



PRA and Overall Assessment of Risk

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Outline



- Qualitative descriptions
 - Free text
 - Word scales
- Summarising aspects of risk assessment
- Combining risk factors (introduction and impact)
- Summarising the summary

Stages



- Stage 1: Initiation
- Stage 2: Pest Risk Assessment
 - Step 1: Pest Categorization
 - Step 2: Assessment of the Probability of Introduction
 - Step 3: Impacts
 - Step 4: Overall Assessment of Risk
 - Step 5: Uncertainty
- Stage 3: Pest Risk Management

Overall risk assessment



 Combines the likelihood of pest introduction (entry and establishment) with impact (spread and economic consequences) of those events



Overall risk assessment - free text

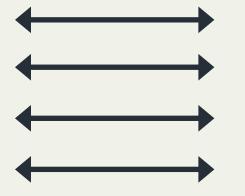
- "Although the pest <u>can</u> gain entry, establish and spread from neighbouring country economic consequences are likely to be very low"
- Improvement to text
- "Although the pest <u>is very likely to</u> gain entry, establish and spread from neighbouring country economic consequences are likely be very low"

Use of word scales



- Likelihood of event
 - Very unlikely
 - Unlikely
 - Likely
 - Very likely

Equivalence



- Scale of impact
 - Negligible
 - Low
 - Medium
 - High



Example for rating Introduction

Negligible

The likelihood of introduction is <u>extremely low</u> on consideration of the following factors: the distribution of the pest at source, pre-export management practices, commodity volume, probability of pest survival in transit, probability of contact with susceptible hosts in the PRA area and suitability of climate for establishment

Low

- The likelihood of introduction is <u>low</u>, but possible, given the expected combination of factors necessary for introduction described before

Medium

 Pest introduction is <u>likely</u> given the combination of factors necessary for introduction described before

High

 Pest introduction is <u>very likely</u>, or <u>certain</u>, given the combination of factors necessary for introduction described before





- Negligible = Extremely low
- Low = Low
- Medium = Likely
- High = Very likely or certain

Example for rating introduction



Negligible

 The pest has no potential to enter and become established in the PRA area

Low

 The pest has potential to enter and become established in approximately one third or less of the range of the host(s) in the PRA area

Medium

 The pest has potential to enter and become established in approximately one third to two thirds of the range of the host(s) in the PRA area

High

 The pest has the potential to enter and become established throughout most or all of the range of hosts in PRA area

Guide for rating introduction



- Negligible = Very unlikely = No potential
- Low = Unlikely = 1/3 or less of host range
- Medium = Likely = 1/3 to 2/3 of host range
- High = Very likely = Most or all of host range

Rating impact



Negligible

 There is no impact on yield, host longevity, production costs or storage

Low

 The pest has a minor impact on the standing crop and little effect on the stored products

Medium

 The pest has a moderate impact on the standing crop but host mortality is rare; losses in storage may occur

High

 The pest has a severe impact on the standing crop with significant host mortality; losses in storage may be total

Risk matrix





High				
Medium				
Low				
Negligible				
	Negligible	Low	Medium	High



Likelihood of introduction





Confidence High Confidence	Medium Confidence	Low Confidence
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Scale of impact

Negligible impact - Low confidence

- Medium confidence
- High confidence



Risk matrix, with upper limits on uncertainty

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Impact	

High				
Medium				
Low				
Negligible				
	Negligible	Low	Medium	High



Likelihood of introduction

Benchmarking a risk outcome



- Expressing risk
 - Reference to existing phytosanitary requirements
 - Indexed to estimated economic losses
 - Expressed on a scale of risk tolerance
 - Compared to the risk presented by the same pest at a different time
 - Compared with the level of risk accepted by other countries
 - Compared with the level of risk accepted for other pests

Summary



- Open to stakeholder review and scrutiny
- Concise and non-technical
- Identify:
 - Point of initiation
 - Pathways
 - Spread and endangered area
 - Impact if the pest gains entry, establishes and spreads to the extent predicted and no measures are taken

Any questions!



- If you have any questions please feel free to contact:
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