



Food and Agriculture
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United Nations



International
Plant Protection
Convention

IPPC Webinar Introduction to the Surveillance Guide (2nd edition)

New IPPC Guides





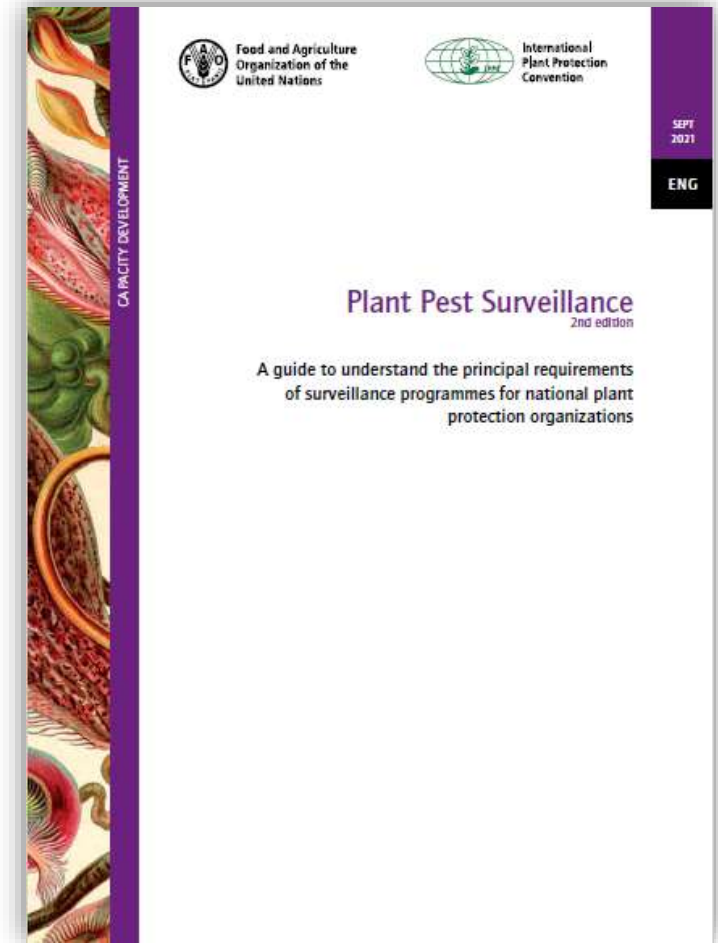
SURVEILLANCE GUIDE

Surveillance Guide (2nd edition)



- The Surveillance Guide was developed to assist NPPOs with implementation of ISPM 6: *Surveillance*.

