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

[2]**Status box**

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| [3]This is not an official part of the standard and it will be modified by the IPPC Secretariat after adoption. | |
| [4]**Date of this document** | [5]2019-06-05 |
| [6]**Document category** | [7]Draft revision of ISPM |
| [8]**Current document stage** | [9]*To* second consultation |
| [10]**Major stages** | [11]2009-11 Standards Committee (SC) recommended adding to the work programme.  [12]2010-03 CPM-5 added topic *Revision of ISPM 8 (Determination of pest status in an area)* (2009-005) to the work programme with normal priority (subsequently changed to priority 1 by CPM-09).  [13]2013-11 SC approved Specification 59.  [14]2017-09 Expert working group (EWG) drafted revised ISPM.  [15]2018-05 SC revised and approved draft for first consultation.  [16]2018-07 First consultation.  [17]2019-02 Steward revised draft.  [18]2019-05 SC-7 (Standards Committee Working Group of seven members) revised and approved draft for second consultation. |
| [19]**Steward history** | [20]2015-11 SC Ms Marina ZLOTINA (US, Lead Steward)  [21]2015-11 SC Ms Shaza OMAR (EG, Assistant Steward)  [22]2012-11 SC Mr Ebbe NORDBO (DK, Assistant Steward)  [23]2009-11 SC Ms Beatriz MELCHO (UY, Lead Steward) |
| [24]**Notes** | [25]2018-01 Edited  [26]2018-05 Edited  [27]2019-06 Edited |

[28]CONTENTS [to be inserted]

[29]Adoption

[30] [To be inserted following adoption]

[31]Introduction

[32]Scope

[33]This standard describes the use of pest records and other information to determine pest status in an area. Pest status categories are defined and a description of the use of pest status for pest reporting is provided.

[34]This standard also provides guidance on the reliability of information used in determining pest status.

[35]References

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

[37]**IPPC.** 1997. *International Plant Protection Convention*. Rome, IPPC Secretariat, FAO.

[38]Definitions

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

[40]Outline of Requirements

[41]National plant protection organizations (NPPOs) use pest status for various activities, such as pest risk analysis, the establishment of and compliance with phytosanitary regulations, and the establishment and maintenance of pest free areas, areas of low pest prevalence, pest free places of production and pest free production sites.

[42]Pest status is determined exclusively by the NPPO responsible for the area and is categorized under “presence” or “absence”.

[43]The quality of the reported information and understanding the reliability and uncertainty of the data are important considerations when determining pest status and are outlined in this standard.

[44]Background

[45]Pest records and other information are used to determine the presence or absence of a pest in an area (i.e. an officially defined country, part of a country or all or parts of several countries). National plant protection organizations of importing and exporting countries need information concerning the status of pests for pest risk analysis, the establishment of and compliance with phytosanitary regulations, the establishment and maintenance of pest free areas, areas of low pest prevalence, pest free places of production and pest free production sites, and other activities.

[46]The purpose of this standard is to provide guidance on the determination of the pest status in an area using, in particular, information from surveillance and pest records as described in ISPM 6 (*Surveillance*). Pest status is a part of the content of pest reports as described in ISPM 17 (*Pest reporting*).

[47]IMPACTS ON BIODIVERSITY AND THE ENVIRONMENT

[48]This standard may contribute to the protection of biodiversity and the environment by helping countries to determine the status of pests whose introduction and spread may have an environmental impact. Determining and describing pest status in a consistent manner may help countries identify risks associated with such pests and apply phytosanitary measures to protect biodiversity and the environment.

[49]REQUIREMENTS

[50]1. Purpose of Pest Status Determination

[51]Determination of pest status in an area is a vital component of various activities undertaken to implement the IPPC and covered by the principles described in ISPM 1 (*Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade*) and elaborated in other ISPMs.

[52]NPPOs may use pest status information when undertaking activities such as:

* [53]pest risk analysis
* [54]considering market access requests
* [55]planning national, regional or international pest management programmes
* [56]establishing and complying with phytosanitary regulations
* [57]establishing and maintaining lists of pests present in an area
* [58]establishing and updating lists of regulated pests
* [59]establishing and maintaining pest free areas, areas of low pest prevalence, pest free places of production and pest free production sites
* [60]exchanging information as outlined in the IPPC.

[61]NPPO responsibilities:

[62]Contracting parties have obligations under the IPPC (Article VIII.1(a)) to report “the occurrence, outbreak or spread of pests”. Pest status should be determined exclusively by the NPPO responsible for the area.

[63]The NPPO should:

* [64]base its determination of pest status on the most reliable and timely information available
* [65]maintain pest records and supporting evidence, taking into account that they may be needed to support the determination of pest status
* [66]re-evaluate pest status if appropriate.

