DRAFT ISPM: Revision of ISPM 8: *Determination of pest status in an area* (2009-005)

Status box

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| This is not an official part of the standard and it will be modified by the IPPC Secretariat after adoption. | |
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| **Steward history** | 2015-11 SC Ms Marina ZLOTINA (US, Lead Steward)  2015-11 SC Ms Shaza OMAR (EG, Assistant Steward)  2012-11 SC Mr Ebbe NORDBO (DK, Assistant Steward)  2009-11 SC Ms Beatriz MELCHO (UY, Lead Steward) |
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CONTENTS [to be inserted]

Adoption

[To be inserted following adoption]

Introduction

Scope

This standard describes the use of pest records and other information to determine pest status in an area. Descriptions of pest status categories are provided, as well as recommendations for good reporting practices.

This standard is not concerned with reporting obligations, but with the quality of information used in determining pest status.

References

The present standard refers toISPMs. ISPMs are available on the International Phytosanitary Portal (IPP) at <https://www.ippc.int/core-activities/standards-setting/ispms>.

**IPPC.** 1997. *International Plant Protection Convention*. Rome, IPPC, FAO.

Definitions

Definitions of phytosanitary terms used in this standard can be found in ISPM 5 (*Glossary of phytosanitaryterms*).

Outline of Requirements

Pest status is determined by the national plant protection organization (NPPO) responsible for the area,using sources of information as outlined in this standard. This standard also provides guidance on the purpose of the determination of pest status.

Guidance on evaluating the reliability of information is provided and sources of uncertainty in determining the pest status in an area are described.

This standard identifies categories for pest status under “presence” or “absence”. It also describes the responsibilities of NPPOs and good practices for determining and reporting pest status.

Background

Pest records and other information are used to determine the presence or absence of a pest in an area. All importing and exporting countries need information concerning the status of pests for pest risk analysis, the establishment of and compliance with phytosanitary regulations, and the establishment and maintenance of pest free areas.

This standard describes how information is used to determine the pest status in an area. This information includes records from surveillance as described in ISPM 6 (*Surveillance*). Pest records and pest status are also used by NPPOs in pest reporting as described in ISPM 17 (*Pest reporting*).

IMPACTS ON BIODIVERSITY AND THE ENVIRONMENT

This standard may contribute to the protection of biodiversity and the environment by helping countries to determine the status of pests that can have an impact on biodiversity and the environment. Determining and describing pest status in a consistent manner may help countries identify risks associated with such pests and to apply phytosanitary measures to protect biodiversity and the environment.

REQUIREMENTS

1. Purpose of Pest Status Determination

Determination of pest status is a vital component of a number of activities covered under the IPPC and by the principles noted in ISPM 1 (*Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade*) and the international standards for phytosanitary measures that have been developed from them. Pest status is determined by the NPPO responsible for the area.

NPPOs may use pest status information for:

* pest risk analysis
* market access requests
* planning national, regional or international pest management programmes
* establishing and complying with phytosanitary regulations
* establishing and maintaining pest free areas and areas of low pest prevalence
* exchanging information as outlined in the IPPC.

Information on the status of a pest in areas may be used to establish the global distribution of a pest.

2. Information Used to Determine Pest Status

Information from pest records or other sources should be used to inform decisions on the appropriate selection of pest status categories as described in section 3.

The information that should be included in pest records is described in ISPM 6.

Sometimes pest status can be difficult to determine because of uncertainty. Sources of uncertainty may include:

* limited critical information on pest biology
* taxonomic revisions or ambiguity
* conflicting, contradictory or outdated information
* difficulties with survey methodologies
* difficulties with diagnostic methodologies
* insufficient understanding of host associations
* unknown aetiology
* findings of signs of organisms without finding live pest or pest damage
* insufficient understanding of the distribution in an area
* unreliability of the information sources used to determine pest status.

Information is available from many sources and has varying levels of reliability. Appendix 1provides guidance that may be used by the responsible NPPO to assess the reliability of different information sources.

Ideally, highly reliable sources should be used to determined pest status. However, when such sources are not available, lower reliability sources may be used. This may increase uncertainty but can also identify information gaps which can be addressed through surveillance (ISPM 6).

3. Describing Pest Status in an Area

The NPPO should decide upon the most appropriate description of the pest status in an area, based on information from various sources such as those described in Appendix 1. This includes results from surveillance. Pests only present under quarantine for diagnostic or research purposes do not affect the pest status in an area.

