHA	Biosecurity

Outputs

The project delivered the following outputs:

A Cherry Biosecurity Plan v3.0 approved by industry and Plant Health Committee (PHC) with amended version 3.2 based on the updates made by the Biosecurity Reference Panel over time.

The Biosecurity Plan included the following updated components:

- A High Priority Pest list, based on the updated Threat Summary Tables
- Established pests and weeds lists
- A revised Biosecurity Implementation Table (see below)
- Gap analysis (see below)

The BRP has met regularly to review the BP. The BRP has ensured the plan remains current and relevant. The BRP has reviewed the HPP list and updated the established pests and weeds lists. The BRP also updated the implementation table to include the most recent activities relating to each preparedness strategy area and they have highlighted the gaps in preparedness. These gaps include the need for the development of national diagnostic protocols and contingency plans for many high priority pests of cherries.

The Biosecurity Implementation Table and Gap Analysis describe industry and government's preparedness and response capabilities in the event of exotic or established pests of quarantine concern. While HPPs, established pests and weeds of biosecurity concern are important aspects of the biosecurity plan, the implementation process drives future investment and assign activities to plant industries, governments, and stakeholders.

The Cherry Biosecurity Plan v3.2 is available on the Biosecurity Preparedness Portal.

Outcomes

In delivering this project PHA has provided the Australian Cherry industry with a current and relevant biosecurity plan. The plan includes information on the high priority cherry pests, established pests and weeds of biosecurity significance, an overview of the status of both industry and government activities that relate to cherry biosecurity in the format of the Biosecurity Implementation Table. Additionally, the Gap Analysis provides both industry and governments with information on the status of national diagnostic protocols, surveillance programs, fact sheets, contingency plans, Emergency Plant Pest Response Deed (EPPRD) categorisation for each HPP and potential cross-industry partnerships.

Plant Health Australia fosters a collaborative environment which involves industry, government, stakeholders, and scientific experts to develop a thorough biosecurity plan. Through this collaborative development process, the priorities of each organisation involved can be openly shared and discussed. Importantly information gaps can be acknowledged, and future biosecurity research, development and extension can be prioritised and supported.

Holding regular reference panel meetings has provided an opportunity to document achievements and update the plan as new information becomes available. Responsibilities and inherent constraints become transparent to all parties involved in the Biosecurity Implementation Group and Biosecurity Reference Panel meetings. This important improvement to the biosecurity planning process is evident by the revisions of the Cherry Biosecurity Plan (version 3.2) throughout the project.

With the industry, in partnership with government, addressing issues such as Queensland fruit fly and its impact on southern fruit crops, all people within the industry are acutely aware of the importance of biosecurity. This plan demonstrates the continuing commitment by both industry and government to cherry industry biosecurity.

Monitoring and evaluation

The Biosecurity Reference Panel review process, involving industry and government experts has ensured that actions and outcomes from the Biosecurity Plan are monitored and

evaluated. Biosecurity activities have been prioritised as an outcome of a regular review process. The priorities are referred to Hort Innovation for prioritisation for future biosecurity research, development, and extension activities.

Recommendations

1. PHA continues to work with Hort Innovation and the cherry industry to monitor industry biosecurity preparedness and develop a long-term plan to deliver enhanced biosecurity preparedness to the industry. This plan would focus on gaps, such as the need for national diagnostic protocols and contingency plans and would link to current and future research priorities.

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The Biosecurity Plan is not made readily available in the public domain owing to trade sensitivity. Industries generally make the report available on Members only sections of their websites. Copies are made available from Plant Health Australia on request.

Acknowledgements

The project would like to acknowledge the contributions of members of the Technical Expert Group, the Biosecurity Implementation Group, and the Biosecurity Reference Panel. These people have contributed to improving the cherry industry's biosecurity preparedness and therefore are contributing to a sustainable future for Australian cherry growers.