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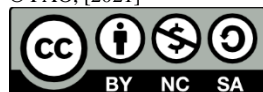
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IPPC Secretariat

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1. Opening of the session

- [1] The Director of the FAO Plant Production and Protection Division, Mr Jingyuan XIA, welcomed participants to the Fifteenth Session of the Commission on Phytosanitary Measures (CPM), which was being held in virtual mode for the first time owing to the COVID-19 pandemic. He extended a particular welcome to Uzbekistan as the 184th contracting party to the International Plant Protection Convention (IPPC).
- [2] The CPM observed a one-minute silence to honour the former CPM Chairperson Mr Felipe CANALE and other members of the IPPC community who had been victims of the pandemic.
- [3] In her opening remarks, the FAO Deputy Director-General Ms Beth BECHDOL assured the CPM that the FAO remains fully committed in its support of the IPPC community and the mission it shares with FAO in protecting the world's plant resources while also contributing to safe trade and environmental protection. She highlighted some of the landmark achievements of the past two years and thanked Finland for spearheading the proclamation of the International Year of Plant Health (IYPH). Looking forward, the Deputy Director-General highlighted the importance of the new IPPC 2020–2030 Strategic Framework, but noted that it will require appropriate implementation plans to deliver it. She expressed appreciation for the role of the IPPC community in supporting Zambia as Champion of the proposal for an International Day of Plant Health and envisioned global implementation of the ePhyto (electronic phytosanitary certificate) Solution. Finally, she updated the CPM on the rigorous progress for the upcoming selection of a new IPPC Secretary.
- [4] Mr XIA thanked the Deputy Director-General and, on the occasion of his last CPM session, highlighted some of the main achievements during his tenure as IPPC Secretary. These included: the development and promotion of IPPC annual themes, IYPH and IPPC strategic frameworks; the adoption of 56 international standards; the delivery of 34 regional workshops; an enhanced IPPC ePhyto Solution; enhanced external collaboration; the issue of over 700 headline news; increased funding; and the reorganization of, and increase in, the IPPC Secretariat (hereafter referred to as the “Secretariat”).

2. Keynote address by the Finnish Minister of Agriculture and Forestry

- [5] The CPM Chairperson, Mr Francisco Javier TRUJILLO-ARRIAGA, welcomed participants and thanked Mr XIA and Ms BECHDOL for their encouraging words and continuous support. He congratulated all contracting parties, CPM observers, Mr Lucien KOUAMÉ KONAN (the CPM Vice-Chairperson), his fellow CPM Bureau members, Mr Avetik NERSISYAN (IPPC Officer-in-Charge of daily matters) and the Secretariat on their work and thanked them for their support. He also expressed his sincere gratitude for the commitment, confidence, flexibility and support that contracting parties (CPs) had shown by endorsing the use of a virtual mode for this CPM session. The Chairperson then introduced the keynote speaker.
- [6] The keynote address was delivered by the Finnish Minister of Agriculture and Forestry, Mr Jari LEPPÄ, who reflected on the impact and legacy of the events of the past year for plant health. The Minister recalled the original proposal by Finland to celebrate the year 2020 as the IYPH, and the ambitious plans of Finland, the FAO and the IPPC community that followed. The aim had been to establish an understanding around the world that plant health is as important for the environment and livelihoods as human health is to the well-being of people. For this reason, the Minister believed that plant health needs to be strengthened at all levels and that we need to build up sustainable plant-health structures nationally, regionally and globally, which do not fluctuate in resourcing depending on the occurrence or non-occurrence of a crisis.
- [7] The Minister acknowledged the enormous impact of the pandemic on IYPH activities, but noted that now it would be easier to demonstrate to the public that plant-health epidemics can spread as fast as human-health epidemics, and that prevention is far more economical than dealing with a full-blown, plant-health emergency. However, the Minister highlighted that we would not be able to prevent a future plant-health

pandemic unless we also tackled climate change and environmental degradation. Emphasizing the role of strong international cooperation, he said that the world needed the cooperation, energy and knowledge of the IPPC community to find meaningful ways to prevent the spread of plant pests. He finished by expressing a dream that in 30 years' time the year 2020 would not only be remembered for the COVID-19 pandemic, but also as the beginning of a new international consciousness about One Health, including plant and environmental health.

3. Adoption of the agenda

[8] The CPM added an update on the desert locust under agenda item 18 (Any other business), to raise awareness of the effects of this pest on food security.

[9] The CPM noted that the inclusion of plant health in the One Health approach, and in biosecurity and biosafety, was a matter for the SPG to examine, as there may not be enough information for it to be discussed at this CPM session.

[10] The CPM:

- (1) *adopted* the Agenda with changes (Appendix 01) and noted the List of Documents (Appendix 02). The List of Participants is also attached (Appendix 03).

3.1 European Union Statement of Competence

[11] In response to a question from the European Union, the CPM Chairperson clarified that it was possible that an online polling system would be used during the session, but this would not constitute voting. In the event of a poll, time would be given to allow the European Union to hold internal consultations.

[12] The CPM:

- (1) *noted* the Declaration of Competences and Voting Rights submitted by the European Union and its 27 member states.¹

4. Election of the Rapporteur

[13] The CPM:

- (1) *elected* Ms Mariangela CIAMPITTI (Italy) and Ms Raymonda JOHNSON (Sierra Leone) as Rapporteurs.

5. Report from the CPM Bureau on credentials

[14] The CPM Chairperson informed the session that this year, in agreement with the FAO Legal Office, credentials submitted by contracting parties for their participation at CPM-15 (2021) had been reviewed by the CPM Bureau. He informed the session that 115 valid credentials had been received (plus three not valid), which was enough to constitute the quorum of a majority of CPM members.

[15] The CPM:

- (1) *noted* the report from the CPM Bureau on credentials.

¹ CPM 2021/CRP/02

6. Report by the Chairperson of the Commission on Phytosanitary Measures

[16] The CPM Chairperson presented his report.² As well as highlighting some of the key achievements of the last year and looking ahead to the challenges of the coming year, the report also outlined the governance position taken by the CPM Bureau following the cancellation of CPM-15 in 2020 owing to the COVID-19 pandemic. This included the Bureau taking various decisions on behalf of the CPM, to progress the annual IPPC work plan to the extent that was possible.

[17] The CPM noted that, in accordance with the *IPPC procedure manual*, reports that do not contain any decisions should be information papers (INFs) rather than DOCs.³

[18] The CPM:

- (1) *noted* the report presented by the CPM Chairperson, including decisions taken by the CPM Bureau by virtual means throughout 2020;
- (2) *noted* that the CPM Bureau, on behalf of the CPM, established a CPM Focus Group on Pest Outbreak Alert and Response Systems;
- (3) *noted* that the CPM Bureau approved the Terms of Reference for a CPM Focus Group on Pest Outbreak Alert and Response Systems as presented in CPM 2021/13;
- (4) *noted* the composition of the CPM Focus Group on Pest Outbreak Alert and Response Systems as selected by the CPM Bureau.

7. Report by the IPPC Secretariat

[19] The IPPC Officer-in-Charge of daily matters presented the 2020 annual report of the IPPC Secretariat,⁴ highlighting important achievements in ten areas of IPPC work: the CPM and subsidiary bodies, standard setting, implementation and capacity development, IPPC networks, the IPPC ePhyto Solution, IYPH, communication and advocacy, international cooperation, resource mobilization, and internal management.

[20] The CPM Chairperson clarified that financial and in-kind contributions were covered in the financial report under agenda item 12.

[21] The CPM:

- (1) *noted* the 2020 annual report of the IPPC Secretariat.

8. Governance and strategy

8.1 Adoption of the IPPC Strategic Framework 2020–2030

[22] The Secretariat presented the IPPC Strategic Framework 2020–2030 to the CPM.⁵ It had been revised to incorporate the adjustments agreed by CPM-14 (2019) and was now presented to the CPM for adoption.

[23] The IPPC Strategic Framework received broad support from CPs. Contracting parties commented on the benefits of identifying the links between the IPPC work programme and the United Nations Sustainable Development Goals, and the usefulness of the framework as a tool when promoting plant health activities. The need to have sufficient funding in place was emphasized, as was the importance of having an implementation plan for the Framework. The CPM noted that the development agenda and other parts of

² CPM 2021/13

³ IPPC Procedure Manual: <https://www.ippc.int/en/core-activities/governance/ippc-procedure-manual/> (section 2.7.3)

⁴ CPM 2021/24

⁵ CPM 2021/03

the Framework could be reviewed when necessary by the IPPC Strategic Planning Group (SPG) and the CPM Bureau, who could then seek agreement for proposed changes from the CPM.

[24] The CPM:

- (1) *adopted* the IPPC Strategic Framework 2020–2030⁶

8.2 Adoption of the revision of the Implementation and Capacity Development Committee Terms of Reference and Rules of Procedure

[25] The Secretariat presented the paper on the proposed revisions to the Terms of Reference and the Rules of Procedure of the Implementation and Capacity Development Committee (IC).⁷ These revisions were undertaken as advised by the FAO Legal Office to clarify several issues and were now being submitted for CPM adoption.

[26] The CPM noted the call from some CPs and a regional plant protection organization (RPPO) to have more time to observe the work of the IC before changing its Terms of Reference and Rules of Procedure.

[27] The CPM:

- (1) *deferred* consideration of the revision of the Implementation and Capacity Development Committee Terms of Reference and Rules of Procedure to a future session of the CPM.

8.3 Report from the Strategic Planning Group

[28] The Chairperson of the SPG, Mr Lucien KOUAME KONAN, presented the 2020 summary report from the SPG,⁸ which highlighted the main issues considered by the SPG at its meetings in 2020. The main focus of the group's discussion had been the implementation of the IPPC Strategic Framework 2020–2030 and the development agenda items identified therein. Areas that needed strengthening had been identified and it had been recognized that these needed to be supported by an adequate budget. The SPG had also reviewed its Rules of Procedure.

[29] The CPM considered the following four proposals arising from the SPG meetings, each being presented in a separate paper (the first by the United States of America and the others by the SPG Chairperson).

Revision of the Strategic Planning Group Rules of Procedure

[30] The SPG had drafted revised Rules of Procedure, with the aim of providing more focus on emerging strategic issues, rather than reviewing operational and administrative matters, and incorporating a mechanism for CPs to submit proposals for topics for discussion at SPG meetings.⁹ The CPM was invited to adopt the revised Rules of Procedure.

[31] The views of CPs were mixed as to whether the proposed changes would serve to strengthen the role of the SPG or were not necessary at this time given the success of the SPG in recent years. Acknowledging the lack of consensus, the CPM Chairperson suggested that the SPG discuss the matter further.

Establishment of CPM Focus Group on Implementation Plans for the IPPC Strategic Framework 2020–2030

[32] The SPG had recommended to the CPM Bureau that Terms of Reference be developed for a focus group, to be established by the CPM, to develop a clear plan for sequencing the implementation of the IPPC

⁶ <http://www.fao.org/documents/card/en/c/cb3995en>

⁷ CPM 2021/09

⁸ CPM 2021/19

⁹ CPM 2021/06

Strategic Framework 2020–2030 development agenda items. The resulting Terms of Reference were presented to the CPM for consideration.¹⁰

- [33] Some CPs expressed their support for the establishment of the CPM focus group, one of which highlighted the importance of sequencing as it is better to focus upon a few items at a time and to do them well, rather than trying to do everything at once. The CPM stressed the importance of the Strategic Framework in promoting plant health and the work of the IPPC community to CPs and audiences outside the plant health community. The CPM expressed appreciation to New Zealand and Finland for the preparing the draft Framework.
- [34] The CPM agreed to amend the proposed Terms of Reference of the focus group to change the nomination process so that the CPM Bureau *endorses* rather than *reviews* nominations and to change the section on Functions to align better with the wording in the IPPC Strategic Framework.¹¹

Establishment of CPM Focus Group on Communications

- [35] The SPG had endorsed a proposal to develop a new IPPC Communications Strategy, which would be aligned with the IPPC Strategic Framework 2020–2030, and had recommended that the CPM establish a focus group on communications to be responsible for drafting and supporting the implementation of the new strategy.
- [36] The CPM considered this proposal, together with the corresponding draft Terms of Reference,¹² and agreed to amend the Terms of Reference to include an additional point to include IPPC communication activities on the planning and implementation of future International Days of Plant Health.

Establishment of CPM Focus Group on Climate Change Impacts on Plant Health

- [37] The SPG had recommended that the CPM establish a focus group on climate change impacts on plant health, which would be mandated to develop an IPPC action plan on climate change and to coordinate its implementation. The CPM considered this proposal, together with the corresponding draft Terms of Reference.¹³
- [38] There was broad support for the establishment of this focus group among CPs, but some also suggested amendments to the Terms of Reference or commented on possible changes to it. These included: amendments to the membership, in terms of having a broader range of skills, a regional nomination component, a clear process for selection of experts, and an open call for nominations including regional nomination; a possible additional function; and amendments to bring the Terms of References into greater alignment with those of the other focus groups being considered under this agenda item. The CPM acknowledged the need for representation from all regions of the world, and noted the concerns expressed that countries should not be asked to commit to cover the costs of participating in face-to-face meetings. Some CPs suggested that the focus group be opened up to other entities working on climate change.
- [39] Wider comments from CPs on the subject of climate included the suggestion for a group to be set up to debate the challenges posed by climate change, and the suggestion that an introductory webinar be held to present the findings of the study on the impact of climate change on plant health. Some CPs emphasized the need to generate a common understanding of the effects of climate change on plant health, and more importantly a shared understanding of the potential actions that the IPPC community and NPPOs can take, as plant health officials, to mitigate those phytosanitary impacts.

¹⁰ CPM 2021/08

¹¹ CPM 2021/CRP/10

¹² CPM 2021/07

¹³ CPM 2021/14

[40] Interested CPs considered the suggested changes to the Terms of Reference in more detail outside of the session, and brought an amended version back to the CPM for consideration.¹⁴ This took account of the need to base membership of the focus group on scientific expertise as well as regional representation, including experts on climate change related to pests. The CPM agreed to the revised Terms of Reference

[41] The CPM:

- (1) *noted* the summary of the 2020 meetings of the IPPC Strategy Planning Group;
- (2) *agreed* not to revise the Rules of Procedure for the IPPC Strategic Planning Group (SPG) at this time, and *noted* that the matter needed further consideration by the SPG;
- (3) *agreed* to establish a CPM Focus Group on Implementation of the IPPC Strategic Framework's 2020–2030 Development Agenda Items, and *adopted* Terms of Reference for the group as modified in this meeting (Appendix 04);
- (4) *agreed* to establish a CPM Focus Group on Communications, and *adopted* Terms of Reference for the group as modified in this meeting (Appendix 05);
- (5) *agreed* to establish a CPM Focus Group on Climate Change Impacts on Plant Health, and *adopted* Terms of Reference for the group as modified in this meeting (Appendix 06).

8.4 Endorsement of updated Framework for Standards and Implementation

[42] The IPPC Officer-in-Charge of daily matters presented the Framework for Standards and Implementation, which had been updated, restructured and aligned with the IPPC Strategic Framework 2020–2030, reviewed by the SC, IC and SPG, and was now being presented to the CPM for endorsement.¹⁵

[43] The CPM:

- (1) *endorsed* the revision of the Framework for Standards and Implementation as presented in the paper;
- (2) *requested* that the Secretariat update the content of the Framework for Standards and Implementation, including updates to reflect decisions made by CPM-15 (2021);
- (3) *agreed* that the most current version of the Framework for Standards and Implementation, updated by the Standards Committee, Implementation and Capacity Development Committee and Strategic Planning Group, will be maintained and fully accessible on the International Phytosanitary Portal (IPP).

9. Standard setting

9.1 Report from Standards Committee

[44] The SC Chairperson presented the report of the SC's activities during 2019 and 2020.¹⁶ He outlined the progress made with development of standards, the work done on the development and governance approach for commodity standards with a new technical panel formed, the discussions held on the reorganization of the pest risk analysis standards, and the webinar held on the authorization of entities to perform phytosanitary actions. He also pointed out that approximately 50 of the 100 topics on the SC work programme have progressed. The SC Chairperson highlighted the collaborative work with the IC in revising the Framework for Standards and Implementation. Finally, he thanked all those involved in the standard setting process, including the Technical Panels and especially the Technical Panel on Forest Quarantine, whose disestablishment was to be considered under agenda item 9.3 of this CPM.

¹⁴ CPM 2021/CRP/11_REV1

¹⁵ CPM 2021/11

¹⁶ CPM 2021/17, CPM 2021/INF/17

[45] The CPM:

- (1) *noted* the report on the activities of the Standards Committee in 2019 and 2020.

9.2 Adoption of standards

[46] The Secretariat introduced the papers for this agenda item, which presented the draft International Standards for Phytosanitary Measures (ISPMs) proposed by the SC for adoption by the CPM, the diagnostic protocols (DPs) adopted by the SC on behalf of the CPM since the last session of the CPM, and activities related to translation of adopted standards.¹⁷ The SC had requested that the CPM convey its appreciation to the experts of the drafting groups for their active contribution to the development of these standards.

[47] The Secretariat informed the CPM that the deadline for objections specified in the Standard Setting Process was three weeks before CPM-15 (2021), namely 22 February 2021, but by that date no objections had been received.¹⁸

[48] The CPM noted the need for capacity development to help CPs in developing countries implement standards such as the one on modified atmosphere treatments.

[49] The CPM:

- (1) *adopted* the revision of ISPM 8 (*Determination of pest status in an area*) (2009-005) (Appendix 15) and revoked the previously adopted version;
- (2) *adopted* ISPM 44 (*Requirements for the use of modified atmosphere treatments as phytosanitary measures*) (2014-006) (Appendix 15);
- (3) *adopted* the 2018 amendments to ISPM 5 (*Glossary of phytosanitary terms*) (1994-001) (Appendix 17) and revoked the previously adopted version;
- (4) *adopted* ISPM 45 (*Requirements for national plant organizations if authorizing entities to perform phytosanitary actions*) (2014-002) (Appendix 15);
- (5) *noted* that the Standards Committee adopted on behalf of the CPM the following diagnostic protocol (DP) as an annex to ISPM 27 (*Diagnostic protocols for regulated pests*): DP 29 (*Bactrocera dorsalis*) (2006-026);
- (6) *adopted* PT 33 (Irradiation treatment for *Bactrocera dorsalis*) (2017-015) as Annex 33 to ISPM 28 (*Phytosanitary treatments for regulated pests*) (Appendix 15);
- (7) *adopted* PT 34 (Cold treatment for *Ceratitis capitata* on *Prunus avium*, *Prunus salicina* and *Prunus persica*) (2017-022A) as Annex 34 to ISPM 28 (Appendix 15);
- (8) *adopted* PT 35 (Cold treatment for *Bactrocera tryoni* on *Prunus avium*, *Prunus salicina* and *Prunus persica*) (2017-022B) as Annex 35 to ISPM 28 (Appendix 15);
- (9) *adopted* PT 36 (Cold treatment for *Ceratitis capitata* on *Vitis vinifera*) (2017-023A) as Annex 36 to ISPM 28 (Appendix 15);
- (10) *adopted* PT 37 (Cold treatment for *Bactrocera tryoni* on *Vitis vinifera*) (2017-023B) as Annex 37 to ISPM 28 (Appendix 15);
- (11) *adopted* PT 38 (Irradiation treatment for *Carposina sasakii*) (2017-026) as Annex 38 to ISPM 28 (Appendix 15);
- (12) *adopted* PT 39 (Irradiation treatment for the genus *Anastrepha*) (2017-031) as Annex 39 to ISPM 28 (Appendix 15);

¹⁷ CPM 2021/15 (including attachments 01–11)

¹⁸ CPM 2021/INF/11

- (13) *thanked* the experts of the groups who drafted the adopted standards for their active contribution to the development of these standards (Appendix 07);
- (14) *noted* that the following three ISPMs (including one diagnostic protocol (DP)) had been reviewed by the Arabic, Chinese, Russian and Spanish Language Review Groups and FAO Translation Services, and that the IPPC Secretariat had incorporated the modifications accordingly and posted the new versions on the Adopted Standards page of the IPP to replace the previous versions:
- ISPM 5 (*Glossary of phytosanitary terms*),
 - ISPM 43 (*Requirements for the use of fumigation as a phytosanitary measure*),
 - DP 2 (*Plum pox virus*);
- (15) *thanked* contracting parties and regional plant protection organizations involved in the Language Review Groups, as well as FAO Translation services, for their efforts and hard work to improve the language versions of ISPMs;
- (16) *acknowledged* the contributions of contracting parties, regional plant protection organizations, and organizations who hosted or helped organize standard setting meetings in 2019:
- Canada for hosting the Expert Working Group on Audit in the Phytosanitary Context (2015-014),
 - The Joint FAO/International Atomic Energy Agency Centre for Nuclear Techniques in Food and Agriculture for hosting the meeting of the Technical Panel on Phytosanitary Treatments in Vienna, Austria,
 - Australia, the Agribio Centre at La Trobe University for hosting the meeting of the Technical Panel on Diagnostic Protocols,
 - France, for providing in-kind staff support in 2019 for the Standard Setting Unit of the IPPC Secretariat;
- (17) *acknowledged* the contributions of the members of the Standards Committee who had left the committee in 2019 and 2020:
- Australia, Mr Bruce HANCOCKS,
 - Brazil, Mr Jesulindo Nery DE SOUZA JUNIOR,
 - Canada, Mr Rajesh RAMARATHNAM,
 - Iraq, Mr Abdulqader Khudhair ABBAS,
 - Kenya, Ms Esther KIMANI,
 - Lebanon, Mr Nicholas EID,
 - New Zealand, Mr Stephen BUTCHER,
 - Samoa, Mr Lupeomanu Pelenato FONOTI,
 - Sri Lanka, Ms Jayani Nimanthika WATHUKARAGE,
 - Syria, Ms Ouroba ALZITANIABOALBORGHOL;
- (18) *acknowledged* the contributions of the members of the Technical Panel on Phytosanitary Treatments who left in 2019:
- FAO/IAEA Joint Centre, Mr Andrew PARKER (member),
 - China, Yuejin WANG (member),
 - Egypt, Ms Shaza OMAR (Assistant Steward);
- (19) *acknowledged* the contribution of the following member of the Technical Panel on Forest Quarantine who left in 2019:
- Poland, Mr Krzysztof SUPRUNIUK (member).

[50] The Secretariat presented the paper on proposed ink amendments to adopted ISPMs, arising from consistency reviews,¹⁹ and also highlighted that the ink amendments to phytosanitary treatments on irradiation described in the paper would also be applied to the two irradiation treatments adopted at this CPM as annexes to ISPM 28.²⁰

[51] The CPM noted the request that, in future, changes of a technical nature that change the substance or content of a standard, such as the removal of the disclaimer from the irradiation treatments, should be considered to be technical revisions and not be submitted as ink amendments, and that ink amendments should be reserved for changes that improve the consistency of terminology.

[52] The CPM:

- (1) *noted* the ink amendments to the following adopted annexes to ISPM 28 (Appendix 16, attached to the English version only):
 - PT 1 (Irradiation treatment for *Anastrepha ludens*),
 - PT 2 (Irradiation treatment for *Anastrepha obliqua*),
 - PT 3 (Irradiation treatment for *Anastrepha serpentina*),
 - PT 4 (Irradiation treatment for *Bactrocera jarvisi*),
 - PT 5 (Irradiation treatment for *Bactrocera tryoni*),
 - PT 7 (Irradiation treatment for fruit flies of the family Tephritidae (generic)),
 - PT 14 (Irradiation treatment for *Ceratitis capitata*),
 - PT 33 (Irradiation treatment for *Bactrocera dorsalis*),
 - PT 39 (Irradiation treatment for the genus *Anastrepha*);
- (2) *noted* the ink amendments to the use of “commodity class” to ensure a consistent use across adopted ISPMs (Appendix 16, attached to the English version only);
- (3) *noted* that the ink amendments will be implemented into the language versions of the standards concerned as resources permit;
- (4) *agreed* that, once the Secretariat has applied the ink amendments, the previous versions of the standards will be replaced by the newly implemented versions;
- (5) *noted* the comments made at this meeting that ink amendments should be reserved for changes that improve the consistency of terminology.

9.3 Standards Committee recommendations to the CPM

[53] The SC Chairperson presented the SC’s recommendations to the CPM from 2019 and 2020.²¹ These included updates to the *List of topics for IPPC standards*²², including topics added by the CPM Bureau on behalf of the CPM, and a proposal to disestablish the Technical Panel on Forest Quarantine because none of the current topics on its work programme are anticipated to move forward in the coming years and the panel had not met since September 2017.

¹⁹ CPM 2021/22

²⁰ CPM 2021/INF/12

²¹ CPM 2021/18

²² *List of topics for IPPC standards*: <https://www.ippc.int/en/core-activities/standards-setting/list-topics-ippc-standards/list>

[54] The CPM noted that the disestablishment of the Technical Panel on Forest Quarantine would not hinder progress on topics related to forestry, as work on individual topics could still proceed via expert working groups or the Technical Panel on Phytosanitary Treatments.

[55] The CPM:

- (1) *adopted* the *List of topics for IPPC standards*, with the adjustments outlined in CPM 2021/18;
- (2) *disestablished* the Technical Panel on Forest Quarantine (TPFQ);
- (3) *thanked* the members of the TPFQ for their contributions over the years (Appendix 08).

10. CPM recommendations

[56] The Secretariat presented the paper outlining the development of draft CPM Recommendations since CPM-14 (2019).²³ A CPM Recommendation is an adopted text by the Commission on important issues related to plant health, either to promote action on a specific phytosanitary issue or to address a more generalized issue.²⁴

10.1 Adoption of draft CPM Recommendation on “food aid”

[57] The draft CPM Recommendation on *Safe provision of food and other humanitarian aid to prevent the introduction of plant pests during an emergency situation* (2018-026) had been submitted to two rounds of consultation and had been revised accordingly. This had included removing the appendices because it had been suggested that these would go beyond the scope of the IPPC. It was proposed that the appendices be submitted as contributed resources on the IPP instead, following the usual contributed resources process. Further to these changes, the CPM Bureau had recommended the draft CPM Recommendation to CPM-15 (2021) for adoption.²⁵

[58] Some CPs expressed support for adoption of the draft CPM Recommendation, noting the particular importance of the Recommendation for countries that are vulnerable to natural disasters. A few of these also expressed disappointment about the removal of the appendices. One RPPO informed the CPM of its intention to submit a proposal for an ISPM on the provision of food and humanitarian aid during the 2021 Call for Topics, including the information contained in the appendices removed from the CPM Recommendation, as it felt there is a need for more detailed guidance. A few CPs lent their support to the idea of developing a standard, with one also intending to submit a proposal for a topic.

[59] The CPM:

- (1) *adopted* CPM Recommendation R-09 (*Safe provision of food and other humanitarian aid to prevent the introduction of plant pests during an emergency situation*) (2018-026) (Appendix 16)

10.2 Approval for consultation of CPM Recommendation on “contaminating pests”

[60] The draft CPM Recommendation on *Facilitating safe trade by reducing the incidence of contaminating pests associated with traded goods* (2019-002) had been developed through an international workshop and virtual drafting group,²⁶ and the SPG had subsequently recommended it to CPM-15 (2021) for approval for consultation.

²³ CPM 2021/16

²⁴ CPM Recommendations: <https://www.ippc.int/en/core-activities/governance/cpm/cpm-recommendations-1/cpm-recommendations/>

²⁵ CPM 2021/16_01

²⁶ CPM 2021/16_02

[61] The CPM noted the support of CPs for this proposal.

[62] The CPM:

- (1) *agreed* to submit to consultation the draft CPM Recommendation on *Facilitating safe trade by reducing the incidence of contaminating pests associated with traded goods* (2019-002), contained in CPM 2021/16_02, between 1 July and 30 September 2021 using the Online Comment System, with a view to presenting a final version for adoption at CPM-16 (2022).

10.3 Inclusion of any other topics submitted by contracting parties in the CPM work programme

[63] The Secretariat informed the CPM that the only proposal received thus far was the proposal to revise CPM Recommendation R-06 (*Sea containers*), which was to be considered under agenda item 11.3.

[64] No other proposals for new CPM recommendations were made.

11. Implementation and capacity development

11.1 Report from Implementation and Capacity Development Committee

[65] The Chairperson of the IC presented the IC's report for 2019 and 2020.²⁷ He summarized the matters considered by the IC during this period, including work related to the global plant health surveillance programme, the Sea Containers Task Force (SCTF), e-commerce, national reporting obligations, the dispute avoidance and settlement programme, the Implementation Review and Support System (IRSS), guides and training materials, monitoring and evaluation, and phytosanitary capacity evaluation (PCE). Finally, he thanked the IC members who had left the committee, welcomed the new members, and thanked the former Chairperson Ms Olga LAVRENTJEVA and the Secretariat.

[66] Contracting parties commented on various aspects of implementation and capacity development activities. These included the need to provide sufficient Secretariat support for IC work; the need to encourage CPs, RPPOs and other institutions to provide resources; and the benefits of shifting the IRSS from a project-driven activity to a system, driven by the IPPC community. The value of PCEs was highlighted, while recognizing that PCE needs to be promoted.

[67] The CPM:

- (1) *thanked* the following Implementation and Capacity Development Committee members who ended their term in 2020 for their work and important contributions to the work of this committee:
 - Ms Sally JENNINGS (New Zealand),
 - Mr Mamoun ALBAKRI (Jordan),
 - Mr Dilli Ram SHARMA (Nepal),
 - Mr Yuji KITAHARA (Japan),
 - Mr Ngatoko NGATOKO (Cook Islands),
 - Mr Philip KARONJO NJOROGI (Kenya);
- (2) *thanked* the experts who had contributed to the *Guide for establishing and maintaining pest free areas* and the *IPPC guide to pest risk communication* (Appendix 09);
- (3) *noted* the activities undertaken to advance the e-Commerce Programme;
- (4) *noted* the activities undertaken to advance the National Reporting Obligations programme;

²⁷ CPM 2021/26, CPM 2021/INF/18

- (5) *noted* that the Implementation and Capacity Development Committee, based on a SPG recommendation, had agreed to put the work on dispute avoidance and settlement on hold until the end of the IYPH;
- (6) *noted* the request from the Implementation and Capacity Development Committee for the CPM to consider allocating funds to the revision of the CPM-approved IPPC dispute settlement procedures to ensure their clarity and consistency;
- (7) *noted* the activities undertaken to advance the work under the Implementation Review and Support System (IRSS);
- (8) *noted* the intention of the IPPC Secretariat to move the IRSS from a project driven activity to a System for the IPPC Community with a long-term work plan that will be funded by multiple donors;
- (9) *acknowledged* that the following three projects were reviewed by the Implementation and Capacity Development Committee and *noted* that they are aligned with the IPPC strategic objectives, have strategic value and a competitive advantage:
 - The phytosanitary component of a FAO project “Common Market for Eastern and Southern Africa (COMESA) Trade Facilitation Project” (2019-2023) (GCP /INT/387/COM),
 - The EU project “Support the IPPC Strategic Framework: Commodity and pathways standards, Pest Outbreak Alert and Response Systems and e-Phyto” (2020-2022) (GCP/GLO/040/EC),
 - The EU project “Supporting the implementation of the International Plant Protection Convention (IPPC)” (2020-2022) (GCP/GLO/040/EC);
- (10) *agreed* that the phytosanitary capacity evaluation (PCE) is a useful tool to help evaluate and develop national phytosanitary capacities;
- (11) *noted* the PCEs conducted by several contracting parties and the achievements of contracting parties where PCE was conducted;
- (12) *noted* the Implementation and Capacity Development activities (2019 and 2020) presented by the IC Chairperson in the IC report to the CPM.

