附件8

Regulating the Importation of Used Agricultural and Forestry Machinery

Penny McLeod – Senior Adviser, Invasive Species Team,
Animal and Plant Health Directorate, MPI

Biosecurity New Zealand
Tiakitanga Pūtaiao Aotearoa

Ministry for Primary Industries
Manatū Ahu Matua

- The Risks
- The Import Requirements
- On-Arrival Action Required
- Pathway Challenges

Associated Risks

- Plant Disease
- Animal Disease
- Regulated Seeds
- Plant Material
- Hitch Hiker Pests
- Soil

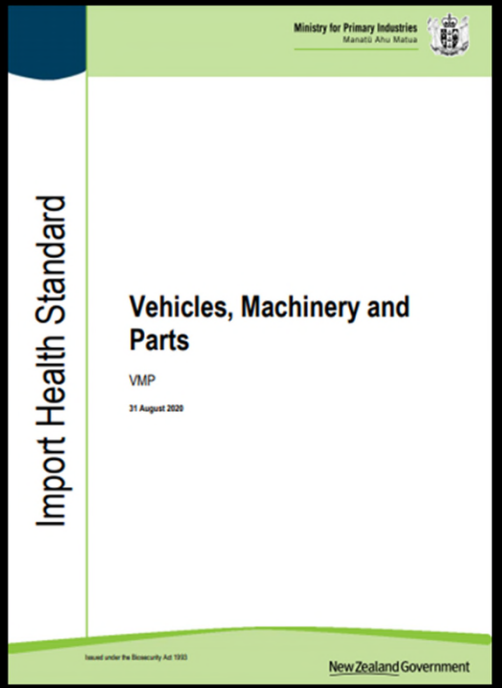
Requirements

MPI sets out the import requirements for ‘risk goods’ using Import Health Standards (IHS).

Requirements are established after public consultation including a 60-day period required as part of SPS obligations..

Regulation for used machinery is guided by International Standard for Phytosanitary Measures *(ISPM) 41 - International movement of used vehicles, machinery and equipment.*

Regulation is also based on MPI’s Pest Risk Assessment of the vehicle and machinery importation pathway.



MPI Requirements

Used agricultural and forestry machinery fall under MPI's general risk class: "Used Outdoor or Targeted Machinery."

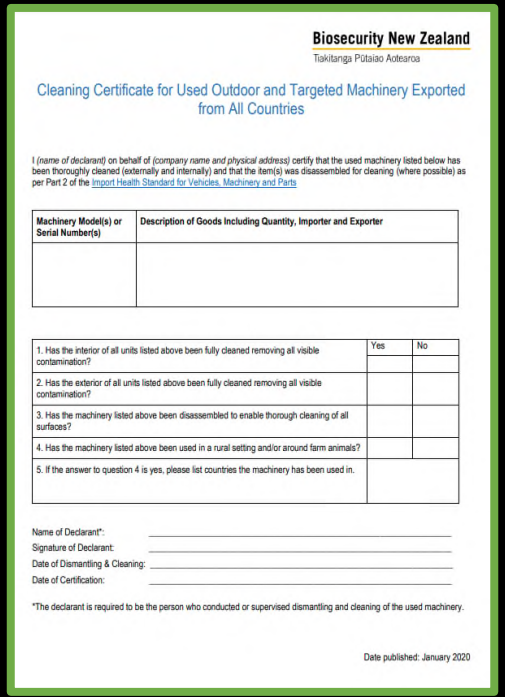
Class captures all used outdoor machinery as well as machinery that is used indoors but has been exposed to biosecurity contamination.

Requirements

All used machinery must arrive clean and free of all biosecurity contamination.

Importers of used outdoor machinery must submit a certified cleaning certificate to MPI before arrival.

Treatment (fumigation or heat) may be required - 37 BMSB risk countries between September and April.



Biosecurity New Zealand
Tiakitanga Pūtaiao Aotearoa

Cleaning Certificate for Used Outdoor and Targeted Machinery Exported from All Countries

I *(name of declarant)* on behalf of *(company name and physical address)* certify that the used machinery listed below has been thoroughly cleaned (externally and internally) and that the item(s) was disassembled for cleaning (where possible) as per Part 2 of the Import Health Standard for Vehicles, Machinery and Parts

Machinery Model(s) or Serial Number(s)	Description of Goods Including Quantity, Importer and Exporter

	Yes	No
1. Has the interior of all units listed above been fully cleaned removing all visible contamination?		
2. Has the exterior of all units listed above been fully cleaned removing all visible contamination?		
3. Has the machinery listed above been disassembled to enable thorough cleaning of all surfaces?		
4. Has the machinery listed above been used in a rural setting and/or around farm animals?		
5. If the answer to question 4 is yes, please list countries the machinery has been used in.		

Name of Declarant*: _____
Signature of Declarant: _____
Date of Dismantling & Cleaning: _____
Date of Certification: _____

*The declarant is required to be the person who conducted or supervised dismantling and cleaning of the used machinery.

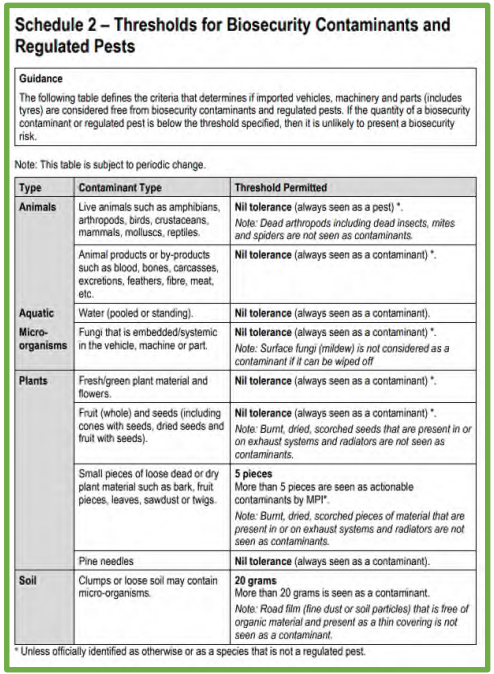
Date published: January 2020

Requirements

The IHS includes contamination thresholds linked to the "clean outcome".

Thresholds:

1) **Guide the importer around the acceptable standard of cleanliness required**
2) **Are used by MPI to verify compliance with the outcome.**



Schedule 2 – Thresholds for Biosecurity Contaminants and Regulated Pests

Guidance

The following table defines the criteria that determines if imported vehicles, machinery and parts (includes tyres) are considered free from biosecurity contaminants and regulated pests. If the quantity of a biosecurity contaminant or regulated pest is below the threshold specified, then it is unlikely to present a biosecurity risk.

Note: This table is subject to periodic change.

Type	Contaminant Type	Threshold Permitted
Animals	Live animals such as amphibians, arthropods, birds, crustaceans, mammals, molluscs, reptiles.	**Nil tolerance** (always seen as a pest) *. *Note: Dead arthropods including dead insects, mites and spiders are not seen as contaminants.*
	Animal products or by-products such as blood, bones, carcasses, excretions, feathers, fibre, meat, etc.	**Nil tolerance** (always seen as a contaminant) *.
Aquatic	Water (pooled or standing).	**Nil tolerance** (always seen as a contaminant).
Micro-organisms	Fungi that is embedded/systemic in the vehicle, machine or part.	**Nil tolerance** (always seen as a contaminant) *. *Note: Surface fungi (mildew) is not considered as a contaminant if it can be wiped off*
Plants	Fresh/green plant material and flowers.	**Nil tolerance** (always seen as a contaminant) *.
	Fruit (whole) and seeds (including cones with seeds, dried seeds and fruit with seeds).	**Nil tolerance** (always seen as a contaminant) *. *Note: Burnt, dried, scorched seeds that are present in or on exhaust systems and radiators are not seen as contaminants.*
	Small pieces of loose dead or dry plant material such as bark, fruit pieces, leaves, sawdust or twigs.	**5 pieces** More than 5 pieces are seen as actionable contaminants by MPI*. *Note: Burnt, dried, scorched pieces of material that are present in or on exhaust systems and radiators are not seen as contaminants.*
	Pine needles	**Nil tolerance** (always seen as a contaminant).
Soil	Clumps or loose soil may contain micro-organisms.	**20 grams** More than 20 grams is seen as a contaminant. *Note: Road film (fine dust or soil particles) that is free of organic material and present as a thin covering is not seen as a contaminant.*

* Unless officially identified as otherwise or as a species that is not a regulated pest.

Requirements

wire cables and ropes that are attached, or have been attached to machinery used for agricultural, horticultural or forestry purposes must be:

- Treated before arrival; and
- Cleaned, free of biosecurity contamination

Verification of compliance

Used high risk outdoor machinery is routinely verified on arrival by MPI due to:

1. Complexity.
2. The difficulty an importer has with cleaning the machine to the required standard.
3. Often requires a direction for further decontamination at an MPI approved facility.

If the contamination can't be dealt with on-arrival, the machinery may face reshipment or destruction at the importer's cost.

The Challenges

NPPOs have low involvement in this pathway (like with most inanimate risk goods).

Machines are complex and usually large. Cleaning is difficult and dismantling is often required.

Because many types of biosecurity contaminants are associated with used machinery, there is often not just one treatment or action that will manage all risk.

The challenges

It is difficult to establish if machinery is highly contaminated until it has been unloaded and inspection starts. Verification inspections are timely, and dismantling may be required.

Reshipment becomes more difficult and costly to direct once the machine is off the vessel.

There may be multiple types of contamination on the machines which require further dismantling or a range of treatments and/treatment rates.

