

Australian Government

Department of Agriculture and Water Resources

General Surveillance Framework supports pest status determination in Australia

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General surveillance

General surveillance constitutes the collation of information from a variety of sources (ISPM 6)

Sources may include NPPOs, government agencies, research institutions, universities, scientific societies, producers, consultants, museums, the general public, scientific and trade journals, unpublished data and contemporary observations

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General surveillance provides confidence

General surveillance collectively provides a level of confidence that the pest, if present, would have been detected and notified.

- General surveillance provides information that the pest is:
 - $\circ \;\;$ absent now and has never been recorded
 - \circ was transient or established in the past but no longer present
- General surveillance aids:
 - \circ early detection of new pests
 - \circ design specific surveys

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General surveillance framework

The general surveillance framework was developed to better define general surveillance and to improve the level of confidence.

The framework consists of two broad categories of elements:

- **Biosecurity system**: elements that reduce the likelihood of a pest entering the country or region and increase confidence that the pest will be reported, accurately diagnosed and controlled rapidly
- Pest and/or host specific biosecurity components: elements that provide sufficient knowledge to detect the pest or its symptoms by less specialised identifiers/collectors

Elements – Biosecurity system

- 1. Effective quarantine measures in place to minimise the risk of introduction of the pest
 - provides confidence that the likelihood of the pest entering Australia or a region within Australia is very low
- 2. Legislative regulations in place that mandate reporting and official control of the pest if detected
 - provides confidence that general surveillance activities will result in the pest being reported and controlled if detected
- 3. Reporting system in place (e.g. Plant Pest Hotline)
 - provides confidence that a pest will be reported to relevant authorities if detected using general surveillance
- 4. Awareness raising processes for the pest are directed at relevant stakeholders or community groups
 - provides confidence that identifiers/collectors have information to detect and report the pest

Elements – Biosecurity system cont.....

- 5. Pest is included in national, regional or industry priority pest lists
 - provides confidence that relevant stakeholder groups are aware of the significance of the pest
- 6. Surveillance activities are recorded and able to be retrieved by relevant government authorities
 - includes recording of data within repositories such as regional/national databases
- 7. Diagnostic expertise and tools are available to identify the pest
 - $\circ~$ provides the ability to identify a pest and/or its symptoms

Elements – Pest and/or host specific

- 8. Pest biology and ecology are well documented
 - provides confidence that sufficient knowledge is available to detect the pest (how, when and where)
- 9. The pest or its symptoms can be readily detected
 - provides confidence that the pest or its symptoms can be detected visually, especially by less specialised identifiers/collectors
- 10. Absence of a suitable host or climatic conditions for spread and establishment of the pest
 - provides confidence that the likelihood of the pest becoming established in Australia or a region within Australia is very low

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Elements – Pest and/or host specific cont....

- 11. Training programs are available for pest detection and monitoring
 - provides confidence that potential identifiers/collectors have sufficient expertise to detect and report the pest
- 12. Plant health monitoring that directly targets the host
 - provides confidence that unusual pests or symptoms will be detected by individuals undertaking plant health monitoring who have expert knowledge of the host

The framework was tested

The framework was tested using case studies to evaluate if general surveillance could be used to declare the pest absent.

Four plant pests which are absent now and have never been recorded or were established and are no longer present in Australia were used:

- Citrus canker (Xanthomonas citri subsp citri)
- Khapra beetle (Trogoderma granarium)
- Onion smut (Urocystis cepulae)
- Asian Papaya fruit fly (*Bactrocera papayae*)

The framework determines the pest status

Case studies determined that:

- the framework would be sufficient to determine pest status
- but should be supported by specific surveys where it is used to claim pest free status during an emergency response
- the threshold of evidence required may vary depending on the pest in question and the requirements of the potential trading partner

The framework is currently being used in Australia to verify status of key plant pests

Can the world use general surveillance?

Can the world adapt this framework to verify pest status?

Do we have a harmonised understanding?

Thank You