11.2 Adoption of the list of implementation and capacity development topics

- [68] The Secretariat presented the paper outlining the proposed adjustments to the *List of implementation and capacity development topics*.²⁸ The list had been reviewed by the IC based on priorities and potential linkages between implementation and capacity development topics and other ongoing work. As a result of the review, the IC had recommended that 13 topics be deleted because they can be merged with other topics or are no longer needed or relevant, and that six topics be removed because they have been completed. The IC had also proposed seven new topics. In addition, the IC had changed the priorities of four topics.
- [69] The suggestion was made that, when presenting the table of the list of topics in the future, the addition of three columns should be considered: one briefly describing the main deliverables of each topic, one giving the projected timeframe and one giving the source of funding.
- [70] The CPM noted the confirmation from the Republic of Korea that it would be providing funding for some implementation and capacity development activities.
- [71] The CPM also acknowledged the contribution of the people working “behind the scenes” for the successful operation of both the IC and SC.
- [72] The CPM:

²⁸ CPM 2021/29

- (1) *noted* the changes to the priority level of four topics made by the Implementation and Capacity Development Committee, as detailed in Appendix 11;
- (2) *agreed* to adjust the *List of implementation and capacity development topics* to delete thirteen topics, remove six topics and add seven topics, as detailed in Appendix 10;
- (3) *adopted* the *List of implementation and capacity development topics* as detailed in Appendix 11.
- (4) *requested* that the IPPC Secretariat add three columns (“main deliverables of each topic”, “projected timeframe” and “the source of funding”) when presenting the table of the list of topics in the future.

11.3 Update from the Sea Containers Task Force

[73] The Secretariat presented the paper outlining the work of the SCTF during 2019 and 2020.²⁹ This highlighted the difficulties in gathering data on sea container cleanliness and the various activities undertaken by the SCTF to raise awareness of the pest risks associated with the movement of sea containers. Among the issues put forward for consideration by CPM-15 (2021) was the suggestion that CPM Recommendation R-06 (*Sea containers*) be revised to reflect the work done by the SCTF.

[74] Contracting parties commented on the importance of sea container cleanliness, acknowledging that it is a complicated and challenging issue and recognizing that there was still a need for further international cooperation. The CPM noted that there had been limitations to gathering data; however, useful conclusions may still be drawn, given that sea containers travel all over the world.

[75] Regarding the work of the SCTF in the remaining months until their mandate elapses at the end of 2021, the CPM considered various suggestions made by CPs. These included a suggestion that the SCTF address some core strategic questions and consider the possibility of an international workshop (or open-ended technical consultation) in late 2022. It was agreed that after the report and recommendations of the SCTF are presented to CPM-16 (2022), the CPM would then consider how to move forward on this topic including: the establishment of a CPM focus group to drive the delivery of the agreed approach, the revision of CPM Recommendation R-06, or resuming the development of a draft ISPM on sea container cleanliness.

[76] The CPM Chairperson suggested that interested CPs participate in a Friends of the Chair meeting, which took place outside of the session and resulted in agreement to revised decisions that were presented to the CPM to consider.³⁰ The CPM considered these and agreed to them.

[77] The CPM:

- (1) *noted* the outcome of the Friends of the Chair meeting;
- (2) *communicated* to contracting parties the value of carrying out sea container surveys and, in so doing, making use of the IPPC Guidelines on Sea Container Surveys for national plant protection organizations³¹ and encouraging the submission of any related information to the Secretariat once any survey is executed;
- (3) *noted* the executive summary of the “Questionnaire on Monitoring of Sea Container Cleanliness” (Appendix 12);
- (4) *noted* the work of the Secretariat and the Sea Container Task Force (SCTF) in encouraging the inclusion of sea container cleanliness among the criteria for the International Maritime Organization’s (IMO’s) inspection programmes for cargo transport units;

²⁹ CPM 2021/27

³⁰ CPM 2021/CRP/12_REV01

³¹ <https://www.ippc.int/en/publications/87069/>

- (5) *noted* that contracting parties may contact their IMO national contact points to support the inclusion of sea container cleanliness among the criteria for the IMO's inspection programmes for cargo transport units;
- (6) *requested* that the Secretariat and SCTF continue to explore the potential use of the Authorized Economic Operators framework to incorporate phytosanitary criteria and the inclusion of additional fields in the World Customs Organization Data Model to track container cleanliness;
- (7) *noted* the Secretariat's and SCTF's arrangements to update the IMO/International Labour Organization/United Nations Economic Commission for Europe's Code of Practice for Packing of Cargo Transport Units (CTU Code) and the potential co-sponsoring of the CTU Code by the FAO;
- (8) *encouraged* contracting parties to use CPM Recommendation R-06 (*Sea containers*);
- (9) *encouraged* contracting parties to use the IPPC guidance document *Sea container supply chains and cleanliness: An IPPC best practice guidance on measures to minimize pest contamination*³²;
- (10) *noted* the IPPC leaflet *Reducing the spread of invasive pests by sea containers*³³;
- (11) *confirmed* the following key objectives for the SCTF to pursue during the remainder of its mandate (which extends to the end of December 2021) and which are to be reported on at CPM-16 in 2022 on behalf of the SCTF. In this regard, under the direction of the Implementation and Capacity Development Committee, *the SCTF is asked, as feasible in the remaining time available, to:*
 - consider and prepare responses to the core strategic questions laid out in CPM 2021/INF/13, "Update from the Sea Containers Task Force – Proposal for a Path Forward for the Sea Container Task Force". The SCTF may also review additional sources of information of potential value in this regard, such as information gathered by the earlier IPPC working group that developed the recommendation on contaminating pests;
 - outline potential core aspects that the SCTF would consider important for inclusion in (a) a potential revision of CPM Recommendation No. 6 on Sea Containers, and (b) a potential ISPM on sea containers, recognizing that the CPM has yet to determine whether to proceed with further development of either approach;
 - consider and communicate viewpoints on the potential value of an international workshop (or open-ended technical consultation) that could be held in late 2022, subject to CPM-16 approval, to be arranged by a CPM focus group as described below, which would allow for: (a) the discussion of the SCTF's final report and any related recommendations; (b) exchange of relevant lessons learned, views, experiences and recommendations; and (c) identification of critical elements which should be considered in conjunction with any future related activities or development of related IPPC guidance. The outcomes of the workshop would be expected to be presented to CPM-17 in 2023;
 - develop any other considerations, recommendations or options that CPM-16 may wish to take into account during related decision-taking in 2022;
 - develop a draft Terms of Reference for a prospective CPM focus group that would be charged with arranging a possible 2022 workshop or consultation or any other tasks which CPM-16 (2022) decides upon and assembling related information or recommendations for subsequent communication to CPM-17 (2023). The draft Terms of Reference for this focus group would be presented to the Strategic Planning Group in 2021 for review and subsequently presented to CPM-16 (2022) for consideration and decision on holding the workshop or consultation.

³² <http://www.fao.org/documents/card/en/c/ca7963en>

³³ <https://www.ippc.int/en/publications/88564/>

12. Financial report and budget

12.1 IPPC Secretariat financial report (2019 and 2020)

[78] The IPPC Secretariat presented its financial reports, detailing the resources available from FAO's regular-programme budget, extra-budgetary and in-kind (non-financial) sources.³⁴ As the CPM had not been able to convene in 2020, two reports were presented: one for 2019 and the other for 2020. The year 2019 had been a record year for the Secretariat in terms of extra-budgetary contributions received. In 2020, only four CPs had contributed to the IPPC Multi-Donor Trust Fund, but this reduction in contributions had been offset by an increase in regular-programme funding from FAO and by the reduction in travel expenses as a result of the pandemic. In both 2019 and 2020, in-kind contributions had totalled approximately USD 1 million.

[79] While welcoming the increase in FAO regular-programme funding, some CPs asked the Secretariat to confirm that this increased level of funding would continue and voiced concerns that the funding was still not sufficient (see also agenda item 12.2).

[80] The CPM noted a suggestion that the funds saved for contingencies should be increased, given the recent reduction in contributions and the current uncertain times.

[81] The CPM welcomed the confirmation from the Republic of Korea that its contribution to the Multi-Donor Trust Fund would be the same in 2021 as in 2020 and that it would support the IPPC regional workshop for Asia in 2021.

[82] The CPM:

- (1) *noted* the Financial Report of the IPPC Secretariat for 2019;
- (2) *adopted* the financial report for 2019 of the IPPC Multi-Donor Trust Fund (Special Trust Fund of the IPPC) as presented in CPM 2021/23;
- (3) *noted* the Financial Report for 2020 of the IPPC Secretariat;
- (4) *adopted* the Financial Report for 2020 of the IPPC Multi-Donor Trust Fund (Special Trust Fund of the IPPC) as presented in CPM 2021/23;
- (5) *authorized* the CPM Bureau to allocate USD 650 000 of the IPPC Multi-Donor Trust Fund (Special Trust Fund of the IPPC) un-earmarked funds in 2021 to fund CPM priorities from the CPM-15 session and Secretariat's priority needs to support its operations;
- (6) *encouraged* contracting parties to contribute to the IPPC Multi-Donor Trust Fund (Special Trust Fund of the IPPC) and IPPC Projects, preferably on an ongoing basis;
- (7) *thanked* contracting parties that had contributed to the IPPC Secretariat's programme of work in 2019 and 2020.

12.2 2021 IPPC Secretariat work plan and budget

[83] The IPPC Secretariat presented the work plan and budget of the IPPC Secretariat for 2021.³⁵ The work plan and budget are aligned with the IPPC Strategic Framework 2020–2030 and the five-year investment plan, and takes into account all core activities of the Secretariat.

[84] Some CPs suggested that the CPM, in its conclusions of this meeting, appreciates the FAO increased contribution in 2020–2021 from the FAO regular programme, and calls on the FAO to keep this increased contribution on a permanent basis. This was accepted by the CPM.

³⁴ CPM 2021/23

³⁵ CPM 2021/25

[85] Other suggestions made by CPs were to: prioritize activities on issues that are important to plant health, such as pest outbreak alert and response systems; use savings from reduced travel to support activities, such as SC meetings or IC projects that are lacking funds; and provide special assistance to the ePhyto programme.

[86] The CPM:

- (1) *approved* the 2021 IPPC Secretariat work plan and budget.
- (2) *expressed* its appreciation to FAO for the increase in regular-programme funding in 2021 and *called upon* FAO to make this funding level permanent.

13. ePhyto

13.1 Long-term financial sustainability

[87] The Secretariat presented the paper on how to financially sustain the IPPC ePhyto Solution.³⁶ The CPM was invited to consider which of the seven potential options set out in the paper should be explored in greater detail.

[88] One additional option was suggested: to embed ePhyto into a supplementary agreement under Article XVI of the IPPC.

[89] The CPM noted the need to consider some basic fundamentals, including fee exemptions for countries that have a low usage of ePhytos or were least developed, payments being based on the value of export rather than import (if basing payments on volume of ePhytos), and that the funding should support the ePhyto Solution but not be used as a funding stream for other IPPC activities. The CPM noted that, regardless of the mechanism that is finally agreed by the CPM, it does not need to be a permanent arrangement but could be reviewed depending on the experiences gained.

[90] The CPM deferred further discussion and came back to it later in the meeting. In the intervening time, the Secretariat and the IPPC Finance Committee had confirmed that sufficient funds for ePhyto were in place for 2021 and 2022. The CPM therefore considered a proposal for a CPM focus group to be established to develop a two-phase funding solution. The first phase of this would be an interim solution, which might rely upon a coalition of parties willing to provide funding or be a multi-pledge solution. This would give more time for a more permanent solution (e.g. a supplementary agreement or a charging scheme) to be developed as the second phase. The interim phase would last until the long-term solution could be implemented.

[91] Some CPs expressed support for the establishment of a small working group to consider some of the options in greater detail and were willing to take part in the group. The CPM considered the membership of the proposed focus group. The CPM noted the need for a balanced representation from all FAO regions while avoiding an over-sized group. Several suggestions were made by CPs about the number and composition of the focus group membership, but the CPM noted that no decision on this was needed at this meeting. The CPM noted the suggestion that the group should include people with administrative and funding experience.

[92] The United States of America offered to continue funding ePhyto until this long-term scheme could be implemented, and the European Union offered to look into how it could contribute. New Zealand added that it would also provide transitional funding for ePhyto.

[93] The CPM:

³⁶ CPM 2021/31

- (1) *agreed* to pursue a two-phase funding solution for the IPPC ePhyto Solution, with the first phase relying on funding from interested contracting parties and the second phase providing long-term financial sustainability;
- (2) *requested* that the Secretariat take the lead in drafting Terms of Reference for a CPM focus group, including its composition, to be presented to the CPM Bureau for review and approval, and *agreed* that the membership would include at least one representative from each region;
- (3) *agreed* that the focus group be tasked with preparing a decision document on the funding solution for the second phase, for presentation at the CPM session in 2023.

14. IPPC communication

14.1 Update on IPPC communications

[94] The Secretariat presented the paper, summarizing the communication and advocacy activities undertaken by the Secretariat in 2019 and 2020, and presenting a communication and advocacy action plan for 2021.³⁷ Activities had included publications, headline news, revision of the IPP, an upgrade to the Online Comment System, social media, media outreach, promotion of the annual theme for 2019 “Plant Health and Capacity Development”, and the various initiatives taken to promote the IYPH in 2020.

[95] The CPM thanked the Secretariat for their ongoing work and recalled the decision taken earlier in the meeting in relation to the CPM Focus Group on Communications (agenda item 8.3) that the International Day of Plant Health should be the focus of the IPPC communications strategy.

[96] The Secretariat clarified that there was no firm timeline for the migration of the IPP to the FAO domain, because the latter was in the process of being restructured, but it would not happen in 2021.

[97] The CPM:

- (1) *noted* the report of communication and advocacy activities carried out by the IPPC Secretariat in 2019 and 2020;
- (2) *noted* the IPPC Secretariat’s communication and advocacy action plan for 2021;
- (3) *agreed* to develop a new IPPC Communications Strategy 2022–2030 under the auspices of the CPM Focus Group on Communications;
- (4) *encouraged* contracting parties to continuously report on national level activities, which may be advertised via the IPPC Secretariat’s communication channels.

14.2 Update on International Year of Plant Health

[98] The Secretariat, together with the Chairperson of the IYPH International Steering Committee, Mr Ralf LOPIAN, presented the paper.³⁸ This outlined the IYPH activities during 2020, the changes that had been necessary in response to the COVID-19 pandemic, and plans for 2021 and beyond, including the proposed rescheduling of the First International Plant Health Conference, which had been postponed and then cancelled because of COVID-19.

[99] Several CPs thanked and congratulated the IYPH International Steering Committee, its Chairperson Mr Ralf LOPIAN and the Secretariat for their commitment towards and achievements during the IYPH.

[100] The CPM:

- (1) *noted* the report on the International Year of Plant Health (IYPH) 2020;

³⁷ CPM 2021/20

³⁸ CPM 2021/04

- (2) *noted* the remaining IYPH 2020 activities to be undertaken in 2021;
- (3) *agreed* that the First International Plant Health Conference be organized as an IPPC event for the week of 12 May 2022;
- (4) *mandated* the IYPH 2020 Technical Advisory Body to function as the IPPC preparatory body for the planning and organization of the First International Plant Health Conference and the webinars leading to it;
- (5) *called* upon IPPC contracting parties to volunteer for hosting the First International Plant Health Conference in 2022;
- (6) *thanked* and *congratulated* the IYPH International Steering Committee, Mr Ralf LOPIAN (Chairperson of the committee), and the Secretariat for their efforts in delivering the IYPH, despite the challenges posed by the COVID-19 pandemic.

14.3 Update on proposal for an International Day of Plant Health

[101] The Secretariat presented the paper, which provided an update on progress towards the observance by the United Nations system of an “International Day of Plant Health”.³⁹

[102] The CPM:

- (1) *noted* the update on the process to establish the observance by the United Nations system of an “International Day of Plant Health” on 12 May every year;
- (2) *thanked* Zambia for its continuing efforts and support in establishing an International Day of Plant Health as well as the governments expressing support for such a proposal;
- (3) *encouraged* the IPPC contracting parties to support the proposal to establish the observance by the United Nations system of an “International Day of Plant Health” on 12 May every year by considering pledges to support the implementation of the occurrence and liaising with their counterparts in the FAO Conference and at the United Nations General Assembly to facilitate their final endorsement.

15. External cooperation

15.1 Update on international cooperation

[103] The Secretariat presented the report, outlining its main cooperative activities in 2019 and 2020 with RPPOs and external international organizations.⁴⁰

[104] The CPM:

- (1) *noted* the report on the international cooperation of the IPPC Secretariat in 2019 and 2020.

15.2 Written reports from international organizations

[105] The following international organizations provided written reports:⁴¹

- Biological Weapons Convention;
- Secretariat of the Convention on Biological Diversity;
- Europe-Africa-Caribbean-Pacific Liaison Committee (COLEACP);

³⁹ CPM 2021/05

⁴⁰ CPM 2021/28

⁴¹ CPM 2021/INF/01, CPM 2021/INF/02, CPM 2021/INF/03, CPM 2021/INF/04, CPM 2021/INF/05, CPM 2021/INF/06, CPM 2021/INF/07, CPM 2021/INF/08, CPM 2021/INF/09, CPM 2021/INF/10, CPM 2021/INF/22, CPM 2021/INF/23, CPM 2021/CRP/04

- Global Alliance for Trade Facilitation;
- International Organization for Standardization (ISO);
- International Pest Risk Research Group;
- Joint FAO/International Atomic Energy Agency Programme of Nuclear Techniques in Food and Agriculture;
- Ozone Secretariat for the Montreal Protocol on Substances that Deplete the Ozone Layer;
- Phytosanitary Measures Research Group;
- Standards and Trade Development Facility;
- World Customs Organization;
- World Trade Organization (WTO).

[106] The CPM:

- (1) *noted* the written reports from international organizations.

16. IPPC network activities

16.1 Updates on technical cooperation among regional plant protection organizations

[107] Mr Jean Gérard MEZUI M'ELLA (Inter-African Phytosanitary Council) and Ms Juliet GOLDSMITH (Caribbean Agricultural Health and Food Safety Agency) presented the reports of the 31st and 32nd meetings of the Technical Consultation among Regional Plant Protection Organizations (TC-RPPOs) held in Nigeria in October 2019 and in virtual mode between December 2020 and February 2021, respectively.⁴² One special highlight of the 32nd meeting had been to receive a request from the Economic Community of West African States for recognition as an RPPO under Article IX of the IPPC. This would be considered further at the 33rd meeting of the TC-RPPOs, which would be held in virtual mode in October and November 2021.

[108] Some CPs suggested that consideration be given to an enhanced involvement of the plant-health community in the One Health approach. This could start with the Secretariat having discussions with key international players in One Health, such as FAO, the World Health Organization, the World Organization for Animal Health (OIE) and the United Nations Environment Programme, and the inclusion of the topic in the SPG agenda.

[109] The CPM also acknowledged the role of plant health in biosecurity, biosafety and environmental protection.

[110] The CPM:

- (1) *noted* the reports from the 31st and 32nd meetings of the Technical Consultation among Regional Plant Protection Organizations;
- (2) *requested* that the agenda of the next Strategic Planning Group include a discussion on the extent of the involvement of plant health in the One Health approach, and the role of plant health in biosecurity, biosafety and environmental protection, to allow a further assessment and to make an informed CPM decision on this issue.

17. Confirmation of membership and potential replacements for CPM subsidiary bodies

[111] The CPM Chairperson invited the CPM to confirm the membership and potential replacements for the CPM Bureau (including election of a new CPM Chairperson and Vice-Chairperson) and the SC. The Secretariat also clarified that, because of the COVID-19 pandemic and the postponement of CPM-15 originally

⁴² CPM 2021/10, CPM 2021/33, CPM 2021/INF/19, CPM 2021/INF/20

scheduled for 2020, the CPM Bureau had extended the terms of those members whose terms would have expired in 2020, for one additional year to ensure continuity of the work. The Secretariat provided the CPM with lists of the nominations.⁴³

[112] A representative from the FAO Legal Office clarified that, under Rule II of the CPM Rules of Procedure, members of the CPM Bureau serve for a term of two years and are eligible for re-election for another two consecutive terms.⁴⁴ In exceptional circumstances, an FAO region may submit a request to the CPM for an exception to allow a member to serve an additional term or terms.

[113] The Secretariat recalled that the new members of the SC have their terms starting after the SC-7. Thus, the Secretariat encouraged new members of the SC to register as observers for the May 2021 meeting, to ensure a smooth handover.

[114] The Secretariat invited the CPM to note the membership and potential replacements for the IC,⁴⁵ and clarified that memberships of the IC had been extended from May 2020 to November 2020 because of the COVID-19 pandemic.

[115] Following the election process, several CPs congratulated Mr Lucien KOUAME KONAN (Africa) on his election as Chairperson of the CPM Bureau and Mr John GREIFER (North America) for his election as the Vice-Chairperson.

[116] The CPM:

- (1) *elected* Mr Lucien KOUAME KONAN (Africa) as the Chairperson for the CPM Bureau;
- (2) *elected* Mr John GREIFER (North America) as the Vice-Chairperson for the CPM Bureau;
- (3) *elected* members for the CPM Bureau from FAO regions not represented by the Chairperson and Vice-Chairperson (Appendix 13);
- (4) *elected* replacements for members of the CPM Bureau (Appendix 13);
- (5) *noted* the current membership of the Standards Committee and the potential replacements for the Standards Committee (Appendix 13);
- (6) *confirmed* new members and potential replacements for the Standards Committee, and the order in which potential replacements will be called upon for each region (Appendix 13);
- (7) *noted* the membership, alternative and replacement members for the Implementation and Capacity Development Committee (Appendix 14).

18. Any other business

[117] Mr Shoki AL-DOBAI (FAO Plant Production and Protection Division) gave an update on the desert locust upsurge and the FAO response.⁴⁶ He explained that FAO is the United Nations' global organization responsible for coordinating the monitoring, early warning and forecasting of the desert locust – a pest that has the potential to affect up to 20% of land across the world, stretching from western Africa to southeast Asia. As well as coordinating the response to the locust at a global level, FAO also supports three Desert Locust Regional Commissions.

⁴³ CPM 2021/21, CPM 2021/30, CPM 2021/CRP/07

⁴⁴ CPM Rules of Procedure: Rule II, <https://www.ippc.int/en/core-activities/governance/cpm/cpm-rules-of-procedure/#rule2>; Annex I, Rules of Procedure for the CPM Bureau, <https://www.ippc.int/en/core-activities/governance/cpm/cpm-rules-of-procedure/#annex1>

⁴⁵ CPM 2021/32

⁴⁶ CRP 2021/CRP/13

[118] Currently, eastern Africa is facing the worst desert locust upsurge in more than 70 years, which started as a result of two cyclones in Arabia in 2018. Swarms spread to southwest Asia and eastern Africa. There were several peaks of swarm activity in 2019 and 2020, and of hopper band activity in 2020, affecting the Horn of Africa, Arabia and southwest Asia, but numbers are now declining in 2021 compared to the same time in 2020. It is hoped that this trend, which is the result of lower levels of rainfall, will continue.

[119] Mr AL-DOBAI introduced the FAO's Global Desert Locust Response Plan, which has three pillars: curb the spread of desert locust; safeguard livelihoods and promote early recovery; coordination and preparedness. He thanked the many partners that had provided support for the FAO response to the desert locust upsurge and described the range of inputs for survey and control operations, including aircrafts, ground control equipment, pesticides, ground teams, vehicles with mounted sprayers, motorbikes and surveillance tools and reporting. He also highlighted the innovations developed during this recent upsurge, using technologies such as digital tools, drones, satellites, computer models and geographical information systems (GIS). He finished by summarizing the impact of the FAO response in the Greater Horn of Africa and Yemen, where almost 2 million hectares of land had been treated: the loss of 3.99 million tonnes of cereal crops and 786 million litres of milk production (with a commercial value of USD 1.53 million) had been averted since January 2020, thereby securing food security for 33.99 million people.

[120] Up-to-date information on the current situation can be found on the FAO web platforms for desert locust.⁴⁷

[121] In response to questions from the floor, Mr AL-DOBAI confirmed that the pesticides used are commercial preparations recommended by the FAO Desert Locust Group: Chlorpyrifos, Fenitrothion, Malathion, Deltamethrin, the biopesticide Novacrid and growth regulators such as Teflubenzuron. FAO is monitoring and encouraging the countries to collect empty pesticide drums and put into safe storage until they are cleaned and crushed. He confirmed that there is currently no threat of invasion of desert locust into Senegal or Mauritania from other countries.

19. CPM authorization for the CPM Bureau to operate on its behalf during 2021

[122] The CPM Chairperson presented the paper, setting out proposals for the CPM Bureau to operate on the CPM's behalf during times of emergencies or crises, such as the current COVID-19 pandemic.⁴⁸ The paper made it clear that decisions such as adopting ISPMs or CPM Recommendations would still remain under the exclusive authority of the CPM. A two-week period between a CPM Bureau decision and the action being taken was proposed, after which the CPM Bureau would be entitled to proceed with the actions if no objections had been voiced.

[123] Some CPs expressed their support for the proposals in the paper, thanking the CPM Bureau for their strong, active and sustained leadership over the past 12 months. Some CPs suggested that the "silence consent period" be increased from two to four weeks, to allow internal consultation.

[124] The CPM noted the need for the CPM Bureau to keep CPs informed, through their contact points, on matters dealt with by the Bureau on behalf of the CPM.

[125] The CPM:

- (1) *agreed* that on an exceptional basis the CPM Bureau, through the IPPC Secretary, seek CPM concurrence electronically on decisions or issues that may be considered sufficiently important or sensitive to require CPM awareness and engagement (using a four-week silence consent procedure);

⁴⁷ FAO desert locust web platforms: <https://locust-hub-hqfao.hub.arcgis.com/>; <http://www.fao.org/ag/locusts/en/info/info/index.html>; <http://www.fao.org/locusts/response-overview-dashboard/en>

⁴⁸ CPM 2021/12

- (2) *requested* that the Bureau report to CPM-16 on any decisions that have been approved through the silent-consent procedure.

20. Date and venue of the next session

[126] The Sixteenth Session of the Commission on Phytosanitary Measures (CPM-16) is tentatively scheduled for 4 to 8 April 2022, pending confirmation from FAO. It is hoped that the session will be convened in person, but that will depend on the situation with the pandemic.

21. Finalization of pending items

[127] The CPM addressed agenda item 18 (Any other business) under this agenda item.

22. Adoption of the Report

[128] The report was adopted.

[129] The Secretariat will forward translation issues to the FAO Translation Services.

23. Closing of the Session

[130] On the occasion of his last CPM session before retirement, the CPM expressed its warmest thanks to Mr Ralf LOPIAN (Finland) in recognition of his many years of service to the IPPC community. Mr LOPIAN, who had been the Vice-Chairperson and Chairperson of the Interim Commission on Phytosanitary Measures and subsequently the CPM Vice-Chairperson, thanked the CPM and reflected on his last 30 years of IPPC involvement.

[131] The CPM expressed its thanks to the outgoing CPM Chairperson and welcomed the incoming Chairperson and Vice-Chairperson.

[132] The session was closed.