[67]2. Information Used to Determine Pest Status

[68]Information from pest records or other sources should be used as a basis for determining the appropriate pest status among the categories described in section 3.

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

[70]Information is available from many sources and has varying levels of reliability. Old information is less likely to be reliable about the current status of a pest than recent information because of changes in pest distribution, taxonomy and detection methods. Appendix 1 provides guidance that may be used by the responsible NPPO to assess the reliability of different information sources.

[71]Highly reliable and current sources should be used to determine pest status. However, when such sources are not available, lower reliability sources may be used. This may increase uncertainty but can also help to identify information gaps which can be addressed through surveillance (see ISPM 6) and pest diagnostics.

[72]Sometimes pest status can be difficult to determine because of uncertainty associated with the available information. Sources of uncertainty may include:

* [73]limited information on pest biology
* [74]taxonomic revisions or ambiguity
* [75]contradictory or outdated information
* [76]difficulties with survey methodologies
* [77]difficulties with diagnostic methodologies
* [78]insufficient information on pest–host associations
* [79]unknown aetiology
* [80]detection of signs or observation of symptoms without finding the pest
* [81]insufficient information on the pest distribution in an area
* [82]unreliability of the information sources.

[83]3. Describing Pest Status in an Area

[84]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 (see ISPM 6).

[85]Presence of pests under quarantine for diagnostic or research purposes (e.g. in a laboratory), or pest interceptions on imported consignments at points of entry, while under detention, do not affect the pest status in an area.

[86]Determination of pest status in an area requires evidence and expert judgement on the current distribution of a pest in an area. This judgement should be based on a synthesis of available information from various sources, including current and historical pest records, where available.

[87]Pest status should be determined for an area identified and specified by the NPPO. When pest status is determined, the area in question (including, for example, any pest free areas, pest free places of production or pest free production sites within it) and the date should be indicated. Pest status should be described according to the categories identified below.

[88]3.1 Presence

[89]If a pest is present and reliable information is available, the pest status should be further characterized using the categories provided in Table 1.

[90]**Table 1.** Pest status – Present

| [91]**Pest status** | [92]**Pest status description** |
| --- | --- |
| [93]Present: widely distributed | [94]The pest is present throughout the area, where conditions are suitable. |
| [95]Present: not widely distributed and not under official control | [96]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*)*.* |
| [97]Present: not widely distributed and under official control | [98]The pest is present in a local area, part or parts of the area, and subject to “official control” 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*)*.* The purpose of the official control should be stated alongside the pest status determination. |
| [99]Present: at low prevalence | [100]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*)*.* |
| [101]Present: except in specified pest free areas | [102]The pest is present in the area except in parts of the area which are free from the pest in accordance with ISPM 4 (*Requirements for the establishment of pest free areas*). These parts should be described alongside the pest status determination. |
| [103]Present: except in specified pest free places of production or production sites | [104]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 or sites should be described alongside the pest status determination. |
| [105]Present: transient | [106]Evidence supports the conclusion that the pest is not expected to establish because conditions (e.g. hosts, climate, other seasons) are not suitable for establishment (see ISPM 5) or appropriate phytosanitary measures have been applied (e.g. during outbreaks in a pest free area). |

[107]In some cases, it may be necessary to provide additional information about pest presence, for instance that the pest has only been reported under specific conditions, such as:

* [108]on specific hosts
* [109]in enclosed structures (e.g. in a greenhouse)
* [110]in botanical gardens
* [111]in the environment but not on a plant host (e.g. soil or water)
* [112]at certain times of the year.

[113]3.2 Absence

[114]If a pest is absent and reliable information is available, the pest status should be further categorized using the categories provided in Table 2.

[115]**Table 2**. Pest status – Absent

| [116]**Pest status** | [117]**Pest status description** |
| --- | --- |
| [118]Absent: pest not recorded | [119]Surveillance supports the conclusion that the pest is absent and has not been recorded (see ISPM 6 (*Surveillance*)) or evidence supports the conclusion that the pest cannot establish. |
| [120]Absent: the entire country is a pest free area | [121]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*). |
| [122]Absent: pest records invalid | [123]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:  [124]- changes in taxonomy have occurred  [125]- misidentification has occurred  [126]- there are errors in the record or records  [127]- changes in national borders have occurred. |
| [128]Absent: pest no longer present | [129]Pest records indicate that the pest was present in the past, but surveillance indicates that the pest is no longer present (see ISPM 6 (*Surveillance*)). The reason or reasons may include:  [130]- climate or other natural limitation to pest perpetuation  [131]- changes in cultivated host species or cultivars  [132] - changes in production practices. |
| [133]Absent: pest eradicated | [134]Pest records indicate that the pest was present in the past. Documented pest eradication measures were implemented and were successful (see ISPM 9 (*Guidelines for pest eradication programmes*)). Surveillance confirms continued absence (see ISPM 6 (*Surveillance*)). |

[135]Absence of findings of the pest during specific surveillance may be the basis for an NPPO to determine that the pest is absent. If information on pest presence is unreliable, the NPPO may conclude that the pest is absent. However, lack of information does not constitute a basis for determining pest absence.