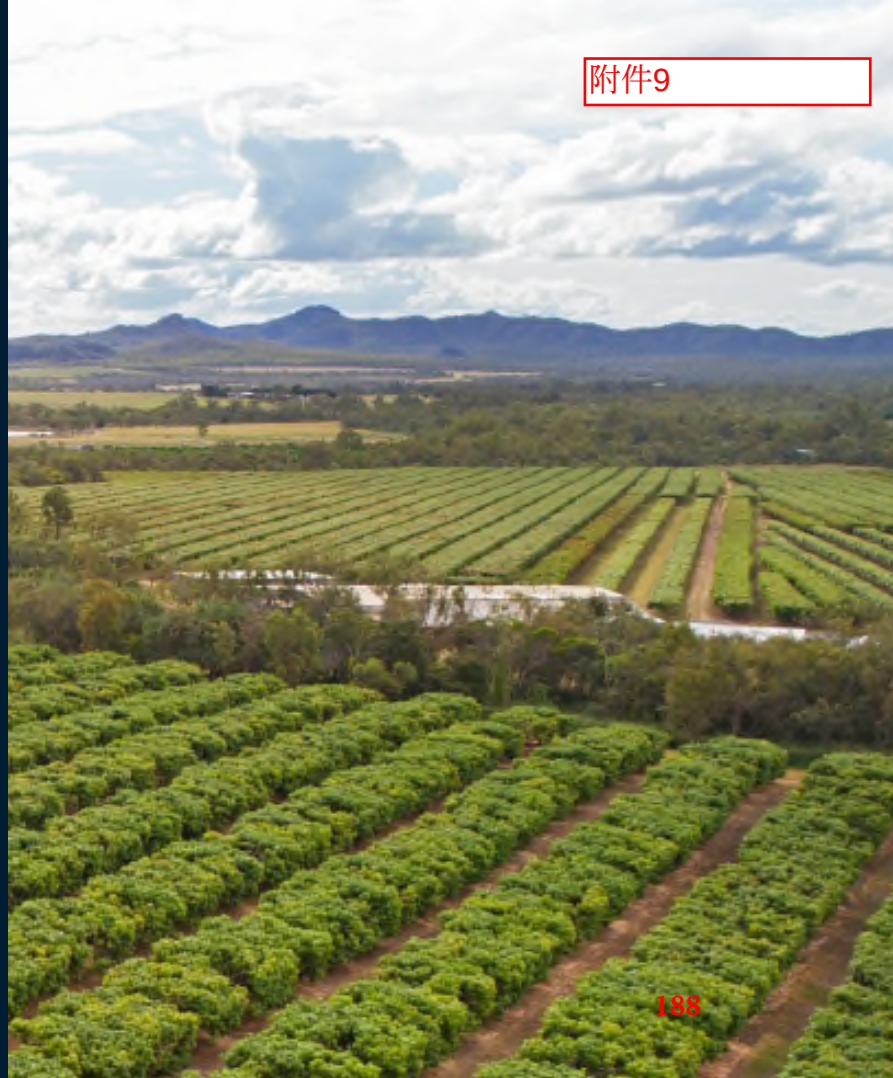
Thank you for your attention.

Please feel free to contact the Invasive Species Team (Standards@mpi.govt.nz) if you have any questions.

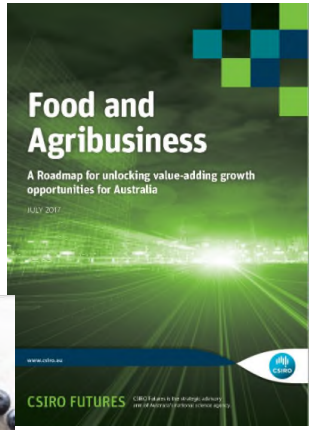
附件9

Australia's Biosecurity Future

Unlocking the next decade of resilience



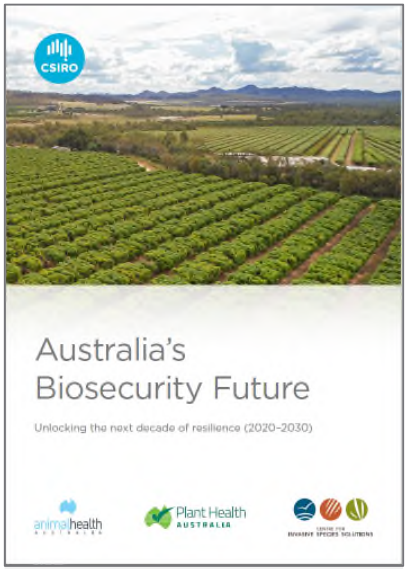
Background



Emerging medical devices landscape and associated regulatory environment

Background

2014
Megatrends
Megashocks



2020
Future states (2030)
System recommendations

Objectives

1. Promote the importance of a strong biosecurity system (especially through a One Health lens)

2. Create a sense of urgency across the biosecurity system in relation to necessary improvements/actions

3. Inform policy, investment decisions and future Government biosecurity reviews

Process

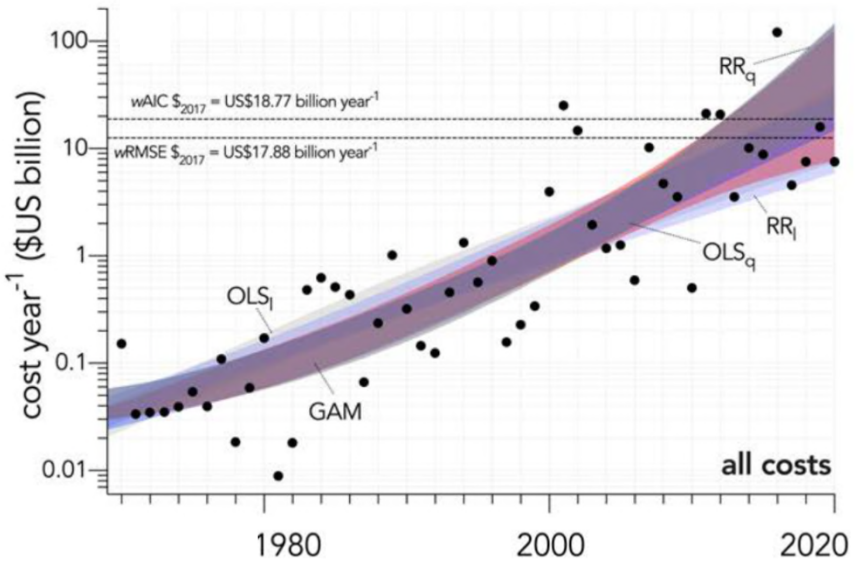
56
individuals

26
organisations

40
reviews

Economic impacts

- COVID-19 caused a 3.8% decline in Australian economy contracted Jan-Sep but recovered 3.3% in the Sept quarter unemployment peaking at 15% in April
- Environmental biosecurity system protects Australia's environmental assets valued at over $6.5 trillion
- Alien pests weeds and diseases cost Australia over $390 B over last 50 years*
  - up to 6-fold increases per decade
  - current annual costs between $8.9 B (direct) and $76 B (direct & indirect)



*Bradshaw et al. (*in press*) Detailed assessment of the reported economic costs of invasive species in Australia. *Neobiota*

Two trajectories

Business as usual trajectory		Transformational trajectory
Declining and stretched	Expertise and infrastructure capability	Up-to-date and adaptive
Response and recovery	System focus	Prevention and detection
Low and slow	Data sharing	High and fast
Under-engaged, one-way	Community and stakeholder engagement	Collaborative, highly informed and engaged
Vulnerable to non-tariff trade barriers	International market access	Increasing export market access
Unaligned and fragmented	Technology development	Strategic
Slow and incremental	Rate of change	Fast and transformational

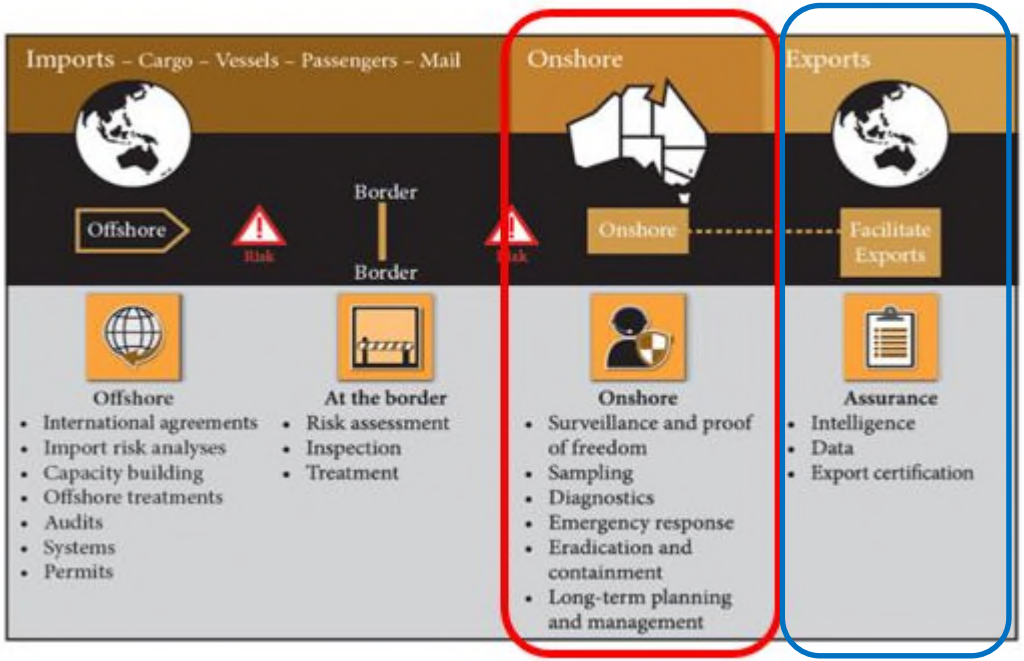
Recommendation themes

20 actions across 3 themes.