(Add link and QR code of the new guide)<https://>

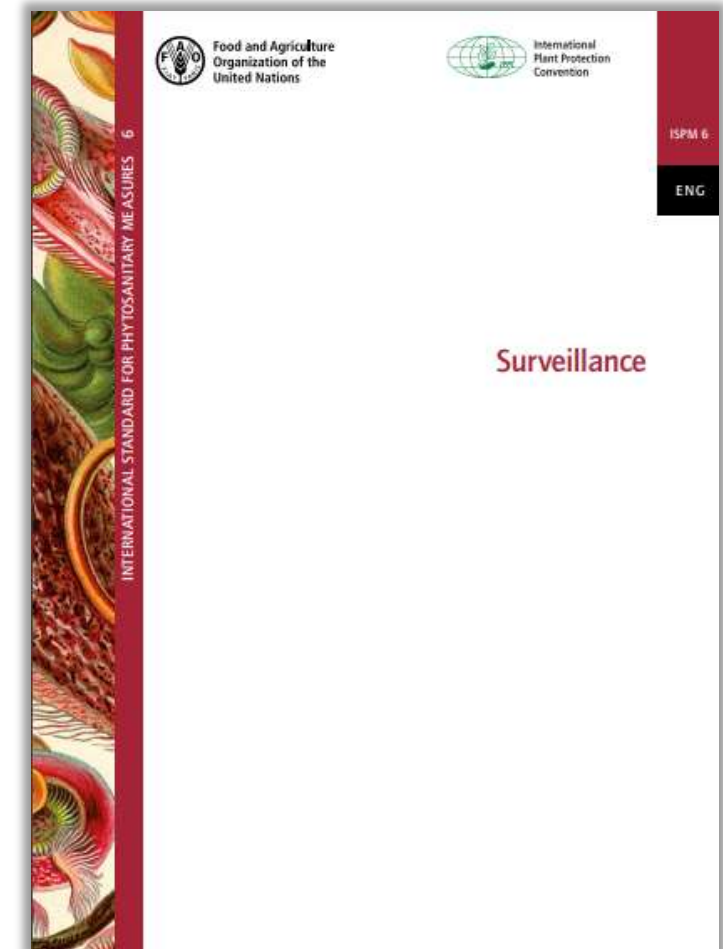




SURVEILLANCE GUIDE

Surveillance Guide and ISPM 6 (Surveillance)

- ISPM 6 describes the requirements for surveillance and the specific requirements and components of a national surveillance system
- ISPM 6 was adopted by the CPM-13 (2018) and replaced the original ISPM 6 (Guidelines for surveillance) that was adopted in 1997
- While the guide on Plant Pest Surveillance was developed and published in 2016 (during the review and drafting of the ISPM 6 revision)
- Expert group reviewed the guide on Plant Pest Surveillance in 2020 and concluded that the guide was still technically valid and slightly revised to align with ISPM 6 adopted in 2018



Section 1: Introduction

General surveillance

General surveillance should:

- support NPPO declarations of pest status
- provide information on the early detection of exotic pests
- report to other organizations, such as other NPPOs, RPPOs and FAO
- compile host and commodity pest lists and distribution records.

Outcomes of general surveillance may include:

- the imposition or lifting of quarantines based on the knowledge gained
- the design of a specific surveillance activity if more information about a pest is needed



Observatree volunteer-training workshop. © Charles Lane, Fera Science Ltd

Section 1: Introduction

Specific surveillance

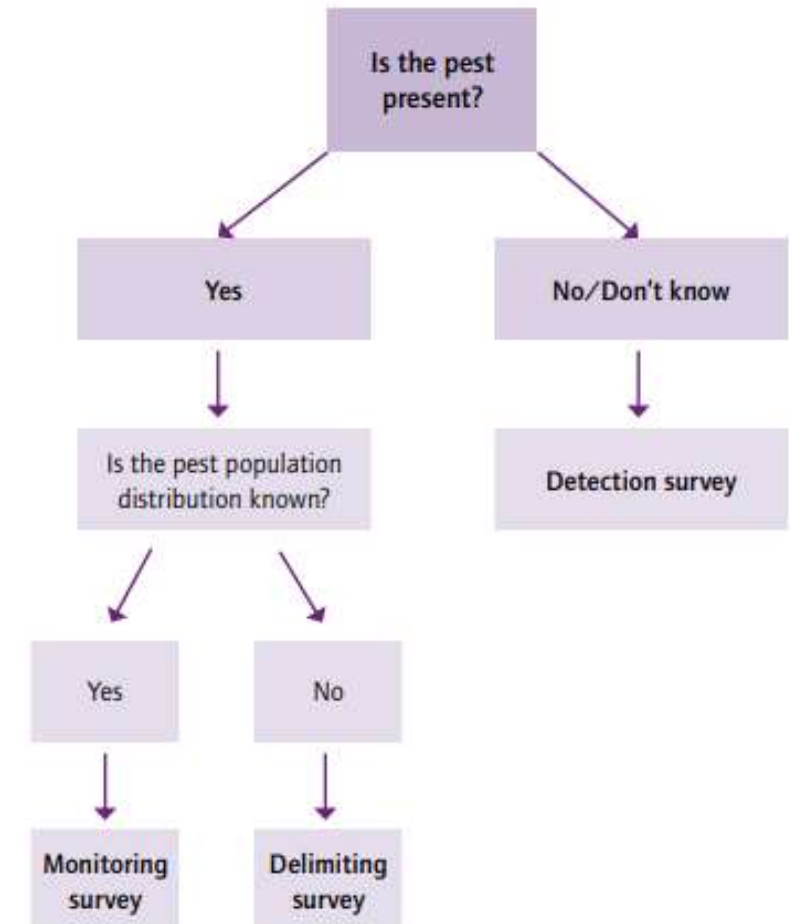
Specific surveillance may be focused on a pest or on a host or commodity. Types of specific surveillance include:

