



Australian Government

Cotton Research and
Development Corporation

Extension Activity REPORT

Part 1 - Summary Details

Please use your TAB key to complete Parts 1 & 2.

CRDC Project Number: **PHA1702**

Project Title: COTTON BIOSECURITY WORKSHOP

Project Commencement Date:

Project Completion Date:

Part 2 – Contact Details

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Part 3 – Final Report

Background

1. Outline the background to the project.

The aim of this training was to build industry biosecurity capacity and provide a gap analysis for boll weevils. Participants worked through the process of an incursion and eradication, with PHA facilitating the scenario. The event was followed by the annual Biosecurity group meeting, to be held at the same venue.

Objectives

2. List the project objectives (from the application) and the extent to which these have been achieved.

AIM: This activity aims to build industry capacity to respond to a biosecurity incursion.

Methods

3. Detail the methodology and justify the methodology used. Include any discoveries in methods that may benefit other related projects.

The activity was delivered as a one-day workshop format where participants from the cotton industry – from growers, to Cotton Australia, CottonInfo staff and government stakeholders – were presented with a fictitious scenario of a Cotton boll weevil detection in the Emerald cotton production region and worked through the process of how the pest would be responded to under national arrangements (i.e. the Emergency Plant Pest Response Deed).

The participants were challenged with questions and activities throughout the day that allowed them to explore key elements of a response, their understanding, what is in place and the industry preparedness. Activities on the day focussed on:

- increasing understanding of national Emergency Plant Pest responses
- understanding the industry pest reporting pathways and drivers following the detection of a suspect Emergency Plant Pest
- delivering effective communication to the cotton industry during a response while meeting confidentiality requirements
- preliminary analysis of available response strategies to eradicate cotton boll weevil.
- Identification of further gaps in preparedness

Outcomes

4. Describe how the project's outputs will contribute to the planned outcomes identified in the project application. Describe the planned outcomes achieved to date.

The planned outcome for this project was to improve the industry's preparedness for a biosecurity incursion. The workshop was attended by key personnel in the cotton industry who may play a significant role in a biosecurity response, and their knowledge and understanding of response management and activities was improved.

In addition, a number of key outcomes and recommendations were identified through the workshop:

- Future development of pest awareness material should include the “tractor view” (images and descriptions) of pest symptoms in the crop to better assist growers to detect pests sooner.
- First reports of an exotic pest will occur through established grower-agronomist-researcher pathway in the cotton industry, and not through direct contact of the exotic plant pest hotline.
- Further investigation is required into the ability to undertake an area-wide fallow of cotton, a central eradication strategy for Cotton boll weevil, in terms of technical and social impacts.
- Cotton Australian and CottonInfo will develop emergency communication content for key cotton pests to facilitate rapid rollout in an incursion
- The cotton industry will develop and document recommended command structures during a major EPP response (i.e. how the personnel in Cotton Australia, CottonInfo and CRDC will work together and allocate roles).
- A contingency plan for the eradication of Cotton boll weevil in Australia needs to be developed. The differential acceptance of some identified eradication approaches

across the different cotton production regions was highlighted as a key consideration during the contingency plan development.

Evaluation:-

Twenty-five of the total 30 participants submitted feedback forms on the day. The following is a summary of the feedback given on the questionnaires.

Overall, participant gave a rating of 4 for the Cotton Biosecurity Workshop, with 1 being poor and 5 being excellent. Participants were presented a number of questions and asked to answer them on a scale of 1 (low) to 4 (high). The average responses are shown in Table 1.

Table 1. Average answers to participant questionnaire questions.

Question	Average response
What level of value did you get from attending this workshop?	3.2
What level of value do you see in similar workshops being run to focus on other major pests of cotton?	3.0
What is the level of value in running a more in-depth activity focussing on responding to a detection of Cotton boll weevil in Australia?	3.0
What is your level of understanding in relation to where you fit in an emergency response to an exotic pest of the cotton industry?	3.1
How much confidence do you have that you know what to do if you found an unknown or exotic pest?	3.6
What level of confidence do you have that an exotic pest of cotton would be reported quickly?	2.5
What is your level of understanding in regards to confidentiality and the need for it during a response to an exotic pest?	3.5
Working within the current national communications arrangements, how confident are you that growers can receive appropriate information or guidance during a response to an exotic pest?	2.8

Conclusion

5. Provide an assessment of the likely impact of the results and conclusions of the research project for the cotton industry. What are the take home messages?

The Cotton Biosecurity Workshop activities targeted identified areas of uncertainty for the cotton industry in relation to an Emergency Plant Pest (EPP) detection and response, recognising pathways to improve preparedness. Largely, the industry structures and practices proved effective to appropriately contribute to EPP responses, and the experience and knowledge gained through the workshop activities strengthened this position.

The principal conclusions against the three target areas for the workshop were:

1. **Reporting a suspect EPP:** The cotton industry has an embedded reporting pathway for new and unusual pests through the agronomist networks, and these are highly likely to be utilised following an EPP detection. This effectively achieves the required outcome of notification to the relevant state government agency.
2. **Communication to growers:** The delivery of relevant and up-to-date information to growers in the event of an incursion can be facilitated through existing structures (e.g. CottonInfo), but the development of internal structures and a chain of command to support key industry representatives is required. Key appropriate information was identified for communication in a response scenario that should support growers and meet confidentiality requirements.

3. **Eradication strategies:** There is an absence of appropriate eradication strategies for Cotton boll weevil available for implementation in Australia. Where eradication has been undertaken internationally, the programs undertook gradual limitation and knock-down approaches that do not lend themselves to application in the likely Australian context. For improved preparedness, identification and documentation of an appropriate eradication strategy is required.

Extension Opportunities

6. Detail a plan for the activities or other steps that may be taken:

PHA recommends that the following activities be undertaken:

- Delivery on the recommendations outlined in the outcomes section of this report.
- After addressing some or all the recommendations identified, the cotton industry can test ability to respond to a pest incursions through a simulation exercise.

Simulation exercises are used to provide in-depth practical training on biosecurity issues using real world examples to test response readiness. Along with assessing the preparedness of an industry to a pest incursion, simulation exercises can be used to increase the understanding of the required roles and resources, identify communication gaps, and highlight the interaction between industry and government departments during a response.

- PHA can work with the CRDC, Cotton Australia and CottonInfo to fill any further gaps in communications for a response and the develop materials required to meet the needs.