Recommendation themes

System connectivity

- Digitised processes and data sharing
- Domestic and international partnerships



Recommendation themes

System connectivity

- Digitised processes and data sharing
- Domestic and international partnerships

Shared responsibility

- Community and public engagement
- Indigenous engagement
- Industry engagement

Recommendation themes

- Innovation in S&T
  - Supporting innovation
  - Science and technology capability

Recommendation themes

Australian Biosecurity System

- Protects our unique environment & internationally competitive $60B agricultural export industries
- Provides the platform for shared-responsibility and government-industry and community partnerships
- Needs to be transformed to meet growing risks and impacts – scaling up not good enough
- Needs to innovate by defining and investing in technologies for priority areas
- Needs a human-agriculture-environment One-Health approach

Australia wants to be the most biosecure trading nation respected globally. Transformative change is needed to get there

Thank you

Andy.Sheppard@csiro.au
CSIRO

Australian Government
Department of Agriculture, Water and the Environment

STDF | STANDARDS and TRADE DEVELOPMENT FACILITY

Promoting IT solutions for surveillance and pest reporting

STDF/PG/432

QRM Quarantine Regulators Meeting
Advancing biosecurity systems through a success-oriented plan

STDF_DAWE/ Ms Carol Quashie-Williams & Ms Roshan Khan

25 June 2021

Introduction

The "*Promoting Information Technology (IT) solutions for surveillance and pest reporting"* project *(aka* Surveillance and Reporting Project*)*

promotes best practice in;

- Surveillance - design, planning and implementation
- Efficient data collection
- Management of surveillance information, and
- Evidence-based reporting on pest status

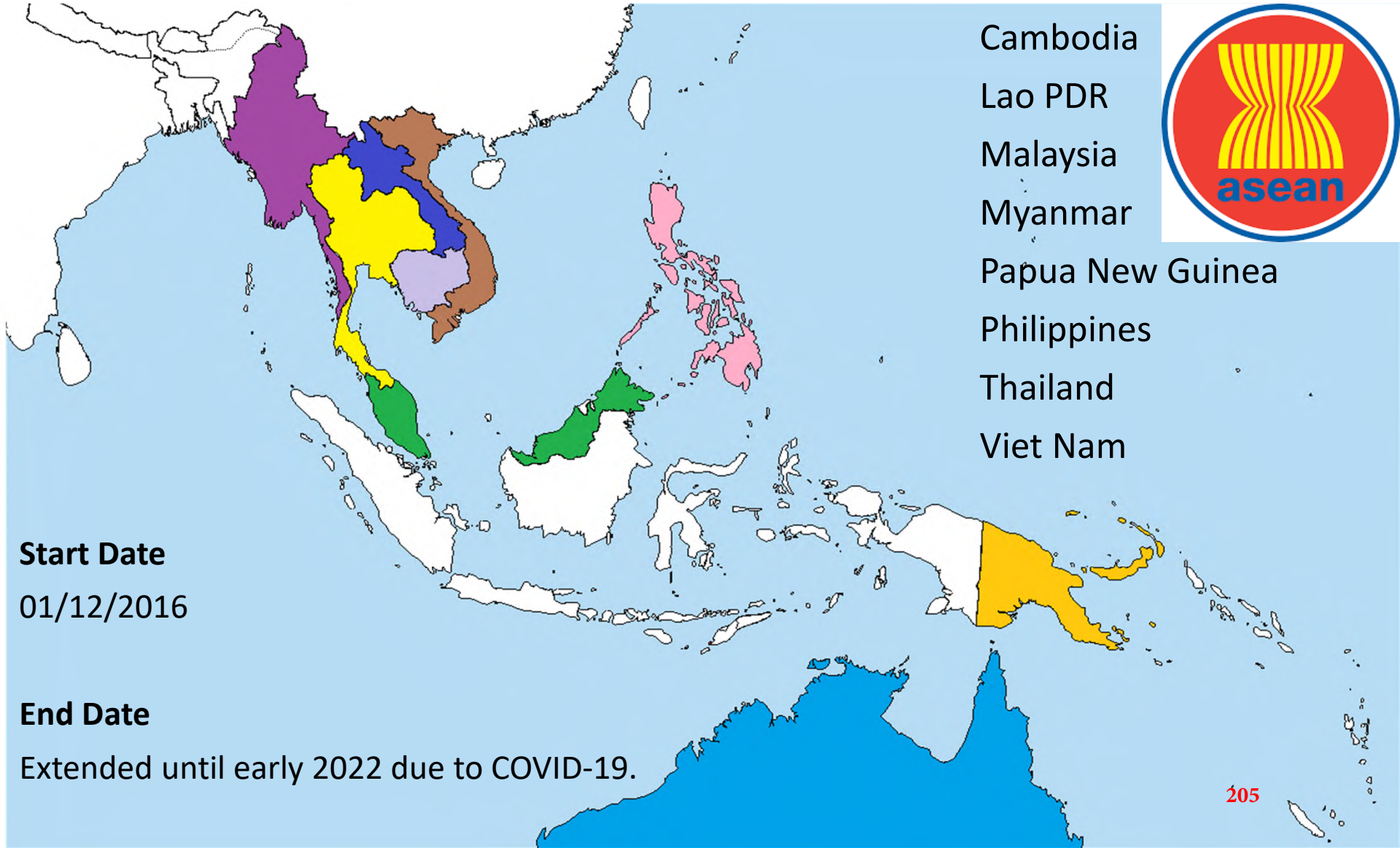
- Funding

STDF | STANDARDS and TRADE DEVELOPMENT FACILITY

- Management

Australian Government
Department of Agriculture, Water and the Environment

Beneficiary countries:



Cambodia

Lao PDR

Malaysia

Myanmar

Papua New Guinea

Philippines

Thailand

Viet Nam

Start Date

01/12/2016

End Date

Extended until early 2022 due to COVID-19.

Theory

Australian Government
Department of Agriculture and Water Resources

STDF

STDF SURVEILLANCE PROGRAM WORKSHOP

Day One	Day Two	Day Three	Day Four	Day Five
STDF Surveillance Program Management and International Surveillance Standards	STDF Surveillance Program Planning, Prioritization and Design	STDF Surveillance Operations and Communication P-tracker Field Data Collection	STDF Field Activity (Surveillance Operations and Delivery)	STDF Surveillance Information Management and Reporting

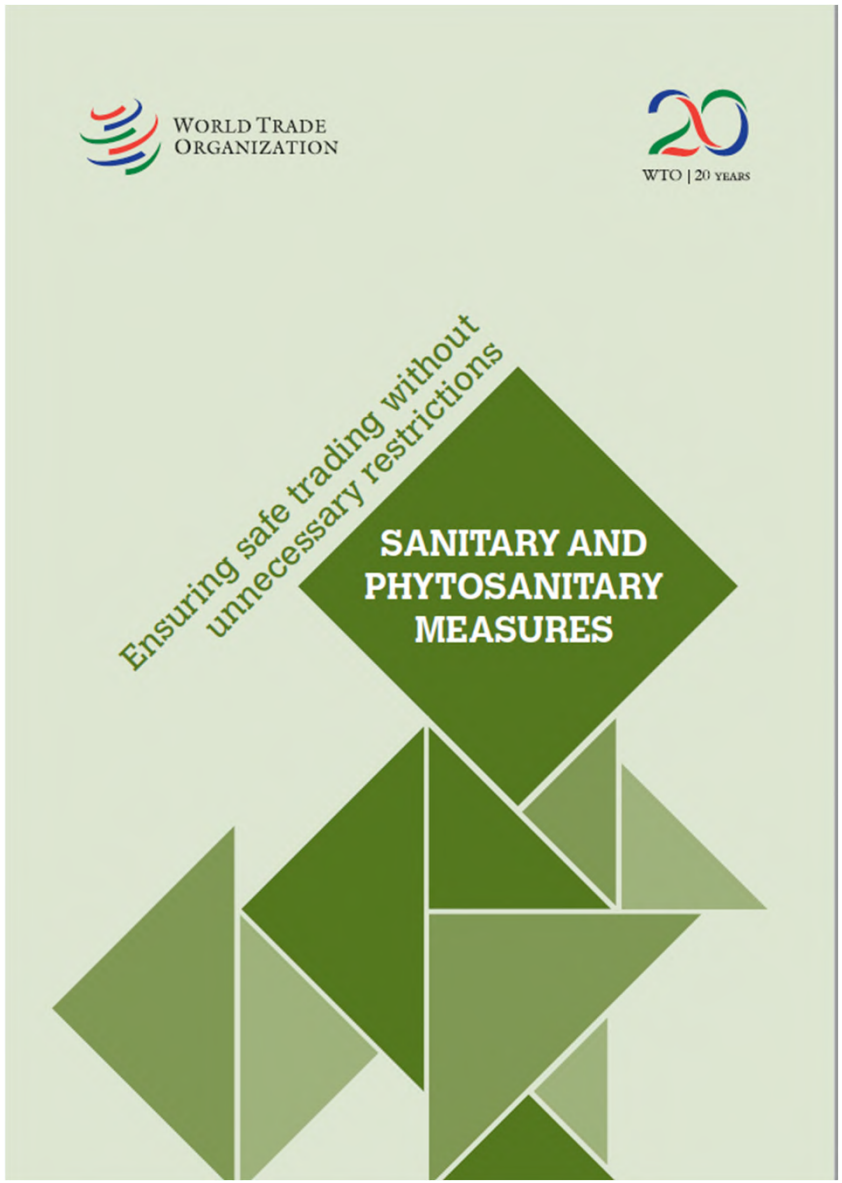
Australian Government
Department of Agriculture and Water Resources