- Detection survey
- Delimiting survey
- Monitoring survey

Specific surveillance outcomes should:

- support NPPO declarations of pest freedom
- aid in the early detection of exotic pests
- assist in reporting to organizations, such as other NPPOs, RPPOs and FAO

Figure 1: Decision support process for planning pest surveillance

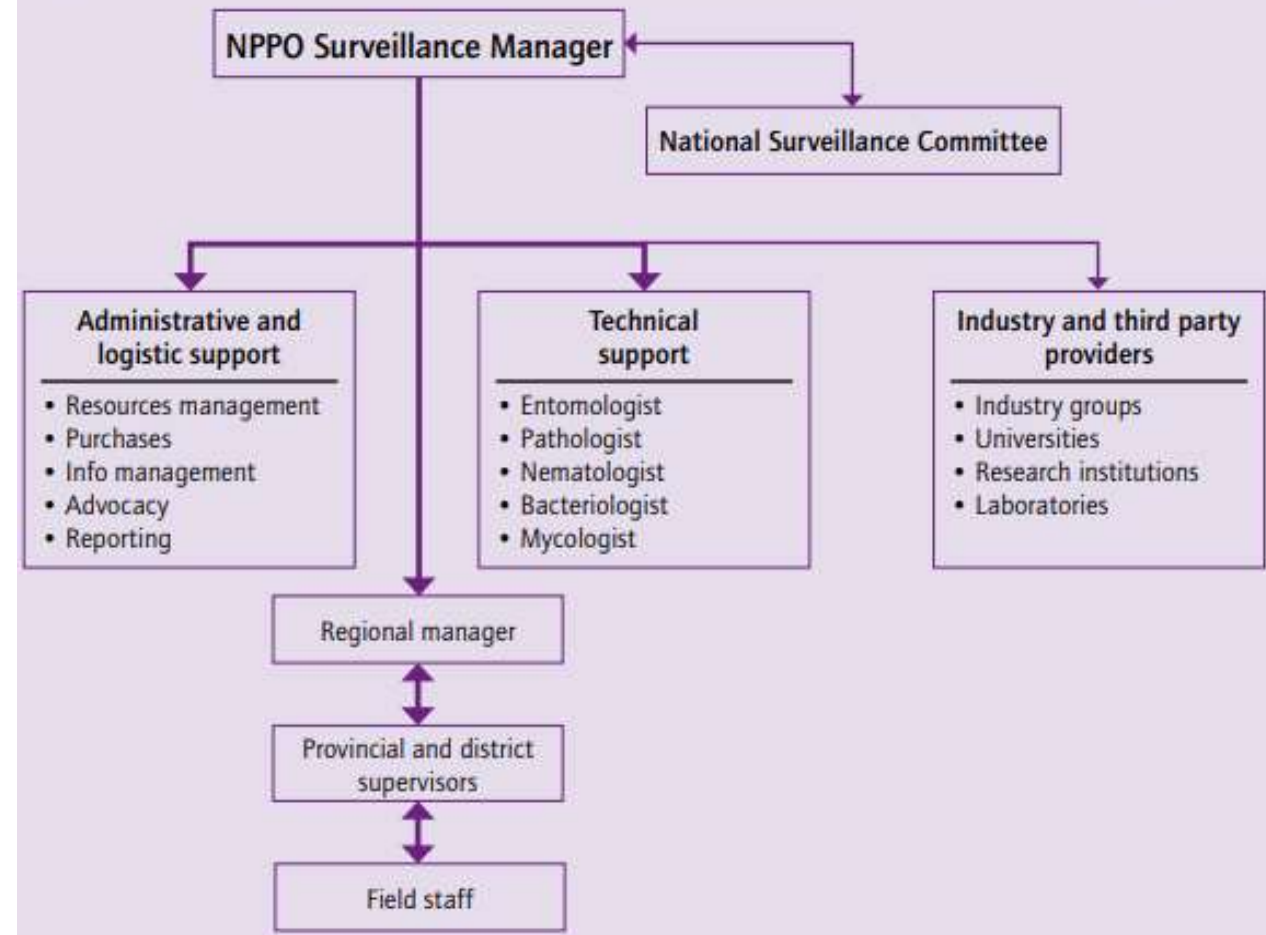


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Section 2: Organizational Arrangements

3. National Legislation
4. Funding and Sustainability
 - 4.1 Potential sources of funding
5. Management
 - 5.1 Strategy
 - 5.2 Authority
 - 5.3 Responsibilities
 - 5.4 Planning
 - 5.5 Resources and budget allocation