APPENDIX 01 – Annotated Agenda

Session 1 (16 March 2021, 10:00 to 1:00 pm CET)

AGENDA ITEM	DOCUMENT NUMBER	DOCUMENT TITLE	ACTION	PRESENTER
1. Opening of the Session	N/A (live speeches by FAO)	<ul style="list-style-type: none"> <i>Opening of the Session</i> 	-The CPM Session is opened.	-Ms Beth BECHDOL, FAO DDG -Mr Jingyuan XIA, NSP Director
2. Keynote Address	N/A (live speech and pre-recorded video, 10 minutes) CPM 2021/INF/15		-The CPM Chairperson makes brief introductory remarks and introduces the keynote address by Finnish Minister of Agriculture and Forestry.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson -Mr Jari LEPPA, Minister of Agriculture and Forestry of Finland
3. Adoption of the Agenda	CPM 2021/01_REV_01 CPM 2021/02 CPM 2021/CRP CPM 2021/INF/01 CPM 2021/INF/21	<ul style="list-style-type: none"> <i>CPM-15 Provisional Agenda</i> <i>CPM-15 Annotated Agenda</i> <i>CPM-15 Documents List</i> <i>Zoom guidelines for participants</i> 	-The CPM Chairperson makes some announcements and the CPM-15 Provisional Agenda is adopted.-Guidelines are presented.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson
3.1 EU statement of competence	CPM 2021/CRP	<ul style="list-style-type: none"> <i>EU statement of competence</i> 	-The EU presents its statement of competence.	-EU delegation
4. Election of the Rapporteur	N/A		-The CPM-15 Rapporteur is nominated and elected.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson
5. Report from the CPM Bureau on Credentials	N/A (verbal update)		-The CPM Chairperson presents the CPM Bureau report on credentials.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson
6. Report from the CPM Chairperson (including update on CPM Focus Group on Strengthening pest outbreak alert and response systems)	CPM 2021/13 (5 minutes)	<ul style="list-style-type: none"> <i>Report from the CPM Chairperson</i> 	-The CPM receives a report from the CPM Chairperson for noting.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson

7. Report from the IPPC Secretariat (including update on IPPC Regional Workshops)	CPM 2021/24 (5 minutes)	<ul style="list-style-type: none"> <i>Report from the IPPC Secretariat</i> 	-The CPM receives a report from the IPPC Secretariat for noting.	-Mr Avetik NERSISYAN, IPPC Secretary in charge of daily matters
8. Governance and Strategy				
8.1 Adoption of the IPPC Strategic Framework 2020-2030	CPM 2021/03 CPM 2021/INF/14	<ul style="list-style-type: none"> <i>IPPC Strategic Framework 2020-2030</i> 	-The IPPC Strategic Framework 2020-2030 is presented for adoption.	-Mr Arop DENG, IPPC Secretariat
8.2 Adoption of the revision of the Implementation and Capacity Development Committee Terms of Reference and Rules of Procedure	CPM 2021/09	<ul style="list-style-type: none"> <i>Implementation and Capacity Development Committee Terms of Reference and Rules of Procedure – Revision presented for adoption</i> 	-The revision of the Implementation and Capacity Development Committee Terms of Reference and Rules of Procedure is presented for adoption. The CPM is expected to consider the Terms of Reference and adopt them.	-Mr Brent LARSON, IPPC Secretariat
8.3 Report from Strategic Planning Group	CPM 2021/19	<ul style="list-style-type: none"> <i>Report from Strategic Planning Group - Summary 2020 Strategic Planning Group Report</i> <i>Strengthening the Strategic Planning Group's strategic focus and value to the Bureau and CPM</i> <i>Terms of Reference for a CPM Focus Group on Implementation of the IPPC Strategic Framework's 2020-2030 Development Agenda Items</i> <i>Terms of Reference for a CPM Focus Group on Communications</i> <i>Terms of Reference for a CPM Focus Group on Climate change and Phytosanitary Issues</i> 	-Report is provided from the Strategic Planning Group for noting. -The CPM is expected to note the paper on Strengthening the Strategic Planning Group's strategic focus and value to the Bureau and CPM. -The CPM is expected to discuss and adopt the new Terms of Reference for the SPG. - The CPM is expected to discuss and adopt Terms of Reference for a CPM Focus Group on Implementation of the IPPC Strategic Framework's 2020-2030 Development Agenda Items. -The CPM is expected to discuss and adopt the new Terms of Reference for the Focus Group on Communications. -The CPM is expected to discuss and adopt the new Terms of Reference for the Focus Group on Climate Change and Phytosanitary Issues on Climate	-Mr Lucien KUAME KONAN, SPG Chairperson
<ul style="list-style-type: none"> Adoption of the revision of the Strategic Planning Group Terms of Reference 	CPM 2021/06			
<ul style="list-style-type: none"> Establishment of CPM Focus Group on Implementation plans for the IPPC Strategic Framework 2020-2030 	CPM 2021/08 CPM 2021/INF/14			
<ul style="list-style-type: none"> Establishment of CPM Focus Group on Communications Establishment of CPM Focus Group on Climate change impacts on plant health 	CPM 2021/07 CPM 2021/14			

			change and Phytosanitary Issues.	
8.4 Endorsement of updated Framework for standards and implementation	CPM 2021/11	<ul style="list-style-type: none"> <i>Endorsement of updated Framework for standards and implementation</i> 	-The CPM is expected to endorse the updated Framework for standards and implementation.	-Mr Avetik NERSISYAN, IPPC Secretary in charge of daily matters

Session 2 (16 March 2021, 3:00 pm to 6:00 pm CET)

AGENDA ITEM	DOCUMENT NUMBER	DOCUMENT TITLE	ACTION	PRESENTER
8. Governance and Strategy (continued)				
9. Standard Setting				
9.1 Report from Standards Committee	CPM 2021/17 (pre-recorded video, 15 minutes) CPM 2021/INF/17	<ul style="list-style-type: none"> <i>Report from Standards Committee</i> 	-The Chairperson of the Standards Committee provides a report for noting.	-Mr Ezequiel FERRO, SC Chairperson
9.2 Adoption of standards	CPM 2021/15 CPM 2021/INF/11 CPM 2021/15_01 CPM 2021/15_02 CPM 2021/15_03 CPM 2021/15_04 CPM 2021/15_05 CPM 2021/15_06	<ul style="list-style-type: none"> <i>Adoption of International Standards for Phytosanitary Measures (ISPMs)</i> <i>Individual ISPMs and Phytosanitary treatments (PTs):</i> <ul style="list-style-type: none"> Draft Revision of ISPM 8: <i>Determination of pest status in an area</i> (2009-005) Draft ISPM: <i>Requirements for the use of modified atmosphere treatments as phytosanitary measures</i> (2014-006) Draft 2018 Amendments to ISPM 5: <i>Glossary of phytosanitary terms</i> (1994-001) Draft ISPM: <i>Requirements for NPPOs if authorizing entities to perform phytosanitary actions</i> (2014-002) 	-Individual ISPMs and PTs are presented to the CPM for adoption.	- Ms Adriana MOREIRA, IPPC Secretariat

	CPM 2021/15_07	<ul style="list-style-type: none"> ○ Draft PT Annex to ISPM 28: Irradiation treatment for <i>Bactrocera dorsalis</i> (2017-015) ○ Draft PT Annex to ISPM 28: Cold treatment for <i>Ceratitis Capitata</i> on <i>Prunus avium</i>, <i>Prunus salicina</i> and <i>Prunus persica</i> (2017-022A) ○ Draft PT Annex to ISPM 28: Cold treatment for <i>Bactrocera tryoni</i> on <i>Prunus avium</i>, <i>Prunus salicina</i> and <i>Prunus persica</i> (2017-022B) ○ Draft PT Annex to ISPM 28: Cold treatment for <i>Ceratitis capitata</i> on <i>Vitis vinifera</i> (2017-023A) ○ Draft PT Annex to ISPM 28: Cold treatment for <i>Bactrocera tryoni</i> on <i>Vitis vinifera</i> (2017-023B) ○ Draft PT Annex to ISPM 28: Irradiation treatment for <i>Carposina sasakii</i> (2017-026) ○ Draft PT Annex to ISPM 28: Irradiation treatment for the genus <i>Anastrepha</i> (2017-031) 		
	CPM 2021/15_08			
	CPM 2021/15_09			
	CPM 2021/15_10			
	CPM 2021/15_11			
	CPM 2021/22 CPM 2021/INF/12	<ul style="list-style-type: none"> • <i>Adoption of International Standards for Phytosanitary Measures - Ink amendments to adopted international standards for phytosanitary measures (ISPMs)</i> 	-The adoption of ink amendments to adopted ISPMs is presented for noting by the CPM.	-Ms Adriana MOREIRA, IPPC Secretariat
9.3 Standards Committee recommendations to the CPM (including adoption of the List of topics for IPPC standards)	CPM 2021/18	<ul style="list-style-type: none"> • <i>Standards Committee recommendations to the CPM (including adoption of the List of topics for IPPC standards)</i> 	-Standards Committee recommendations are provided to the CPM for consideration and decision and the list of topics is adopted.	-Mr Ezequiel FERRO, SC Chairperson

Session 3 (18 March 2021, 10:00 to 1:00 pm CET)

AGENDA ITEM	DOCUMENT NUMBER	DOCUMENT TITLE	ACTION	PRESENTER
9. Standard Setting (continued)				
10. CPM recommendations				
10.1 Adoption of draft CPM Recommendation on “food aid”	CPM 2021/16 CPM 2021/16_01 CPM 2021/INF/16	<ul style="list-style-type: none"> • <i>CPM Recommendations</i> • <i>Safe provision of food and other humanitarian aid to prevent the introduction of plant pests during an emergency situation (2018-026)</i> 	-The CPM considers and adopts the recommendation.	-Ms Adriana MOREIRA, IPPC Secretariat
10.2 Approval for first consultation of CPM Recommendation on “contaminating pests”	CPM 2021/16 CPM 2021/16_02	<ul style="list-style-type: none"> • <i>CPM Recommendations</i> • <i>Facilitating safe trade by reducing the incidence of contaminating pests associated with traded goods (2019-002)</i> 	-The CPM considers and approves the recommendation for consultation.	-Ms Adriana MOREIRA, IPPC Secretariat
10.3 Inclusion of any other topics for CPM Recommendations submitted by contracting parties	CPM 2021/16	<ul style="list-style-type: none"> • <i>CPM Recommendations</i> 	-The CPM considers any other topics for CPM recommendations submitted by Contracting Parties.	-Ms Adriana MOREIRA, IPPC Secretariat (floor to CPs with proposals for new topics for CPM Recommendations)
11. Implementation and Capacity Development				
11.1 Report from Implementation and Capacity Development Committee	CPM 2021/26 Pre-recorded video (15 minutes) CPM 2021/INF/18	<ul style="list-style-type: none"> • <i>Report from Implementation and Capacity Development Committee</i> 	<ul style="list-style-type: none"> -The Chairperson of the IC provides a report to the CPM on the activities of the IC. -A summary of decisions is provided at the end of this paper. -The CPM is expected to consider several decision points. 	-Mr Dominique PELLETIER, IC Chairperson
11.2 Adoption of the List of Implementation and Capacity Development Topics	CPM 2021/29	<ul style="list-style-type: none"> • <i>Adoption of the List of Implementation and Capacity Development Topics - Adjustments</i> 	-The CPM considers adjustments to the List of Implementation and Capacity Development Topics and adopt changes	-Mr Brent LARSON, IPPC Secretariat
11.3 Update from the Sea Containers Task Force	CPM 2021/27 CPM 2021/INF/13	<ul style="list-style-type: none"> • <i>Update from the Sea Containers Task Force</i> 	-The CPM receives an Update from the Sea Containers Task Force from the Secretariat.	-Mr Artur SHAMILOV, IPPC Secretariat

	CPM 2021/INF/14		-The CPM is expected to consider several decision points.	
12. Financial Report and Budget				
12.1 IPPC Secretariat financial report (2019 and 2020)	CPM 2021/23	<ul style="list-style-type: none"> <i>IPPC Secretariat financial report (2019 and 2020)</i> 	-The CPM notes the IPPC Secretariat financial report (2019 and 2020) and adopts the financial report for the IPPC Multi-donor trust fund (2019 and 2020).	-Mr Marko BENOVIĆ, IPPC Secretariat
12.2 2021 IPPC Secretariat Work Plan and Budget	CPM 2021/25	<ul style="list-style-type: none"> <i>IPPC Secretariat Work Plan and Budget for 2021</i> 	-The CPM approves the IPPC Secretariat Work Plan and approves the IPPC Secretariat Budget for 2021.	-Mr Marko BENOVIĆ, IPPC Secretariat

Session 4 (18 March 2021, 3:00 pm to 6:00 pm CET)

AGENDA ITEMS	DOCUMENT NUMBER	ITEM / DOCUMENT TITLE	ACTION	PRESENTER
13. ePhyto				
13.1 Long-term financial sustainability	CPM 2021/31 CPM 2021/INF/14	<ul style="list-style-type: none"> <i>Long-term financial sustainability of the IPPC ePhyto solution</i> 	-The CPM considers the Long-term financial sustainability of the IPPC ePhyto solution, and provides direction and guidance on the best way forward.	-Mr Craig FEDCHOCK, IPPC Secretariat
14. IPPC Communication				
14.1 Update on IPPC communications	CPM 2021/20	<ul style="list-style-type: none"> <i>Update on IPPC communications - Report on Communication and Advocacy of the IPPC Secretariat</i> 	-The CPM receives and notes a Report on Communication and Advocacy of the IPPC Secretariat.	-Mr Mirko MONTUORI, IPPC Secretariat
14.2 Update on International Year of Plant Health	CPM 2021/04	<ul style="list-style-type: none"> <i>International Year of Plant Health (IYPH) 2020</i> 	-The CPM receives and notes an update on the International Year of Plant Health (IYPH) 2020 and takes relevant decisions.	-Mr Ralf LOPIAN, IYPH ISC Chairperson / Mr Mirko MONTUORI, IPPC Secretariat
14.3 Update on proposal for an International Day of Plant Health	CPM 2021/05	<ul style="list-style-type: none"> <i>Proposal for an International Day of Plant Health</i> 	-The CPM receives and notes an update on the Proposal for an International Day of Plant Health.	-Mr Arop DENG, IPPC Secretariat
15. External Cooperation				
15.1 Update on international cooperation	CPM 2021/28	<ul style="list-style-type: none"> <i>Report on international cooperation of the IPPC Secretariat</i> 	-The CPM receives and notes a Report on international cooperation of the IPPC Secretariat.	-Mr Arop DENG, IPPC Secretariat

15.2 Written reports from international organizations	CPM 2021/INF/02 CPM 2021/INF/03 CPM 2021/INF/04 CPM 2021/INF/05 CPM 2021/INF/06 CPM 2021/INF/07 CPM 2021/INF/08 CPM 2021/INF/09 CPM 2021/INF/10	<ul style="list-style-type: none"> • <i>Updates from international organizations (INF papers)</i> 	-The CPM receives and notes updates from international organizations (INF papers).	-Mr Arop DENG, IPPC Secretariat (PPT slide)
16. IPPC Network Activities				
16.1 Updates on the 31 st and 32 nd Technical Cooperation among regional plant protection organizations	CPM 2021/10 CPM 2021/INF/19 CPM 2021/INF/20 CPM 2021/33 Plus two pre-recorded videos (5 minutes each)	<ul style="list-style-type: none"> • <i>Update on 31st Technical Consultation among regional plant protection organizations – Summary Report</i> • <i>Update on 32nd Technical Consultation among regional plant protection organizations – Summary Report</i> 	-Summary video is projected, the CPM receives and notes an update on 31 st Technical Consultation among regional plant protection organizations. -Summary video is projected, the CPM receives and notes an update on 32 nd Technical Consultation among regional plant protection organizations.	-Mr Brent LARSON, IPPC Secretariat - Videos by Mr Jean Gérard MEZUI M'ELLA, IAPSC, and Ms Juliet GOLDSMITH, CAHFSA
17. Confirmation of Membership and Potential Replacements for the CPM Bureau (including selection of new CPM Chairperson) and CPM Subsidiary Bodies	CPM 2021/30 (plus relevant CRPs) CPM 2021/21 (plus relevant CRPs) CPM 2021/32	<ul style="list-style-type: none"> • <i>Confirmation of Membership and Potential Replacements for CPM Subsidiary Bodies (including selection of new CPM Chairperson) - CPM Bureau</i> • <i>Confirmation of Membership and Potential Replacements for CPM Subsidiary Bodies - Standards Committee</i> • <i>Confirmation of Membership and Potential Replacements for Implementation and Capacity Development Committee</i> 	-The CPM confirms Membership and Potential Replacements for CPM Bureau (including selection of new CPM Chairperson). -The CPM confirms Membership and Potential Replacements for Standards Committee. -The CPM notes Membership and Potential Replacements for Implementation and Capacity Development Committee.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson -Ms Adriana MOREIRA, IPPC Secretariat -Mr Brent LARSON, IPPC Secretariat
18. Any other business	N/A	<ul style="list-style-type: none"> • <i>Depending on final agenda</i> 	-Depending on final agenda, the CPM considers any other business brought before the CPM.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson

19. CPM authorization for the CPM Bureau to operate on its behalf during 2021	CPM 2021/12 CPM 2021/INF/14	<ul style="list-style-type: none"> <i>CPM authorization for the CPM Bureau to operate on its behalf during 2021 - Role of the CPM Bureau and IPPC Secretariat during times of emergencies or crises</i> 	-The CPM discusses about the role of the CPM Bureau and IPPC Secretariat during times of emergencies or crises and authorizes the CPM Bureau to operate on its behalf during 2021.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson
20. Date and Venue of the Next Session	N/A	<ul style="list-style-type: none"> <i>Date and Venue to be communicated</i> 	-The CPM learns the date and venue CPM of the next session.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson

Session 5 (1 April 2021, 10:00 to 1:00 pm CET)

AGENDA ITEMS	DOCUMENT NUMBER	ITEM / DOCUMENT TITLE	ACTION	PRESENTER
21. Finalization of pending items (if needed)				

Session 6 (1 April 2021, 3:00 pm to 6:00 pm CET)

AGENDA ITEMS	DOCUMENT NUMBER	ITEM / DOCUMENT TITLE	ACTION	PRESENTER
22. Adoption of the Report		<ul style="list-style-type: none"> <i>Draft CPM-15 report</i> 	-The draft CPM-15 report is reviewed and adopted by the CPM.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson
23. Closing of the Session	N/A	<ul style="list-style-type: none"> <i>Verbal remarks by the CPM Chairperson</i> <i>Closing of the Session</i> 	-The CPM Session is closed.	-Mr Francisco Javier TRUJILLO ARRIAGA, CPM Chairperson

APPENDIX 02 – List of Documents

Doc number	Title	Agenda	Languages posted	Link
CPM 2021/01_Rev 01	Provisional Agenda	03	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89254/
CPM 2021/02	Annotated Agenda	03	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89526/
CPM 2021/03	Adoption of the IPPC Strategic Framework 2020-2030	08.1	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89170/
CPM 2021/04	International Year of Plant Health (IYPH) 2020	14.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89277/
CPM 2021/05	Proposal for an International Day of Plant Health	14.3	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89278/
CPM 2021/06	Report from Strategic Planning Group - Strengthening the Strategic Planning Group's strategic focus and value to the Bureau and CPM	08.3	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89279/
CPM 2021/07	Report from Strategic Planning Group - Terms of Reference for a CPM Focus Group on Communications	08.3	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89280/
CPM 2021/08	Report from Strategic Planning Group - Terms of Reference for a CPM Focus Group on Implementation of the IPPC Strategic Framework's 2020-2030 Development Agenda Items	08.3	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89281/
CPM 2021/09	Implementation and Capacity Development Committee Terms of Reference and Rules of Procedure – Revision presented for adoption	08.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89283/
CPM 2021/10	31st Technical Consultation among Regional Plant Protection Organizations (TC-RPPOs) - Summary Report	14.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89284/
CPM 2021/11	Framework for Standards and Implementation	08.6	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89285/
CPM 2021/12	CPM authorization for the CPM Bureau to operate on its behalf during 2021 - Role of the CPM Bureau and IPPC Secretariat during times of emergencies or crises	19	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89364/

CPM 2021/13	Report from the CPM Chairperson (including update on CPM Focus Group on Strengthening pest outbreak alert and response systems)	06	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89301/
CPM 2021/14	Report from Strategic Planning Group - Establishment of CPM Focus Group on Climate change impacts on plant health	08.3	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89305/
CPM 2021/15	Adoption of International Standards for Phytosanitary Measures	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89327/
CPM 2021/15_01	Draft Revision of ISPM 8: Determination of pest status in an area (2009-005)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89328/
CPM 2021/15_02	Draft ISPM: Requirements for the use of modified atmosphere treatments as phytosanitary measures (2014-006)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89329/
CPM 2021/15_03	Draft 2018 Amendments to ISPM 5: Glossary of phytosanitary terms (1994-001)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89330/
CPM 2021/15_04	Draft ISPM: Requirements for NPPOs if authorizing entities to perform phytosanitary actions (2014-002)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89331/
CPM 2021/15_05	Draft PT Annex to ISPM 28: Irradiation treatment for <i>Bactrocera dorsalis</i> (2017-015)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89319/
CPM 2021/15_06	Draft PT Annex to ISPM 28: Cold treatment for <i>Ceratitis Capitata</i> on <i>Prunus avium</i> , <i>Prunus salicina</i> and <i>Prunus persica</i> (2017-022A)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89320/
CPM 2021/15_07	Draft PT Annex to ISPM 28: Cold treatment for <i>Bactrocera tryoni</i> on <i>Prunus avium</i> , <i>Prunus salicina</i> and <i>Prunus persica</i> (2017-022B)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89321/
CPM 2021/15_08	Draft PT Annex to ISPM 28: Cold treatment for <i>Ceratitis capitata</i> on <i>Vitis vinifera</i> (2017-023A)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89322/
CPM 2021/15_09	Draft PT Annex to ISPM 28: Cold treatment for <i>Bactrocera tryoni</i> on <i>Vitis vinifera</i> (2017-023B)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89323/

CPM 2021/15_10	Draft PT Annex to ISPM 28: Irradiation treatment for <i>Carposina sasakii</i> (2017-026)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89324/
CPM 2021/15_11	Draft PT Annex to ISPM 28: Irradiation treatment for the genus <i>Anastrepha</i> (2017-031)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89325/
CPM 2021/16	CPM recommendations	10	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89313/
CPM 2021/16_01	Safe provision of food and other humanitarian aid to prevent the introduction of plant pests during an emergency situation (2018-026)	10	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89314/
CPM 2021/16_02	Facilitating safe trade by reducing the incidence of contaminating pests associated with traded goods (2019-002)	10	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89315/
CPM 2021/17	Report of the Standards Committee (SC)	09.1	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89307/
CPM 2021/18	Standards Committee recommendations to the Commission on Phytosanitary Measures	09.3	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89308/
CPM 2021/19	Report from Strategic Planning Group - Summary 2020 Strategic Planning Group Report	08.3	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89316/
CPM 2021/20	Update on IPPC communications - Report on Communication and Advocacy of the IPPC Secretariat	14.1	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89317/
CPM 2021/21	Confirmation of Membership and Potential Replacements for CPM Subsidiary Bodies - Standards Committee	17	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89318/
CPM 2021/22	Adoption of International Standards for Phytosanitary Measures - Ink amendments to adopted international standards for phytosanitary measures (ISPMs)	09.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89346/
CPM 2021/23	IPPC Secretariat financial report (2019 and 2020)	12.1	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89603/
CPM 2021/24	Report from the IPPC Secretariat	07	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89366/
CPM 2021/25	IPPC Secretariat Work Plan and Budget for 2021	12.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89372/

CPM 2021/26	Report of the Implementation and Capacity Development Committee	11.1	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89406/
CPM 2021/27	Update from the Sea Containers Task Force	11.3	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89374/
CPM 2021/28	Update on international cooperation	15.1	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89412/
CPM 2021/29	Adoption of the List of Implementation and Capacity Development Topics - Adjustments	11.2	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89375/
CPM 2021/30	Confirmation of Membership and Potential Replacements for CPM Subsidiary Bodies (including selection of new CPM Chairperson) - CPM Bureau	17	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89432/
CPM 2021/31	Long-term - financial sustainability - ePhyto	13.1	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89434/
CPM 2021/32	Confirmation of Membership and Potential Replacements for CPM Subsidiary Bodies - Implementation and Capacity Development Committee (IC) Membership	17	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89498/
CPM 2021/33	Updates on Technical Cooperation among regional plant protection organizations - Update on the 32nd Technical Consultation among Regional Plant Protection Organizations (TC-RPPO)	16.1	EN/ES/FR/RU/CH/AR	https://www.ippc.int/en/publications/89559/
CPM 2021/INF/01	Zoom Guidelines	03	EN/ES/RU/AR/FR	https://www.ippc.int/en/publications/89362/
CPM 2021/INF/02	Written reports from relevant international organizations - FAO-IAEA_JointProgramme	15.2	EN	https://www.ippc.int/en/publications/89269/
CPM 2021/INF/03	Written reports from relevant international organizations - Report_ISO	15.2	EN	https://www.ippc.int/en/publications/89270/
CPM 2021/INF/04	Written reports from relevant international organizations - COLEACP	15.2	EN	https://www.ippc.int/en/publications/89334/
CPM 2021/INF/05	Written reports from relevant international organizations WCO	15.2	EN	https://www.ippc.int/en/publications/89335/
CPM 2021/INF/06	Written reports from relevant international organizations - ISU_BWC	15.2	EN/FR/ES	https://www.ippc.int/en/publications/89378/

CPM 2021/INF/07	Written reports from relevant international organizations – STDF	15.2	EN	https://www.ippc.int/en/publications/89436/
CPM 2021/INF/08	Written reports from relevant international organizations - Ozone Secretariat	15.2	EN	https://www.ippc.int/en/publications/89447/
CPM 2021/INF/09	Written reports from relevant international organizations - WTO	15.2	EN/FR/ES	https://www.ippc.int/en/publications/89503/
CPM 2021/INF/10	Written reports from relevant international organizations - IPRRG	15.2	EN	https://www.ippc.int/en/publications/89505/
CPM 2021/INF/11	Adoption of International Standards for Phytosanitary Measures – Objections to draft ISPMs presented for adoption by CPM-15 (2021)	09.2	EN	https://www.ippc.int/en/publications/89523/
CPM 2021/INF/12	Adoption of standards and noting of ink amendments (Referring to paper CPM 2021/22)	09.2	EN	https://www.ippc.int/en/publications/89565/
CPM 2021/INF/13	Update from the Sea Containers Task Force - Proposal for a Path Forward for the Sea Container Task Force	11.3	EN/FR/ES	https://www.ippc.int/en/publications/89566/
CPM 2021/INF/14	New Zealand Statements on Selected Agenda Items	08.1; 08.3; 11.3; 13; 13.1; 19	EN	https://www.ippc.int/en/publications/89570/
CPM 2021/INF/15	Keynote Address - Speech by H.E. Jari Leppä, Minister of Agriculture and Forestry of Finland	02	EN	https://www.ippc.int/en/publications/89580/
CPM 2021/INF/16	Pacific Plant Protection Organisation (PPPO) and its members statements on Selected Agenda Item	10.1	EN	https://www.ippc.int/en/publications/89581/
CPM 2021/INF/17	Report from Standards Committee - Speech by the Chairperson of the Standards Committee	09.1	EN	https://www.ippc.int/en/publications/89582/
CPM 2021/INF/18	Report from Implementation and Capacity Development Committee - Speech by the Chairperson of the Capacity Development Committee	11.1	EN	https://www.ippc.int/en/publications/89583/
CPM 2021/INF/19	Updates on Technical Cooperation among regional plant protection organizations - Update on 31st Technical Consultation among regional plant protection organizations	16.1	EN	https://www.ippc.int/en/publications/89584/
CPM 2021/INF/20	Updates on Technical Cooperation among regional plant protection	16.1	EN	https://www.ippc.int/en/publications/89585/

	organizations - Update on 32nd Technical Consultation among regional plant protection organizations			
CPM 2021/INF/21	Adoption of the Agenda - CPM-15 App	03	EN	https://www.ippc.int/en/publications/89589/
CPM 2021/INF/22	Written reports from international organizations - Phytosanitary Measures Research Group (PMRG)	15.2	EN	https://www.ippc.int/en/publications/89595/
CPM 2021/INF/23	Written reports from international organizations - Statement from the Global Alliance for Trade Facilitation (the Alliance)	15.2	EN	https://www.ippc.int/en/publications/89596/

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APPENDIX 04 – Terms of Reference - Implementation of the IPPC Strategic Framework’s 2020-2030 Development Agenda Items

Background

1. The IPPC Strategic Framework (SF) 2020-2030 was endorsed by the fourteenth session of the Commission on Phytosanitary Measures (CPM-14) in 2019 in view of being adopted by the fifteenth session (CPM-15) in 2020. The framework provides a new operating environment and supports national plant protection organizations (NPPOs) to address the expected structural and operational changes that NPPOs will encounter during 2020–2030. The framework comprises three core activities, three strategic objectives and a development agenda items with eight key programmes of new work areas aligned to the IPPC’s vision, mission, and strategic objectives.

2. While the development agenda programmes present great opportunities to advance the mission of the IPPC, progressing them is dependent on securing adequate resources and addressing other challenges related to impacts of COVID-19, which has significantly altered the global operating environment in 2020 with 2021 expected to be much the same. This will have implications on CPM operations and delivery of the IPPC mission. Moreover, the eight development agenda items are complex topics, which require further elaboration and funding.

3. Consequently, the Strategic Planning Group (SPG) in its October 2020 meeting has identified the need to develop a clear sequencing and staging of the implementation of the IPPC SF 2020-2030 development agenda items. This will enable assessment of the resources available and still to be secured, as well as an opportunity to define potential resource mobilization strategies for all development agenda items.

4. Although substantial work has already been undertaken on some of them, the SPG highlighted the need to address all the development agenda items in a carefully planned manner to avoid simultaneous implementation of the items that may result in inefficient use of available resources and poor delivery of results.

5. In this regards, the SPG recommended to CPM Bureau a need for establishment of a Focus Group by the CPM in order to continue a structured discussion on sequencing the implementation of IPPC Strategic Framework 2020 – 2030 development agenda items.

Purpose

6. To develop an overarching implementation plan for all IPPC Strategic Framework 2020 – 2030 development agenda items containing clear start dates, milestones, a feasible timeline, a monitoring and evaluation framework, and adequate estimation of required budget and staff, which may be used for resource mobilization purposes.

Membership

7. The focus group will be composed of up to eleven members with knowledge of the IPPC’s mandate and activities, taking account of geographical representation and gender balance as follows:

- Seven members representing national plant protection organizations in each of seven FAO regions
- One representative of the ten regional plant protection organizations (RPPOs)
- One representative of the CPM Bureau
- One representative of the Standards Committee (SC)
- One representative of the Implementation and Capacity Development Committee (IC).

Functions

8. The focus group will:

- draft the implementation plan for the IPPC SF development agenda items with milestones to be reached within a ten-year period.
- provide advice on the implementation of the IPPC SF 2020-2030 development agenda items and report progress to CPM.
- provide practical guidance and advice to the IPPC community on key technical aspects related to the strategic objectives of the IPPC's Strategic Framework, which are enhancing global food security and increasing sustainable agricultural productivity, protecting forests and the environment from the impacts of plant pests, and facilitating safe trade, development and economic growth.

Process

9. The establishment of the focus group will follow a CPM decision on this subject in its 2021 session. A call for nominations will be published on the IPPC website to allow contracting parties and regional plant protection organizations to nominate their representatives to be part of the focus group.

10. Each region, the RPPOs, the CPM Bureau, SC and IC will submit one nomination, to be endorsed by the CPM Bureau.

Funding

11. The organization that employs an IPPC meeting participant is responsible for funding the travel and daily subsistence allowance for that person to attend. If the employer is unable to allocate sufficient funds, participants are first encouraged to seek assistance from sources other than the IPPC Secretariat. Where such demonstrated efforts to secure assistance have been unsuccessful, requests for assistance (i.e. travel and subsistence costs) from the IPPC Secretariat may be made. However, any support is subject to available funds. The IPPC Secretariat will consider funding assistance for participants following IPPC criteria for funding. Full details on these criteria can be found on the IPP (<https://www.ippc.int/publications/criteria-used-prioritizing-participants-receive-travel-assistance-attend-meetings>).

Duration

12. The focus group will remain effective until the new IPPC SF development Agenda items implementation plan is developed and adopted by the CPM (anticipated to be in 2022).

APPENDIX 05 – Terms of Reference – CPM Focus Group on Communications

Background

1. In 2012, the Commission on Phytosanitary Measures (CPM) adopted the IPPC Communications Strategy 2013-2018. Following this, the CPM Strategic Planning Group (SPG) considered the opportunity to renew the IPPC Communications Strategy, and deemed it is essential to update and renew it in order that a coordinated, coherent and effective approach to IPPC communications can continue to be pursued.
2. In 2019, the SPG recommended that the development of a new IPPC Communications Strategy be initiated after the 2020 SPG meeting, not least in order to consider lessons learned from the implementation of the International Year of Plant Health (IYPH).
3. Renewal of the Communications Strategy has become even more important in light of experiences of the COVID-19 pandemic, which had a deep impact in many areas, including communications.
4. In October 2020, the SPG endorsed a proposal to develop a new IPPC Communications Strategy, which would be aligned with the IPPC Strategic Framework 2020-2030. The SPG also recommended the CPM to establish a CPM Focus Group on Communications to be responsible for drafting and supporting the implementation of the new IPPC Communications Strategy (2022-2030).