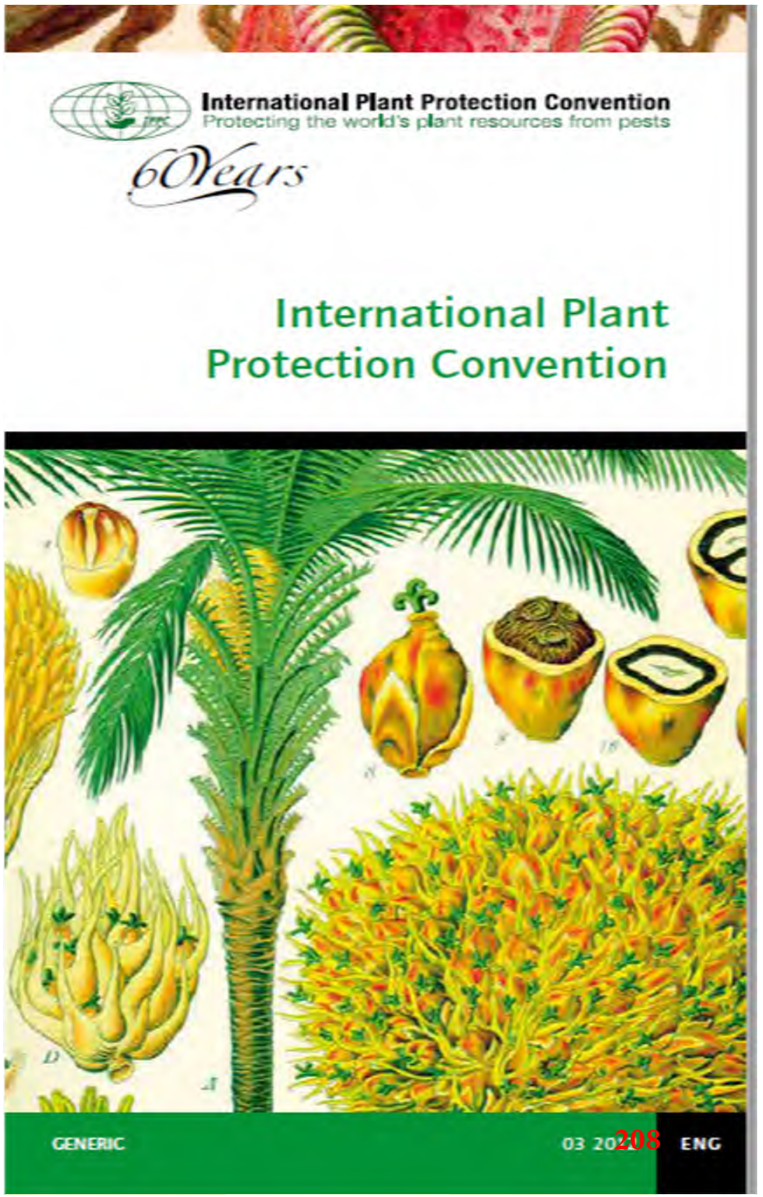
STDF

COMPONENTS OF A NATIONAL SURVEILLANCE SYSTEM

- A national surveillance system is an integral part of a country's plant health strategy and should contribute to the facilitation of trade.
- A national surveillance system should comprise surveillance programmes and the infrastructure and governance to implement them;
  - Official (Pre-border, Border, Post-Border)
  - Pest Specific (fruit flies, CMD, SALB)
  - Commodity Specific (cassava, citrus, rubber)
  - Trade and Market Access Specific (PFA, delimiting)

Training: Why do surveillance?





Skills in planning and implementing pest surveillance for trade and biosecurity objectives.

Surveillance Equipment Provided

Hand-held smartphone devices (iPad or iPhone) to record field surveillance data using a P-tracker GeoJot+ app;

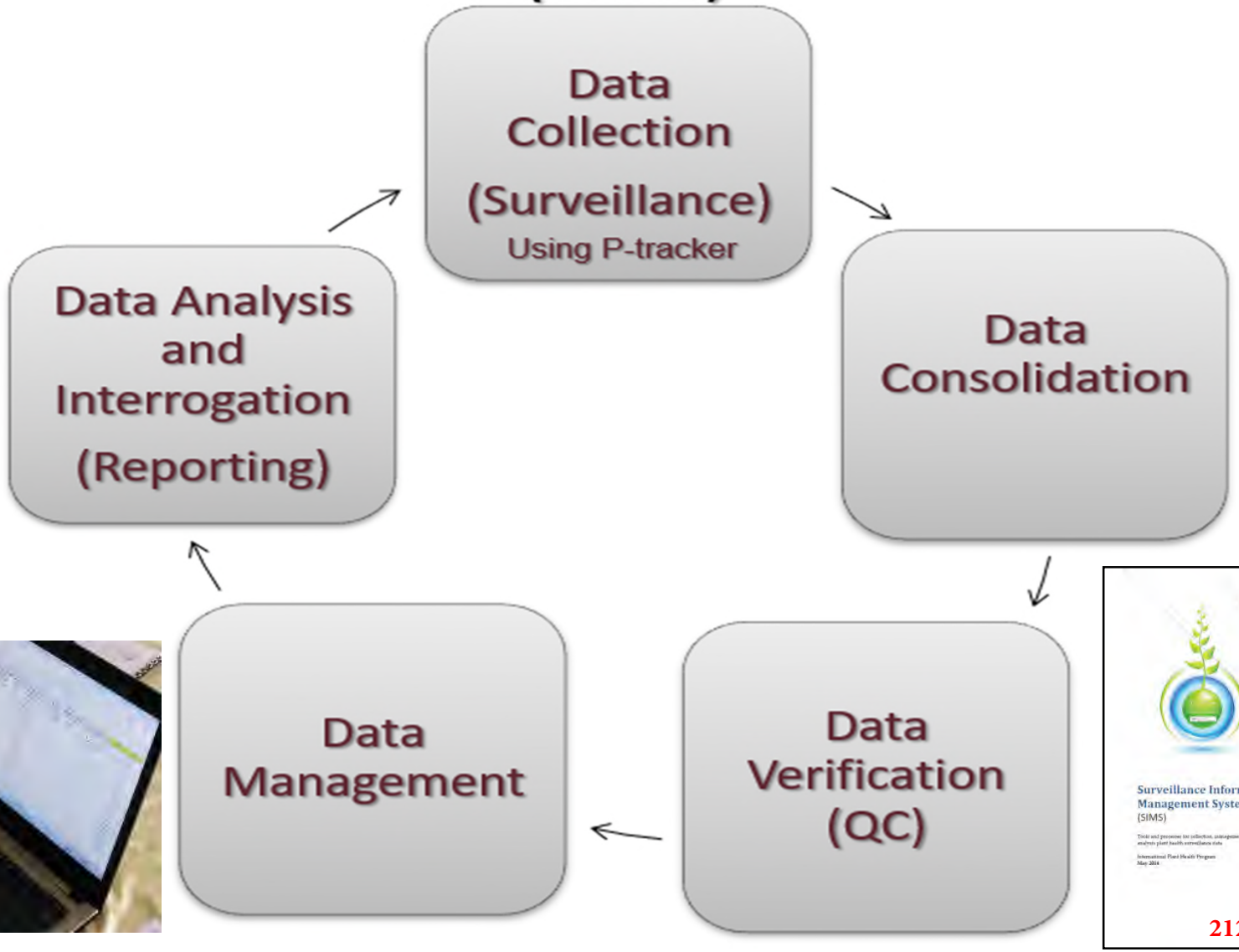
Laptop with Surveillance Information Management System (SIMS) for importing surveillance data

GeoJot+ Field Data Collection App

GeoJot+ license fees provided by project

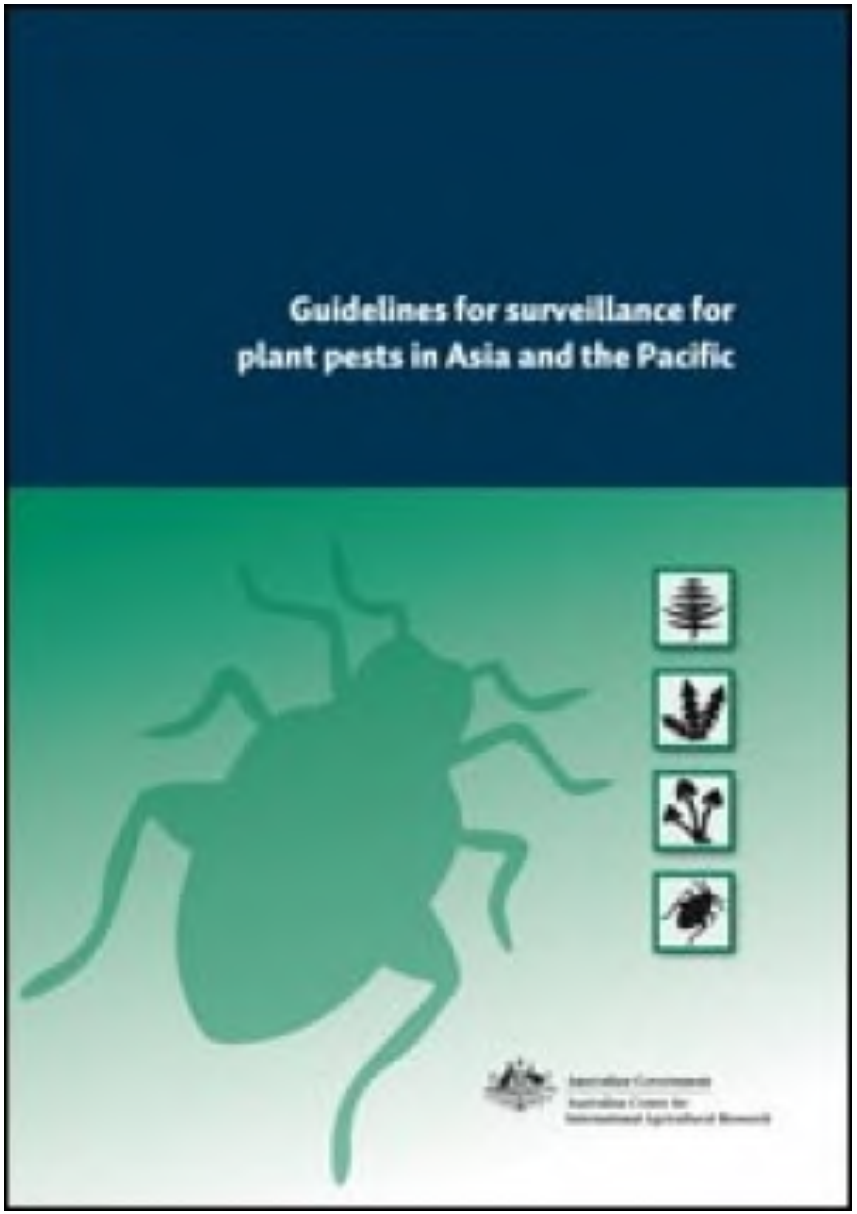
An app that collects GPS, photos and field data and generates reports