 - 5.6 Engagement mechanisms
 - 5.7 Performance review
 - 5.8 Monitoring and evaluation

Figure 2: Conceptual organization of a management structure for a national surveillance programme



Section 2: Organizational Arrangements

6. Human Resources

6.1 Training

6.2 Staff retention

6.3 Safety at work

7. Information Management

7.1 Data flow (Workflow structure, Record keeping, General guidelines for information management)

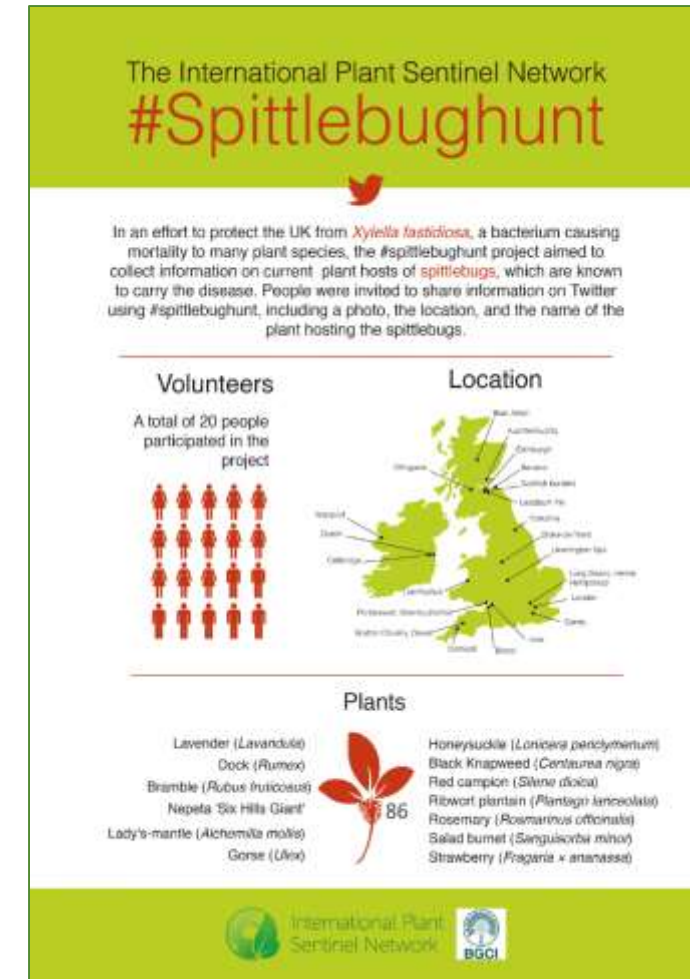
8. Communication

8.1 Communication strategy

8.2 Stakeholder engagement

8.3 Reporting

8.4 Awareness-raising and advocacy



Spittle bug infographic. Editing and layout: Green Ink (www.greenink.co.uk)

