



Australian Government  
Department of Agriculture

# New Zealand Biosecurity Innovation Exchange 4 – 5 November 2019

## State of Innovation

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Australian Government Department of Agriculture

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# Our success so far...

## Biosecurity Innovation Exchange 2018

In March 2018 the Exchange identified four initiatives:

1. [Biosecurity innovation platform](https://haveyoursay.agriculture.gov.au/biosecurity-innovation)  
[haveyoursay.agriculture.gov.au/biosecurity-innovation](https://haveyoursay.agriculture.gov.au/biosecurity-innovation)
2. Gamification and citizen science
3. Next generation sequencing
4. Sensors and bionic technologies

## The Seed - Biosecurity Innovation Hub

Welcome to **The Seed**, our biosecurity innovation hub where you can learn more about exciting developments in the biosecurity space.

This initiative was an outcome of the inaugural Biosecurity Innovation Exchange 2018.

Each issue will feature stories about exciting initiatives and profiles of people who are making great strides in innovation.

You can also plant your ideas in our ideas patch and subscribe so you don't miss out on the latest news.



# BIOSECURITY INNOVATION

SEED FEED

STORIES

IDEAS PATCH

### At the forefront of Innovation Month 2019

about 2 months ago



Video: Innovation Sandpit 2019 summary

#### Biosecurity Innovation Exchange Clip



[more..](#)

#### Video Transcripts

Biosecurity Innovation Exchange Clip Transcript (21 KB) (docx)

[more..](#)



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#### Document Library

Biosecurity Innovation Exchange 2018 Summary Report (201 KB) (pdf)

[more..](#)



# Our success so far...

## Biosecurity Innovation Exchange 2018

In March 2018 the Exchange identified four initiatives:

1. Biosecurity innovation e-newsletter  
[haveyoursay.agriculture.gov.au/biosecurity-innovation](https://haveyoursay.agriculture.gov.au/biosecurity-innovation)
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# Game-based Learning with Simulated Events!

**Surveillance**

TIME 4:26

631 BP

**BIOSECURITY CONTROL**

**MODULE OBJECTIVES: 0/3**

- ☐ Complete RIFA case study
- ☐ Resolve 12 activities
- ☐ Respond to 3 team events

CLOSE

**MESSAGES**

- Suspected biosecurity breach reported: East Queensland
- Response required at South East QLD: RIFA
- Outbreak contained: Dickeya dianthicola

Suspected biosecurity breach reported: East Queensland

**ECONOMIC** **COMMUNITY** **ENVIRONMENTAL**

96

0 100

**CONFIDENCE**

**?** HELP

**||** PAUSE & OPTIONS

**↗** SCREEN SIZE



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# CYBERTONGUE®

- New application for an existing technology
- A fast and reliable way to verify treatment status
- Collaboration with the Commonwealth Scientific and Industrial Research Organisation (CSIRO)





# Biosecurity Research and Innovation Priorities

## CURRENTLY UNDER DEVELOPMENT

### Automation

Enhance the department's biosecurity processes through the use of automation to improve the efficiency and effectiveness of biosecurity activities

### Data & intelligence

Improve data accessibility across the department and enable its use as business intelligence to inform biosecurity decision-making

### Risk analysis & management

Inform and enhance the department's risk-based approach to biosecurity risk management

### Surveillance, diagnostics & screening

Enhance the department's surveillance, diagnostic and screening capability and capacity

### Communication & collaboration

Improve communication and collaboration across the biosecurity system to enhance system participants' understanding, awareness and acceptance of biosecurity requirements



# Biosecurity Innovation Program

- In June 2018 the Australian Government announced the Biosecurity Innovation Program
- \$25.2 million over 5 years
- Aims to invest in identifying, developing and implementing innovative technologies and approaches to improve biosecurity



# Rapiscan RTT<sup>®</sup>110 Real Time Tomography (RTT) 3D X-ray

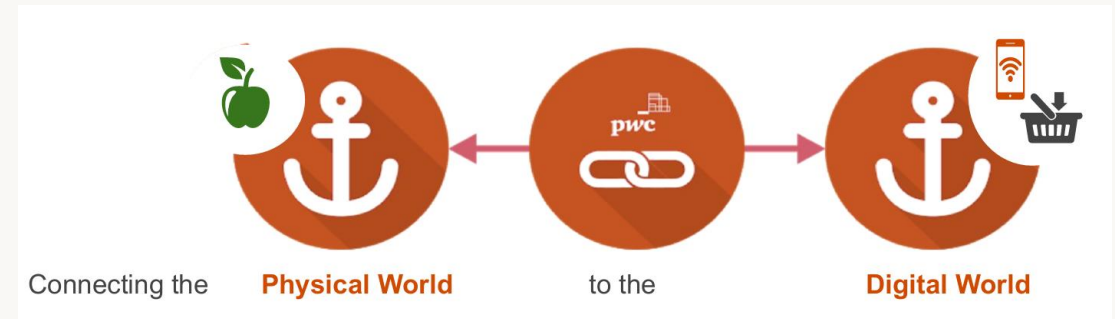


- World first for biosecurity
- Algorithm development for automatic detection of biosecurity risk material
- Successfully detecting fruit; now developing capability for meat, seeds and other plant products



# TruTag Technologies

- Food and wine fraud: estimated at \$1,689 million in 2017
- Microscopic silicon dioxide barcodes provide a signature for product identity
- Enhance product verification and anti-counterfeiting measures







# Innovation into the future



- Big challenges need bold solutions – innovation!
- Collaboration is key to innovation – we want to work with you