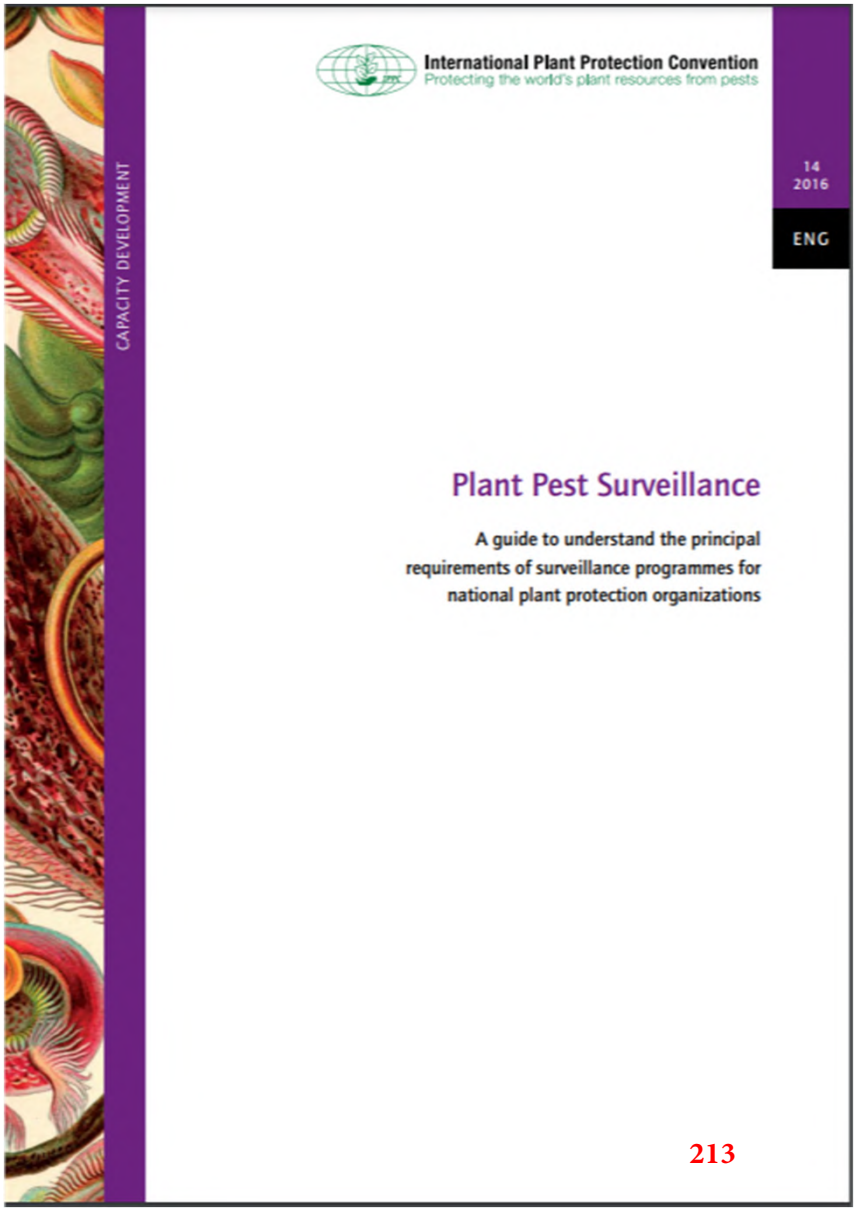
Surveillance Information Management System (SIMS)



