RSPM 40 – the NAPPO concept standard on pest risk management

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Persons involved in the development of this standard:

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ISPM 2. 2007. *Framework for pest risk analysis*. Rome, IPPC, FAO. (focus on Stage 1 of PRA, initiation)

ISPM 11. 2013. *Pest risk analysis for quarantine pests*. Rome, IPPC, FAO. (focuses primarily on Stage 2 of PRA, pest risk assessment)

RSPM 40 provides detailed guidance on how to complete Stage 3 of pest risk analysis (PRA): 'pest risk management'



The purpose of this standard is to provide guidance to assist NPPOs in identifying, evaluating and selecting appropriate risk management measures following the completion of the pest risk assessment stage of a PRA.

The standard includes six components of this process (1) sources of information (2) identification of measures (3) evaluation of measures (4) selection of measures (5) documentation (6) monitoring and feedback. What is pest risk management?

According to ISPM 5:

pest risk management (for quarantine pests) Evaluation and selection of options to reduce the risk of introduction and spread of a pest [FAO, 1995; revised ISPM 11, 2001]



A Process Overview for Pest Risk Analysis



Identification of mitigation measures...

- inspection / examination
- certification
- treatment
- surveillance and monitoring
- sanitation
- pest-free concepts
- post-entry measures
- systems approaches
- prohibition





When does it apply?

During the production, harvesting, treatment, packing and transport of commodities

Pre-harvest	Harvest	Post-harvest	Shipping	Distribution	End use
Treatments Cultivars Certification Low prevalence PFA´s Planting time	Treatments Culling Sanitation Ripeness Time of harvest Handling	Treatments Inspection Sanitation Certification	Treatments Inspection Sanitation Type of transport	Treatment Inspection Post-entry quarantine	Restrict end use Timing Location Quantity

Post-entry

Pre-entry

Evaluating measures

- Efficacy
- Treatment efficacy
- Alternative treatment efficacies
- Other measures of efficacy:
 Pest freedom, measures to verify
 requirements are met
- Feasibility
- Effects of treatment on commodity
- Availability of facilities, treatments

Impacts



Selecting measures

Once potential measures have been identified based on efficacy, feasibility and impacts, specific measures may be selected.

Selected phytosanitary measures should be appropriate to the pest risk and technically justified.





Other things to consider

- Comparing risk management measures
- Cost effectiveness
- Cost-benefit analysis
- Rational relationship of measures to risk
- Consistency and non-discrimination
- Equivalence of phytosanitary measures
- Emergency measures and provisional measures





Other things to consider

Uncertainty

Uncertainty is an inherent part of pest risk analysis. It may arise from insufficient information, variability (including natural variation), and imprecision (such as model errors).

Uncertainty due to variability among individuals is inherent in biological systems and should be measured or described. New or additional information will not usually reduce uncertainty arising from variability.

Uncertainty due to lack of knowledge may be reduced by further study and data collection.



Other things to consider

Redundancy

Adding measures or extra strength to measures as a means to compensate for uncertainty is sometimes referred to as redundancy. Redundancy may be a type of provisional measure and therefore requires technical justification to be maintained.

Redundancy may be used:

- to compensate for uncertainty
- as a safeguard for lack of experience
- when no less stringent measure is available

- when no single measure is available, or as an alternative to a single more stringent measure (as in systems approaches)



Documentation

Documentation of the pest risk management stage should include a discussion of all uncertainties considered in conducting the analysis to identify and select the official pest risk management measures.

It is important that risk management documentation clearly informs decision makers of the level of uncertainty regarding the scientific evidence forming the basis for the selection of risk management options.



Pest risk management...

1.- Concludes with the determination that there are no appropriate phytosanitary measures (negative).

2.- Concludes with the selection of one or more pest risk management options that lower the pest risk to a level deemed acceptable level.

"The selected pest risk management options form the basis of phytosanitary regulations or requirements".

The determinations and the process used to derive them must be clearly and thoroughly documented and communicated.



Thank you

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