Determination of pest status requires expert judgement on the current distribution of a pest in an area. This judgement should be based on a synthesis of available pest records and information from other sources. Both current and historical records, where available, should be used in assessing the pest status. Pest status should be determined on the basis of an area. When pest status is recorded or reported, the area in question (including any pest free areas or pest free places of production or production sites within it) and the date the pest status was determined should be included. Pest status should be described according to the categories identified below.

3.1 Presence

A pest is deemed to be present if records indicate that it is indigenous, introduced or transient. If a pest is present and reliable information is available, then it should be possible to characterize its distribution using the categories provided in Table 1.

**Table 1.** Categories of pest status – Present

| **Status** | **Status description** |
| --- | --- |
| Present: widely distributed | The pest is present throughout the area where conditions are suitable. |
| Present: not widely distributed and not under official control | The pest is present in a part or parts of the area in accordance with Supplement 1 (Guidelines on the interpretation and application of the concepts of “official control” and “not widely distributed”) to ISPM 5 (*Glossary of phytosanitary terms*)*.* |
| Present: not widely distributed and under official control | The pest is present in the area and subject to “official control” in accordance with Supplement 1 (Guidelineson the interpretation and application of the concepts of “official control” and “not widely distributed”) to ISPM 5 (*Glossary of phytosanitary terms*)*.* The purpose of the official control should be stated alongside the status determination. |
| Present: at low prevalence | The pest is present in the area but its prevalence is low in accordance with ISPM 22 (*Requirements for the establishment of areas of low pest prevalence*)*.* |
| Present: except in specified pest free areas | The pest is present in the area except for areas which are free from the pest in accordance with ISPM 4 (*Requirements for the establishment of pest free areas*). These areas should be described alongside the status determination. |
| Present: except in specified pest free places of production or production sites | The pest is present in an area except for pest free places of production or production sites in accordance with ISPM 10 (*Requirements for the establishment of pest free places of production and pest free production sites*). These places should be described alongside the status determination. |
| Present: not expected to establish | The pest is evaluated and determined to be transient, or the pest is not expected to establish because appropriate phytosanitary measures have been applied (e.g. during outbreaks in a pest free area). |

In some cases, it might be necessary to provide additional information about pest presence, for instance that the pest has only been reported under limited conditions, such as:

* on specific hosts
* in enclosed structures
* in botanical gardens
* in the environment but not associated with a plant host (e.g. soil or water)
* at certain times of the year.

3.2 Absence

A pest is considered to be absent if surveillance and other information indicate that the pest is not found in the area. If a pest is absent and reliable information is available, then it should be possible to characterize this status using the categories provided in Table 2.

**Table 2.** Categories of pest status – Absent

| **Status** | **Status description** |
| --- | --- |
| Absent: pest not recorded | Surveillance supports the conclusion that the pest is absent and has never been recorded. |
| Absent: pest free area (entire country) | The entire country is established and maintained as a pest free area in accordance with ISPM 4 (*Requirements for the establishment of pest free areas*). |
| Absent: pest records invalid | Pest records indicate the presence of a pest, but the conclusion is reached that the records are invalid or no longer valid, such as in the following cases:  - changes in taxonomy have occurred  - misidentification has occurred  - there are errors in the record or records  - reinterpretation of the record or records may be needed as a result of changes in national borders. |
| Absent: pest no longer present | Pest records indicate that the pest was present in the past, but surveillance indicates that the pest is no longer present. The reason or reasons may include:  - climate or other natural limitation to pest perpetuation  - changes in hosts cultivated  - changes in cultivars  - changes in production practices. |
| Absent: pest eradicated | Pest records indicate that the pest was present in the past. A documented pest eradication programme was conducted and was successful (see ISPM 9 (*Guidelines for pest eradication programmes*)). Surveillance confirms continued absence. |

It is possible to conclude that a pest is absent if information on presence is unreliable. Negative results of surveillance may provide knowledge about the absence of a pest. However, lack of information does not necessarily constitute a basis for determining pest absence.

Pest interceptions on imported consignments at points of entry while under detention do not affect the pest status of the area. Detections of pests in an area, shown by surveillance not to represent a population, do not affect the pest status in an area.

Pest status may be “undetermined” if the NPPO cannot provide results from surveillance or any other supporting information. This could include cases, for example, where pest records indicate the presence of a pest, but the taxonomic nomenclature is ambiguous or the identification or diagnostic methods are outdated. In such cases, surveillance may be necessary.