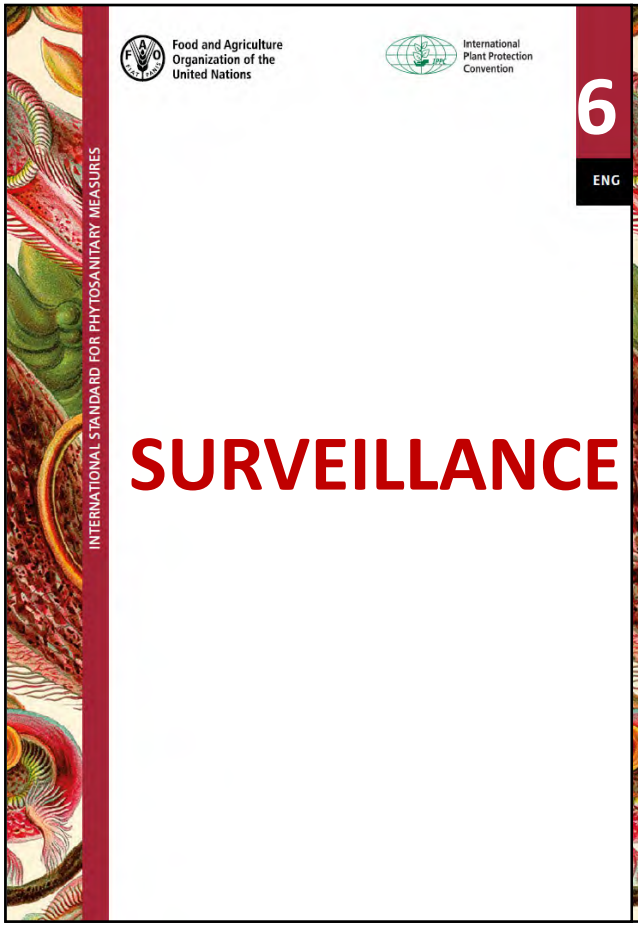
SIMS, a Microsoft Access product

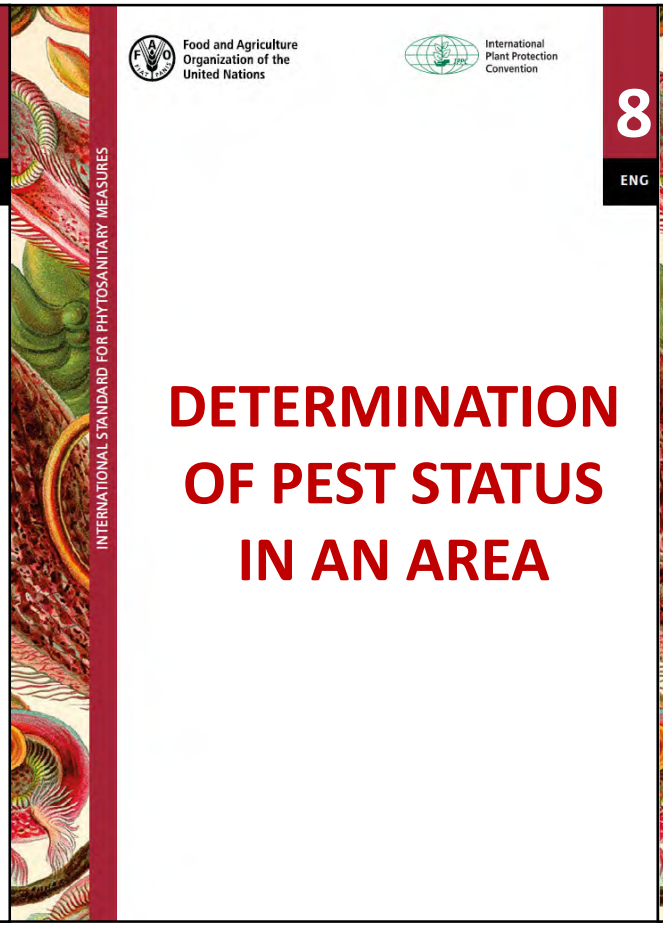
Surveillance Manuals Provided



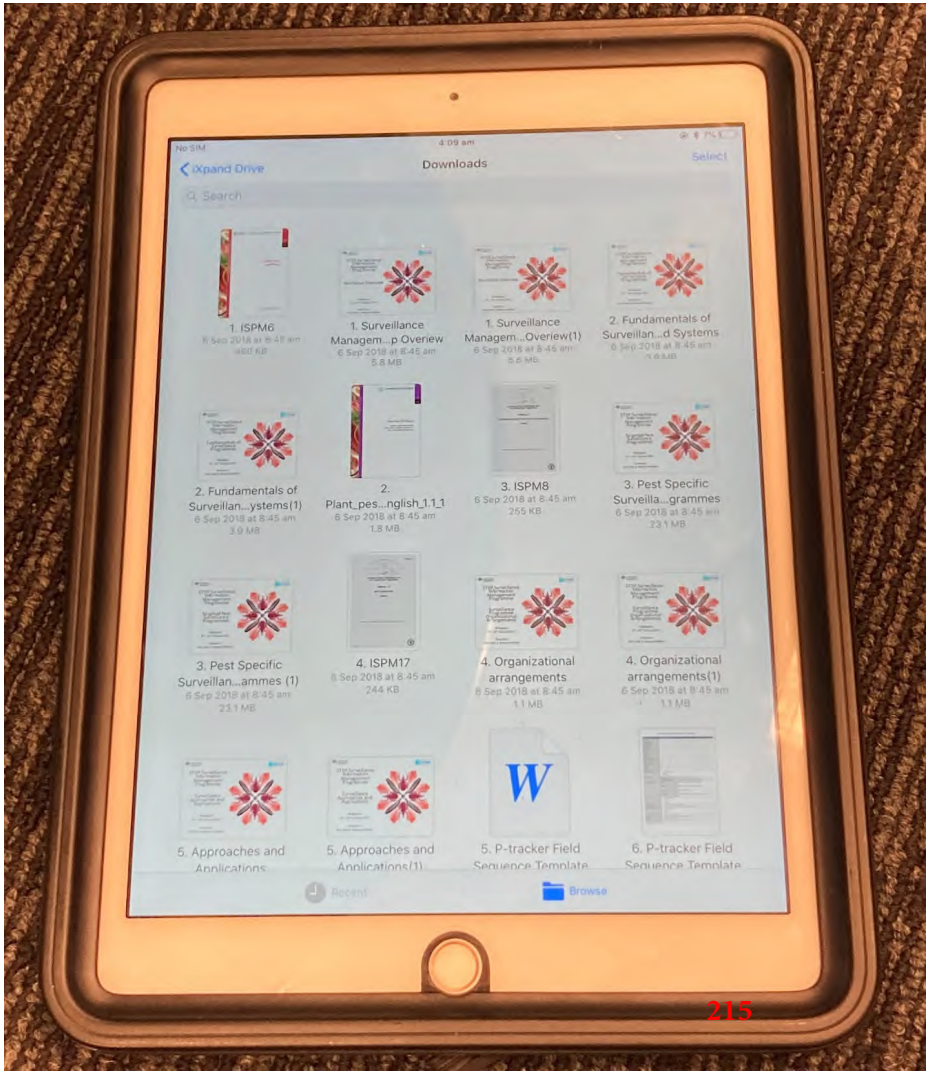


Important ISPMs-Surveillance



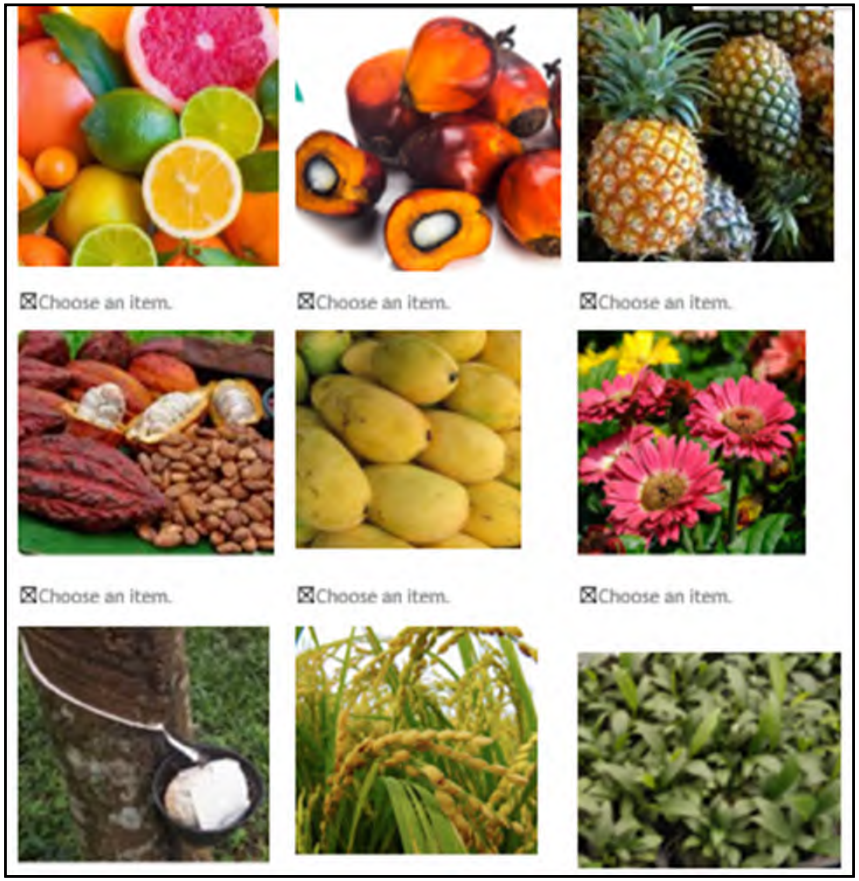


All Resources available on the project iPad



Surveillance Priority Targets Identified

Plant Products



Pests and Diseases

Section Two
Fruit Fly Surveillance Programme Planning and Prioritization

Surveillance Programme Province, District and Plantation Prioritization

Planning and Coordination discussions within NPPPO Plant Protection and provincial operations and with STDF representative are still in progress (regarding funding, resourcing, reporting and stakeholder engagement requirements). It is anticipated that fruit fly monitoring and surveys will be initially prioritized to the following provinces: Kampong Cham, Kampong Speu and Kampot Field surveillance activities will focus on known commercial and large scale plantations. Surveillance activities will focus on monitoring activities, utilizing observational and 'negative' records as the primary surveillance information data source.

Surveillance Prioritization	Surveillance Pre-Survey	Surveillance Survey Delivery	Surveillance Post-Survey	Surveillance Data and Analysis
NPPO Considerations	Kampong Cham, Kampong Speu and Kampot Provinces	Kampong Cham, Kampong Speu and Kampot Provinces	Kampong Cham, Kampong Speu and Kampot Provinces	Kampong Cham, Kampong Speu and Kampot Provinces
STDF Considerations	N/A	N/A	N/A	N/A
OTHER Considerations	N/A	N/A	N/A	N/A
Foreign Donors Considerations	N/A	N/A	N/A	N/A
Industry Considerations	N/A	N/A	N/A	N/A

- **Specific Plant Pest Surveillance Programme Design**

A fruit fly specific field surveillance operational procedure (programme design) has been developed (in collaboration with NPPP plant protection and field officers) to assist surveillance Officers with the field surveillance and inspection for these pests. The operational procedure has been developed based on internationally recognised protocols and field testing by the NPPO and pest surveillance experts during the STDF workshop field activity in February 2017. This operational procedure can be utilised to provide early warning and detection, and monitor changes inpest, severity and spread.

- **Fruit Fly Response, Delimiting and Trace Back Surveillance**

The specific field surveillance operational procedures for these pests have been developed (in collaboration with NPPO plant protection and field officers) to assist NPPO Officers with the field surveillance of plantations and inspections for the two pests. These operational procedures (along with the pest surveillance data collection form information) can be utilised to provide early detection, early warning, response, delimiting and trace back surveillance and assist monitor changes in pest severity and spread.

Fruit fly of mango symptoms:

Adult fruit flies damage the fruit where they lay their eggs causing blemishes and discoloration. The maggots bore into the fruit, develop inside and pave the way for secondary invaders (fungi or bacteria), which cause extensive rotting and dropping of fruit. Damaged fruits are unfit for human consumption. Damage symptoms do not vary on different crops.

Fig.1: Effect of fruit fly to mango fruit

Process – Field Surveillance Methodology:

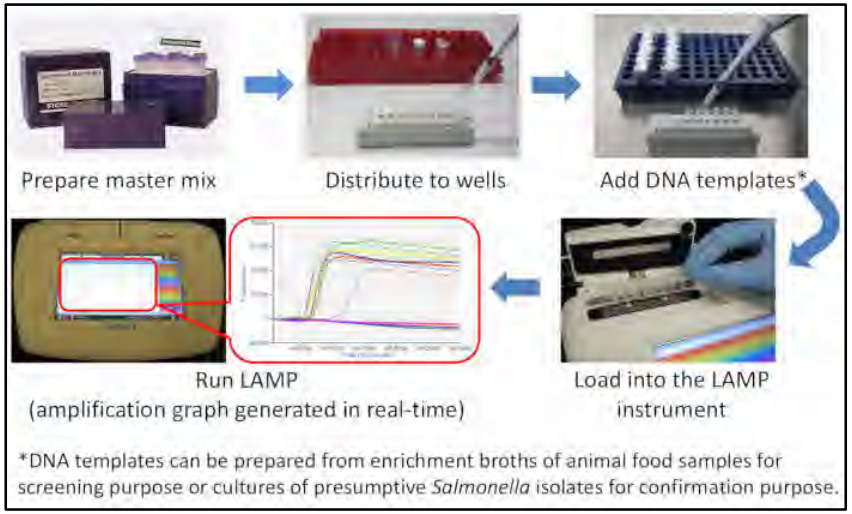
- Surveys should be conducted in known farms and mango fields within commercial and small and large mango planting area.
- To assure coverage of the entire region of interest, sampling of fruit fly will be made thru placing traps with Methyl eugenol and cure lure pheromone at the identified site.
- Traps were placed at the host trees at the sites with distribution of 4 traps/ha, or at non-host trees.
- All fruit fly samples shall be collected in the sampling bottle and sent to the Entomology Unit of Plant Biosecurity Division Kuala Lumpur for further identification.

Fig.2: Fruit fly trap

Labeling Insect Samples

Project Activities

Skills in planning and implementing pest surveillance for trade and biosecurity objectives.


Prepare master mix
Distribute to wells
Add DNA templates*
Load into the LAMP instrument
Run LAMP
(amplification graph generated in real-time)
*DNA templates can be prepared from enrichment broths of animal food samples for screening purpose or cultures of presumptive *Salmonella* isolates for confirmation purpose.

Whitefly diagnostics workshop
MARDI, Malaysia
September 2015

Workshop on the Identification of Pest Fruit Flies (Tephritidae)
SIDF
TROPICAL FRUIT FLIES OF SOUTH-EAST ASIA
CABI

1 mm
STDF (B.correcta vs B.zonata)

Surveillance Reporting

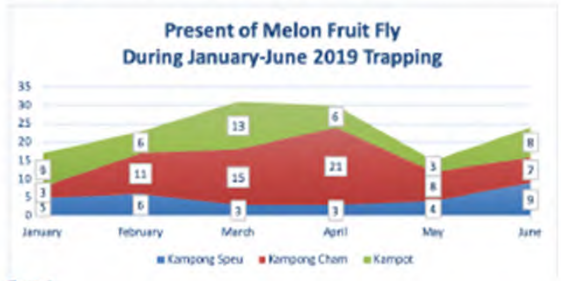


Figure 2:

c. ***Guava Fly***
was rarely but trapped in ME trap. It is shown to present during November and December 2018 in Kampong Cham Province.

