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# IPPC Global Workshop on Systems Approaches

Santiago, Chile  
1 – 4 December 2025

In partnership with:



Australian Government  
Department of Agriculture,  
Fisheries and Forestry

## How production practices influence pest risk assessment

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## What is Pest Risk Assessment?

**Evaluation of the probability of the introduction and spread of a pest and the magnitude of the associated potential economic consequence (ISPM 5, 2024).**





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## Important considerations for risk determination

- There must be a potential hazard for risk to exist.
- Risk is measurable, objective, and based on fixed criteria.
- Phytosanitary measures should be established based on risks and not on hazards.





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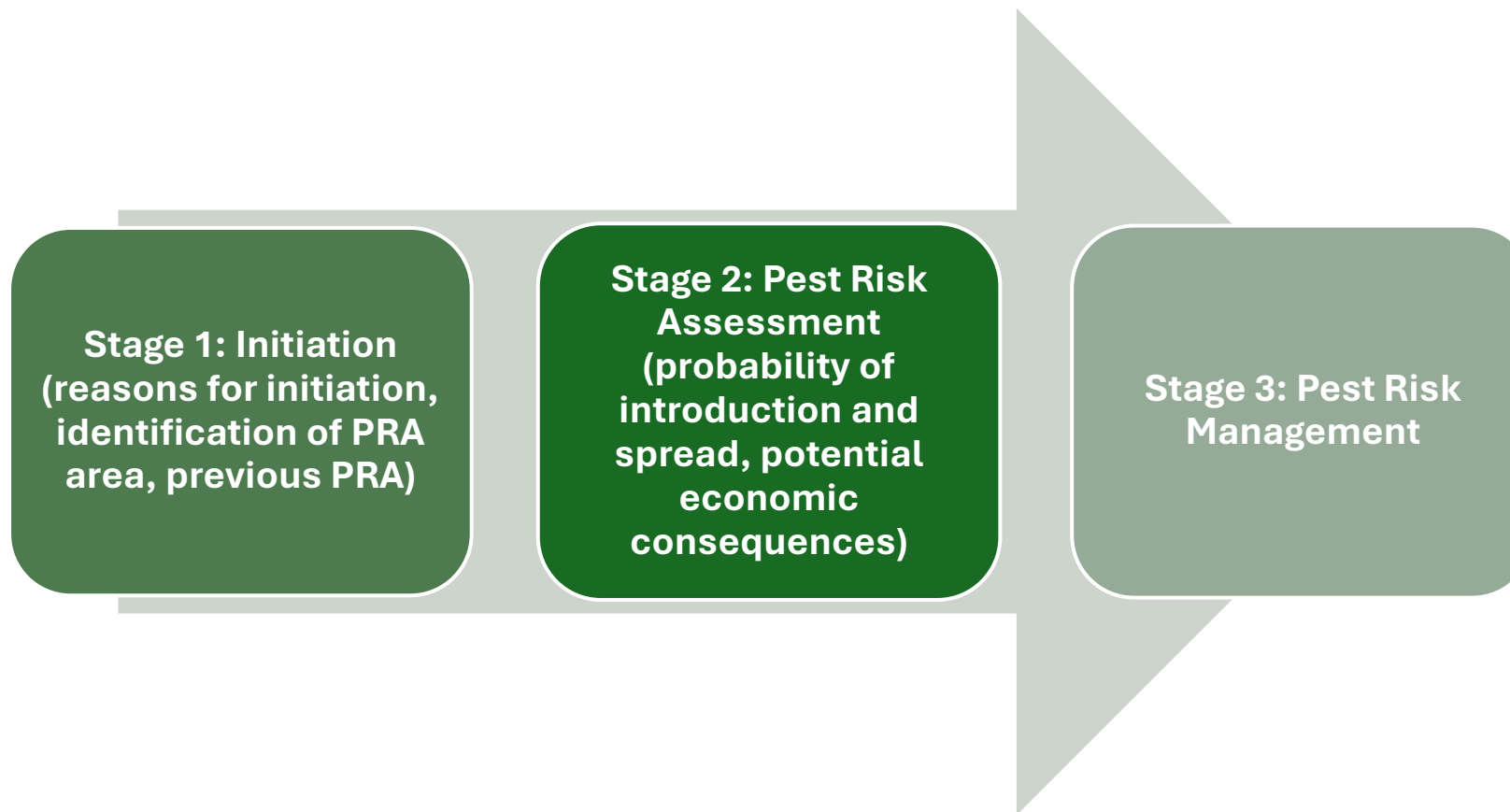


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## The stages of PRA are:







## Stage 2: Assessment Probability of entry of a pest through a pathway.

**Probability of the pest being associated with the pathway at origin**

- prevalence of the pest in the source area
- occurrence of the pest in a life stage that would be associated with commodities
- **pest management, cultural and commercial procedures applied at the place of origin**

**Probability of survival during transport or storage**

- vulnerability of the life stages during transport or storage
- **commercial procedures (e.g. refrigeration) applied to consignments in the country of origin, country of destination, or in transport or storage.**
- Evidence of interception of species of the same genus.