Purpose

5. The CPM Focus Group on Communications will review and update the IPPC Communications Strategy (2013-2018) to align it with the IPPC Strategic Framework 2020-2030 to continue raising awareness of the importance of plant health and the role of the IPPC beyond the IYPH, and to provide related advocacy.

Membership

6. The FG is composed of up to twelve members with relevant skills and experience in communications and knowledge of the IPPC as well as related activities of the IPPC Community. The CPM Bureau, upon consultation with the IPPC Secretariat and taking account of the balance of skills and experience required, gender balance and geographical representation, will select and appoint the members.

Functions

7. The key tasks of the focus group will be:
 - 1) provide guidance on and lead the development of the IPPC Communications Strategy (2022-2030) to be presented to CPM-16 (2022) for adoption, including through the identification of communications objectives, target audiences, key messages, channels, tools, resources, and key performance indicators;
 - 2) support implementation of the Communications Strategy at the global, regional and national levels;
 - 3) propose and, as appropriate, develop initiatives and campaigns to raise global awareness of, and provide advocacy related to, plant health and the work of the IPPC Secretariat among selected target audiences, including internal and external stakeholders, and the general public;
 - 4) Elaborate and if appropriate propose procedures and processes on how to plan IPPC communication activities and their implementation for future international days of plant health;
 - 5) ensure that IPPC contracting parties, Regional Plant Protection Organizations, the IPPC Secretariat and representatives of relevant FAO divisions, other international organizations and major donors are actively engaged to help ensure they contribute to the planning and implementation of the IPPC Communication Strategy;

- 6) identify, solicit and help to mobilize resources for the implementation of the IPPC Communication Strategy;
- 7) monitor the implementation of the IPPC Communications Strategy against its key performance indicators;
- 8) perform other related functions as required.

Process

8. The establishment of the focus group will follow a CPM decision on this subject in its 2021 session. A call for nominations will be published on the IPPC website to allow contracting parties and regional plant protection organizations to nominate their representatives to be part of the focus group. The IPPC Secretariat Management Team will review the nominations and select focus group members assuring gender and geographical balance and submit them to CPM Bureau for endorsement.

Funding

9. The organization that employs an IPPC meeting participant is responsible for funding the travel and daily subsistence allowance for that person to attend. If the employer is unable to allocate sufficient funds, participants are first encouraged to seek assistance from sources other than the IPPC Secretariat. Where such demonstrated efforts to secure assistance have been unsuccessful, requests for assistance (i.e. travel and subsistence costs) from the IPPC Secretariat may be made. However, any support is subject to available funds. The IPPC Secretariat will consider funding assistance for participants following IPPC criteria for funding. Full details on these criteria can be found on the IPP (<https://www.ippc.int/publications/criteria-used-prioritizing-participants-receive-travel-assistance-attend-meetings>).

Duration

10. The focus group will be established by the Bureau by June 2021 in order that they can develop the draft new Communications Strategy on preparation for CPM-16 (2022). The focus group will remain effective until CPM-17 (2023), subject to possible subsequent Bureau decisions on extending its mandate.

APPENDIX 06 – Terms of Reference - CPM Focus Group on Climate Change and Phytosanitary Issues

Background

1. Available science suggests that climate change has a significant impact on plant health, especially due to the actual and potential expansion of pest distribution and intensity, and changes in pest epidemiology and life cycle. Mitigation of these impacts will present a major challenge to the national, regional and international plant protection organizations.
2. The IPPC Strategic Framework 2020-2030 includes assessing and managing the impacts of climate change on plant health as one of the eight development agenda items to be addressed by the global plant health community over the current decade.
3. The goal defined in the IPPC Strategic Framework is that by 2030, the impacts of climate change on plant health and the safe trade of plants and plant products are 1) evaluated on a regular basis, especially in relation to pest risk analysis and management issues, and that 2) phytosanitary matters are adequately reflected in the international climate change debate and better considered for example by the Intergovernmental Panel on Climate Change.
4. To enhance understanding of the issue, the International Steering Committee (ISC) of the International Year of Plant Health 2020 (IYPH) has commissioned a study report on the impact of climate change on plant health. The study report will be published on 1 June 2021 at a virtual High-Level Launch Event where its results and recommendations will be presented. The study report, which will be accompanied by a summary for policymakers, will be one of the key legacies of the IYPH 2020, and its results and recommendations will provide an important scientific basis for the future actions on assessing and managing the impacts of climate change.
5. In light of the further postponement of the International Plant Health Conference (IPHC) to 2022, the IYPH ISC decided to hold a series of events to establish a path leading towards the first IPHC. A virtual launch event of the study report on the impact of climate change on plant health opens the series on 1 June 2021. The launch will be followed by two webinars on 29 and 30 June 2021 focusing respectively on plant health and food systems and on plant health, climate change and biodiversity. The session on 30 June will provide a chance to discuss the results and recommendations of the study report on a technical level. It aims at increased understanding of the technical and scientific aspects of the impact of climate change on plant health among the plant health community, especially with regard to the actual and potential impact on pest dispersal, epidemiology and life cycle.
6. At its October meeting, the SPG provided guidance to the IPPC Secretariat on how to proceed with the afore-described development agenda item. The SPG agreed that the major goal in 2021 with regard to this should be to increase understanding of the phytosanitary issues associated with climate change, and that the study report forms an important basis for this understanding.
7. In addition, the SPG agreed to recommend the CPM to establish a focus group on climate change and phytosanitary issues. The mandate of the focus group would be, inter alia, to develop an IPPC action plan on climate change and to coordinate its implementation. Its proposed purpose, further functions, composition, funding and duration are explained in more detail below.

Purpose

8. The focus group will coordinate the development and support the implementation of the IPPC's action plan on climate change:

- to raise awareness of the impacts of climate change on plant health;
- to enhance evaluation and management of risks of climate change to plant health and
- to enhance the adequate recognition of phytosanitary matters in the international climate change debate, inter alia by providing related advocacy.

Membership

9. The IPPC focus group on climate change and phytosanitary issues will be composed of up to ten members with relevant skills and experience in one or several of the following fields: plant health policy and regulation (including plant pathology and agricultural and silvicultural entomology), phytosanitary measures, understanding of NPPO operations (including regulatory functions) and their interactions and relationships with other agencies, climate change, ecology or other relevant field.

10. In addition, the group should have one or two experts on climate change designated by the Intergovernmental Panel on Climate Change.

11. In addition, all members should have knowledge of the IPPC's mandate and activities.

Functions

12. The focus group will:

- conduct an analysis of the CPM responsibilities on climate change issues as appropriate, with a view on their effect on plant health policies;
- develop a draft IPPC climate change action plan with a schedule to be presented to the CPM-16 (2022) for consideration, based on the analysis above and the findings and recommendations of the IYPH International Steering Committee commissioned report on
- the impact of climate change on plant health;
- provide guidance on and lead the development of the IPPC future actions with regard to the impacts of climate change on plant health;
- cooperate and exchange information on climate change and plant health matters with the Intergovernmental Panel on Climate Change;
- liaise also with other relevant entities that deal with climate change such as the Secretariat of the Convention on Biological Diversity;
- support implementation of the action plan at the global, regional and national levels;
- call IPPC contracting parties, regional plant protection organizations, relevant international organizations, and major donors, for actively contributing to the planning and implementation of the IPPC climate change action plan;
- identify and, with support of the IPPC Secretariat, solicit revenue sources to fund the implementation of the action plan;
- monitor implementation of the action plan against its key performance indicators;
- perform other related functions as required.

Process

13. The establishment of the focus group will follow a CPM decision on this subject in its 2021 session.

14. The member selection for the Focus Group shall be carried out according to the following guidelines:

- A call for nominations will be published on the IPPC website in April 2021 to allow contracting parties and regional plant protection organizations to nominate their representatives to be part of

the focus group. Each region shall nominate two experts from different disciplines to fit some of the skill sets described under “Membership”.

- The IPPC Secretariat Management Team will review the nominations for focus group members assuring gender and geographical balance and submit them to CPM Bureau for selection. The CPM-Bureau shall select one nominee from each FAO region as the regional representative in the focus group, aiming to cover as many scientific disciplines as possible.
- The CPM-Bureau will select three “expert members” for the focus group from the remaining pool of seven nominees in order to cover scientific disciplines not or poorly covered by the seven regional representatives.

15. The focus group will convene virtually for the first time by July 2021, soon after the results and recommendations of the study report on the impact of climate change on plant health are published on 1 June 2021, to select its chairperson and discuss its action plan and functions as described in section 3.

16. The relevant action plan will be presented to the CPM Bureau and the SPG by December 2021.

17. A webinar on the impacts of climate change on plant health will be organized by the IPPC Secretariat to present the proposed action plan.

18. The action plan will be presented to CPM-16 (2022).

Funding

19. The organization that employs an IPPC meeting participant is responsible for funding the travel and daily subsistence allowance for that person to attend. If the employer is unable to allocate sufficient funds, participants are first encouraged to seek assistance from sources other than the IPPC Secretariat. Where such demonstrated efforts to secure assistance have been unsuccessful, requests for assistance (i.e. travel and subsistence costs) from the IPPC Secretariat may be made. However, any support is subject to available funds. The IPPC Secretariat will consider funding assistance for participants following IPPC criteria for funding. Full details on these criteria can be found on the IPP (<https://www.ippc.int/publications/criteria-used-prioritizing-participants-receive-travel-assistance-attend-meetings>).

Duration

20. The focus group will remain effective until CPM-19 (2025).

APPENDIX 07 – Recognition related to Standard Setting activities

We would like to express gratitude to the experts of the drafting groups for their active contribution in the development of the following ISPMs, or Annexes to ISPMs, adopted in 2021:

Table 1: Revision of ISPM 8: Determination of pest status in an area (2009-005)

Country	Expert	Role
USA	Ms Marina ZLOTINA	Steward
Argentina	Mr Pablo CORTESE	EWG Member
Australia	Ms Wendy ODGERS	EWG Member
Canada	Mr Robert FAVRIN	EWG Member
France (EPPO)	Ms Anne Sophie ROY	EWG Member
Kenya	Ms Asenath Abigael KOECH	EWG Member
Republic of Korea	Ms Kyu Ock YIM	EWG Member
USA	Ms Christina DEVORSHAK	EWG Member
UK (CABI)	Ms Lucinda Mary Frances CHARLES	Invited Expert
Viet Nam	Ms Ho Thi Xuan HUONG	Host
Viet Nam	Ms Le THI Ngoc ANH	Host

Table 2: ISPM: Requirements for the use of modified atmosphere treatments as phytosanitary measures (2014-006)

Country	Expert Name	Role
Chile	Mr Alvaro SEPULVEDA LUQUE	Steward (2019-05)
Netherlands	Mr Nico HORN	Steward (2017-11)
USA	Ms Marina ZLOTINA	Steward (2016-11)
USA	Mr Scott W. MYERS	Assistant Steward (2016-11) / Steward (2014-05)
Israel	Mr David OPATOWSKI	TPPT Steward
China	Mr Yuejin WANG	TPPT member
New Zealand	Mr Michael ORMSBY	TPPT member
USA	Mr Guy HALLMAN	TPPT member
Argentina	Mr Eduardo WILLINK	TPPT member
Australia	Mr Matthew SMYTH	TPPT member
Australia	Mr Glenn BOWMAN	TPPT member
China	Mr Daojian YU	TPPT member
Japan	Mr Toshiyuki DOHINO	TPPT member
USA	Mr Patrick GOMES	TPPT member
IAEA	Mr Andrew PARKER	TPPT member

Table 3: ISPM: Requirements for NPPOs if authorizing entities to perform phytosanitary actions (2014-002)

Country	Expert Name	Role
Canada	Mr Rajesh RAMARATHAM	Steward (2016-05)
USA	Ms Marina ZLOTINA	Assistant Steward
Canada	Ms Marie-Claude FOREST	Steward (2014-05)
Argentina	Ms Paula MENDY	EWG Member
Canada	Ms Nancy FURNESS	EWG Member
Netherlands	Mr Thorwald GEUZE	EWG Member
New Zealand	Mr Peter JOHNSTON	EWG Member
USA	Mr Robert M. BISHOP	EWG Member
Vietnam	Mr Le Son HA	EWG Member
Canada	Ms Sarah HEBERT	Host
Canada	Mr Gordon HENRY	Organizer

Table 4: ISPM on 2018 amendments to ISPM 5 (Glossary of phytosanitary terms) (1994-001)

Country	Expert Name	Role
France	Ms Laurence BOUHOT-DELDUC	TPG Steward
USA	Ms Stephanie BLOEM	TPG English
New Zealand	Mr John HEDLEY	TPG English
Uruguay	Ms Beatriz MELCHO	TPG Spanish
China	Ms Hong NING	TPG Chinese
Denmark	Mr Ebbe NORDBO	TPG English, Assistant Steward
Egypt	Ms Shaza Roushdy OMAR	TPG Arabic
France	Mr Andrei ORLINSKI	TPG Russian

Tables 5: ISPMs developed by the Technical Panel on Diagnostic Protocols as Annexes to ISPM 27 (*Diagnostic protocols for regulated pests*)**Table 5-A: TPDP Stewards:**

Country	Steward Name
Sri Lanka	Ms Jayani Nimanthika WATHAKURAGE
Chile	Mr Álvaro SEPÚLVEDA LUQUE

Table 5-B: DP 29: *Bactrocera dorsalis* (2006-026)

Country	Expert	Role
USA	Mr Norman BARR	Discipline Lead and TPDP member
Jamaica	Ms Juliet GOLDSMITH	Referee and TPDP member
Japan	Mr Kenji TSURUTA	Lead Author
Thailand	Mr Sujinda THANAPHUM	Co-author
USA	Mr Luc LEBLANC	Co-author
Australia	Ms Jane Royer	Expert
Australia	Mr Mark Schutze	Expert
Kenya	Ms Josephine Moraa Songa	Expert
Kenya	Mr George Momanyi	Expert
UK	Ms Sharon Reid	Expert
Japan	Mr Yuji Kitahara	Expert
Malaysia	Mr Ken Hong Tan	Expert
Malaysia	Mr Alvin Hee	Expert
Netherlands	Mr Dijkstra	Expert
Australia	Ms Elizabeth Minchinton	Expert

Table 6: ISPMs developed by the Technical Panel on Phytosanitary Treatments as Annexes to ISPM 28 (*Phytosanitary treatments for regulated pests*)

Country	Expert Name	Role
Israel	Mr David OPATOWSKI	TPPT Steward
China	Mr Yuejin WANG	TPPT member
New Zealand	Mr Michael ORMSBY	TPPT member
USA	Mr Guy HALLMAN	TPPT member
Argentina	Mr Eduardo WILLINK	TPPT member
Australia	Mr Matthew SMYTH	TPPT member

Australia	Mr Glenn BOWMAN	TPPT member
China	Mr Daojian YU	TPPT member
Japan	Mr Toshiyuki DOHINO	TPPT member
IAEA	Mr Andrew PARKER	TPPT member
USA	Mr Scott MYERS	TPPT member
IAEA	Mr Walther ENKERLIN HOEFLICH	TPPT member
Australia	Mr Peter Llewellyn LEACH	TPPT member
USA	Ms Andrea Beam	TPPT member

APPENDIX 08 – Recognition of the members of the TPFQ for their contributions over the years

Table 1: Current and former members and Stewards of the Technical Panel on Forest Quarantine

Country	Expert Name	Role
USA	Ms Marina ZLOTINA	TPFQ Steward
Poland	Mr Piotr WLODARCZYK	Former TPFQ Steward
USA	Ms Julie ALIAGA	Former TPFQ Steward
Japan	Mr Masahiro SAI	TPFQ Assistant Steward
Canada	Ms Marie-Claude FOREST	Former TPFQ Assistant Steward
Ghana	Mr Victor AGYEMAN	TPPT member
New Zealand	Mr Michael ORMSBY	TPFQ member
Japan	Mr Mamoru MATSUI	TPFQ member
USA	Mr John Tyrone JONES	TPFQ member
Italy	Mr Lucio MONTECCHIO	TPFQ member
China	Mr Zong SHIXIANG	TPFQ member
Canada	Mr Eric ALLEN	Former TPFQ member
Chile	Mr Marcos Beéche CISTERNAS	Former TPFQ member
Brazil	Mr Edson Tadeu IEDE	Former TPFQ member
Canada	Mr Shane SELA	Former TPFQ member
Norway	Mr Sven Christer MAGNUSSON	Former TPFQ member
Germany	Mr Thomas SCHRÖDER	Former TPFQ member
China	Mr Fuxiang Wang	Former TPFQ member
Poland	Mr Krzysztof SUPRUNIUK	Former TPFQ member

APPENDIX 09 – List of experts who had contributed to the guides for establishing and maintaining pest free areas and the IPPC guide to pest risk communication

[133] The CPM-15 (2021) *thanked* the following experts who had contributed to the development of the following guides:

1. Guide for Establishing and Maintaining Pest Free Areas:

- Mr Roberto Carlos RAZERA PAPA (Brazil),
- Mr Ahmed HUSSEIN (Egypt),
- Ms Alies Van SAUERS-MULLER (Suriname),
- Mr Kenneth A. BLOEM (USA) and
- Mr Walther ENKERLIN HOEFLICH (Joint FAO/IAEA Division)

2. Guide on Pest Risk Communication:

- Mr Michael MANDER (Canada),
- Ms Andrea SISSONS (Canada),
- Ms Melanie NEWFIELD (New Zealand),
- Ms Leanne STEWART (New Zealand) and
- Mr Alan MACLEOD (United Kingdom)

APPENDIX 10 – Adjustments to the Implementation and Capacity Development List of Topics

[1] The CPM agreed to the following adjustments to Implementation and Capacity Development List of Topics:

1. Deletion of the following 13 topics:

- 1) *Dispute avoidance and settlement* (2001-005)
- 2) *e-Commerce* (2017-050)
- 3) *Surveillance, case study on fruit flies* (2016-017)
- 4) *Surveillance, case study on invasive ants* (2016-018)
- 5) *Surveillance, case study on Xylella fastidiosa* (2016-019)
- 6) *One Belt One Road, High level symposiums* (2016-020)
- 7) *Dispute avoidance and settlement, Guide* (2004-034)
- 8) *ISPM 15 treatment: Dielectric heat treatments, Guide* (2012-015)
- 9) *ISPM 15 implementation guidelines for non-compliance, Guide* (2018-012)
- 10) *Fruit fly phytosanitary procedures, Guide* (2017-040)
- 11) *Fruit fly standards, Guide on suite of standards* (2017-041).
- 12) *Implementation of official control (ISPM 5; Supplement 1) and pest free areas (ISPM 4). Guide* (2018-007)
- 13) *Smart phone application to monitor Xylella fastidiosa for all relevant stakeholders and a mapping system to follow up on its global distribution, Tool available on the IPP* (2018-023)

2. Removal of the following six topics that have been completed:

- 1) *Guides and training materials, Strategy, policies and process* (2017-037)
- 2) *PCE tool, Strategy and policies for implementation* (2017-038)
- 3) *Pest Free Areas (PFA), Guide* (2017-045)
- 4) *Pest Risk Communication, Guide* (2017-046)
- 5) *Pest Free Areas and Surveillance, Symposium* (2017-053)
- 6) *Fruit fly standards, infographic* (2017-042)

3. Addition of the following seven new topics, noting associated priorities:

- 1) *Contingency planning, Guide* (2019-012), priority 1;
- 2) *Risk based inspection of imported consignments, Guide* (2018-022), priority 2.
- 3) *Pest risk analysis, e-Learning course* (2020-002), priority 1;
- 4) *Phytosanitary export certification system, e-Learning course* (2020-003), priority 1

- 5) *Inspection and diagnostics, e-Learning course* (2020-011), priority 1
- 6) *Surveillance and reporting obligations, e-Learning course* (2020-012), priority 1
- 7) *Fall Armyworm Prevention, Guidelines and training materials* (2020-010), priority 1

4. Noting the new priority levels assigned to the following four topics:

- 1) *e-Commerce for plants, plant products and other regulated articles, Guide* (2017-039) from 3 to 1;
- 2) *Pest Risk Management, Guide* (2017-047) from priority 2 to 3;
- 3) *Plant health officer training, Curriculum* (2017-054) from priority 2 to 1;
- 4) *Plant Pest Surveillance, Guide-Revision* (2017-049) from 3 to 1.

APPENDIX 11 – Implementation and Capacity Development List of Topics

Presented by priority, then status

Row No	Topic numbers	ICD Topic	Priority (1 high to 4 low)	Strategic Objective ⁴⁹	Drafting body ⁵⁰	Added to the list	IC lead	Status ⁵¹	Notes
1	2020-002	Pest risk analysis, e-Learning course	1	A	WG	Pending CPM-15 adding topic	Ms Faith NDUNGE	05. Product under development	Proposed as part of the COMESA Trade Facilitation Project .
2	2020-003	Phytosanitary export certification system, e-Learning course	1	A, C	WG	Pending CPM-15 adding topic	Mr Ahmed M. Abdellah ABDELMOTTALEB	05. Product under development	Proposed as part of the COMESA Trade Facilitation Project .
3	2017-049	Plant Pest Surveillance, Guide-Revision	1	A	WG	IC 2018-05	Mr Chris DALE	05. Product under development	
4	2020-010	Fall Armyworm Prevention, Guidelines and training materials	1	A	FAO-IPPC FAW Technical Working Group	Pending CPM-15 adding topic	Mr Chris DALE	05. Product under development	This is a special case as the FAO Director General has called for rapid action ⁵² .
5	2016-016	Sea containers, Programme	1	B	IC Sub-group, Sea Container Task Force	IC 2018-05	Ms Stephanie BLOEM	05. Product under development	
6	2017-043	ISPM 15 Wood packaging material, Guide	1	B	WG	IC 2018-05	Ms Stephanie BLOEM and Ms. Faith NDUNGE	04.WG established	

⁴⁹ Strategic Objectives of IPPC Strategic Framework 2020-2030 (draft) are assigned in line with the Framework for Standards and Implementation paper (15_SPG_2019_Oct) available at: <https://www.ippc.int/en/publications/87641/>

⁵⁰ WG (Working Group); IC Sub-group; IC team; IC-SC team; Other

⁵¹ 00. Pending; 01. Topic added to the List of topics; 02. Draft outline under development, 03. Outline approved; 04. WG established; 05. Product under development; 06 Product delivered

⁵² Further information is available at: <https://www.ippc.int/en/the-global-action-for-fall-armyworm-control/>

Row No	Topic numbers	ICD Topic	Priority (1 high to 4 low)	Strategic Objective ⁴⁹	Drafting body ⁵⁰	Added to the list	IC lead	Status ⁵¹	Notes
7	2017-039	e-Commerce for plants, plant products and other regulated articles, Guide	1	C	WG	IC 2018-05	Mr Thorwald GEUZE	03. Outline approved	Linked to the Development Agenda ⁵³ : e-Commerce
8	2019-012	Contingency planning, Guide	1	A	WG	Pending CPM-15 adding topic	Ms LAVRENTJEVA Olga Assistant Lead: Mr Lalith Bandula KUMARASINGHE	02. Draft Outline is under development	Linked to the Development Agenda : Strengthening Pest Outbreak Alert and Response System
9	2018-008	Development and implementation of regulations and legislation to manage phytosanitary risks on regulated articles for NPPOs, Guide	1	A, B	WG	CPM-14 (2019)	Mr Chris DALE	02. Draft Outline is under development	
10	2020-011	Inspection and diagnostics e- Learning course	1	A, C	WG	Pending CPM-15 adding topic	Mr Thorwald GEUZE	01. Topic added to the List of topics	Proposed as part of the COMESA Trade Facilitation Project .
11	2018-038	Inspection of consignments for <i>Xylella fastidiosa</i> at points of entry, Guide	1	A	TBD	CPM-14 (2019)	Mr Ahmed M. Abdellah ABDELMOTTALEB	01. Topic added to the List of topics	Linked to the Development Agenda : Strengthening Pest Outbreak Alert and Response System

⁵³ Development Agenda items from the IPPC Strategic Framework (2020-2030)

Row No	Topic numbers	ICD Topic	Priority (1 high to 4 low)	Strategic Objective ⁴⁹	Drafting body ⁵⁰	Added to the list	IC lead	Status ⁵¹	Notes
12	2017-054	Plant health officer training, Curriculum	1	A	TBD	IC 2018-05	Mr Lalith Bandula KUMARASINGHE Assistant leads: Mr Francisco GUTIERREZ, Ms Magda GONZALEZ ARROYO and Mr Ahmed M. Abdellah ABDELMOTTALEB	01. Topic added to the List of topics	Linked to be part of the PCE facilitators training (2014-008).
13	2017-051	Strengthening Pest Outbreak Alert and Response Systems, Programme	1	A	TBD	IC 2018-05	Ms Olga LAVRENTJEVA	01. Topic added to the List of topics	Linked to the Development Agenda : Strengthening Pest Outbreak Alert and Response System
14	2020-012	Surveillance and reporting obligations, e-Learning course	1	A	WG	Pending CPM-15 adding topic	Mr Chris DALE	01. Topic added to the List of topics	Proposed as part of the COMESA Trade Facilitation Project .
15	2018-037	Surveillance of <i>Xylella fastidiosa</i> , Guide	1	A	TBD	CPM-14 (2019)	Mr Chris DALE	01. Topic added to the List of topics	Linked to the Development Agenda : Strengthening Pest Outbreak Alert and Response System
16	2018-036	Assessing the risk of introduction of pests with seeds, Guide	1	A	TBD	CPM-14 (2019)	Ms Stephanie BLOEM Assistant lead: Mr Thorwald GEUZE	00. Pending	Pending the discussions on the Reorganization of pest risk analysis standards (2020-001)
17	2018-028	Developing Phytosanitary Security Procedures, Guide	1	A	TBD	CPM-14 (2019)	Ms Kyu-Ock YIM	00. Pending	Pending the revisions of the Export Certification Guide and Transit Guide. Linked with the topic on Managing non-compliant treated consignments (2018-027)
18	2015-015	Plant health surveillance, Portal	1	A	IC-SC team	IC 2018-05	Mr Chris DALE	00. Pending	Pending the development of this portal by the Australian NPPO and will be submitted as a contributed resource.

Row No	Topic numbers	ICD Topic	Priority (1 high to 4 low)	Strategic Objective ⁴⁹	Drafting body ⁵⁰	Added to the list	IC lead	Status ⁵¹	Notes
19	2017-048	Pest Status Guide,	2	A	WG	IC 2018-05	Mr Francisco GUTIERREZ	05. Product under development	To be published following CPM adoption of the Revision of ISPM 8, Determination of pest status in an area (2009-005).
20	2017-044	Pest Free Areas (PFA), e-Learning course	2	A	WG	IC 2018-05	Mr Dominique PELLETIER	01. Topic added to the List of Topics	
21	2018-040	Authorization of entities to perform phytosanitary actions, Guide	2	C	TBD	CPM-14 (2019)	Mr Dominique PELLETIER	00. Pending	Pending CPM decision of the draft ISPM Requirements for NPPOs if authorizing entities to perform phytosanitary actions (2014-002)
22	2018-017	Management of plants and plant products carried by entry passengers, Awareness materials	2	C	WG	CPM-14 (2019)	Ms Faith NDUNGE	00. Pending	Pending the IYPH International Steering Committee (ISC) development of materials related to entry passengers as part of their communication action plan for travellers.
23	2018-027	Managing non-compliant treated consignments, Guide	2	C	TBD	CPM-14 (2019)	TBD	00. Pending	Pending the revision of the Export Certification Guide and Import Verification Guide. Linked to Developing Phytosanitary Security Procedures (2018-028)
24	2018-022	Risk based inspection of imported consignments, Guide	2	A	TBD	Pending CPM-15 adding topic	Ms Stephanie BLOEM	00. Pending	
25	2014-008	PCE facilitators training, Training materials	3	C	TBD	IC 2018-05	Ms. GONZALEZ Magda ARROYO	01. Topic added to the List of topics	Linked to Plant Health officer training curriculum (2017-054) which could be used as the first part of this training.

Row No	Topic numbers	ICD Topic	Priority (1 high to 4 low)	Strategic Objective ⁴⁹	Drafting body ⁵⁰	Added to the list	IC lead	Status ⁵¹	Notes
26	2017-052	PCE tool, Modernization	3	C	TBD	IC 2018-05	Ms. Magda GONZALEZ ARROYO	01. Topic added to the List of topics	
27	1999-005	"Dispute settlement, Procedures revision "	3	C	IC Sub-group	IC 2018-05	Ms Stephanie BLOEM	00. Pending	Pending the end of the IYPH.
28	2017-047	Pest Risk Management, Guide	3	A	WG	IC 2018-05	Mr Álvaro SEPÚLVEDA LUQUE	00. Pending	Pending the development of the draft ISPM on Pest risk management for quarantine pests (2014-001).
29	2018-013	Designing plant quarantine laboratories, Reference material	4	A	TBD	CPM-14 (2019)	Mr Lalith Bandula KUMARASINGHE	00. Pending	Pending the revision of the Guide to Delivering Phytosanitary Diagnostic Services. Linked to the Development Agenda: on Diagnostic laboratory networking.
30	2016-015	Pest diagnostics, TBD	4	A	TBD	IC 2018-05	Mr Lalith Bandula KUMARASINGHE	00. Pending	Pending the completion of the IRSS study on the Utility of IPPC Diagnostic Protocols (IRSS: 2019-014; Priority 1) Linked to the Development Agenda: on Diagnostic laboratory networking.