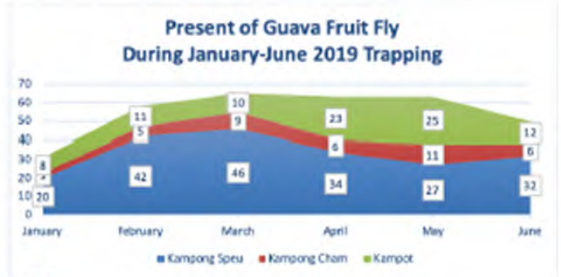


Figure 3:

3. **Summaries surveillance activities in the table**

Surveillance effort	Fruit Fly Trapping						
	Jan	Feb	Mar	Apr	May	Jun	Total
Number of surveillance sites	6	6	6	30	30	30	108
Number of samples preserved	23,442	15,717	8,985	8,625	7,910	3,410	68,089
Number of samples identified	23,381	15,667	8,943	8,588	7,884	3,384	67,847
Number of samples not yet identified	61	50	42	37	26	26	242
Number of provinces visited	3	3	3	3	3	3	3
Number of plantations/ farms visited	6	6	6	30	30	30	108

Table 7: Summaries of Surveillance activities

Australian Government
Department of Agriculture and Water Resources
STDF Standards and Trade Development Facility

Post-Entry Plant Quarantine Center No 1 (PEQ 1)
Plant Protection Department (PPD)
Ministry of Agriculture and Rural Development (MARD)

The presence of *Conopomorpha sinensis* on Lychee has been recorded in Bac Giang, Hai Duong and Quang Ninh province with the incidence of insect is low to moderate (5-10%);

3. Depictall surveillance localities in a map (can be created from Excel data out put from iPad).

- May(Lychee)

- June (Lychee)

Project Challenges 2020-21

Domestic and International

Civil Unrest

Internal Movement Controls

Steering Committee Meeting Postponed

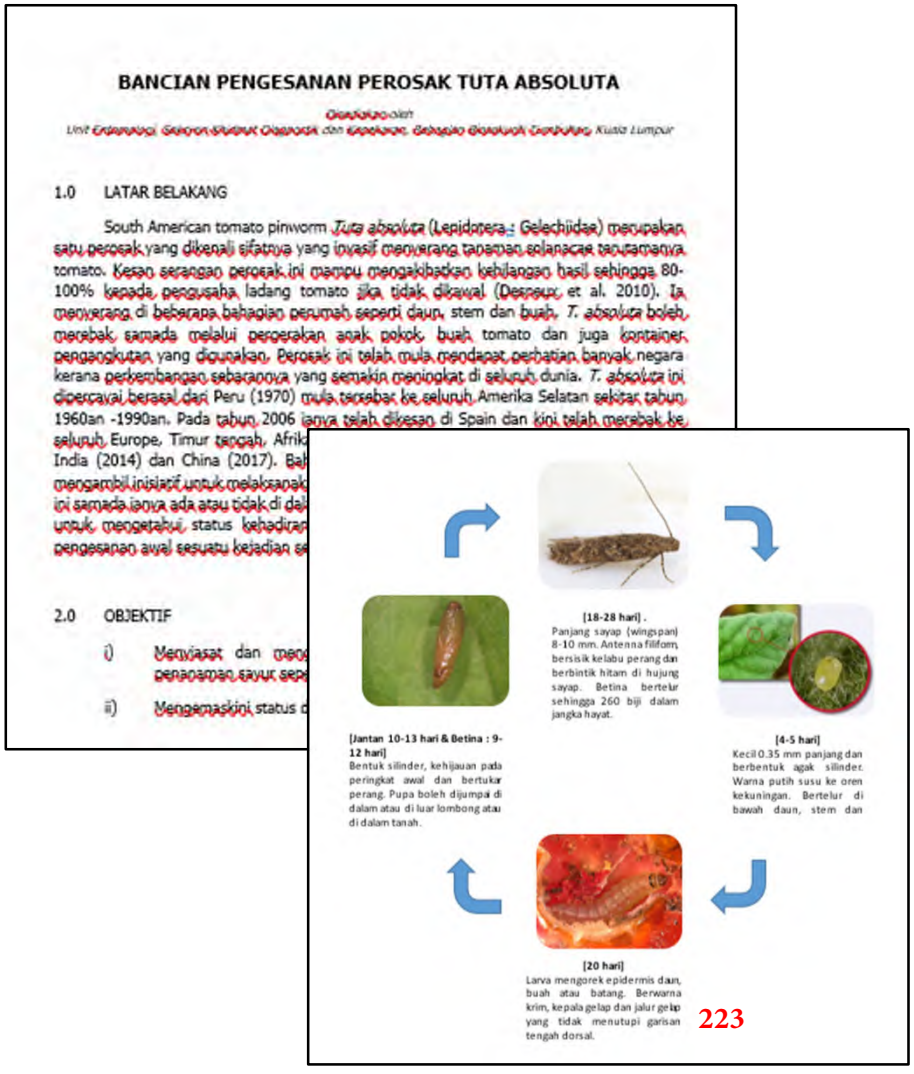
Project Status

COUNTRY	Completed Project Activities	Surveillance Competency	Trainers Competent
Cambodia	✓	Fully	Yes
Lao PDR	Covid affected	Fully	Yes
Malaysia	Covid affected	Partly	Yes
Myanmar	Covid affected	Fully	Yes
PNG	✓	Fully	Yes
Philippines	✓	Fully	Yes
Thailand	Covid affected	Fully	Yes
Viet Nam	✓	Fully	Yes

Malaysia

STDF Aquatic plant surveillance

Ministry of Agriculture
Tuta absoluta pest surveillance



BANCIAN PENGESANAN PEROSAK TUTA ABSOLUTA

Disediakan oleh
Unit Entomologi, Seksyen Khidmat Diagnostik dan Kepakaran, Bahagian Biosekuriti Tumbuhan, Kuala Lumpur

1.0 LATAR BELAKANG

South American tomato pinworm *Tuta absoluta* (Lepidoptera : Gelechiidae) merupakan satu perosak yang dikenali sifatnya yang invasif menyerang tanaman solanacae terutamanya tomato. Kesan serangan perosak ini mampu mengakibatkan kehilangan hasil sehingga 80-100% kepada pengusaha ladang tomato jika tidak dikawal (Desneux et al. 2010). Ia menyerang di beberapa bahagian pokok seperti daun, stem dan buah. *T. absoluta* boleh merebak samada melalui pergerakan anak pokok, buah tomato dan juga kontainer pengangkutan yang digunakan. Perosak ini telah mula mendapat perhatian banyak negara kerana perkembangan sebarannya yang semakin meningkat di seluruh dunia. *T. absoluta* ini dipercayai berasal dari Peru (1970) mula tersebar ke seluruh Amerika Selatan sekitar tahun 1960an -1990an. Pada tahun 2006 ianya telah dikesan di Spain dan kini telah merebak ke seluruh Europe, Timur tengah, Afrik
India (2014) dan China (2017). Bah
mengambil inisiatif untuk melaksanak
ini samada ianya ada atau tidak di dal
untuk mengetahui status kehadiran
pengesanan awal sesuatu kejadian se

2.0 OBJEKTIF

i) Menyiasat dan meng
penanaman sayur sepe

ii) Mengemaskini status d

[18-28 hari] .
Panjang sayap (wingspan) 8-10 mm. Antenna filiform, bersisik kelabu perang dan berbintik hitam di hujung sayap. Betina bertelur sehingga 260 biji dalam jangka hayat.

[Jantan 10-13 hari & Betina : 9-12 hari]
Bentuk silinder, kehijauan pada peringkat awal dan bertukar perang. Pupa boleh dijumpai di dalam atau di luar lombong atau di dalam tanah.

[4-5 hari]
Kecil 0.35 mm panjang dan berbentuk agak silinder. Warna putih susu ke oren kekuningan. Bertelur di bawah daun, stem dan

[20 hari]
Larva mengorek epidermis daun, buah atau batang. Berwarna krim, kepala gelap dan jalur gelap yang tidak menutupi garisan tengah dorsal.

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Malaysia training
Surveillance Webinars

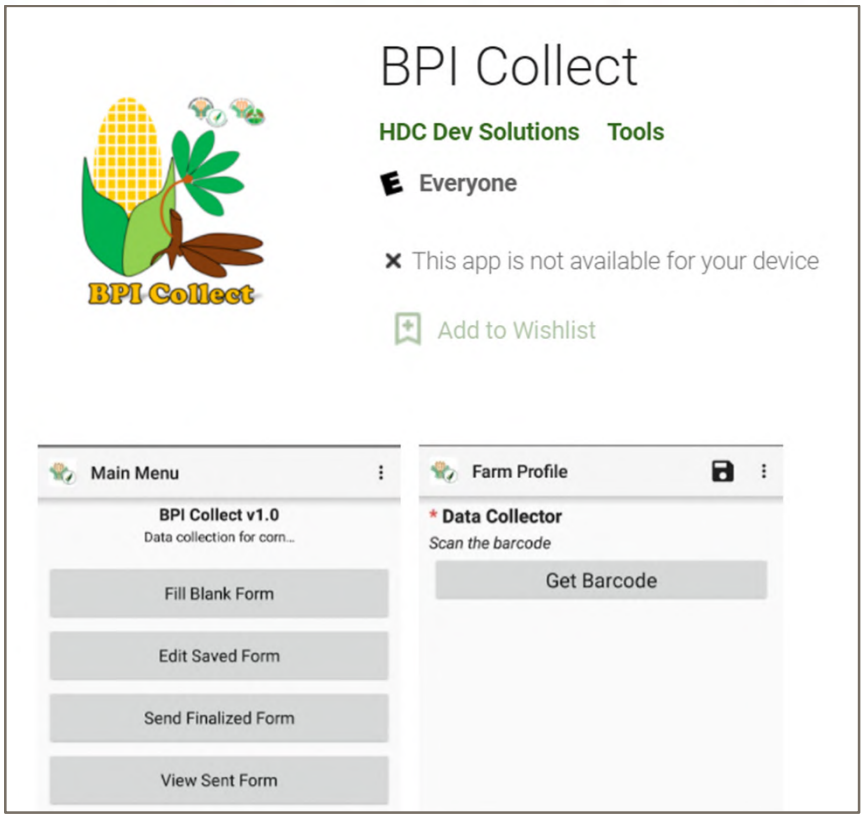
1. Surveillance Basics
2. Surveillance in Malaysia
3. Report Writing

45-60 minutes. Zoom platform. Recorded

Diversified Learning Aids!