4. Responsibilities of NPPOs and Good Reporting Practices

Contracting parties have obligations under the IPPC (Article VIII.1(a)) to report “the occurrence, outbreak or spread of pests”. Information pertaining to pest status in an area contributes to pest reports. Pest status is determined by the NPPO responsible for the area concerned using pest records and other information from different sources. It is the responsibility of an NPPO to provide pest records and supporting evidence upon request from another NPPO.

There may be some instances in which a pest status declared by an NPPO is questioned by another NPPO (e.g. when there are repeated interceptions or contradictory pest records). In these situations, bilateral contacts between NPPOs should be made to clarify the situation, and if needed the pest status may be revised by the NPPO responsible for the area.

4.1 Good practices for determining and reporting pest status

NPPOs should:

* use the categories of “presence” and “absence” set out in this standard when exchanging pest status information, to promote harmonization and transparency
* base determinations of pest status in an area on the most reliable and timely information available
* maintain pest records and supporting evidence, taking into account that they may be needed to support the determination of pest status
* re-evaluate pest status if appropriate
* inform other NPPOs and their regional plant protection organization, where appropriate, of relevant changes in pest status according to ISPM 17.

This appendix is for reference purposes only and is not a prescriptive part of the standard.

APPENDIX 1: Guidance on reliability of information sources

| **Information source** | **Reliability** | **Examples** |
| --- | --- | --- |
| **Information gathered from surveillance** | **High** | Surveillance conducted by NPPOs, or by entities authorized by the NPPO, supported by:  - documented protocols  - diagnostics laboratories with a high degree of expertise and high-quality infrastructure  - use of validated methods  - use of information management systems to capture and manage data in a consistent manner  - trained personnel  - implementation of quality management systems |
| **Moderately high** | Surveillance with a high degree of NPPO oversight or participation, supported by:  - documented protocols  - diagnostics laboratories with recognized expertise  - use of information management systems to capture and manage data in a consistent manner  - trained personnel |
| **Moderately low** | Structured general surveillance programmes with some degree of NPPO oversight, where:  - sample identification requires confirmation by recognized authorities or laboratories  - data capture and information management systems are in place but with uncertain verification and validation procedures  - there is little or no direct training of personnel and their competency is uncertain |
| **Low** | General surveillance activities with low or no NPPO oversight and participation, where:  - identification expertise is low and there is little diagnostic laboratory support  - information management infrastructure is weak  - training and expertise are minimal or variable |
| **Peer-reviewed journals** | **High** | Multiple original research papers with detailed description of the methodological approach or approaches used; approaches are widely accepted; published in high impact-factor journals |
| **Moderately high** | - At least one original research paper with detailed description of methodological approach  - Several original research papers without specified methodology  - Multiple published review articles; articles cite independent (separate) sources of information |
| **Moderately low** | Only one or a few original research papers; any found do not describe methodology ***or*** methodology used is not widely accepted; published in low impact-factor journals |
| **Low** | No peer-reviewed literature available |
| **Databases and websites** | **High** | Published by a reputable organization; uses authoritative scientific sources and terminology; provides links or details to locate primary records and the dates of the primary records or last review of content; has a published updating and quality control policy |
| **Moderately high** | Published by a reputable organization; uses authoritative scientific sources and terminology but may not provide all of the following: links or details to locate primary records; the dates of the primary records or last review of content; a published updating and quality control policy |
| **Moderately low** | One or two criteria above are met, but most information not verified or traceable |
| **Low** | The publisher is not authoritative and there may not be links to primary scientific sources (so records cannot readily be traced); data may be old or undated and there may not be a current updating or quality control policy |
| **Other published expert sources that are not peer-reviewed (e.g. from universities, subject matter experts, scientific societies) –may include extension reports, non-journal articles, bulletins, alerts, etc.** | **High** | Many reports from independent sources; well understood methodology; general consensus between information sources |
| **Moderately high** | Several independent articles or reports basedon independent information; methodologyisdescribed |
| **Moderately low** | A few articlesand reports that may or may not haveeach been based on independent (different) information sources |
| **Low** | - Single reports; if more than one report, those that are found may or may not be based on independent (different) information sources  - No supporting evidence found |
| **Unpublished communications from sources other than NPPO** | **Moderate** | - Opinion from a recognized expert that has been documented by the NPPO and can be provided upon request  - Personal communication that has been archived |
| **Low** | Informal or unarchived personal communication |

**Potential implementation issues**

This section is not part of the standard. The Standards Committee in May 2016 requested the Secretariat to gather information on any potential implementation issues related to this draft. Please provide details and proposals on how to address these potential implementation issues.