APPENDIX 12 – Executive Summary and Overview of the Results of the Sea Container Questionnaire on Monitoring of Sea Container Cleanliness

Executive summary

- [1] Invasive pests travel around the globe in and on the agricultural and forestry products we trade. They also travel on and in the millions of rail wagons, trailers and sea cargo containers that crisscross our oceans and continents on trains, trucks and ships.
- [2] The Sea Containers Task Force (SCTF) was established to support the implementation of the Sea Container Complementary Action Plan (SCCAP) to reduce the pest risks associated with the movement of sea containers endorsed by CPM-12. The SCTF circulated a questionnaire among national plant protection organisations (NPPOs) to assess their current level of monitoring of sea containers and its outcomes, their implementation of existing guidelines and to gauge which data are being recorded and would be available for assessment by the SCTF.
- [3] The questionnaire was developed and implemented online using the World Bank's Survey Solutions software. All 183 contracting parties to the IPPC plus 40 local contacts and information points of non-contracting parties were sent an email invitation which included a link to the online questionnaire. The invitations were sent out between 18-20 March 2019 with a response deadline of 16 August.
- [4] Despite monthly reminders and a request to the CPM Bureau to advocate participation among contracting parties, participation was low, with only 36% of contracting parties (n=66) fully or partially completing the questionnaire. An email asking for reasons for non-response was answered by 32 contact points. Not having time and personnel issues (e.g. personnel changes) were most commonly mentioned. Seven NPPOs answered that they could not provide answers as the topic was not considered relevant (e.g. due to being a landlocked country). Five NPPOs explicitly expressed an interest in the topic. One answered that data had been collected but not by the NPPO but by a port authority.
- [5] The low response means that results are unlikely to reflect overall NPPO perceptions and activities related to sea containers and their cargo, and they should therefore be interpreted with care.
- [6] Participation per region varied, with highest participation in North America (2 out of 2 countries), and lowest in the Near East (only 20% of all Near East contracting parties participated). In absolute numbers, most responses came from African countries (22), followed by European participants (14), and these regions therefore have a larger impact on the overall results presented in this report. Due to the low number of observations, results per region are not presented separately (as these would be based on very few observations for some regions).

Results

- [7] The main results are discussed below and presented in Table 1 at the bottom of the Executive summary.
- [8] Almost all responding NPPOs perceive containers and their cargo as a risk, but for around a quarter (18 out of 68 countries) this is only the case when the containers are carrying regulated articles. Only three countries did not consider them a risk, but two of these motivated their answer by saying they were landlocked and therefore did not receive sea containers directly. This may indicate a need to raise awareness among landlocked countries and add clarification in future questionnaires, as sea containers entering a country indirectly can still carry a risk.
- [9] Close to half of all responding NPPOs (32 out of 68 countries) said they have regulations in place that allow them to deal with the risk of sea containers and their cargo. In all likelihood this is an underestimate as some countries seem to have misunderstood the question as only referring to having regulations specifically

relating to containers, rather than any regulations that allow them to inspect containers and act upon found pests.

- [10] Of the 66 NPPOs that responded to this question 54 said they inspect containers and their cargo, mostly in targeted inspections (n=32), but also as part of inspections not directly targeting containers (n=22). Most commonly NPPOs that inspect containers do so following official national procedures or guidelines (30 of the 46 countries that inspected containers). Existing industry guidelines such as the CTU Code and the Joint Industry Container Cleanliness Guidelines were each mentioned by only one respondent. The inspections predominantly took place in the port of (un)loading, or in a container depot or (un)packing location.
- [11] Measures were taken or authorised if risks on imported containers or their cargo were found said 51 of the 62 countries that answered this question, while 43 NPPOs said to do the same with ready-to-export containers. Of the eight countries that said not to take measures, some indicated they saw no risk, and one country indicated there was no provision for this within their legislation. The most common measure for imported containers is rejection, but cleaning and/or treating containers was also a commonly selected answer. Cleaning and/or treating containers is the most common measure for ready-to-export containers, with equal numbers indicating they would do this with and without unpacking containers first (most do both).
- [12] Pests, organisms or other contamination were encountered by almost three quarters of the NPPOs that answered this question (46 out of 61 countries that answered this question). The remaining 16 NPPOs said they had not encountered anything or did not inspect containers. The most commonly selected pre-listed answer options – those selected by at least half the responding NPPOs – were:
- Insects (beetles, flies, etc.) – selected by 39 countries⁵⁴
 - Soil – selected by 36 countries
 - Plants/plant products/plant debris – selected by 31 countries
 - Seeds – selected by 30 countries
- [13] All but four of the 43 countries that had found pests on containers and that answered this follow-up question said these included quarantine (32 countries) and non-quarantine pests (35 countries), and 28 NPPOs indicated both. A full list of these pests is included in the annexes. There is not a lot of overlap in the indicated pests, and no quarantine pest was entered by more than three respondents; for non-quarantine pests, this was four respondents. Most pests were found alive or both dead and alive. Almost no-one indicated only to have found dead examples of the pests.
- [14] Of the 58 NPPOs that responded to this question, 36 said they did not have an information management system in which information about containers and their cargo was stored. Those countries with a system most commonly enter data about presence of pests (n=18) and the type of contamination (n=17). Contamination location is also entered by more than half the countries with a system (n=14), but the level of contamination (e.g., high/low) is less commonly stored (n=9), and only a minority (n=5) store information about absence of contamination, indicating that structural data keeping necessary to determine the proportion of containers that harbour pests is uncommon. Most countries with an information management system said they were willing to share this information with the SCTF (17 countries).

⁵⁴ In the questionnaire this answer option was included near the bottom of the pre-listed answers and phrased as "Other insects (including beetles, flies, etc.)". Ants, moths, wasps and bees were included in other pre-listed answer options and therefore are not included in this answer.

Table 1 Summary of main results

Questions	# countries
Are containers and their cargo seen as a risk for spreading pests?	68
Yes, regardless of the type of cargo	47
Yes, but only if carrying regulated articles	18
No	3
Are regulations in place to deal with the risk of containers and cargo?	68
Yes	32
Future plans	15
No	21
Are there inspections of containers and cargo?	66
Yes, focussed specifically on containers and their cargo	32
Yes, but not as separate inspections focussed on containers	22
No	17
Are measures taken if risks on containers and cargo are discovered?	62
Yes, on imported containers	51
Yes, on ready-to-export containers	43
No	8
Are pests, other organisms or contamination found on containers and cargo?	61
Yes, including quarantine pests	32
Yes, including non-quarantine pests	35
No, not found or containers and cargo not inspected	16
Is there an information management system for container-related information?	58
No	36
Yes (to varying degrees)	22

APPENDIX 13 – Memberships of the CPM Bureau and CPM Standards Committee

I. Bureau of the CPM Membership and Potential Replacements (following CPM-15 decisions)

Table 1. Current membership of the Bureau of the CPM

Region	Country	Name	Nominated/ Re-nominated	Current term/duration	Term expires
Africa	Cote D'Ivoire	Mr Lucien Kouame KONAN	CPM-7 (2012) CPM-9 (2014) CPM-11 (2016) CPM-13 (2018) CPM-15 (2021)	5th Term/2 years	2023
Asia	China	Mr Fuxiang WANG	CPM -13 (2018) CPM-15 (2021)	2 nd term/ 2 years	2023
Europe	Malta	Ms Marica GATT	CPM-13 (2018) CPM-15 (2021)	2nd term/2 years	2023
Latin America and Caribbean	Mexico	Mr Francisco Javier TRUJILLO ARRIAGA	CPM-11 (2016) CPM-13 (2018) CPM-15 (2021)	3rd term/ 2 years	2023
Near East	Egypt	Mr Ahmed Kamal EL- ATTAR	CPM-15 (2021)	1st term/2 years	2023
North America	USA	Mr John GREIFER	CPM-5 (2010) CPM-7 (2012) CPM-9 (2014) CPM-11 (2016) CPM-15 (2021)	5th term/ 2 years	2023
Southwest Pacific	New Zealand	Mr Peter THOMSON	CPM-9 (2014) CPM-15 (2021)	2 term/2 years	2023

Table 2. Current replacements of the Bureau of the CPM

Region	Country	Name	Nominated/ Renominated	Current term/duration	Term expires
Africa	1 South Africa	Mr Kgabo MATLALA	CPM-13 (2018) CPM-15 (2021)	2 nd term/ 2 years	2023
	2	VACANT			
Asia	1	VACANT			
	2	VACANT			
Europe	1 United Kingdom	Mr Samuel BISHOP	CPM-12 (2017) CPM-13 (2018) CPM-15 (2021)	3 rd term/ 2 years	2023
	2 Netherlands	Mr Marco TRAA	CPM-15 (2021)	1 st term/ 2 years	2023
Latin America and Caribbean	1 Argentina	Mr Diego QUIROGA	CPM-11 (2016) CPM-13 (2018) CPM-15 (2021)	3 rd term/ 2 years	2023
	2 Belize	Mr Francisco GUTIÉRREZ	CPM-13 (2018) CPM-15 (2021)	2 nd term/ 2 years	2023
Near East	1 Tunisia	Mr Lahbib BEN JAMÂA	CPM-15 (2021)	1 st term/ 2 years	2023
	2 Lybia	Mr Salem Abdulkader HAROUN	CPM-15 (2021)	1 st term/ 2 years	2023
North America	1Canada	Mr Gregory WOLFF	CPM-15 (2021)	1 st term/ 2 years	2023
	2	VACANT			
Southwest Pacific	1 Australia	Ms Gabrielle Vivian SMITH	CPM-15 (2021)	1 st term/ 2 years	2023
	2	VACANT			

II. Standards Committee Membership and Potential Replacements (following CPM-15 decisions)

Table 3. Standards Committee Membership

Region	Country	Name	Nominated/ Re-nominated	Current term/duration	Term expires
Africa	Kenya	Mr Theophilus Mwendwa MUTUI	CPM-15 (2021)	1 st term / 3 years	2024
	Rep. Congo	of Ms Alphonsine LOUHOUARI TOKOZABA	CPM-13 (2018) CPM-15 (2021)	2 nd term / 3 years	2024
	Malawi	Mr David KAMANGIRA	CPM-11 (2016) CPM-14 (2019)	2 nd term / 3 years	2022
	Ghana	Mr Prudence ATTIPOE	CPM-15 (2021)	1 st term / 3 years	2024
Asia	Thailand	Ms Chonticha RAKKRAI	CPM-14 (2019)	1 st term / 3 years	2022
	Philippines	Mr Gerald Glemn F. PANGANIBAN	CPM-15 (2021)	1 st term / 3 years	2024
	Japan	Mr Masahiro SAI	CPM-13 (2018) CPM-15(2021)	2 nd term / 3 years	2024
	China	Mr Xiaodong FENG	CPM-13 (2018) CPM-15 (2021)	2 nd term / 3 years	2024
Europe	Estonia	Ms Olga LAVRENTJEVA	CPM-15 (2021)	1 st term / 3 years	2024
	Israel	Mr David OPATOWSKI	CPM-1 (2006) CPM-4 (2009) CPM-12 (2017) CPM-15 (2021)	4 th term / 3 years	2024
	Italy	Ms Mariangela CIAMPITTI	CPM-14 (2019)	1 st term / 3 years	2022

Region	Country	Name	Nominated/ nominated	Re- Current term/duration	Term expires
	United Kingdom	Mr Samuel BISHOP	CPM-13 (2018) CPM-15 (2021)	2 nd term / 3 years	2024
Latin America and Caribbean	Argentina	Mr Ezequiel FERRO	CPM-8 (2013) CPM-11 (2016) CPM-14 (2019)	3 rd term / 3 years	2022
	Brazil	Mr Andre Felipe CARRAPATOSO PERALTA DA SILVA	CPM-14 (2019)	1 st term / 3 years	2022
	Costa Rica	Mr Hernando MORERA GONZÁLEZ	CPM-13 (2018) CPM-15 (2021)	2 nd term / 3 years	2024
	Chile	Mr Álvaro SEPÚLVEDA LUQUE	CPM-10 (2015) CPM-13 (2018) CPM-15 (2021)	3 rd term / 3 years	2024
Near East	Egypt	Mr Nader ELBADRY	CPM-15 (2021)	1 st term / 3 years	2024
	Iran	Ms Maryam JALILI MOGHADEM	CPM-15 (2021)	1 st term / 3 years	2024
	Jordan	Mr Imad ALAWAD	CPM-15 (2021)	1 st term / 3 years	2024
	Tunisia	Mr Lahbib BEN JAMÂA	CPM -15 (2021)	1 st term / 3 years	2024
North America	Canada	Mr Steve CÔTE	CPM-15 (2021)	1 st term / 3 years	2024
	USA	Ms Marina ZLOTINA	CPM-10 (2015) CPM-13 (2018) CPM-15 (2021)	3 rd term / 3 years	2024
Southwest Pacific	Australia	Ms Sophie Alexia PETERSON	CPM-15 (2021)	1 st term / 3 years	2024
	New Zealand	Ms Joanne WILSON	CPM-14 (2019)	1 st term / 3 years	2022
	Papua New Guinea	Mr David TENAKANAI	CPM-15 (2021)	1 st term / 3 years	2024

TABLE. 4 Standards Committee Potential Replacements

Region	Country	Name	Nominated / Re-nominated	Current term/duration	Term expires
Africa	1 Burundi	Mr Eliakim SAKAYOYA	CPM-11 (2016) CPM-14 (2019)	2nd term / 3 years	2022
	2	VACANT			
Asia	1 Republic of Korea	Ms Mi Chi YEA	CPM-15 (2021)	1st term / 3 years	2024
	2	VACANT			
Europe	1 Belgium	Mr Harry ARIJS	CPM-15 (2021)	1st term / 3 years	2024
	2 Russia	Mr Kostantin KORNEV	CPM-14 (2019)	1st term / 3 years	2022
Latin America and Caribbean	1 Argentina	Ms Melisa Graciela NEDILSKYJ	CPM-15 (2021)	1 st term / 3 years	2024
	2	VACANT			
Near East	1 Syria	Mr Ayad MOHAMED	CPM-15 (2021)	1st term / 3 years	2024
	2 Sudan	Mr Abdelmoneem Ismaeel ADRA ABDETAM	CPM-15 (2021)	1st term / 3 years	2024
North America	1 Canada	Mr Rajesh RAMARATHNAM	CPM-15 (2021)	1st term / 3 years	2024
	2 USA	Ms Stephanie DUBON	CPM-11 (2016) CPM-14 (2019)	2nd term / 3 years	2022

Region	Country	Name	Nominated / Re-nominated	Current term/duration	Term expires
Southwest Pacific	1 To replace New Zealand or Australia	Ms Susie COLLINS	CPM-15 (2021)	1st term / 3 years	2024
	2	VACANT			

APPENDIX 14 – Membership and Potential Replacements for CPM Subsidiary Bodies - Implementation and Capacity Development Committee (IC).

Table 1: Membership of the Implementation and Capacity Development Committee

Region /Role	Country / Organization	Name	Current term/ duration	Term expires
Africa	Kenya	Ms Faith NDUNGE	2 nd term / 3 years	2023
Asia	Republic of Korea	Ms Kyu-Ock YIM	1 st term / 3 years	2023
Europe	Estonia	Ms Olga LAVRENTJEVA	2 nd term / 3 years	2023
Latin America and Caribbean	Belize	Mr Francisco Adrian GUTIERREZ	2 nd term / 3 years	2023
Near East	Egypt	Mr Ahmed M. Abdellah ABDELMOTTALEB	1 st term / 3 years	2023
North America (Chairperson)	Canada	Mr Dominique PELLETIER	2 nd term / 3 years	2023
Southwest Pacific	Fiji	Mr Nilesh Ami CHAND	1 st term / 3 years	2023
Expert (Vice Chairperson)	Australia	Mr Christopher John DALE	2 nd term / 3 years	2023
Expert	Costa Rica	Ms Magda GONZALEZ ARROYO	2 nd term / 3 years	2023
Expert	The Netherlands	Mr Thorwald GEUZE	1 st term / 3 years	2023
Expert	Chile	Ms Ruth AREVALO MACIAS	1 st term / 3 years	2023
Expert	New Zealand	Mr Lalith Bandula KUMARASINGHE	1 st term / 3 years	2023
Representative from the SC	Chile	Mr Álvaro SEPÚLVEDA LUQUE	1 st term	2021
Representative from the RPPOs	NAPPO	Ms Stephanie BLOEM	2 nd term	2023

Table 2. Current alternates and replacements of the Implementation and Capacity Development Committee

Region	Country	Name	Current term/ duration	Term expires
Africa	Sierra Leone	Ms Raymonda JOHNSON	1 st term /3 years	2022
Asia		VACANT		
Europe	Latvia (1)	Mr Ringolds ARNITIS	1 st term 3 years	2022
Europe	Greece (2)	Ms Stavroula IOANNIDOU	1 st term /3 years	2024
	United Kingdom (3)	Mr Matthew EVERATT	1 st term /3 years	2024
Latin America and Caribbean	Argentina	Ms Melisa Graciela NEDILSKYJ	1 st term /3 years	2024
Near East	Egypt	Mr Islam Farahat Abdel-Aziz ABOELELA	1 st term /3 years	2024
North America	United States of America	Ms Wendolyn J. BELTZ	2 nd term /3 years	2023
Southwest Pacific	Cook Islands	Mr Ngatoko TA NGATOKO	1 st term /3 years	2023

APPENDIX 15 – Ink amendments to irradiation treatments of Tephritid fruit flies in adopted Phytosanitary Treatments (PTs) (English only)

Table 1: Ink amendments to remove the restriction of the use of the irradiation treatment to commodities that have been stored in modified atmosphere

ISPM	CURRENT TEXT	PROPOSED INK AMENDMENT
ISPM 28 (<i>Phytosanitary treatments for regulated pests</i>) - PT 1 (<i>Irradiation treatment for Anastrepha ludens</i>)	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]
ISPM 28 (<i>Phytosanitary treatments for regulated pests</i>) - PT 2 (<i>Irradiation treatment for Anastrepha obliqua</i>)	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]
ISPM 28 (<i>Phytosanitary treatments for regulated pests</i>) - PT 3 (<i>Irradiation treatment for Anastrepha serpentina</i>)	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]
ISPM 28 (<i>Phytosanitary treatments for regulated pests</i>) - PT 4 (<i>Irradiation treatment for Bactrocera jarvisi</i>)	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]
ISPM 28 (<i>Phytosanitary treatments for regulated pests</i>) - PT 5 (<i>Irradiation treatment for Bactrocera tryoni</i>)	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]
ISPM 28 (<i>Phytosanitary treatments for regulated pests</i>) - PT 7 (<i>Irradiation treatment for fruit flies of the family Tephritidae (generic)</i>)	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]
ISPM 28 (<i>Phytosanitary treatments for regulated pests</i>) - PT 14 (<i>Irradiation treatment for Ceratitis capitata</i>)	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]
ISPM 28 (<i>Phytosanitary treatments for regulated pests</i>) - PT 33	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]

ISPM	CURRENT TEXT	PROPOSED INK AMENDMENT
Irradiation treatment for <i>Bactrocera dorsalis</i>		
ISPM 28 (<i>Phytosanitary treatments for regulated pests</i>) - PT 39 Irradiation treatment for the genus <i>Anastrepha</i>	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]	"This irradiation treatment should not be applied to fruits and vegetables stored in modified atmospheres." [...]

Ink amendments to ensure a consistent use of “commodity class” and its derivatives in adopted ISPMs (*English only*)

Table 2: Ink amendments to ISPMs in relation to the use of “commodity class” (2018-004)

Row	ISPM	Section / para	Current text	Proposed text	Rationale
1.	13	Article 6.1 Required information (for notification)	<i>Identity of consignment.</i> Consignments should be identified by the phytosanitary certificate number if appropriate or by references to other documentation and including commodity class and scientific name (at least plant genus) for plants or plant products.	<i>Identity of consignment.</i> Consignments should be identified by the phytosanitary certificate number if appropriate or by references to other documentation and including commodity class commodity and scientific name (at least plant genus) for plants or plant products.	Reference to a ‘commodity’ instead of ‘commodity class’ in the documentation accompanying a consignment is enough (and even better) for consignment identification
2.	16	Article 4.2 “Intended use”	The “intended use” of plants for planting may be: - growing for direct production of other commodity classes (e.g. fruits, cut flowers, wood, grain) - to remain planted (e.g. ornamentals) - increasing the number of the same plants for planting (e.g. tubers, cuttings, seeds).	The “intended use” of plants for planting may be: - growing for direct production of other commodity classes commodities (e.g. fruits, cut flowers, wood, grain) - to remain planted (e.g. ornamentals) - increasing the number of the same plants for planting (e.g. tubers, cuttings, seeds).	Reference to direct production of other ‘commodities’ instead of ‘commodity classes’ is enough for specifying the “intended use” of plants for planting.
3.	16	Article 6.4 Non-compliance	Phytosanitary action taken for non-compliance with phytosanitary import requirements for RNQPs should be in accordance with the principles of non-discrimination and minimal impact. Options include: - downgrading (change commodity class or intended use) - treatment - redirection for another purpose (e.g. processing) - redirection to origin or another country - destruction.	Phytosanitary action taken for non-compliance with phytosanitary import requirements for RNQPs should be in accordance with the principles of non-discrimination and minimal impact. Options include: - downgrading (change commodity class commodity or intended use) - treatment - redirection for another purpose (e.g. processing) - redirection to origin or another country - destruction.	‘Change of commodity or intended use’ is clearer for understanding than ‘change commodity class or intended use’.
4.	21	Article 1.1 Intended use	The intended use of plants for planting may be: - growing for direct production of other commodity classes (e.g. fruits, cut flowers, wood, grain) - increasing the number of the same plants for planting (e.g. tubers, cuttings, seeds, rhizomes) - to remain planted (e.g. ornamentals); this includes plants that are intended to be used for amenity, aesthetic or other use.	The intended use of plants for planting may be: - growing for direct production of other commodity classes commodities (e.g. fruits, cut flowers, wood, grain) - increasing the number of the same plants for planting (e.g. tubers, cuttings, seeds, rhizomes) - to remain planted (e.g. ornamentals); this includes plants that are intended to be used for amenity, aesthetic or other use.	Reference to direct production of other ‘commodities’ instead of ‘commodity classes’ is enough for specifying the “intended use” of plants for planting.
5.	24	Outline of Require-ments 2 nd para	Equivalence generally applies to cases where phytosanitary measures already exist for a specific pest associated with trade in a commodity or commodity class. Equivalence	Equivalence generally applies to cases where phytosanitary measures already exist for a specific pest associated with trade in a commodity or commodity class . Equivalence determinations are based on the specified	In terms of equivalence of phytosanitary measures, it is clearer for understanding to consider a ‘pest associated with trade in a commodity’ than a ‘pest associated

Row	ISPM	Section / para	Current text	Proposed text	Rationale
			determinations are based on the specified pest risk and equivalence may apply to individual measures, a combination of measures, or integrated measures in a systems approach.	pest risk and equivalence may apply to individual measures, a combination of measures, or integrated measures in a systems approach.	with trade in a commodity or commodity class’.
6.	24	Article 2.3 Technical justification for equivalence 2 nd para	Although the alternative measures need to be examined, a new complete pest risk assessment may not necessarily be required since, as trade in the commodity or commodity class is already regulated, the importing country should have at least some PRA-related data.	Although the alternative measures need to be examined, a new complete pest risk assessment may not necessarily be required since, as trade in the commodity or commodity class is already regulated, the importing country should have at least some PRA-related data.	In terms of regulation and PRA, it is more practical to consider the ‘trade in the commodity’ than the ‘trade in the commodity or commodity class’.
7.	24	Article 2.4 Non-discrimination in the application of the equivalence of phyto-sanitary measures 1 st para	The principle of non-discrimination requires that when equivalence of phytosanitary measures is granted for one exporting contracting party, this should also apply to contracting parties where the status of the relevant pest is the same and similar conditions for the same commodity or commodity class and/or pest.	The principle of non-discrimination requires that when equivalence of phytosanitary measures is granted for one exporting contracting party, this should also apply to contracting parties where the status of the relevant pest is the same and similar conditions for the same commodity or commodity class and/or pest.	The wording ‘similar conditions for the same commodity and/or pest’ is simpler and more precise than ‘similar conditions for the same commodity or commodity class and/or pest’ without changing the sense.
8.	24	Article 2.4 Non-discrimination in the application of the equivalence of phyto-sanitary measures 1 st para	It should be recognized that equivalence of phytosanitary measures does not, however, mean that when a specific measure is granted equivalence for one exporting contracting party, this applies automatically to another contracting party for the same commodity or commodity class or pest. Phytosanitary measures should always be considered in the context of the pest status and phytosanitary regulatory system of the exporting contracting party, including the policies and procedures.	It should be recognized that equivalence of phytosanitary measures does not, however, mean that when a specific measure is granted equivalence for one exporting contracting party, this applies automatically to another contracting party for the same commodity or commodity class or pest. Phytosanitary measures should always be considered in the context of the pest status and phytosanitary regulatory system of the exporting contracting party, including the policies and procedures.	The wording ‘for the same commodity or pest’ is simpler and more precise than ‘for the same commodity or commodity class or pest’ without changing the sense.
9.	24	Article 3.2 Existing measures 2 nd para	Where new commodities or commodity classes are presented for importation and no measures exist, contracting parties should refer to ISPM 11 (Pest risk analysis for quarantine pests) and ISPM 21 (Pest risk analysis for regulated non-quarantine pests) for the normal PRA procedure.	Where new commodities or commodity classes are presented for importation and no measures exist, contracting parties should refer to ISPM 11 (Pest risk analysis for quarantine pests) and ISPM 21 (Pest risk analysis for regulated non-quarantine pests) for the normal PRA procedure.	In the context of PRA, it is more precise to consider commodities rather than ‘commodity classes’ as potential pest pathways.

Row	ISPM	Section / para	Current text	Proposed text	Rationale
10.	38	Scope 1 st para	This standard provides guidance to assist national plant protection organizations (NPPOs) in identifying, assessing and managing the pest risk associated with the international movement of seeds (as a commodity class).	This standard provides guidance to assist national plant protection organizations (NPPOs) in identifying, assessing and managing the pest risk associated with the international movement of seeds (as a commodity class <u>commodity</u>).	It is proposed to replace the term ‘seeds (as a commodity class)’ by ‘seeds (as a commodity)’ in the Glossary.
11.	38	Scope 3 rd para	Under ISPM 5 (Glossary of phytosanitary terms) seeds (as a commodity class) are intended for planting and not for consumption. Viable seeds, which are a sample of a seed lot, imported for laboratory testing or destructive analysis are also addressed by this standard.	Under ISPM 5 (Glossary of phytosanitary terms) seeds (as a commodity class <u>commodity</u>) are intended for planting and not for consumption. Viable seeds, which are a sample of a seed lot, imported for laboratory testing or destructive analysis are also addressed by this standard.	It is proposed to replace the term ‘seeds (as a commodity class)’ by ‘seeds (as a commodity)’ in the Glossary.
12.	Draft ISPM on International movement of cut flowers and foliage	BACK-GROUND	Cut flowers are a short-lived commodity that may be a pathway for pest entry, although this may not always lead to establishment. Phytosanitary measures such as inspection, certification and treatments often involve a variety of phytosanitary actions to reduce the associated pest risk. Guidelines on how to minimize the pest risk from quarantine pests present in cut flowers prior to import may facilitate international trade in this commodity class.	Cut flowers are a short-lived commodity that may be a pathway for pest entry, although this may not always lead to establishment. Phytosanitary measures such as inspection, certification and treatments often involve a variety of phytosanitary actions to reduce the associated pest risk. Guidelines on how to minimize the pest risk from quarantine pests present in cut flowers prior to import may facilitate international trade in this commodity class <u>commodity</u> .	In terms of risk from quarantine pests present in cut flowers, it is clearer for understanding to consider ‘international trade in this commodity’ than ‘international trade in this commodity class’. It is proposed to delete the term ‘cut flowers and branches (as a commodity class)’ from the Glossary.

APPENDIX 16 – Adoption of International Standards for Phytosanitary Measures (ISPMs), phytosanitary treatments (PTs) and the CPM Recommendation

[1] The CPM adopted the following eleven standards, including seven PTs (attached to this report):

- Revision of ISPM 8 (*Determination of pest status in an area*) (2009-005)
- 2018 Amendments to ISPM 5 (*Glossary of phytosanitary terms*) (1994-001)
- ISPM 44 (*Requirements for the use of modified atmosphere treatments as phytosanitary measures*) (2014-006)
- ISPM 45 (*Requirements for NPPOs if authorizing entities to perform phytosanitary actions*) (2014-002)
- PT 33 Irradiation treatment for *Bactrocera dorsalis* (2017-015) as Annex 33 to ISPM 28
- PT 34 Cold treatment for *Ceratitis capitata* on *Prunus avium*, *Prunus salicina* and *Prunus persica* (2017-022A) as Annex 34 to ISPM 28
- PT 35 Cold treatment for *Bactrocera tryoni* on *Prunus avium*, *Prunus salicina* and *Prunus persica* (2017-022B) as Annex 35 to ISPM 28
- PT 36 Cold treatment for *Ceratitis capitata* on *Vitis vinifera* (2017- 023A) as Annex 36 to ISPM 28
- PT 37 Cold treatment for *Bactrocera tryoni* on *Vitis vinifera* (2017- 023B) as Annex 37 to ISPM 28
- PT 38 Irradiation treatment for *Carposina sasakii* (2017-026) as Annex 38 to ISPM 28
- PT 39 Irradiation treatment for the genus *Anastrepha* (2017-031) as Annex 39 to ISPM 28

[2] The CPM adopted the following CPM Recommendation (attached to this report):

- R-09 Safe provision of food and other humanitarian aid to prevent the introduction of plant pests during an emergency situation

INTERNATIONAL STANDARDS FOR
PHYTOSANITARY MEASURES

ISPM 8

Determination of pest status in an area

Produced by the Secretariat of the
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Publication history

This is not an official part of the standard

1994-05 CEPM-1 added topic *Pest categorization and pest risk definitions* (1994-004).

1994 Expert working group (EWG) developed draft text.

1995-05 CEPM-2 revised draft text and approved for consultation.

1996-05 CEPM-3 decided to add new draft text.

1997-10 CEPM-4 revised draft text and approved for consultation.

1998 Sent for consultation.

1998-05 CEPM-5 revised draft text for adoption.

1998-11 ICPM-1 adopted standard.

ISPM 8. 1998. *Determination of pest status in an area*. Rome, IPPC, FAO.

2010-03 CPM-5 added topic *Revision of ISPM 8* (Determination of pest status in an area) (2009-005).

2013-11 Standards Committee (SC) approved Specification 59.

2017-09 Expert working group drafted revised ISPM.

2018-05 SC revised and approved draft for first consultation.

2018-07 First consultation.

2019-02 Steward revised draft.

2019-05 SC Working Group of seven members (SC-7) revised and approved draft for second consultation.

2019-07 Second consultation.

2019-11 SC revised and recommended the draft for adoption by CPM.

2021-03 CPM-15 adopted the standard.

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Adoption

This standard was adopted by the First Session of the Interim Commission on Phytosanitary Measures in November 1998. This first revision was adopted by the Fifteenth Session of the Commission on Phytosanitary Measures in March 2021 as the present standard.

INTRODUCTION

Scope

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.

This standard also provides guidance on the possible sources of uncertainty associated with information used to determine pest status.