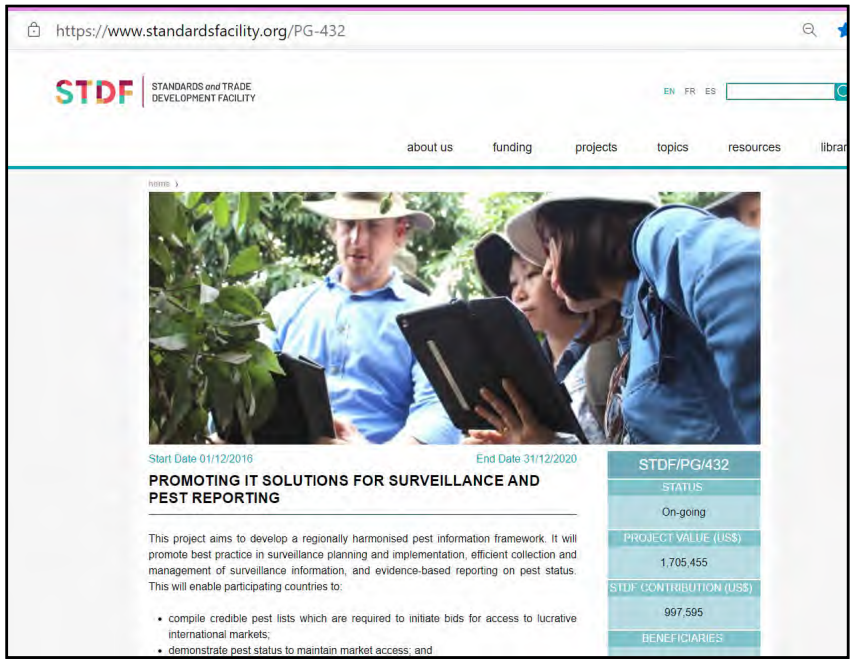
The Philippines

"Proud and Confident Experts in Surveillance"

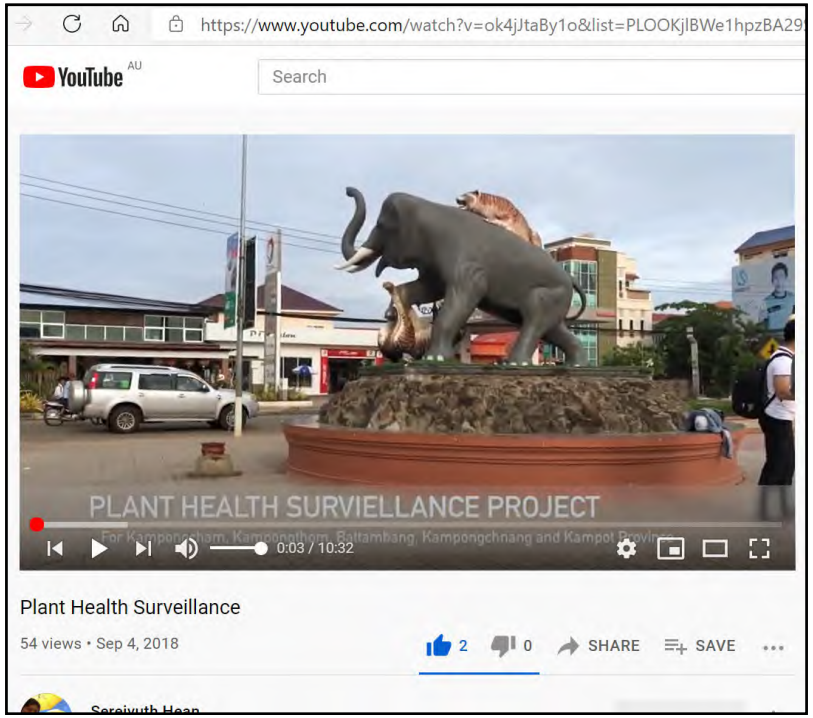


Alternative open-source surveillance apps

Project Updates



https://www.standardsfacility.org/PG-432



https://youtu.be/ok4jJtaBy1o

Thank you for listening

Any questions?

What is PIER?

Product Import Export Requirement fully integrated tools

PIER is for ‘regulatory’ not ‘transactional’ information / data

Products

Official New Zealand Pest Register (ONZPR)

ONZPR, a single NZ Govt. official searchable database of pests regulated in New Zealand, and includes general information about each pest as well as specific details for importers and exporters

Live Dec-2021

ONZPR Keywords

Scientific name, Organism type, Unwanted, Notifiable, Regulated, Non-regulated, Not assessed, Quarantine, Actionable, New organism, Not-new organism, Prohibited New Zealand country freedom, Action upon interception in NZ, Potential Vector, HSNO

PIER SEARCH

PIER SEARCH, an official database for importing commodities using associated attributes and country of origin. It identifies whether the trade route is open and provides a direct link to the requirements for importing and exporting

PIER SEARCH Keywords

Commodity, Import, Export, From Country, To Country, Pathway status, Approved, Suspended, Not approved, Commodity, End use, Part or life stage, Official reference, Requirements, IHS, ICPR

PIER CONCISE

PIER CONCISE, an extension of PIER SEARCH will provide a concise output for the specific risks and measures that are required when importing or exporting a commodity on a specific trade route. The output supports and aligns with the official IHSs and ICPRS.

PIER CONCISE Keywords

Measures, Risk scenario, Risk items, Treatment, PEQ, Action, Measure sets, Port of entry, Facility, Associated guidance documents

What is being designed & built using a incremental delivery

Live Dec-2021

Scheduled Dec-2021 — Release C1

Planned Jun-2022 — Release C2

PIER components

PIER Public Pages	PIER APIs	PIER Data Maintenance Pages
PIER Data Model	PIER Code	PIER Data Database
	PIER IHS building blocks	*PIER IHS Builder*

Vision and future scope (not in current project)

Who and Why PIER?

Product Import Export Requirement fully integrated tools

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Stakeholders

- Importers & Industry
- Exporters & Industry
- Border Systems
- NPPOs
- Public
- Other stakeholders*

*over 25 associated stakeholder groups

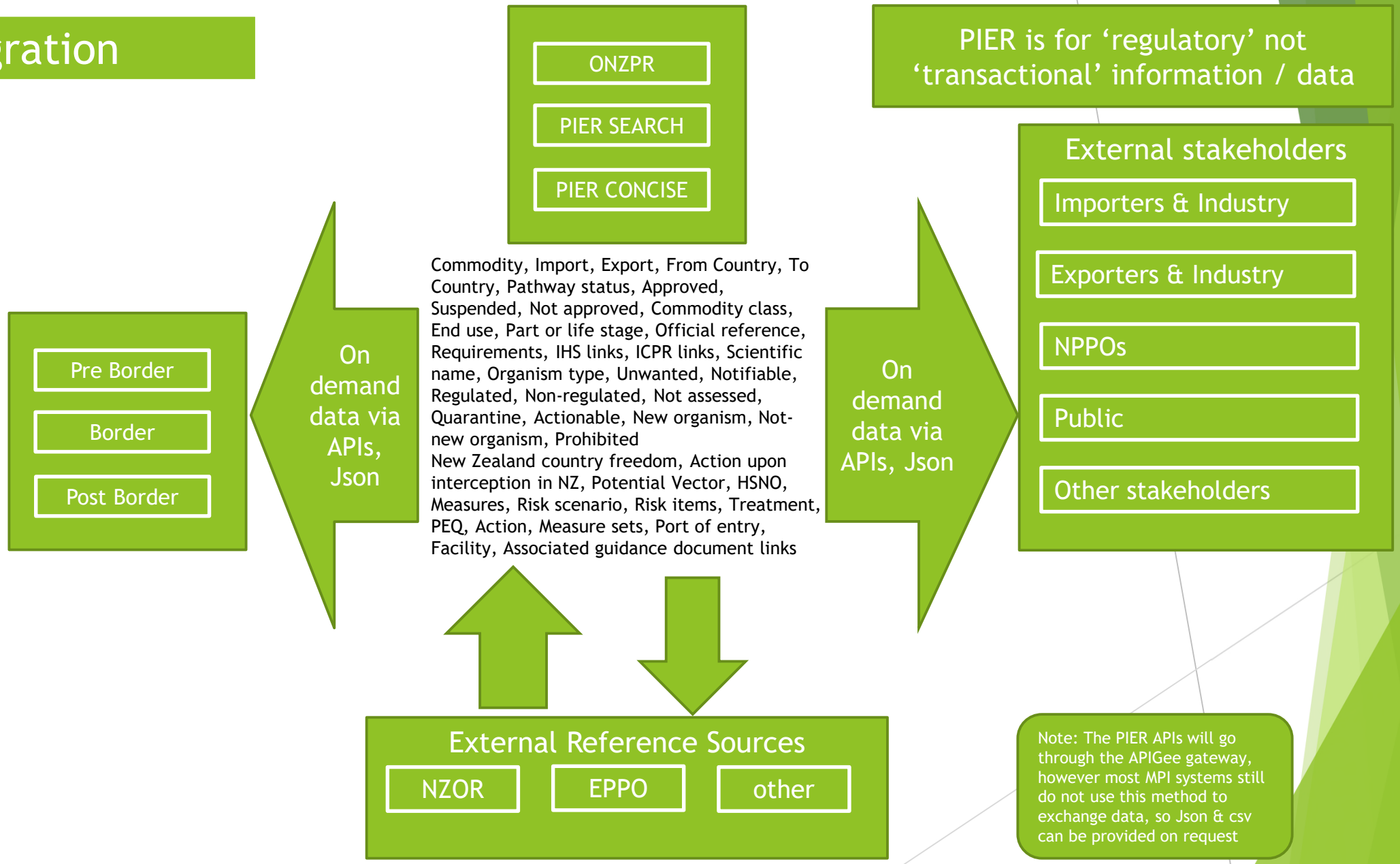
Benefits

- NZ Govt – Better for Business (MBIE)
- MPI- Ease of Business
- Consolidation of often conflicting Information
- Current and maintainable
- Designed for Incremental Enhancements
- System to System Integration
- Foundation Data for MPI Biosecurity Common Data
- Expandable & 'future' proof capability for BioSecurity Act changes

Challenges

Complex 'regulatory' information held in over 400 official 'word' documents including 576 schedules separately maintained; Over time many disparate lists across Biosecurity NZ have been built with little or no integration; Requirements and risks produce more than 300,000 pest-commodity-country-risk measure combinations that are difficult to keep current, be consistent and cross referenced, comprehendible and maintained; Over 25 identified stakeholder groups that require engagement and communication

PIER integration



Note: The PIER APIs will go through the APIGee gateway, however most MPI systems still do not use this method to exchange data, so Json & csv can be provided on request