Section 3: Planning and Prioritization

9. Planning a Surveillance Programme

9.1 Cost–benefit analysis

9.2 Key issues

9.3 Surveillance implementation

10. Prioritization

10.1 Early detection

10.2 Stakeholder interests

10.3 Responses to outbreaks or incursions

Figure 3. Prioritization factors of surveillance programmes



Section 3: Planning and Prioritization

11. Designing a Specific Plant Pest Surveillance Programme
 - 11.1 Survey design
 - 11.2 Pest-specific surveillance
 - 11.3 Commodity-specific surveillance
 - 11.4 Examples of survey design
12. Response, Delimiting and Trace-back Surveillance
 - 12.1 Early warning detection surveys
 - 12.2 Investigation plan
 - 12.3 Delimiting surveillance



Section 4: Operations

13. Resource Requirements

13.1 Human resources

13.2 Financial resources

13.3 Physical resources

14. Methodologies

14.1 General surveillance

14.2 Specific surveys

14.3 Methods

14.4 Inspection

14.5 Sample coding

14.6 Sample collection

14.7 Submission to diagnostic laboratory

Table 4. Use of specific surveys for different pest situations

Specific survey	Pest situation				
	Pest present without control	Pest present under suppression	Pest present under eradication	Pest absent under exclusion	Pest transient, eradication of an incursion
Monitoring	Uncontrolled pest subject to monitoring surveys	Pest under suppression subject to monitoring surveys	Pest under eradication subject to monitoring and verification surveys		
Detection				No pest; detection surveys including intensive trapping for exclusion in a PFA	
Delimiting					Incursion detected through ongoing detection surveys, therefore additional implementation of delimiting surveys

Source: derived from IAEA (2003).

Section 4: Operations

- 15. Data Collection and Submission
- 16. Field Communication and Feedback
 - 16.1 Pre-survey briefing
 - 16.2 Survey (in-field) communications
 - 16.3 Methods of communication
- 17. Interaction with Stakeholders
- 18. Supervision of Activities



Identifying damage caused by *Stenoma catenifer*. © Agencia de Regulación y Control Fito y Zoonosanitario

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Case studies

1. (General Surveillance) Surveillance for invasive forest pests: Innovative national trapping and rearing surveys in Canada
 - Two early detection general pest surveys, 1) the Invasive Alien Species (IAS) Forest Trapping Survey and 2) the IAS Insect Rearing Survey
2. (General Surveillance) Observatree – an early warning system for tree health using citizen science in United Kingdom
 - Early warning surveys for tree health: network of specialist, trained volunteers (citizen scientists) undertake surveys to assist with spotting new tree pests and diseases
3. (Specific Surveillance) Monitoring of the avocado seed moth (*Stenoma catenifer*) using pheromones in Ecuador
 - Monitoring of the avocado seed moth including activities such as training, mobile application and taking samples



Setting an IAS trap in the field. © Her Majesty the Queen in Right of Canada



Examining symptoms of *Armillaria* decay. © Charles Lane, Fera Science Ltd

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Case studies

4. (Specific Surveillance) Phytosanitary measures and procedures taken to manage the risk of fall armyworm in Egypt
 - Specific surveillance on fall armyworm in cooperation with the FAO regional office
5. (Specific Surveillance) The International Plant Sentinel Network Spittlebug Hunt in United Kingdom
 - Activities to improve understanding of host plants of spittlebugs that are known to vector or are potential vectors of *Xylella fastidiosa*
6. (General surveillance) Management of an expert network in Argentina
 - Developing a general plant pest surveillance network under in cooperation between the NPPO and non-NPPO experts in the national phytosanitary system



Fall armyworm in caterpillar stage. © Nader ElBadry and Ahmed ElAttar, Central Administration of Plant Quarantine (NPPO of Egypt)



Spittlebug on fireweed (*Chamaenerion angustifolium*). ©David Knott RBGE UK



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Thank you

IPPC Secretariat

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