References

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

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

Definitions

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

Outline of requirements

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

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

The quality of the reported information and the reliability and uncertainty of the data are important considerations to be taken into account by the NPPO when determining pest status in an area.

BACKGROUND

Pest records and other information are used by NPPOs to determine the presence or absence of a pest in an area. The NPPOs 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.

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*).

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 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.

REQUIREMENTS

1. Purpose of pest status determination

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.

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

- pest risk analysis;
- considering market access requests;
- planning national, regional or international pest surveillance and management programmes;
- establishing and complying with phytosanitary regulations;
- establishing and maintaining lists of pests present in an area;
- establishing and updating lists of regulated pests;
- establishing and maintaining pest free areas, areas of low pest prevalence, pest free places of production and pest free production sites;
- exchanging information as outlined in the IPPC.

2. NPPO responsibilities

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 concerned.

The NPPO should:

- base its determination of pest status 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.

3. Information used to determine pest status

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 4.

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

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.

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 (see ISPM 27 (*Diagnostic protocols for regulated pests*)).

Sometimes it may be difficult or not possible to determine pest status because of uncertainty associated with the available information. Sources of uncertainty may include:

- limited information on pest biology;
- taxonomic revisions or ambiguity;
- contradictory or outdated information;
- difficulties with or unreliability of survey methodologies;
- difficulties with or unreliability of diagnostic methodologies;
- insufficient information on pest–host associations;
- unknown aetiology;
- detection of signs or observation of symptoms without finding the pest;
- insufficient information on the pest distribution in an area;
- unreliability of the information sources.

When an NPPO is not able to determine pest status, the NPPO should indicate that this is the case.

4. 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 including results from surveillance (see ISPM 6).

Pests under quarantine for diagnostic or research purposes (e.g. in a laboratory), or pest interceptions on imported consignments under detention, do not affect the pest status in an area.

Similarly, detection of a pest in an area, confirmed by surveillance not to represent a population, may not affect the pest status in the area. Determination of pest status in an area requires evidence and expert judgement on the current distribution of a pest in the area. This judgement should be based on a synthesis of available information from various sources, also taking into account historical pest records, where available.

Pest status should be determined for an area identified and specified by the NPPO. When pest status is determined, the area concerned and the date should be indicated. Information on pest free areas, pest free places of production or pest free production sites may be added to the report (see ISPM 4 (*Requirements for the establishment of pest free areas*) and ISPM 10 (*Requirements for the establishment of pest free places of production and pest free production sites*)). Pest status should be described according to the categories identified below.

4.1 Presence

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

Table 1. Pest status – Present

Pest status	Pest 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 and is not under “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 (<i>Glossary of phytosanitary terms</i>).
Present: not widely distributed and under official control	The pest is present in a part or parts of the area and is 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 (<i>Glossary of phytosanitary terms</i>). The purpose of the official control should be stated alongside the pest status determination.
Present: at low prevalence	The pest is present in the area but its prevalence is low in accordance with ISPM 22 (<i>Requirements for the establishment of areas of low pest prevalence</i>).
Present: except in specified pest free areas	The pest is present in the area except in parts of the area which are free from the pest in accordance with ISPM 4 (<i>Requirements for the establishment of pest free areas</i>). These parts should be described alongside the pest status determination.
Present: transient	The pest is present but the evidence supports the conclusion that the pest is not expected to establish because conditions (e.g. hosts, climate) are not suitable for establishment or appropriate phytosanitary measures have been applied.

In some cases, it may be necessary to provide additional information about pest presence, for instance:

- the extent of a localized outbreak;
- official control measures applied;
- the pest has only been reported under specific conditions, such as:
 - on specific hosts,
 - in enclosed structures (e.g. in a greenhouse),
 - in botanical gardens,
 - in the environment but not on a plant host (e.g. in soil or water),
 - in urban areas,
 - at certain times of the year.

4.2 Absence

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

Table 2. Pest status – Absent

Pest status	Pest status description
Absent: pest not recorded	Surveillance supports the conclusion that the pest is absent and has not been recorded (see ISPM 6 (<i>Surveillance</i>)).
Absent: the entire country is pest free	The entire country is established and maintained as a pest free area in accordance with ISPM 4 (<i>Requirements for the establishment of pest free areas</i>).
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: <ul style="list-style-type: none"> - changes in taxonomy have occurred; - misidentification has occurred; - the record or records have not been confirmed; - there are errors in the record or records; - changes in national borders have occurred.
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 (see ISPM 6 (<i>Surveillance</i>)). The reason or reasons may include: <ul style="list-style-type: none"> - climate or other natural limitation to pest perpetuation; - changes in cultivated host species or cultivars; - changes in production practices.
Absent: pest eradicated	Pest records indicate that the pest was present in the past. Documented pest eradication measures were implemented and were successful (see ISPM 9 (<i>Guidelines for pest eradication programmes</i>)). Surveillance confirms continued absence (see ISPM 6 (<i>Surveillance</i>)).

Lack of information due to inadequate or insufficient surveillance activities does not constitute a basis for determining pest absence.

5. Exchange of pest status information between NPPOs

Information pertaining to pest status in an area contributes to pest reports (see ISPM 17). It is the responsibility of an NPPO to provide pest records and other supporting evidence on pest status upon request from another NPPO.

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 such cases, bilateral contacts between NPPOs should be made to clarify the situation, and if needed the pest status should be revised by the NPPO responsible for the area concerned.

NPPOs should:

- use the categories of pest status set out in this standard when exchanging pest status information, to promote harmonization and transparency;
- in a timely manner, inform other NPPOs and their regional plant protection organization, where appropriate, of relevant changes in pest status according to ISPM 17.

INTERNATIONAL STANDARDS FOR
PHYTOSANITARY MEASURES

ISPM 44

**Requirements for the use of
modified atmosphere treatments as
phytosanitary measures**

Produced by the Secretariat of the
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Publication history

This is not an official part of the standard

2014-04 CPM-9 added the topic *Requirements for the use of modified atmosphere treatments as a phytosanitary measure* (2014-006) to the work programme.

2014-05 Standards Committee (SC) revised the draft specification.

2014-11 SC approved draft Specification 62 (*Requirements for the use of phytosanitary treatments as phytosanitary measures*) for consultation via e-decision (2014_eSC_Nov_06).

2015-05 SC approved Specification 62.

2015-08 Technical Panel on Phytosanitary Treatments (TPPT) meeting (deferred).

2017-07 TPPT meeting revised the draft.

2018-02 TPPT virtual meeting approved the draft.

2018-05 SC revised and approved the draft for first consultation.

2018-07 First consultation.

2019-02 Steward revised the draft.

2019-05 SC Working Group of seven members (SC-7) revised and approved the draft for second consultation.

2019-07 Second consultation.

2019-11 SC revised and recommended the draft for adoption by CPM.

2021-03 CPM-15 adopted the standard.

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Adoption

This standard was adopted by the Fifteenth Session of the Commission on Phytosanitary Measures in March 2021.

INTRODUCTION

Scope

This standard provides technical guidance for national plant protection organizations (NPPOs) on the application of modified atmosphere treatments (including controlled atmosphere treatments) as phytosanitary measures, including authorization, monitoring and auditing of treatment providers.

This standard does not provide details on specific modified atmosphere treatments, such as specific schedules for specific regulated pests on specific commodities, and does not include the use of modified atmosphere for non-phytosanitary purposes, such as minimizing the perishability of foodstuffs or other quality-related uses of the modified atmosphere.

References

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>.

Definitions

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

Outline of requirements

This standard provides guidance on modified atmosphere treatments and their application as phytosanitary measures. It identifies parameters to be considered when applying modified atmosphere treatments. Operational requirements for treatment application, including enclosures, treatment procedures and treatment systems, are described.

Guidance is provided to NPPOs on authorizing, monitoring and auditing treatment providers. The roles and responsibilities of NPPOs and treatment providers are described.

BACKGROUND

This standard provides generic requirements for the application of modified atmosphere treatments as phytosanitary measures, specifically those adopted under ISPM 28 (*Phytosanitary treatments for regulated pests*).

Modified atmosphere treatments involve altering gas concentrations in ambient air, which is achieved by increasing the carbon dioxide (CO₂) content (hypercarbia) or reducing the oxygen (O₂) content (hypoxia or anoxia) of the treatment environment, or both, to create an atmosphere lethal to target pests. Controlled atmosphere treatment is a type of modified atmosphere treatment.

Modified atmosphere treatments are frequently used in conjunction with modification of other parameters, such as temperature and humidity.

IMPACTS ON BIODIVERSITY AND THE ENVIRONMENT

Modified atmosphere treatments may be used to prevent the introduction and spread of regulated pests and hence may be beneficial to biodiversity. The use of modified atmosphere treatments as an alternative to methyl bromide fumigation provides an additional benefit to the environment by reducing methyl

bromide emissions, which deplete the ozone layer. While an atmosphere with a high CO₂ or a low O₂ concentration inside the treatment enclosure may be harmful, in this application there are negligible environmental impacts.

REQUIREMENTS

1. Treatment objective

The objective of using modified atmosphere treatments as phytosanitary measures is to achieve pest mortality at a specified efficacy.

2. Treatment application

Modified atmosphere treatments are undertaken by either NPPO personnel or treatment providers authorized by the NPPO of the country in which the treatment is conducted or initiated. Modified atmosphere treatments as phytosanitary measures may be applied before export, during transport, or at the point of entry under suitable conditions of confinement.

The O₂ and CO₂ concentrations may be modified in the following ways:

- changing the proportion of O₂ and CO₂ in the atmosphere by adding a gas (such as CO₂ or nitrogen (N₂)) and maintaining this atmosphere;
- adding a substance (such as iron oxide) that captures O₂;
- converting O₂ to CO₂ by combustion of a hydrocarbon;
- holding the commodity in hermetic or semi-hermetic storage, in which the respiration of the commodity and pests infesting it depletes the level of O₂ and increases the level of CO₂;
- creating a partial vacuum, which lowers concentrations of all atmospheric gases proportionally.

2.1 Treatment parameters

The main parameters to consider when implementing modified atmosphere treatments include:

- atmospheric gas concentrations (O₂ and CO₂);
- duration of the treatment;
- temperature (of the air and the commodity);
- humidity.

Modified atmosphere treatments are conducted in an enclosure (e.g. vacuum chamber, freight container, warehouse, cargo ship hold, packaging). The lethal condition of the atmosphere should be achieved and maintained throughout the enclosure for a specified length of time as required by the treatment schedule.

Respiration, sorption of atmospheric gases and the packaging of the commodity may result in differential gas concentrations within the enclosure and influence the efficacy of a modified atmosphere treatment. This should be taken into account when applying treatments.

When the gas concentrations are not maintained at the required level for the specified duration, the treatment should be restarted.

Temperature and humidity are factors to consider in order to achieve the required efficacy of modified atmosphere treatments, in particular because they affect the respiration rate of the target pest, and should be maintained according to the treatment schedule.

3. Enclosures used for modified atmosphere treatments

The enclosure used for modified atmosphere treatments may consist either of packaging or of a portable or fixed structure that is designed either as a continuous gas flow system or a static system.

The ability to maintain the specified gas concentrations for the duration of the treatment is influenced by the permeability of the material and the surface area-to-volume ratio of the enclosure, and the effectiveness of seals at structural conjunctions or joins and openings of the enclosure.

Enclosures should be designed and constructed to maintain the parameters of the treatment. Features of specifically designed and constructed enclosures, both fixed and portable, include:

- gas-tight doors or gas-tight valves;
- gas concentration control;
- temperature control;
- humidity control;
- pressure control;
- recirculation of atmospheric gases within the enclosure;
- exhaust systems;
- systems to alert operators when there is a technical failure (e.g. leakage).

Modified atmosphere treatments that rely on the introduction of inert gases to reduce O₂ levels and hence achieve anoxic conditions may use non-gas-tight enclosures or enclosures that are not specifically designed for modified atmosphere treatments. When using enclosures that are not specifically designed for modified atmosphere treatments, particular attention should be paid to the pressure required to maintain the treatment parameters as specified in the treatment schedule.

4. Measuring treatment parameters

Parameters specified in the treatment schedule should be measured and recorded at appropriate intervals to ensure that the required treatment parameters have been reached and maintained throughout the treatment period to achieve pest mortality. The critical parameters for modified atmosphere treatments are typically O₂ and CO₂ concentrations, temperature and duration of exposure of the commodity.

In some cases, humidity is considered as an important treatment parameter and should then also be measured and recorded during the treatment period.

Pressure does not affect the efficacy of the treatment but may be important to ensure that the required treatment conditions are achieved, either when negative pressure is used to remove O₂ or when positive pressure is used to flush the enclosure of O₂. If pressure is important to achieve the required treatment conditions, it should also be measured and recorded.

All equipment used for measuring and recording treatment parameters should be calibrated according to the manufacturer's instructions and, where applicable, NPPO specifications.

4.1 Measuring gas concentrations

The equipment used to measure gas concentrations within the enclosure should have an adequate accuracy (e.g. $\pm 5\%$ of the gas concentrations to be achieved throughout the treatment).

4.2 Measuring and mapping temperature

The temperature of the commodity and the atmosphere within the enclosure should be measured and recorded to ensure that the required temperature is reached.

If the modified atmosphere treatment is used together with temperature treatment, temperature mapping of the enclosure may be necessary to identify temperature variation under normal operating conditions (e.g. as regards loads and packaging).

5. Adequate systems for treatment facilities

Confidence in the adequacy of modified atmosphere treatments as phytosanitary measures is primarily based on assurance that the treatments are effective against the target pests under specific conditions

and that the treatments have been properly applied. Systems for such treatments should be designed, used and monitored to ensure that treatments are properly conducted and commodities are protected from infestation and contamination after treatment.

The NPPO of the country in which the treatment is conducted or initiated (the latter when treatment takes place during transport) is responsible for ensuring that the system requirements are met.

5.1 Authorization of treatment providers

The NPPO of the country in which the treatment is conducted or initiated is responsible for the authorization of treatment providers. This authorization normally includes approval of both treatment facilities and treatment providers. The NPPO should set requirements for treatment provider authorization, including training of personnel, treatment procedures, adequate equipment and storage conditions. Specific procedures appropriate for each facility, provider and commodity treatment should also be approved by the NPPO.

NPPOs should maintain a list of authorized treatment providers for modified atmosphere treatment, including, where appropriate, approved facilities.

5.2 Monitoring and auditing

The NPPO of the country in which the treatment is conducted or initiated is responsible for monitoring and auditing the treatment facilities and providers. Continuous supervision of treatments should not be necessary, provided treatment procedures are properly designed and can be verified to ensure a high degree of system integrity for the facility, process and commodity in question. The monitoring and auditing should be sufficient to detect and correct deficiencies promptly.

Treatment providers should meet the monitoring and auditing requirements set by the NPPO. These requirements may include:

- access for the NPPO to audit, including either prearranged or unannounced visits or both;
- a system to maintain and archive treatment records and provide NPPOs, or where appropriate other government agencies, with access to these;
- corrective action to be taken in the event of nonconformity.

5.3 Prevention of infestation and contamination after treatment

The consignment owner is responsible for prevention of infestation and contamination after treatment and may cooperate with the treatment provider on how to achieve this. After the treatment is successfully completed, measures should be implemented to prevent possible infestation or contamination of the treated commodity. The following measures may be required:

- keeping the commodity in a pest free enclosure;
- packing the commodity immediately in pest-proof packaging;
- segregating and identifying treated commodities;
- dispatching the commodity as soon as possible.

5.4 Labelling

Commodities may be labelled with treatment lot numbers or other features of identification (e.g. locations of packing and the treatment facility, dates of packing and treatment) allowing trace-back for non-compliant consignments. When used, labels should be easily identifiable and placed on visible locations.

6. Documentation

The NPPO of the country in which the treatment is conducted or initiated is responsible for ensuring that treatment providers maintain documents of procedures and keep appropriate records, such as raw

data on gas concentrations and temperature recorded during treatments. Accurate record keeping is essential to allow for trace-back capability.

6.1 Documentation of procedures

Procedures should be documented to ensure that commodities are treated consistently in accordance with the treatment schedule. Process controls and operational parameters should be established to provide the operational details necessary for the authorization of a treatment provider. Calibration and quality control procedures should be documented by the treatment provider. The documented procedures should include the following:

- commodity handling before, during and after treatment;
- orientation and configuration of the commodity during treatment;
- treatment parameters and the means for measuring and recording them;
- gas and temperature sensor calibration;
- contingency plans and corrective actions to be taken in the event of treatment failure or problems with treatment parameters;
- handling of rejected lots;
- labelling (if required), record keeping and documentation requirements;
- training of personnel.

6.2 Record keeping

Treatment providers should keep appropriate records for each treatment application. These records should be made available to the NPPO of the country in which the treatment is conducted or initiated for auditing and verification purposes or when a trace-back is necessary.

Appropriate records for modified atmosphere treatments as phytosanitary measures, including equipment calibration records, should be kept by the treatment provider for at least one year to enable the trace-back of treated lots. Records on individual treatments may include data on:

- identification of facility and treatment provider;
- treatment schedule applied;
- commodity treated;
- target regulated pest;
- packer, grower, exporter and place of production of the commodity;
- lot size and volume, including number of articles or packages;
- treatment number or other identifying markings or characteristics of the lot;
- date and duration of treatment and name of individual performing the treatment;
- gas concentration or concentrations, temperature of commodity and (if required) other atmospheric parameters such as humidity and pressure;
- any observed deviation from the treatment schedule and, where appropriate, subsequent actions taken.

6.3 Documentation by the NPPO

All NPPO procedures should be appropriately documented and records, including those of monitoring inspections made and phytosanitary certificates issued, should be maintained for at least one year. In cases of non-compliance or new or unexpected phytosanitary situations, documentation should be made available upon request as described in ISPM 13 (*Guidelines for the notification of non-compliance and emergency action*).

7. Inspection

Inspection should be carried out by the NPPO of the exporting country, and an inspection at import may be carried out by the NPPO of the importing country, to determine compliance with phytosanitary import requirements. Where live non-target pests are found after treatment, by either the NPPO of the exporting country or the NPPO of the importing country, the NPPO should consider if their survival indicates a treatment failure and whether additional phytosanitary measures may be necessary.

The NPPO of the importing country may examine documentation and records for treatments conducted during transport to determine compliance with phytosanitary import requirements.

8. Responsibilities

The NPPO of the country in which the treatment is conducted or initiated is responsible for the evaluation, approval and auditing of the application of modified atmosphere treatments as phytosanitary measures, including those performed by the NPPO itself or by other authorized treatment providers. When treatments are conducted or completed during transport, the NPPO of the exporting country is usually responsible for authorizing the treatment provider applying the treatment during transport and the NPPO of the importing country is responsible for verifying if the treatment requirements have been met.

To the extent necessary, the NPPO should cooperate with other national regulatory agencies concerned with the development, approval and safety of the modified atmosphere treatment, including the training and certification of personnel conducting the treatment, the authorization of treatment providers, and the approval of treatment facilities. The respective responsibilities of the NPPO and the other regulatory agencies, if any, should be identified to avoid requirements that are overlapping, conflicting, inconsistent or unjustified.

INTERNATIONAL STANDARDS FOR
PHYTOSANITARY MEASURES

ISPM 45

**Requirements for national plant protection
organizations if authorizing entities to perform
phytosanitary actions**

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Adoption

This standard was adopted by the Fifteenth Session of the Commission on Phytosanitary Measures in March 2021.

INTRODUCTION

Scope

This standard provides requirements for national plant protection organizations (NPPOs) if they decide to authorize entities to perform specific phytosanitary actions on their behalf.

In accordance with Article V.2(a) of the IPPC, this standard does not cover the issuance of phytosanitary certificates. Also, this standard does not cover the development and establishment of phytosanitary measures.

References

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

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

Definitions

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

Outline of requirements

This standard outlines the key requirements for the development of an authorization programme and the eligibility criteria for entities to become authorized. The standard identifies the roles and responsibilities of the parties involved in the implementation of an authorization programme. It also describes processes for audits, types of nonconformities, and suspension and revocation of authorization.

BACKGROUND

Article IV of the IPPC sets out the responsibilities for NPPOs. Article V.2(a) of the IPPC provides for the possibility of NPPOs authorizing entities to perform phytosanitary actions. The concept of authorization is referred to in several ISPMs, such as ISPM 3 (*Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms*), ISPM 6 (*Surveillance*), ISPM 7 (*Phytosanitary certification system*), ISPM 12 (*Phytosanitary certificates*), ISPM 20 (*Guidelines for a phytosanitary import regulatory system*), ISPM 23 (*Guidelines for inspection*), ISPM 42 (*Requirements for the use of temperature treatments as phytosanitary measures*) and ISPM 43 (*Requirements for the use of fumigation as a phytosanitary measure*). In order to foster confidence between NPPOs, there is a need to harmonize the requirements for authorizations of specific phytosanitary actions and to ensure that the practice aligns with the principles of the IPPC. If an NPPO decides to authorize entities, it remains responsible for the phytosanitary actions performed by the entities on its behalf.

IMPACTS ON BIODIVERSITY AND THE ENVIRONMENT

Authorization programmes may have a positive impact on biodiversity and the environment because they may contribute to the delivery of phytosanitary actions.

REQUIREMENTS

There is no obligation for NPPOs to authorize entities to perform phytosanitary actions. However, if an NPPO decides to authorize entities, the following requirements apply.

1. Basic understanding of authorization

An NPPO decides whether to use authorization of entities to perform phytosanitary actions. Authorization may be used by NPPOs to authorize entities to perform specific phytosanitary actions, to audit other authorized entities, or to supervise phytosanitary actions. Examples of phytosanitary actions that an NPPO may decide to authorize an entity to perform include monitoring, sampling, inspection, testing, surveillance, treatment, post-entry quarantine and destruction. If an NPPO decides to authorize entities, it should have sole responsibility for deciding which entity is authorized and for which specific phytosanitary actions. Audits may be conducted by an authorized entity in order to assess the eligibility of another entity to perform a specific phytosanitary action; however, the decision to authorize should be the responsibility of the NPPO alone.

The NPPO is responsible for ensuring that the authorized entity performs the phytosanitary actions according to the NPPO's requirements. With the authorization, the phytosanitary action is performed by the entity but the responsibility remains with the NPPO. Authorization may be given only to perform phytosanitary actions to implement phytosanitary measures that are decided by the NPPO. Authorization to perform phytosanitary actions does not include NPPO core activities such as issuance of phytosanitary certificates or development and establishment of phytosanitary measures because these are not phytosanitary actions. The NPPO should have sufficient staff with the necessary expertise to carry out oversight, including auditing, of authorized entities.

In this standard, "entities" include the providers of phytosanitary action (e.g. individuals, organizations, enterprises) and, where appropriate, their facilities (such as equipment, laboratories, treatment enclosures). In some cases, authorization of entities may require an NPPO to approve individuals within the entity (such as those responsible for specific phytosanitary actions), relevant documentation, facilities, or any combination of these. The NPPO and the entity should determine the nature of the authorization agreement.

2. Authorization programme

Under its phytosanitary system, an NPPO deciding to authorize entities to perform specific phytosanitary actions should establish an authorization programme.

Before deciding to authorize entities to perform phytosanitary actions and developing an authorization programme, NPPOs should ensure that their country's legal framework enables them to authorize, suspend, revoke and reinstate authorizations.

NPPOs should only set up authorization programmes that result in effective phytosanitary actions that are delivered with integrity and transparency. The authorization programme should ensure that the authorized entities are accountable to the NPPO for these actions and that phytosanitary security is maintained, consistent with the provisions of the IPPC and ISPMs.

2.1 Development of authorization programme

The NPPO should develop an authorization programme that is appropriate for its purposes, first defining the programme's scope and objectives. When developing an authorization programme, the NPPO should:

- set the requirements that must be met by an entity to be authorized;
- develop procedures for receiving, maintaining and delivering information, including procedures to ensure confidentiality;

- develop procedures to process the information received, from the time of receipt of the information required by the NPPO and its subsequent evaluation to the decision on whether to grant authorization to the entity;
- develop a training plan to ensure that NPPO personnel have the expertise to manage the authorization programme;
- develop training or identify minimum training, equipment, competency and skills requirements for entities to perform phytosanitary actions (these requirements should be equivalent to those required for the NPPO if it were to undertake the same phytosanitary actions);
- develop a template agreement that can be used to formalize the authorization of entities and make the authorization legally binding;
- determine a validity period for the authorization agreement, including the timing of any review and the length of any extension if appropriate;
- develop specific performance criteria, guidelines and performance-based verification processes for the actions performed by the entities;
- develop an audit or monitoring process and supporting tools, which may include audit or monitoring checklists and templates for audit or monitoring reports, and templates for corrective action reports;
- develop criteria to determine nonconformities;
- develop a process to address nonconformity, this including, where appropriate, suspending, reinstating or revoking authorization;
- develop a process for the authorized entity to voluntarily withdraw from the authorization agreement with the NPPO;
- identify risks which may arise from authorization and which need to be managed through the authorization programme;
- develop contingency plans for ensuring continuity of action in the event that an authorized entity has its authorization suspended or revoked or voluntarily withdraws from the authorization programme;
- develop a process to ensure efficient and effective communication between the NPPO and the authorized entity;
- develop a process to maintain an up-to-date list of authorized entities;
- develop a framework to assess the impartiality and independence of entities, and to assess and identify any potential conflicts of interest and address them appropriately (e.g. by requiring entities to be free of any conflict of interest or by allowing entities to manage conflicts of interest).

3. Criteria for eligibility of entities

The NPPO should ensure that the entity meets the following criteria:

- it can legally operate in the country of authorization;
- it has the ability to enter into an agreement with the NPPO;
- it has sufficient resources (financial and human), including the expertise, equipment and infrastructure required, to undertake the specific phytosanitary actions to be performed and to ensure continuity of service;
- it appoints or identifies the individual or individuals who will be responsible for delivery of the phytosanitary actions to be performed;
- it has documentation demonstrating the process by which it will consistently meet the requirements set by the NPPO for the phytosanitary actions to be performed;
- it agrees to conform with the NPPO's requirements, including requirements on impartiality, independence and conflicts of interest (e.g. to declare whether it is free of any conflict of interest or to identify potential conflicts of interest);

- it has a clear statement of liability for damages if these result from actions it performs in its role as an authorized entity;
- it has a process to ensure efficient and effective resolution of conflicts with the client receiving delivery of the phytosanitary action (if the client is not the NPPO), including a process to elevate issues to the NPPO for a final decision.

4. Roles and responsibilities for implementing the authorization programme

4.1 Roles and responsibilities of the NPPO

The roles and responsibilities of the NPPO should include the following:

- to assess the entity against the criteria for eligibility for authorization set in this standard and those established by the NPPO;
- to evaluate the entity against the requirements set by the NPPO regarding its documented procedures and their implementation on-site, and propose suggestions for improvement as necessary;
- to clearly define the phytosanitary actions the entity is authorized to perform and the performance criteria;
- to enter into an agreement which authorizes the entity to perform specific phytosanitary actions, and to review and update the agreement as necessary;
- to notify entities that do not meet the criteria for eligibility and provide the rationale for the decision;
- to train NPPO personnel and, if needed, authorized entities' personnel and ensure that their skills and competencies are maintained at an adequate level to consistently implement the authorization programme;
- to carry out regular audits or monitoring of the authorized entity to verify that it conforms with the requirements of the NPPO's authorization programme;
- to carry out internal audits of its own procedures and processes to verify that the objectives of its authorization programme continue to be met;
- to implement processes for addressing identified nonconformities, including determining the corrective actions and requiring the authorized entity to take the corrective actions, and, where appropriate, suspending or revoking authorization, which may include regulatory enforcement;
- to implement processes for reinstatement of authorization;
- to implement processes for the entity to voluntarily withdraw from the authorization agreement with the NPPO, when needed;
- to maintain documentation, including records and published lists of authorized entities, corresponding authorized phytosanitary action, and authorization period, if applicable;
- to identify for how long an entity needs to save its records, in relation to the specific phytosanitary actions performed;
- to implement and maintain transparent, efficient and effective communication on the authorization programme, in particular between the NPPO and the authorized entities;
- to ensure that NPPO personnel involved in authorization of entities maintain impartiality and are free of any conflict of interest.

4.2 Roles and responsibilities of the entity

The roles and responsibilities of the entity should include the following:

- to provide required information to the NPPO when being considered for authorization to perform specific phytosanitary actions;
- to enter into a written agreement to perform the specific phytosanitary actions;

- to implement documented procedures to conform with the requirements set by the NPPO, which may cover:
 - operating procedures describing how specific phytosanitary actions are performed (i.e. who does what, when, where and how),
 - skills and competency of personnel,
 - training of personnel,
 - document control, which includes:
 - revision of documents
 - records, in particular of the activities undertaken in relation to the specific phytosanitary actions,
 - a list of equipment and their maintenance or calibration schedule, where appropriate,
 - internal audit,
 - management of nonconformity;
- to provide notification (within an agreed time frame) to the NPPO upon a major change in management or location, a change in process, a nonconformity or any other information that has an impact on the specific phytosanitary action that has been authorized;
- to maintain infrastructure and security, where applicable, and resources to consistently carry out the specific phytosanitary actions to conform with the requirements set by the NPPO;
- to ensure that personnel have the relevant knowledge and experience required by the NPPO to perform the specific phytosanitary actions;
- to train personnel and ensure that their skills and competencies are maintained at an adequate level to consistently carry out the specific phytosanitary actions to conform with the requirements set by the NPPO;
- to maintain and provide documented procedures (including records of its activities) to the NPPO as required;
- to undergo monitoring, audits and controls as described in the requirements set by the NPPO;
- to comply with the requirements set in the authorization agreement, the phytosanitary procedures, standards, legislation and guidelines of the NPPO that relate to the authorization;
- to maintain the confidentiality of the information obtained through the authorized phytosanitary actions.

4.2.1 Roles and responsibilities of entities authorized to audit or supervise

The NPPO may choose to authorize entities to audit other authorized entities or to supervise phytosanitary actions. An entity that audits other authorized entities or supervises phytosanitary actions should meet the requirements in section 4.2. The roles and responsibilities of the entity should also include the following:

- to develop and carry out an action plan, including procedures or corrective actions, for dealing with nonconformities of the entities it audits that compromise the integrity of and trust in the programme, including notification (within an agreed time frame) of these to the authorizing NPPO;
- to maintain confidentiality of information gained through its auditing or supervisory activities;
- to maintain impartiality and independence from the entities it audits or supervises, and be free of any conflict of interest;
- to ensure personnel have the relevant knowledge, experience and training to carry out the specific audits or supervision being performed;
- to undertake internal audits to provide continuous feedback and identify system gaps (if applicable).