[136]Similarly, detection of a pest in an area, shown by surveillance not to represent a population (e.g. detection of an individual specimen), does not affect the pest status in the area.

[137]3.3 Unable to determine pest status

[138]There may be insufficient information available from surveillance or other sources for the NPPO to determine the pest status. 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 to meet obligations under the IPPC. This information can be provided to other NPPOs upon request.

[139]4. Exchange of Pest Status Information between NPPOs

[140]Information pertaining to pest status in an area contributes to pest reports. It is the responsibility of an NPPO to provide pest records and other supporting evidence on pest status upon request from another NPPO.

[141]There may be some cases where a pest status declared by an NPPO is questioned by another NPPO (e.g. when there are repeated interceptions by importing countries 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.

[142] NPPOs should:

* [143]use the categories of pest status set out in this standard when exchanging pest status information, to promote harmonization and transparency
* [144]inform other NPPOs and their regional plant protection organization, where appropriate, of relevant changes in pest status according to ISPM 17.

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

[146]APPENDIX 1: Reliability of information sources

[147]The table below categorizes information sources based on their reliability. These categories are for guidance purposes only and are not considered to be exhaustive.

| [148]**Information source** | [149]**Reliability** | [150]**Examples** |
| --- | --- | --- |
| [151]**Surveillance (as described in ISPM 6)** | [152]**High** | [153]Surveillance conducted by NPPOs, or by entities authorized by an NPPO, supported by:  [154]- documented protocols  [155]- voucher specimens  [156]- diagnostic laboratories with a high degree of expertise and high-quality infrastructure  [157]- use of validated methods  [158]- use of information management systems to capture and manage data in a consistent manner (as described in ISPM 6)  [159]- implementation of quality management systems  [160]- trained personnel.  [161] |
| [163]**Moderately high** | [164]Surveillance with a high degree of NPPO oversight or participation, supported by:  [165]- documented protocols  [166]- diagnostic laboratories with recognized expertise  [167]- use of information management systems to capture and manage data in a consistent manner (as described in ISPM 6)  [168]- trained personnel. |
| [170]**Moderately low** | [171]Structured general surveillance programmes with some degree of NPPO oversight, where:  [172]- sample identification requires confirmation by recognized authorities or laboratories  [173]- data capture and information management systems are in place but with uncertain verification and validation procedures  [174]- personnel competency is uncertain. |
| [176]**Low** | [177]General surveillance activities with low or no NPPO oversight and participation, where:  [178]- identification expertise is low and there is little diagnostic laboratory support  [179]- information management infrastructure is weak  [180]- training and expertise are minimal or variable. |
| [181]**Peer-reviewed journals** | [182]**High** | [183]Multiple original research papers with detailed description of the methodological approach or approaches used; approaches are widely accepted; Published in highly regarded peer-reviewed journals relevant to the subject matter. |
| [185]**Moderately high** | [186]- At least one original research paper with detailed description of methodological approach.  [187]- Several original research papers without specified methodology.  [188]- Multiple published review articles; articles cite independent (separate) sources of information. |
| [190]**Moderately low** | [191]Only one or a few original research papers;any original research paper found does not describe methodology ***or*** methodology used is not widely accepted; published in low impact-factor journals. |
| [193]**Low** | [194]No peer-reviewed literature available. |
| [195]**Databases and websites** | [196]**High** | [197]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. |
| [199]**Moderately high** | [200]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. |
| [202]**Moderately low** | [203]One or two of the above criteria are met, but most information not verified or traceable. |
| [205]**Low** | [206]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. |
| [207]**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.** | [208]**High** | [209]Many articles or reports from independent sources; well understood methodology; general consensus between information sources. |
| [211]**Moderately high** | [212]Several independent articles or reports based on independent information; methodology is described. |
| [214]**Moderately low** | [215]A few articles or reports that may or may not have each been based on independent (different) information sources. |
| [217]**Low** | [218]- Single article or report, or more than one article or report but based only on one primary information source.  [219]- No supporting evidence found. |
| [220]**Unpublished communications** | [221]**Moderately low** | [222]- Opinion from a recognized expert that has been documented by the NPPO and can be provided upon request.  [223]- Personal communication that has been archived. |
| [225]**Low** | [226]Informal or un-archived personal communication. |

[227]**Potential implementation issues**

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

[229]Contracting parties, regional plant protection organizations and other relevant organizations are invited to comment on whether the appendix should remain in this ISPM or whether it would be better to place it in implementation material.