## Stage 2: Assessment Probability of entry of a pest through a pathway.

### Probability of pest surviving existing pest management procedures

pest management procedures (including phytosanitary procedures) applied to consignments against other pests.

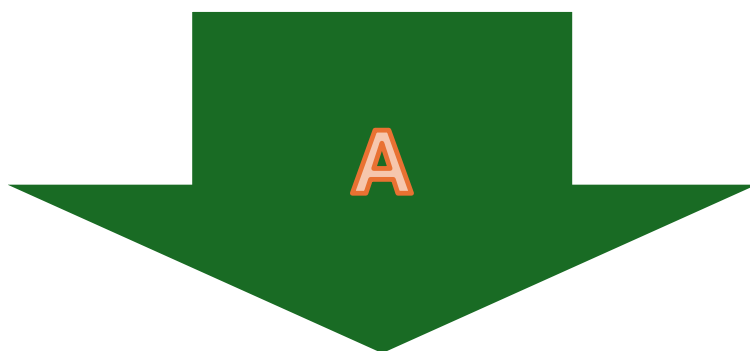
- pest is not detected during inspection

### Probability of transfer to a suitable host

- whether the imported commodity is to be sent to a few or many destination points in the PRA area
- time of year at which import takes place
- intended use of the commodity (e.g. for planting, processing and consumption)
- risks from by-products and waste



## How production practices influence pest risk assessment? (e.g. 1)

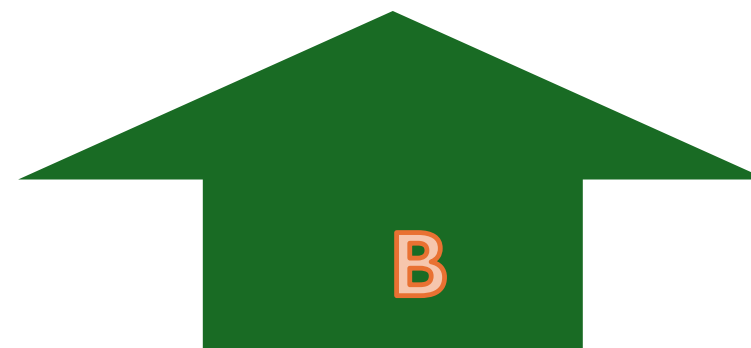


### PRA update for “X” grains with verification at origin

- Phytosanitary certification process for grains
- Storage at the place of production
- Automated sampling to determine percentages of foreign elements or presence of pests such as fungi or insects
- Transportation

### PRA for grains from origin “X” considering standard production practices

- A quarantine pest “Y” associated with the product to be imported has been identified
- Management measures are required to reduce the risk level to an acceptable level





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## How production practices influence pest risk assessment? (e.g. 1)

Climate conditions, storage conditions, and high standards in grain quality management significantly reduce the pest risk associated grain.



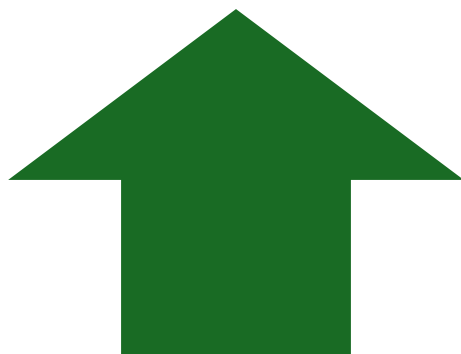
**Decrease in the intensity of the measure**







## How production practices influence pest risk assessment? (e.g. 2)



**PRA for fruits originating from “X” considering standard production practices for export products**

- Quarantine pest “Y” associated with the product to be imported were defined
- Management measures are required to reduce the risk level to an acceptable level



**Interception of a pest other than those defined in the PRA, which is mainly associated with overripe fruit and fruit with physical damage or decomposition.**



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## How production practices influence pest risk assessment? (e.g. 2)

The condition of the fruit significantly increases the risk of primary and secondary pests.



**An PRA should be developed for the pest and, if it qualifies as a quarantine pest, risk management measures should be established.**





## Conclusions

- **Risk assessment may consider production practices that help reduce risk, such as quality practices and physical storage conditions. If the risk is unacceptable, phytosanitary measures must be applied to manage it.**
- **The processes involved in maintaining adequate quality for export products reduce the pest load and can also be considered part of the phytosanitary program.**
- **Knowledge of practices can help reduce uncertainty in risk assessment, apply phytosanitary measures commensurate with the level of risk, and encourage good practices in the sector.**



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# Thank you