5. Process for audits

5.1 Audits to authorize an entity

If an NPPO decides to consider the authorization of an entity, the NPPO (or the entity authorized to conduct audits) should first carry out an initial evaluation of the entity's documented procedures.

When the documented procedures are acceptable, the NPPO (or the entity authorized to conduct audits) should carry out an audit to evaluate the entire system and the capability of the entity to implement the documented operating procedures for each phytosanitary action.

At each step of the audit, the NPPO (or the entity authorized to conduct audits) should provide feedback to the entity on observations and opportunities for improvement as necessary.

The decision about whether to grant authorization should rest solely with the NPPO. The NPPO should only authorize the entity if the audit demonstrates that the NPPO's requirements for authorization of entities have been met.

5.2 Audits to maintain authorization

The NPPO should determine the minimum frequency of the audits to maintain authorization, based on the scope and complexity of the phytosanitary actions and the associated level of pest risk, the performance of the authorized entity and the nonconformities identified, and the results of previous audits. An unscheduled audit may be conducted, for instance upon receipt of a notification of non-compliance from an importing country.

Audits may be conducted by the NPPO (or the entity authorized to conduct audits) on a specific part or parts of the entity's system, as necessary.

6. Types of nonconformity

When the authorized entity does not meet the requirements specified by the NPPO as set out in the authorization agreement, this should be considered as a nonconformity.

A nonconformity may be identified during audits, supervision, or investigations triggered by notification of non-compliance (ISPM 13 (*Guidelines for the notification of non-compliance and emergency action*)).

The type and number of nonconformities identified should be used by the NPPO to determine the status of the entity (authorized, suspended or revoked) and the follow-up audit frequency.

If a nonconformity is identified, the NPPO (or the entity authorized to audit or supervise) should require the authorized entity to take corrective action.

Nonconformities may be considered as critical nonconformities (section 6.1) or other nonconformities (section 6.2).

6.1 Critical nonconformity

“Critical nonconformity” is a nonconformity that immediately impacts the integrity of and trust in the NPPO's phytosanitary system and that requires a rapid corrective action to be identified and implemented. The NPPO may consider nonconformities to be critical in situations such as:

- when there is evidence of failing to properly perform authorized phytosanitary actions;
- when a corrective action is not implemented to the satisfaction of the NPPO (or the entity authorized to audit or supervise);
- when there is a failure to implement timely corrective actions to remedy the shortcomings identified;
- when the integrity or impartiality of the entity is shown to have been compromised;

- when there is evidence of fraud.

An entity's authorization to perform a specific phytosanitary action should be suspended or revoked immediately if a critical nonconformity is identified. The NPPO should have a system in place to manage the critical nonconformity.

6.2 Other nonconformity

“Other nonconformity” is a nonconformity that does not directly or immediately impact the integrity of and trust in the NPPO's phytosanitary system and is not considered a critical nonconformity by the NPPO.

Other nonconformity requires corrective actions to be taken within a time frame specified by the NPPO (or the entity authorized to audit or supervise).

Suspension or revocation of the authorization is not needed but may be considered when this type of nonconformity is repeatedly identified or when corrective actions are not taken within the required time frame. The decision about whether to suspend or revoke authorization of the entity should rest solely with the NPPO.

7. Suspension and revocation of authorization

The decision to suspend, revoke or reinstate authorization of the entity should rest solely with the NPPO.

Suspension. The NPPO temporarily suspends the authorization of an entity for a specified time in order for the entity to implement corrective action.

Revocation. The NPPO withdraws the authorization of an entity.

An entity that has had its authorization suspended and that wishes to have its authorization reinstated should apply to the NPPO for reinstatement. When an entity's authorization has been revoked, the NPPO should evaluate if the entity is eligible for a new authorization. Affected entities should make an application for a new authorization, according to the rules set by the NPPO. The decision about whether to reinstate an entity's authorization should rest solely with the NPPO.

An entity that has voluntarily withdrawn from an authorization agreement and that wishes to have its authorization reinstated should apply to the NPPO for reinstatement.

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PHYTOSANITARY MEASURES

ISPM 5

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1989-09 RPPOs prepared draft *Core vocabulary of phytosanitary terms*.
1990 FAO published *FAO Glossary of phytosanitary terms*; FAO Plant Protection Bulletin 38(1)
1991-05 TC-RPPOs endorsed topic *Glossary phytosanitary terms* (1991-001).
1993-05 TC-RPPOs revised terms and recommended to establish working group for the *FAO Glossary* (GWG).
1994-02 1st meeting of the GWG.
1994-03 CEPM-1 revised text and agreed to add new terms.
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1996-05 CEPM-3 revised text of *Glossary of phytosanitary terms*.
1997-10 CEPM-4 revised the text and 29th Session of the FAO Conference approved **the Glossary**.

1999-02 GWG revised the Glossary.
1999-05 CEPM-6 revised the Glossary and recommended for adoption.
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1999-09 GWG revised standard.
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2001-04 ICPM-3 adopted revised **ISPM 5**. 2001.

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2001-05 ISC-3 approved Specification 1 *Review and updating of the glossary of phytosanitary terms*.
2001-05 ISC-3 revised standard and approved for consultation.
2001-06 Consultation.
2001-11 ISC-4 revised standard for adoption.
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2002-02 GWG revised standard.
2002-05 Standards Committee (SC) revised standard and approved for consultation.
2002-06 Sent for consultation.
2002-11 SC revised standard for adoption.
2003-04 ICPM-5 adopted revised **ISPM 5**. 2003.

2003-02 GWG revised standard.
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2003-11 SC revised standard and requested to add new terms on ISPMs.
2004-02 GWG revised standard.
2004-04 SC revised standard and approved for consultation.
2004-06 Consultation.
2004-11 SC revised standard for adoption.
2005-04 ICPM-7 adopted revised **ISPM 5**. 2005.

2004-10 & 2005-10 GWG revised standard.
2006-05 SC revised standard and approved for consultation.
2006-06 Consultation.
2006-11 SC revised standard for adoption.
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2007-06 Consultation.
2007-11 SC approved draft to be submitted for adoption.
2008-04 CPM-3 adopted revised **ISPM 5**. 2008.

2007-10 TPG revised standard.
2008-05 SC-7 revised standard and approved for Consultation.
2008-06 Consultation.
2008-11 SC approved draft to be submitted for adoption.
2009-03 CPM-4 adopted revised **ISPM 5**. 2009.

2008-10 TPG revised standard.
2009-05 SC revised standard and approved for Consultation.
2009-06 Consultation.
2009-11 SC approved draft to be submitted for adoption.
2010-03 CPM-5 adopted revised **ISPM 5**. 2010.

2009-06 TPG started reviewing adopted standards for consistency in the use of terms.
2010-10 TPG drafted amendments.
2011-05 SC revised draft and approved for consultation.
2011-06 Consultation.
2011-11 SC approved draft to be submitted for adoption.
2012-03 CPM-7 adopted revised **ISPM 5**. 2012.

2012-10 TPG drafted amendments.
2013-06 Consultation.
2014-05 SC-7 approved draft for substantial concerns commenting period (SCCP).
2014-06 SCCP.
2014-11 SC approved draft to be submitted for adoption.
2015-03 CPM-10 adopted revised **ISPM 5**. 2015.

2013-02 TPG drafted amendments.
2014-05 SC revised draft and approved for consultation.
2014-07 Consultation.
2015-05 SC-7 approved for SCCP.
2015-06 SCCP.
2015-11 SC approved draft to be submitted for adoption.
2016-04 CPM-11 adopted revised **ISPM 5**. 2016.

2014-12 TPG drafted amendments for approval by SC in 2015.
2015-05 SC reviewed and approved for consultation.
2015-12 TPG drafted amendments for approval by SC in 2016.
2016-05 SC approved for first consultation.
2016-07 First consultation.
2016-12 TPG reviewed consultation comments and adjusted the draft 2016 amendments; also recommended that revision of “endangered area” be withdrawn from draft 2016 amendments because “endangered area” is defined in Article II of IPPC and the original definition is not incorrect. The misunderstandings that the revision could address are not sufficiently important to merit an “agreed interpretation” of the term. Instead, the Explanatory document on ISPM 5 (the “Annotated Glossary”), note 1, will be adjusted to clarify that the term “endangered area” should not be misinterpreted to mean an environmentally protected area in the ecological conservation sense.
2017-05 SC-7 approved for second consultation.
2017-10 Steward revised draft amendments based on comments.

2017-11 SC reviewed and recommended the draft 2015 and 2016 amendments to the CPM for adoption.
2018-04 CPM-13 adopted revised **ISPM 5**, 2018.

2019-01 IPPC Secretariat updated the glossary terms under revision (indicated by a *).

2019-06 IPPC Secretariat fixed a typo in the glossary term “survey”.

2016-12 TPG drafted amendments.
2017-05 SC approved for first consultation.
2017-07 First consultation.
2017-12 TPG revised.
2018-05 SC-7 approved for second consultation.
2018-7 Second consultation.
2018-10 TPG Steward and Assistant Steward revised.
2018-11 SC approved draft to be submitted for adoption.
2019-04 CPM-14 adopted revised **ISPM 5**, 2019.

2017-12 TPG drafted amendments.
2018-05 SC approved for first consultation.
2018-07 First consultation.
2018-12 TPG revised.
2019-05 SC-7 revised and approved for second consultation.
2019-07 Second consultation.
2019-10 TPG Steward and Assistant Steward revised.
2019-11 SC approved draft to be submitted for adoption.
2021-03 CPM-15 adopted revised **ISPM 5**, 2021.

2021-04 IPPC Secretariat corrected some minor typographical errors and updated punctuation and citation style to align with FAO style.

Supplement 1

1999-10 ICPM-2 added topic *Official control* (1999-002).
2000-03 Expert working group (EWG) developed draft text.
2000-05 ISC-1 revised draft text and approved for consultation.
2000-06 Consultation.
2000-11 ISC-2 approved draft to be submitted for adoption.
2001-04 ICPM-3 adopted Supplement 1 to ISPM 5.

ISPM 5. Supplement 1 *Guidelines on the interpretation and application of the concept of official control for regulated pests* (2001).

2005-03 ICPM-7 added the topic *Not widely distributed* (2005-008) (supplement to ISPM 5: *Glossary of phytosanitary terms*).

2006-05 SC approved Specification 33.
2008-05 SC-7 reviewed draft.
2011-05 SC approved for consultation.
2011-06 Consultation.
2011-11 TPG reviewed comments.
2011-11 SC approved draft supplement to ISPM.
2012-03 CPM-7 adopted revised Supplement 1 to ISPM 5.
ISPM 5. Supplement 1 *Guidelines on the interpretation and application of the concepts of “official control” and “not widely distributed”* (2012).

Supplement 2

2001-04 ICPM-3 added topic *Defining economic importance* (2001-004).
2002-02 GWG developed draft text.

2002-05 SC revised draft text and approved for consultation.

2002-06 Consultation.

2002-11 SC revised draft text for adoption.

2003-04 ICPM-5 adopted Supplement 2 to ISPM 5.

ISPM 5. Supplement 2 *Guidelines on the understanding of “potential economic importance” and related terms including reference to environmental considerations* (2003).

Appendix 1

2005-03 ICPM-7 IPPC and CBD (Convention on Biological Diversity) secretariats decided cooperation programme.
2006-04 CPM-1 agreed to assess progress on the work programme (2006-033).

2006-10 TPG developed draft text.

2007-05 SC requested TPG to develop draft text *CBD terms*.

2007-10 TPG developed draft text.

2008-05 SC revised draft text and approved for consultation.

2008-06 Consultation.

2008-11 SC revised draft text for adoption.

2009-03 CPM-4 adopted Appendix 1 to ISPM 5.

ISPM 5. Appendix 1 *Terminology of the Convention on Biological Diversity in relation to the Glossary of phytosanitary terms* (2009).

Ink amendments

2010-03 CPM-5 noted and IPPC Secretariat applied ink amendments to Supplement 1 (English version).

2011-03 CPM-6 noted and IPPC Secretariat applied ink amendments to: “efficacy (of a treatment)”, “establishment”, “introduction”, “spread”, “regulated area”, “consignment”, “inspection”, “quarantine”, and Supplement 1, 4 (English version).

2013-03 CPM-8 noted and IPPC Secretariat applied ink amendments to: “release (into the environment)”, “corrective action plan (in an area)”, “endangered area”, “official control”, “pest risk (for quarantine pests)”, “pest risk (for regulated non-quarantine pests)”, “pest risk assessment (for quarantine pests)”, “pest risk assessment (for regulated non-quarantine pests)”, “pest risk management (for regulated non-quarantine pests)”, “phytosanitary measure”, “plant quarantine”, “phytosanitary regulation”, “regulated area”, “regulated non-quarantine pest”, and Supplement 2 (English version).

2015-03 CPM-10 noted and IPPC Secretariat applied ink amendments to the terms: “bulbs and tubers”, “cut flowers and branches”, “fruits and vegetables”, “grain”, “plants in vitro”, “seeds”, “wood”.

2015-05 IPPC Secretariat corrected a mistake introduced in the definition of “pest free area” and “area of low pest prevalence”.

2016-04 IPPC Secretariat adjusted the sources of definitions to not include “revision” for ink amendments following TPG 2015-12 decision.

2017-04 CPM noted and IPPC Secretariat applied ink amendments to the term “practically free” and to replace “protected area” with “regulated area”, as appropriate.

2018-04 CPM noted and IPPC Secretariat applied ink amendment to the term “detention”.

Publication history last updated: 2021-04

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Adoption

This standard was first recommended for publication as an international standard by the FAO Committee of Experts on Phytosanitary Measures in 1996, and published in 1997. The first version of the Glossary as ISPM 5 was adopted by the Second Session of the Interim Commission on Phytosanitary Measures in 1999. It has undergone repeated modifications since then. The current edition of ISPM 5 arises from amendments adopted by the Fifteenth Session of the Commission on Phytosanitary Measures in March 2021.

Supplement 1 was first adopted by the Third Session of the Interim Commission on Phytosanitary Measures in April 2001. The first revision of Supplement 1 was adopted by the Seventh Session of the Commission on Phytosanitary Measures in March 2012. Supplement 2 was adopted by the Fifth Session of the Interim Commission on Phytosanitary Measures in April 2003. Appendix 1 was adopted by the Fourth Session of the Commission on Phytosanitary Measures in March–April 2009.

INTRODUCTION

Scope

This reference standard is a listing of terms and definitions with specific meaning for phytosanitary systems worldwide. It has been developed to provide a harmonized internationally agreed vocabulary associated with the implementation of the International Plant Protection Convention (IPPC) and International Standards for Phytosanitary Measures (ISPMs).

Within the context of the IPPC and its ISPMs, all references to plants should be understood to continue to include algae and fungi, consistent with the International Code of Nomenclature for algae, fungi, and plants.

Purpose

The purpose of this reference standard is to increase clarity and consistency in the use and understanding of terms and definitions which are used by contracting parties for official phytosanitary purposes, in phytosanitary legislation and regulations, as well as for official information exchange.

References

The references below correspond to the approval of terms and definitions, as indicated in the definitions. For ISPMs, they do not indicate the most recent version (which is available on the IPP at <https://www.ippc.int/core-activities/standards-setting/ispm>).

CBD. 2000. *Cartagena Protocol on Biosafety to the Convention on Biological Diversity*. Montreal, CBD.

CEPM. 1996. *Report of the Third Meeting of the FAO Committee of Experts on Phytosanitary Measures, Rome, 13–17 May 1996*. Rome, IPPC Secretariat, FAO.

—— 1997. *Report of the Fourth Meeting of the FAO Committee of Experts on Phytosanitary Measures, Rome, 6–10 October 1997*. Rome, IPPC Secretariat, FAO.

—— 1999. *Report of the Sixth Meeting of the Committee of Experts on Phytosanitary Measures, Rome, Italy: 17–21 May 1999*. Rome, IPPC Secretariat, FAO.

CPM. 2007. *Report of the Second Session of the Commission on Phytosanitary Measures, Rome, 26–30 March 2007*. Rome, IPPC Secretariat, FAO.

—— 2008. *Report of the Third Session of the Commission on Phytosanitary Measures, Rome, 7–11 April 2008*. Rome, IPPC Secretariat, FAO.

—— 2009. *Report of the Fourth Session of the Commission on Phytosanitary Measures, Rome, 30 March–3 April 2009*. Rome, IPPC Secretariat, FAO.

- 2012. *Report of the Seventh Session of the Commission on Phytosanitary Measures, Rome, 19–23 March 2012*. Rome, IPPC Secretariat, FAO.
- 2013. *Report of the Eighth Session of the Commission on Phytosanitary Measures, 8–12 April 2013*. Rome, IPPC Secretariat, FAO.
- 2015. *Report of the Tenth Session of the Commission on Phytosanitary Measures, Rome, 16–20 March 2015*. Rome, IPPC Secretariat, FAO.
- 2016. *Report of the Eleventh Session of the Commission on Phytosanitary Measures, Rome, 4–8 March 2016*. Rome, IPPC Secretariat, FAO.
- 2018. *Report of the Thirteenth Session of the Commission on Phytosanitary Measures, Rome, 16–20 April 2018*. Rome, IPPC Secretariat, FAO.
- 2019. *Report of the Fourteenth Session of the Commission on Phytosanitary Measures, Rome, 1–5 April 2019*. Rome, IPPC Secretariat, FAO.
- 2021. *Report of the Fifteenth Session of the Commission on Phytosanitary Measures, Rome, 16 March, 18 March and 1 April 2021*. Rome, IPPC Secretariat, FAO.
- FAO.** 1990. FAO Glossary of phytosanitary terms. *FAO Plant Protection Bulletin*, 38(1): 5–23. [current equivalent: ISPM 5]
- FAO.** 1995. *See ISPM 5, 1995.*
- ICPM.** 1998. *Report of the Interim Commission on Phytosanitary Measures, Rome, 3–6 November 1998*. Rome, IPPC Secretariat, FAO.
- 2001. *Report of the Third Interim Commission on Phytosanitary Measures, Rome, 2–6 April 2001*. Rome, IPPC Secretariat, FAO.
- 2002. *Report of the Fourth Interim Commission on Phytosanitary Measures, Rome, 11–15 March 2002*. Rome, IPPC Secretariat, FAO.
- 2003. *Report of the Fifth Interim Commission on Phytosanitary Measures, Rome, 07–11 April 2003*. Rome, IPPC Secretariat, FAO.
- 2005. *Report of the Seventh Interim Commission on Phytosanitary Measures, Rome, 4–7 April 2005*. Rome, IPPC Secretariat, FAO.
- IPPC.** 1997. *International Plant Protection Convention*. Rome, IPPC Secretariat, FAO.
- ISO/IEC.** 1991. *ISO/IEC Guide 2:1991, General terms and their definitions concerning standardization and related activities*. Geneva, International Organization for Standardization, International Electrotechnical Commission.
- ISPM 2.** 2007. *Framework for pest risk analysis*. Rome, IPPC Secretariat, FAO.
- ISPM 3.** 1995. *Code of conduct for the import and release of exotic biological control agents*. Rome, IPPC Secretariat, FAO. [published 1996]
- ISPM 3.** 2005. *Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms*. Rome, IPPC Secretariat, FAO.
- ISPM 5.** 1995. *Glossary of phytosanitary terms*. Rome, IPPC Secretariat, FAO. [published 1996]
- ISPM 8.** 1998. *Determination of pest status in an area*. Rome, IPPC Secretariat, FAO.
- ISPM 10.** 1999. *Requirements for the establishment of pest free places of production and pest free production sites*. Rome, IPPC Secretariat, FAO.
- ISPM 11.** 2001. *Pest risk analysis for quarantine pests*. Rome, IPPC Secretariat, FAO.
- ISPM 11.** 2004. *Pest risk analysis for quarantine pests including analysis of environmental risks and living modified organisms*. Rome, IPPC Secretariat, FAO.
- ISPM 14.** 2002. *The use of integrated measures in a systems approach for pest risk management*. Rome, IPPC Secretariat, FAO.
- ISPM 15.** 2002. *Guidelines for regulating wood packaging material in international trade*. Rome, IPPC Secretariat, FAO.

- ISPM 16.** 2002. *Regulated non-quarantine pests: concept and application*. Rome, IPPC Secretariat, FAO.
- ISPM 17.** 2002. *Pest reporting*. Rome, IPPC Secretariat, FAO.
- ISPM 18.** 2003. *Guidelines for the use of irradiation as a phytosanitary measure*. Rome, IPPC Secretariat, FAO.
- ISPM 20.** 2004. *Guidelines for a phytosanitary import regulatory system*. Rome, IPPC Secretariat, FAO.
- ISPM 21.** 2004. *Pest risk analysis for regulated non-quarantine pests*. Rome, IPPC Secretariat, FAO.
- ISPM 22.** 2005. *Requirements for the establishment of areas of low pest prevalence*. Rome, IPPC Secretariat, FAO.
- ISPM 23.** 2005. *Guidelines for inspection*. Rome, IPPC Secretariat, FAO.
- ISPM 24.** 2005. *Guidelines for the determination and recognition of equivalence of phytosanitary measures*. Rome, IPPC Secretariat, FAO.
- ISPM 25.** 2006. *Consignments in transit*. Rome, IPPC Secretariat, FAO.
- ISPM 27.** 2006. *Diagnostic protocols for regulated pests*. Rome, IPPC Secretariat, FAO.
- ISPM 28.** 2007. *Phytosanitary treatments for regulated pests*. Rome, IPPC Secretariat, FAO.
- WTO.** 1994. *Agreement on the Application of Sanitary and Phytosanitary Measures*. Geneva, World Trade Organization.

Outline of reference

The purpose of this standard is to assist national plant protection organizations (NPPOs) and others in information exchange and the harmonization of vocabulary used in official communications and legislation pertaining to phytosanitary measures. The present version incorporates revisions agreed as a result of the approval of the International Plant Protection Convention (1997) and terms added through the adoption of additional International Standards for Phytosanitary Measures (ISPMs).

The Glossary contains all terms and definitions approved until the Fifteenth Session of the Commission on Phytosanitary Measures (CPM, 2021). References in square brackets refer to the approval of the term and definition, and not to subsequent adjustments in translation.

As in previous editions of the Glossary, terms in definitions are printed in bold to indicate their relation to other Glossary terms and to avoid unnecessary repetition of elements described elsewhere in the Glossary. Derived forms of words that appear in the Glossary (e.g. *inspected* from *inspection*) are also considered glossary terms.

PHYTOSANITARY TERMS AND DEFINITIONS

** Indicates that the term, at the time of publishing, is on the work programme of the Technical Panel for the Glossary which means the terms or definitions may be revised or deleted in the future.*

absorbed dose	Quantity of radiating energy absorbed per unit of mass of a specified target [ISPM 18, 2003; revised CPM, 2012]
additional declaration	A statement that is required by an importing country to be entered on a phytosanitary certificate and which provides specific additional information on a consignment in relation to regulated pests or regulated articles [FAO, 1990; revised ICPM, 2005; CPM, 2016]
area	An officially defined country, part of a country or all or parts of several countries [FAO, 1990; revised ISPM 2, 1995; CEPM, 1999; based on the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures (WTO, 1994)]
area endangered	See endangered area
area of low pest prevalence	An area , whether all of a country, part of a country, or all or parts of several countries, as identified by the competent authorities, in which a specific pest is present at low levels and which is subject to effective surveillance or control measures [IPPC, 1997; revised CPM, 2015]
bark	The layer of a woody trunk, branch or root outside the cambium [CPM, 2008]
bark-free wood	Wood from which all bark , except ingrown bark around knots and bark pockets between rings of annual growth, has been removed [ISPM 15, 2002; revised CPM, 2008]
biological control agent	A natural enemy , antagonist or competitor, or other organism, used for pest control [ISPM 3, 1995; revised ISPM 3, 2005]
buffer zone	An area surrounding or adjacent to an area officially delimited for phytosanitary purposes in order to minimize the probability of spread of the target pest into or out of the delimited area , and subject to phytosanitary or other control measures, if appropriate [ISPM 10, 1999; revised ISPM 22, 2005; CPM, 2007]
chemical pressure impregnation	Treatment of wood with a chemical preservative through a process of pressure in accordance with an official technical specification [ISPM 15, 2002; revised ICPM, 2005]
clearance (of a consignment)	Verification of compliance with phytosanitary regulations [FAO, 1995]
Commission	The Commission on Phytosanitary Measures established under Article XI [IPPC, 1997]
commodity	A type of plant , plant product , or other article being moved for trade or other purpose [FAO, 1990; revised ICPM, 2001]
commodity pest list	A list of pests present in an area which may be associated with a specific commodity [CEPM, 1996; revised CPM, 2015]

compliance procedure (for a consignment)	Official procedure used to verify that a consignment complies with phytosanitary import requirements or phytosanitary measures related to transit [CEPM, 1999; revised CPM, 2009]
consignment	A quantity of plants , plant products or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more commodities or lots) [FAO, 1990; revised ICPM, 2001]
consignment in transit	A consignment which passes through a country without being imported, and that may be subject to phytosanitary measures [FAO, 1990; revised CEPM, 1996; CEPM 1999; ICPM, 2002; ISPM 25, 2006; formerly “country of transit”]
containment	Application of phytosanitary measures in and around an infested area to prevent spread of a pest [FAO, 1995]
contaminating pest	A pest that is carried by a commodity , packaging , conveyance or container, or present in a storage place and that, in the case of plants and plant products , does not infest them [CEPM, 1996; revised CEPM, 1999; CPM, 2018]
contamination	Presence of a contaminating pest or unintended presence of a regulated article in or on a commodity , packaging , conveyance, container or storage place [CEPM, 1997; revised ICPM, 1999; CPM, 2018]
control (of a pest)	Suppression , containment or eradication of a pest population [FAO, 1995]
corrective action plan (in an area)	Documented plan of phytosanitary actions to be implemented in an area officially delimited for phytosanitary purposes if a pest is detected or a tolerance level is exceeded or in the case of faulty implementation of officially established procedures [CPM, 2009]
country of origin (of a consignment of plant products)	Country where the plants from which the plant products are derived were grown [FAO, 1990; revised CEPM, 1996; CEPM, 1999]
country of origin (of a consignment of plants)	Country where the plants were grown [FAO, 1990; revised CEPM, 1996; CEPM, 1999]
country of origin (of regulated articles other than plants and plant products)	Country where the regulated articles were first exposed to contamination by pests [FAO, 1990; revised CEPM, 1996; CEPM, 1999]
debarked wood	Wood that has been subjected to any process that results in the removal of bark . (Debarked wood is not necessarily bark-free wood .) [CPM, 2008; replacing “debarking”]
delimiting survey	Survey conducted to establish the boundaries of an area considered to be infested by or free from a pest [FAO, 1990]
detection survey*	Survey conducted in an area to determine if pests are present [FAO, 1990; revised FAO, 1995]

detention	Keeping a consignment in official custody or confinement, as a phytosanitary measure [FAO, 1990; revised FAO, 1995; CEPM, 1999; ICPM, 2005]
devitalization	A procedure rendering plants or plant products incapable of germination, growth or further reproduction [ICPM, 2001]
dose mapping	Measurement of the absorbed dose distribution within a process load through the use of dosimeters placed at specific locations within the process load [ISPM 18, 2003]
dunnage	Wood packaging material used to secure or support a commodity but which does not remain associated with the commodity [FAO, 1990; revised ISPM 15, 2002]
ecosystem	A dynamic complex of plant , animal and microorganism communities and their abiotic environment interacting as a functional unit [ISPM 3, 1995; revised ICPM, 2005]
efficacy (of a treatment)	A defined, measurable, and reproducible effect by a prescribed treatment [ISPM 18, 2003]
emergency action	A prompt phytosanitary action undertaken in a new or unexpected phytosanitary situation [ICPM, 2001]
emergency measure	A phytosanitary measure established as a matter of urgency in a new or unexpected phytosanitary situation. An emergency measure may or may not be a provisional measure [ICPM, 2001; revised ICPM, 2005]
endangered area	An area where ecological factors favour the establishment of a pest whose presence in the area will result in economically important loss [ISPM 2, 1995]
entry (of a consignment)	Movement through a point of entry into an area [FAO, 1995]
entry (of a pest)	Movement of a pest into an area where it is not yet present, or present but not widely distributed and being officially controlled [ISPM 2, 1995]
equivalence (of phytosanitary measures)	The situation where, for a specified pest risk, different phytosanitary measures achieve a contracting party's appropriate level of protection [FAO, 1995; revised CEPM, 1999; based on the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures (WTO, 1994); ISPM 24, 2005]
eradication	Application of phytosanitary measures to eliminate a pest from an area [FAO, 1990; revised FAO, 1995; formerly "eradicate"]
establishment (of a pest)	Perpetuation, for the foreseeable future, of a pest within an area after entry [FAO, 1990; revised ISPM 2, 1995; IPPC, 1997; formerly "established"]
exclusion (of a pest)	Application of phytosanitary measures to prevent the entry or establishment of a pest into an area [CPM, 2018]
field	A plot of land with defined boundaries within a place of production on which a commodity is grown [FAO, 1990]

find free	To inspect a consignment , field or place of production and consider it to be free from a specific pest [FAO, 1990]
free from (of a consignment , field or place of production)	Without pests (or a specific pest) in numbers or quantities that can be detected by the application of phytosanitary procedures [FAO, 1990; revised FAO, 1995; CEPM, 1999]
fresh	Living; not dried, deep-frozen or otherwise conserved [FAO, 1990]
fumigation	Treatment with a chemical agent that reaches the commodity wholly or primarily in a gaseous state [FAO, 1990; revised FAO, 1995]
germplasm	Plants intended for use in breeding or conservation programmes [FAO, 1990]
grain (as a commodity)	Seeds (in the botanical sense) for processing or consumption, but not for planting [FAO, 1990; revised ICPM, 2001; CPM, 2016; CPM, 2021]
growing medium	Any material in which plant roots are growing or intended for that purpose [FAO, 1990]
growing period	Period when a plant species actively grows in an area , place of production or production site [ICPM, 2003; revised CPM, 2019]
habitat	Part of an ecosystem with conditions in which an organism is naturally present or can establish [ICPM, 2005; revised CPM, 2015]
harmonization	The establishment, recognition and application by different countries of phytosanitary measures based on common standards [FAO, 1995; revised CEPM, 1999; based on the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures (WTO, 1994)]
harmonized phytosanitary measures	Phytosanitary measures established by contracting parties to the IPPC , based on international standards [IPPC, 1997]
heat treatment	The process in which a commodity is heated until it reaches a minimum temperature for a minimum period of time according to an official technical specification [ISPM 15, 2002; revised ICPM, 2005]
host pest list	A list of pests that infest a plant species, globally or in an area [CEPM, 1996; revised CEPM, 1999]
host range	Species capable, under natural conditions, of sustaining a specific pest or other organism [FAO, 1990; revised ISPM 3, 2005]
import permit	Official document authorizing importation of a commodity in accordance with specified phytosanitary import requirements [FAO, 1990; revised FAO, 1995; ICPM, 2005]
inactivation	Rendering microorganisms incapable of development [ISPM 18, 2003]
incidence (of a pest)*	Proportion or number of units in which a pest is present in a sample, consignment , field or other defined population [CPM, 2009]
incursion	An isolated population of a pest recently detected in an area , not known to be established , but expected to survive for the immediate future [ICPM, 2003]

