



An Overview of ISPM 38: International Movement of Seeds

NAPPO Hemispheric Workshop San Jose, Costa Rica March 5-7, 2019

Edward Podleckis, USDA-APHIS

History

About eight years in development:

2009: Topic introduced

2011: Specification approved

 2013: Expert working group writes draft ISPM

 2017: ISPM 38: International Movement of Seeds adopted







Scope

- Provides guidance to assist national plant protection organizations (NPPOs) in:
 - Identifying, assessing and managing pest risk associated with the international movement of seeds;
 - Establishing phytosanitary import requirements;
 - Inspection, sampling and testing of seeds; and
 - Phytosanitary certification of seeds for export and re-export.





Scope

- Does include:
 - Viable seeds, which are a sample of a seed lot, imported for laboratory testing or destructive analysis.
- Does not apply to:
 - Grain (consumption) or vegetative plant parts (e.g. tubers of potatoes).





Contents



- Introduction
- Background
- Pest risk analysis
- Phytosanitary measures
- Equivalence
- Specific requirements
- Phytosanitary certification
- Record keeping
- Appendices





Introduction



- Introduction
 - Scope
 - Already covered
 - Definitions
 - More later
- Background





Pest Risk Analysis

- Pest risk analysis
 - Seeds as pests
 - Seeds as pathways
 - Purpose of import
 - Mixing, blending and bulking of seeds
 - Pest management in seed production





Phytosanitary Measures



- Phytosanitary measures
 - Consignment inspection & testing
 - Field inspection
 - Pest free concepts
 - Treatments
 - Systems approaches
 - Prohibition





Equivalence / Specific Requirements

- Equivalence of phytosanitary measures
- Specific requirements (for phytosanitary measures)
 - Inspection
 - Sampling
 - Seed testing



Phytosanitary certification / Record Keeping



- Phytosanitary certification
 - Additional official phytosanitary information
 - Country of origin
- Record keeping



Appendices

- Appendix 1: Examples of seed-transmitted, seed-borne and contaminating pests
- Appendix 2: Guidance on the likelihood of pest groups being carried and introduced with seeds
- Appendix 3: Bibliography





Key Features

- Key features:
 - Definitions of seed-borne, seed transmitted
 - Emphasis on PRA to establish seed as a pathway
 - Recognizes risk reduction potential of production practices
 - Supports the use of systems approaches to reduce risk of international seed movement







Definitions

- No existing definitions in ISPM 5 (IPPC Glossary of phytosanitary terms)
- EWG felt the need to create definitions for the purpose of the standard





Definitions

- Seed-borne pest: A pest carried by seeds externally or internally that may or may not be transmitted to plants growing from these seeds and cause their infestation
- Seed-transmitted pest: A seed-borne pest that is transmitted via seeds directly to plants growing from these seeds and causes their infestation





Seeds as Pathways

Category	Description
1 a	Seed-transmitted pests carried internally or externally that directly <u>infest</u> host plant
1b	Non-seed-transmitted pests carried by the seed internally or externally, are transferred to the environment (e.g. water, soil) and then infest hosts
1 c	Carried internally or externally, that do not transfer to a host
2	Though not seed-borne, contaminating pests may be relevant





Seeds as Pathways

- PRA considerations:
 - Seed transmission should be confirmed under natural conditions
 - Seed-transmission in one host does not mean seed transmission in all hosts
 - Biological and epidemiological characteristics of specific pest groups can provide guidance on the likelihood of seed transmission (Appendix 2)



Production Practices

- "Certain practices used in seed production may alone or in combination be sufficient to meet phytosanitary import requirements."
- "Phytosanitary measures may be included in integrated pest management and quality control protocols applied in seed production."
- "Many pest management practices to reduce pest risk throughout the seed production process, from planting to harvesting, may be integrated in a systems approach."







Systems Approaches

- ISPM 38 supports the use of systems approaches to reduce risk of international seed movement:
 - "Many pest management practices to reduce pest risk throughout the seed production process, from planting to harvesting, may be integrated in a systems approach."







Questions?