infestation (of a commodity)	Presence in a commodity of a living pest of the plant or plant product concerned. Infestation includes infection [CEPM, 1997; revised CEPM, 1999]
inspection*	Official visual examination of plants , plant products or other regulated articles to determine if pests are present or to determine compliance with phytosanitary regulations [FAO, 1990; revised FAO, 1995; formerly “inspect”]
inspector	Person authorized by a national plant protection organization to discharge its functions [FAO, 1990]
integrity (of a consignment)*	Composition of a consignment as described by its phytosanitary certificate or other officially acceptable document, maintained without loss, addition or substitution [CPM, 2007]
intended use	Declared purpose for which plants , plant products or other articles are imported, produced or used [ISPM 16, 2002; revised CPM, 2009]
interception (of a consignment)	The refusal or controlled entry of an imported consignment due to failure to comply with phytosanitary regulations [FAO, 1990; revised FAO, 1995]
interception (of a pest)	The detection of a pest during inspection or testing of an imported consignment [FAO, 1990; revised CEPM, 1996]
intermediate quarantine	Quarantine in a country other than the country of origin or destination [CEPM, 1996]
International Plant Protection Convention	International Plant Protection Convention, as deposited with FAO in Rome in 1951 and as subsequently amended [FAO, 1990]
International Standard for Phytosanitary Measures	An international standard adopted by the Conference of FAO, the Interim Commission on Phytosanitary Measures or the Commission on Phytosanitary Measures, established under the IPPC [CEPM, 1996; revised CEPM, 1999]
international standards	International standards established in accordance with Article X paragraphs 1 and 2 of the IPPC [IPPC, 1997]
introduction (of a pest)	The entry of a pest resulting in its establishment [FAO, 1990; revised ISPM 2, 1995; IPPC, 1997]
inundative release	The release of large numbers of mass-produced biological control agents or beneficial organisms with the expectation of achieving a rapid effect [ISPM 3, 1995; revised ISPM 3, 2005]
IPPC	International Plant Protection Convention , as deposited in 1951 with FAO in Rome and as subsequently amended [FAO, 1990; revised ICPM, 2001]
irradiation	Treatment with any type of ionizing radiation [ISPM 18, 2003]
ISPM	International Standard for Phytosanitary Measures [CEPM, 1996; revised ICPM, 2001]

living modified organism	Any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology [Cartagena Protocol on Biosafety to the Convention on Biological Diversity (CBD, 2000)]
LMO	living modified organism [ISPM 11, 2004]
lot	A number of units of a single commodity , identifiable by its homogeneity of composition, origin etc., forming part of a consignment [FAO, 1990]
minimum absorbed dose (Dmin)	The localized minimum absorbed dose within the process load [ISPM 18, 2003]
modern biotechnology	The application of: <ol style="list-style-type: none"> in vitro nucleic acid techniques, including recombinant deoxyribonucleic acid (DNA) and direct injection of nucleic acid into cells or organelles; or fusion of cells beyond the taxonomic family, that overcome natural physiological reproductive or recombination barriers and that are not techniques used in traditional breeding and selection. [Cartagena Protocol on Biosafety to the Convention on Biological Diversity (CBD, 2000)]
monitoring	An official ongoing process to verify phytosanitary situations [CEPM, 1996]
monitoring survey	Ongoing survey to verify the characteristics of a pest population [ISPM 4, 1995]
national plant protection organization	Official service established by a government to discharge the functions specified by the IPPC [FAO, 1990; formerly “plant protection organization (national)”]
natural enemy	An organism which lives at the expense of another organism in its area of origin and which may help to limit the population of that organism. This includes parasitoids , parasites , predators , phytophagous organisms and pathogens [ISPM 3, 1995; revised ISPM 3, 2005]
non-quarantine pest	Pest that is not a quarantine pest for an area [FAO, 1995]
NPPO	National plant protection organization [FAO, 1990; ICPM, 2001]
official	Established, authorized or performed by a national plant protection organization [FAO, 1990]
official control	The active enforcement of mandatory phytosanitary regulations and the application of mandatory phytosanitary procedures with the objective of eradication or containment of quarantine pests or for the management of regulated non-quarantine pests [ICPM, 2001]
outbreak	A recently detected pest population, including an incursion , or a sudden significant increase of an established pest population in an area [FAO, 1995; revised ICPM, 2003]
packaging	Material used in supporting, protecting or carrying a commodity [ISPM 20, 2004]

parasite	An organism which lives on or in a larger organism, feeding upon it [ISPM 3, 1995]
parasitoid	An insect parasitic only in its immature stages, killing its host in the process of its development, and free living as an adult [ISPM 3, 1995]
pathogen	Microorganism causing disease [ISPM 3, 1995]
pathway	Any means that allows the entry or spread of a pest [FAO, 1990; revised FAO, 1995]
pest	Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products . Note: In the IPPC, “plant pest” is sometimes used for the term “pest” [FAO, 1990; revised ISPM 2, 1995; IPPC, 1997; CPM, 2012]
pest categorization	The process for determining whether a pest has or has not the characteristics of a quarantine pest or those of a regulated non-quarantine pest [ISPM 11, 2001]
pest diagnosis	The process of detection and identification of a pest [ISPM 27, 2006]
pest free area	An area in which a specific pest is absent as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained [ISPM 2, 1995; revised CPM, 2015]
pest free place of production	Place of production in which a specific pest is absent as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained for a defined period [ISPM 10, 1999; revised CPM, 2015]
pest free production site	A production site in which a specific pest is absent, as demonstrated by scientific evidence, and in which, where appropriate, this condition is being officially maintained for a defined period [ISPM 10, 1999; revised CPM, 2015]
pest record	A document providing information concerning the presence or absence of a specific pest at a particular location at a certain time, within an area (usually a country) under described circumstances [CEPM, 1997]
pest risk (for quarantine pests)	The probability of introduction and spread of a pest and the magnitude of the associated potential economic consequences [ISPM 2, 2007]
pest risk (for regulated non-quarantine pests)	The probability that a pest in plants for planting affects the intended use of those plants with an economically unacceptable impact [ISPM 2, 2007]
pest risk analysis (agreed interpretation)	The process of evaluating biological or other scientific and economic evidence to determine whether an organism is a pest , whether it should be regulated, and the strength of any phytosanitary measures to be taken against it [ISPM 2, 1995; revised IPPC, 1997; ISPM 2, 2007]
pest risk assessment (for quarantine pests)	Evaluation of the probability of the introduction and spread of a pest and the magnitude of the associated potential economic consequences [ISPM 2, 1995; revised ISPM 11, 2001; ISPM 2, 2007]

pest risk assessment (for regulated non-quarantine pests)	Evaluation of the probability that a pest in plants for planting affects the intended use of those plants with an economically unacceptable impact [ICPM, 2005]
pest risk management (for quarantine pests)	Evaluation and selection of options to reduce the risk of introduction and spread of a pest [ISPM 2, 1995; revised ISPM 11, 2001]
pest risk management (for regulated non-quarantine pests)	Evaluation and selection of options to reduce the risk that a pest in plants for planting causes an economically unacceptable impact on the intended use of those plants [ICPM, 2005]
pest status (in an area)	Presence or absence, at the present time, of a pest in an area , including where appropriate its distribution, as officially determined using expert judgement on the basis of current and historical pest records and other information [CEPM, 1997; revised ICPM, 1998]
PFA	Pest free area [ISPM 2, 1995; revised ICPM, 2001]
phytosanitary action	An official operation, such as inspection , testing , surveillance or treatment , undertaken to implement phytosanitary measures [ICPM, 2001; revised ICPM, 2005]
phytosanitary certificate	An official paper document or its official electronic equivalent, consistent with the model certificates of the IPPC , attesting that a consignment meets phytosanitary import requirements [FAO, 1990; revised CPM, 2012]
phytosanitary certification	Use of phytosanitary procedures leading to the issue of a phytosanitary certificate [FAO, 1990]
phytosanitary import requirements	Specific phytosanitary measures established by an importing country concerning consignments moving into that country [ICPM, 2005]
phytosanitary legislation	Basic laws granting legal authority to a national plant protection organization from which phytosanitary regulations may be drafted [FAO, 1990; revised FAO, 1995]
phytosanitary measure (agreed interpretation)	Any legislation , regulation or official procedure having the purpose to prevent the introduction or spread of quarantine pests , or to limit the economic impact of regulated non-quarantine pests [ISPM 4, 1995; revised IPPC, 1997; ICPM, 2002]

The agreed interpretation of the term phytosanitary measure accounts for the relationship of phytosanitary measures to regulated non-quarantine pests. This relationship is not adequately reflected in the definition found in Article II of the IPPC (1997).

phytosanitary procedure	Any official method for implementing phytosanitary measures including the performance of inspections , tests , surveillance or treatments in connection with regulated pests [FAO, 1990; revised FAO, 1995; CEPM, 1999; ICPM, 2001; ICPM, 2005]
phytosanitary regulation	Official rule to prevent the introduction or spread of quarantine pests , or to limit the economic impact of regulated non-quarantine pests , including establishment of procedures for phytosanitary certification [FAO, 1990; revised ISPM 4, 1995; CEPM, 1999; ICPM, 2001]

phytosanitary security (of a consignment)*	Maintenance of the integrity of a consignment and prevention of its infestation and contamination by regulated pests , through the application of appropriate phytosanitary measures [CPM, 2009]
place of production	Any premises or collection of fields operated as a single production or farming unit [FAO, 1990; revised CEPM, 1999; CPM, 2015]
plant products	Unmanufactured material of plant origin (including grain) and those manufactured products that, by their nature or that of their processing, may create a risk for the introduction and spread of pests [FAO, 1990; revised IPPC, 1997; formerly “plant product”]
plant protection organization (national)	See national plant protection organization
plant quarantine	All activities designed to prevent the introduction or spread of quarantine pests or to ensure their official control [FAO, 1990; revised FAO, 1995]
planting (including replanting)	Any operation for the placing of plants in a growing medium , or by grafting or similar operations, to ensure their subsequent growth, reproduction or propagation [FAO, 1990; revised CEPM, 1999]
plants	Living plants and parts thereof, including seeds and germplasm [FAO, 1990; revised IPPC, 1997]
plants for planting	Plants intended to remain planted , to be planted or replanted [FAO, 1990]
point of entry	Airport, seaport, land border point or any other location officially designated for the importation of consignments , or the entrance of persons [FAO, 1995; revised CPM, 2015]
post-entry quarantine	Quarantine applied to a consignment after entry [FAO, 1995]
PRA	Pest risk analysis [ISPM 2, 1995; revised ICPM, 2001]
PRA area	Area in relation to which a pest risk analysis is conducted [ISPM 2, 1995]
practically free (of a consignment , field , or place of production)	Without pests (or a specific pest) in numbers or quantities in excess of those that can be expected to result from, and be consistent with, good cultural and handling practices employed in the production and marketing of the commodity [FAO, 1990; revised FAO, 1995]
predator	A natural enemy that preys and feeds on other animal organisms, more than one of which are killed during its lifetime [ISPM 3, 1995]
process load	A volume of material with a specified loading configuration and treated as a single entity [ISPM 18, 2003]
processed wood material	Products that are a composite of wood constructed using glue, heat and pressure, or any combination thereof [ISPM 15, 2002]
production site	A defined part of a place of production , that is managed as a separate unit for phytosanitary purposes [CPM, 2015]

prohibition	A phytosanitary regulation forbidding the importation or movement of specified pests or commodities [FAO, 1990; revised FAO, 1995]
provisional measure	A phytosanitary regulation or procedure established without full technical justification owing to current lack of adequate information. A provisional measure is subjected to periodic review and full technical justification as soon as possible [ICPM, 2001]
quarantine	Official confinement of regulated articles , pests or beneficial organisms for inspection , testing , treatment , observation or research [FAO, 1990; revised ISPM 3, 1995; CEPM, 1999; CPM, 2018]
quarantine area*	An area within which a quarantine pest is present and is being officially controlled [FAO, 1990; revised FAO, 1995]
quarantine pest	A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled [FAO, 1990; revised FAO, 1995; IPPC 1997]
quarantine station	Official station for holding plants or plant products or other regulated articles , including beneficial organisms, in quarantine [FAO, 1990; revised FAO, 1995; formerly “quarantine station or facility”; CPM, 2015]
raw wood	Wood which has not undergone processing or treatment [ISPM 15, 2002]
re-exported consignment	Consignment that has been imported into a country from which it is then exported. The consignment may be stored, split up, combined with other consignments or have its packaging changed [FAO, 1990; revised CEPM, 1996; CEPM, 1999; ICPM, 2001; ICPM, 2002; formerly “country of re-export”]
reference specimen	Specimen, from a population of a specific organism, conserved and accessible for the purpose of identification, verification or comparison. [ISPM 3, 2005; revised CPM, 2009]
refusal	Forbidding entry of a consignment or other regulated article when it fails to comply with phytosanitary regulations [FAO, 1990; revised FAO, 1995]
regional plant protection organization	An intergovernmental organization with the functions laid down by Article IX of the IPPC [FAO, 1990; revised FAO, 1995; CEPM, 1999; formerly “plant protection organization (regional)”]
regional standards	Standards established by a regional plant protection organization for the guidance of the members of that organization [IPPC, 1997]
regulated area	An area into which, within which or from which plants , plant products and other regulated articles are subjected to phytosanitary measures [CEPM, 1996; revised CEPM, 1999; ICPM, 2001]

regulated article	Any plant , plant product , storage place, packaging , conveyance, container, soil and any other organism, object or material capable of harbouring or spreading pests , deemed to require phytosanitary measures , particularly where international transportation is involved [FAO, 1990; revised FAO, 1995; IPPC, 1997]
regulated non-quarantine pest	A non-quarantine pest whose presence in plants for planting affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party [IPPC, 1997]
regulated pest	A quarantine pest or a regulated non-quarantine pest [IPPC, 1997]
release (into the environment)	Intentional liberation of an organism into the environment [ISPM 3, 1995]
release (of a consignment)	Authorization for entry after clearance [FAO, 1995]
replanting	See planting
required response	A specified level of effect for a treatment [ISPM 18, 2003]
RNQP	Regulated non-quarantine pest [ISPM 16, 2002]
round wood	Wood not sawn longitudinally, carrying its natural rounded surface, with or without bark [FAO, 1990]
RPPO	Regional plant protection organization [FAO, 1990; revised ICPM, 2001]
sawn wood	Wood sawn longitudinally, with or without its natural rounded surface with or without bark [FAO, 1990]
Secretary	Secretary of the Commission appointed pursuant to Article XII [IPPC, 1997]
seeds (as a commodity)	Seeds (in the botanical sense) for planting [FAO, 1990; revised ICPM, 2001; CPM, 2016; CPM, 2021]
SIT	sterile insect technique [ISPM 3, 2005]
spread (of a pest)	Expansion of the geographical distribution of a pest within an area [ISPM 2, 1995]
standard	Document established by consensus and approved by a recognized body that provides for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context [FAO, 1995; ISO/IEC Guide 2:1991 definition]
sterile insect	An insect that, as a result of a specific treatment, is unable to reproduce [ISPM 3, 2005]
sterile insect technique	Method of pest control using area-wide inundative release of sterile insects to reduce reproduction in a field population of the same species [ISPM 3, 2005]

stored product	Unmanufactured plant product intended for consumption or processing, stored in a dried form (this includes in particular grain and dried fruits and vegetables) [FAO, 1990]
suppression	The application of phytosanitary measures in an infested area to reduce pest populations [FAO, 1995; revised CEPM, 1999]
surveillance	An official process which collects and records data on pest presence or absence by survey , monitoring or other procedures [CEPM, 1996; revised CPM, 2015]
survey (of pests)	An official procedure conducted over a defined period to determine the presence or absence of pests , or the boundaries or characteristics of a pest population, in an area , place of production or production site [FAO, 1990; revised CEPM, 1996; CPM, 2015; CPM, 2019]
systems approach	A pest risk management option that integrates different measures, at least two of which act independently, with cumulative effect [ISPM 14, 2002; revised ICPM, 2005; CPM, 2015]
technically justified	Justified on the basis of conclusions reached by using an appropriate pest risk analysis or, where applicable, another comparable examination and evaluation of available scientific information [IPPC, 1997]
test	Official examination of plants , plant products or other regulated articles , other than visual, to determine if pests are present, identify pests or determine compliance with specific phytosanitary requirements [FAO, 1990; revised CPM, 2018]
tolerance level (of a pest)	Incidence of a pest specified as a threshold for action to control that pest or to prevent its spread or introduction [CPM, 2009]
transience	Presence of a pest that is not expected to lead to establishment [ISPM 8, 1998]
transit	See consignment in transit
transparency	The principle of making available, at the international level, phytosanitary measures and their rationale [FAO, 1995; revised CEPM, 1999; based on the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures (WTO, 1994)]
treatment (as a phytosanitary measure)	Official procedure for killing, inactivating, removing, rendering infertile or devitalizing regulated pests [FAO, 1990; revised FAO, 1995; ISPM 15, 2002; ISPM 18, 2003; ICPM, 2005; CPM, 2021]
treatment schedule	The critical parameters of a treatment which need to be met to achieve the intended outcome (i.e. the killing, inactivation or removal of pests , or rendering pests infertile, or devitalization) at a stated efficacy [ISPM 28, 2007]
visual examination	Examination using the unaided eye, lens, stereoscope or other optical microscope [ISPM 23, 2005; revised CPM, 2018]

wood (as a commodity)	Commodities such as round wood , sawn wood , wood chips and wood residue, with or without bark , excluding wood packaging material , processed wood material , and bamboo and rattan products [FAO, 1990; revised ICPM, 2001; CPM, 2016; CPM, 2021]
wood packaging material	Wood or wood products (excluding paper products) used in supporting, protecting or carrying a commodity (includes dunnage) [ISPM 15, 2002]

This supplement was first adopted by the Third Session of the Interim Commission on Phytosanitary Measures in April 2001. The first revision of this supplement was adopted by the Seventh Session of the Commission on Phytosanitary Measures in March 2012.

The supplement is a prescriptive part of the standard.

SUPPLEMENT 1: Guidelines on the interpretation and application of the concepts of “official control” and “not widely distributed”

INTRODUCTION

Scope

This supplement provides guidance on:

- the official control of regulated pests; and
- determination of when a pest is considered to be present but not widely distributed, for the decision on whether a pest qualifies as a quarantine pest.

References

The present standard refers to ISPMs. ISPMs are available on the International Phytosanitary Portal (IPP – www.IPPC.int).

Definition

Official control is defined as:

The active enforcement of mandatory phytosanitary regulations and the application of mandatory phytosanitary procedures with the objective of eradication or containment of quarantine pests or for the management of regulated non-quarantine pests.

BACKGROUND

The words “present but not widely distributed and being officially controlled” express an essential concept in the definition of quarantine pest. According to that definition, a quarantine pest must always be of potential economic importance to an endangered area. In addition, it must either meet the criterion of not being present in that area or it must meet the combined criteria of being present but not widely distributed and subject to official control.

The *Glossary of phytosanitary terms* defines official as “established, authorized or performed by an NPPO” and control as “suppression, containment or eradication of a pest population”. However, for phytosanitary purposes, the concept of *official control* is not adequately expressed by the combination of these two definitions.

The purpose of this supplement is to describe more precisely the interpretation of:

- the concept of official control and its application in practice for quarantine pests that are present in an area as well as for regulated non-quarantine pests; and
- the concept of “present but not widely distributed and under official control” for quarantine pests.

“Not widely distributed” is not a term included in the description of pest status listed in ISPM 8.

REQUIREMENTS

1. General requirements

Official control is subject to ISPM 1, in particular the principles of non-discrimination, transparency, equivalence of phytosanitary measures and pest risk analysis.

1.1 Official control

Official control includes:

- eradication and/or containment in the infested area(s);
- surveillance in the endangered area(s);
- restrictions related to the movement into and within the regulated area(s) including phytosanitary measures applied at import.

All official control programmes have elements that are mandatory. At minimum, programme evaluation and pest surveillance are required in official control programmes to determine the need for and effect of control to justify phytosanitary measures applied at import for the same purpose. Phytosanitary measures applied at import should be consistent with the principle of non-discrimination (see section 2.2 below).

For quarantine pests, eradication and containment may have an element of suppression. For regulated non-quarantine pests, suppression may be used to avoid unacceptable economic impact as it applies to the intended use of plants for planting.

1.2 Not widely distributed

“Not widely distributed” is a concept referring to a pest’s occurrence and distribution within an area. A pest may be categorized as present and widely distributed in an area or not widely distributed, or absent. In pest risk analysis (PRA), the determination of whether a pest is not widely distributed is carried out in the pest categorization step. Transience means that a pest is not expected to establish and therefore is not relevant to the concept of “not widely distributed”.

In the case of a quarantine pest that is present but not widely distributed, the importing country should define the infested area(s) and the endangered area(s). When a quarantine pest is considered not widely distributed, this means that the pest is limited to parts of its potential distribution and there are areas free from the pest that are at risk of economic loss from its introduction or spread. These endangered areas do not need to be contiguous but may consist of several distinct parts. In order to justify the statement of a pest being not widely distributed, a description and delimitation of the endangered areas should be made available if requested. There is a degree of uncertainty attached to any categorization of distribution. The categorization may also change over time.

The area in which the pest is not widely distributed should be the same as the area for which the economic impact applies (i.e. the endangered area) and where the pest is under or being considered for official control. The decision that a pest is a quarantine pest, including consideration of its distribution, and placing that pest under official control, is typically made with respect to an entire country. However, in some instances it may be more appropriate to regulate a pest as a quarantine pest in parts of a country rather than in the whole country. It is the potential economic importance of the pest for those parts that has to be considered in determining phytosanitary measures. Examples of when this may be appropriate are countries whose territories include one or more islands or other cases where there are natural or artificially created barriers to pest establishment and spread, such as large countries in which specified crops are restricted by climate to well-defined areas.

1.3 Decision to apply official control

A national plant protection organization (NPPO) may choose whether or not to officially control a pest of potential economic importance that is present but not widely distributed, taking into account relevant factors from PRA, for example the costs and benefits of regulating the specific pest, and the technical and logistical ability to control the pest within the defined area. If the pest is not subjected to official control, it does not then qualify as a quarantine pest.

2. Specific requirements

The specific requirements to be met relate to pest risk analysis, technical justification, non-discrimination, transparency, enforcement, mandatory nature of official control, area of application, and NPPO authority and involvement in official control.

2.1 Technical justification

Domestic requirements and phytosanitary import requirements should be technically justified and result in non-discriminatory phytosanitary measures.

Application of the definition of a quarantine pest requires knowledge of potential economic importance, potential distribution and official control programmes (ISPM 2). The categorization of a pest as present and widely distributed or present but not widely distributed is determined in relation to its potential distribution. This potential distribution represents the areas where the pest could become established if given the opportunity, i.e. its hosts are present and environmental factors such as climate and soil are favourable. ISPM 11 provides guidance on the factors to be considered in assessing the probability of establishment and spread when conducting a pest risk analysis. In the case of a pest that is present but not widely distributed, the assessment of potential economic importance should relate to the areas where the pest is not established.

Surveillance should be used to determine the distribution of a pest in an area as a basis for the further consideration of whether the pest is not widely distributed. ISPM 6 provides guidance on surveillance, and includes provisions on transparency. Biological factors such as pest life cycle, means of dispersal and rate of reproduction may influence the design of surveillance programmes, the interpretation of survey data and the level of confidence in the categorization of a pest as not widely distributed. The distribution of a pest in an area is not a static condition. Changing conditions or new information may necessitate reconsideration of whether a pest is not widely distributed.

2.2 Non-discrimination

The principle of non-discrimination between domestic requirements and phytosanitary import requirements is fundamental. In particular, requirements for imports should not be more stringent than the effect of official control in an importing country. There should therefore be consistency between domestic requirements and phytosanitary import requirements for a defined pest:

- Import requirements should not be more stringent than domestic requirements.
- Domestic and import requirements should be the same or have an equivalent effect.
- Mandatory elements of domestic and import requirements should be the same.
- The intensity of inspection of imported consignments should be the same as equivalent processes in domestic control programmes.
- In the case of non-compliance, the same or equivalent phytosanitary actions should be taken on imported consignments as are taken domestically.
- If a tolerance level is applied within a domestic official control programme, the same tolerance level should be applied to equivalent imported material. In particular, if no action is taken in the domestic official control programme because the pest incidence does not exceed the tolerance level concerned, then no action should be taken for an imported consignment if the pest incidence does not exceed that same tolerance level. Compliance with import tolerance levels is generally determined by inspection or testing at entry, whereas compliance with the tolerance level for domestic consignments should be determined at the last point where official control is applied.
- If downgrading or reclassifying is permitted within a domestic official control programme, similar options should be available for imported consignments.

2.3 Transparency

Domestic requirements for official control and the phytosanitary import requirements should be documented and made available, on request.

2.4 Enforcement

The domestic enforcement of official control programmes should be equivalent to the enforcement of phytosanitary import requirements. Enforcement should include:

- a legal basis;
- operational implementation;
- evaluation and review;
- phytosanitary action in the case of non-compliance.

2.5 Mandatory nature of official control

Official control is mandatory in the sense that all persons involved are legally bound to perform the actions required. The scope of official control programmes for quarantine pests is completely mandatory (e.g. procedures for eradication campaigns), whereas the scope for regulated non-quarantine pests is mandatory only in certain circumstances (e.g. official certification programmes).

2.6 Area of application

An official control programme can be applied at national, subnational or local area level. The area of application of official control measures should be specified. Any phytosanitary import requirements should have the same effect as the domestic requirements for official control.

2.7 NPPO authority and involvement in official control

Official control should:

- be established or recognized by the contracting party or the NPPO under appropriate legislative authority;
- be performed, managed, supervised or, at minimum, audited/reviewed by the NPPO;
- have enforcement assured by the contracting party or the NPPO;
- be modified, terminated or lose official recognition by the contracting party or the NPPO.

Responsibility and accountability for official control programmes rests with the contracting party. Agencies other than the NPPO may be responsible for aspects of official control programmes, and certain aspects of official control programmes may be the responsibility of subnational authorities or the private sector. The NPPO should be fully aware of all aspects of official control programmes in its country.

This supplement was adopted by the Fifth Session of the Interim Commission on Phytosanitary Measures in April 2003.

The supplement is a prescriptive part of the standard.

SUPPLEMENT 2: Guidelines on the understanding of “potential economic importance” and related terms including reference to environmental considerations

1. Purpose and scope

These guidelines provide the background and other relevant information to clarify *potential economic importance* and related terms, so that such terms are clearly understood and their application is consistent with the International Plant Protection Convention (IPPC) and the International Standards for Phytosanitary Measures (ISPMs). These guidelines also show the application of certain economic principles as they relate to the IPPC’s objectives, in particular in protecting uncultivated/unmanaged plants, wild flora, habitats and ecosystems with respect to invasive alien species that are pests.

These guidelines clarify that the IPPC:

- can account for environmental concerns in economic terms using monetary or non-monetary values;
- asserts that market impacts are not the sole indicator of pest impact;
- maintains the right of contracting parties to adopt phytosanitary measures with respect to pests for which the economic damage caused to plants, plant products or ecosystems within an area cannot be easily quantified.

They also clarify, with respect to pests, that the scope of the IPPC covers the protection of cultivated plants in agriculture, horticulture and forestry, uncultivated/unmanaged plants, wild flora, habitats and ecosystems.

2. Background

The IPPC has historically maintained that the adverse consequences of pests, including those concerning uncultivated/unmanaged plants, wild flora, habitats and ecosystems, are measured in economic terms. References to the terms *economic effects*, *economic impacts*, *potential economic importance* and *economically unacceptable impact* and the use of the word *economic* in the IPPC and in ISPMs has resulted in some misunderstanding of the application of such terms and of the focus of the IPPC.

The scope of the Convention applies to the protection of wild flora resulting in an important contribution to the conservation of biological diversity. However, it has been misinterpreted that the IPPC is only commercially focused and limited in scope. It has not been clearly understood that the IPPC can account for environmental concerns in economic terms. This has created issues of consistency with other agreements, including the Convention on Biological Diversity and the Montreal Protocol on Substances that Deplete the Ozone Layer.

3. Economic terms and environmental scope of the IPPC and ISPMs

The economic terms found in the IPPC and ISPMs may be categorized as follows.

Terms requiring judgement to support policy decisions:

- potential economic importance (in the definition for quarantine pest);
- economically unacceptable impact (in the definition for regulated non-quarantine pest);
- economically important loss (in the definition for endangered area).

Terms related to evidence that supports the above judgements:

- limit the economic impact (in the definition for phytosanitary regulation and the agreed interpretation of phytosanitary measure);
- economic evidence (in the definition for pest risk analysis);

- *cause economic damage* (in Article VII.3 of the IPPC, 1997);
- direct and indirect *economic impacts* (in ISPM 11 and ISPM 16);
- economic consequences and potential economic consequences (in ISPM 11);
- commercial consequences and non-commercial consequences (in ISPM 11).

ISPM 11 notes in section 2.1.1.5 with respect to pest categorization, that there should be a clear indication that the pest is likely to have an unacceptable economic impact, including environmental impact, in the PRA area. Section 2.3 of the standard describes the procedure for assessing potential economic consequences of a pest introduction. Pest effects may be considered to be direct or indirect. Section 2.3.2.2 addresses analysis of commercial consequences. Section 2.3.2.4 provides guidance on the assessment of the non-commercial and environmental consequences of pest introduction. It acknowledges that certain types of effects may not apply to an existing market that can be easily identified, but it goes on to state that the impacts could be approximated with an appropriate non-market valuation method. This section notes that if a quantitative measurement is not feasible, then this part of the assessment should at least include a qualitative analysis and an explanation of how the information is used in the PRA. Environmental or other undesirable effects of control measures are covered in section 2.3.1.2 (Indirect pest effects) as part of the analysis of potential economic consequences. Where a pest risk is found to be unacceptable, section 3.4 provides guidance on the selection of pest risk management options, including measurements of cost-effectiveness, feasibility and least trade restrictiveness.

In April 2001 the ICPM recognized that under the IPPC's existing mandate, to take account of environmental concerns, further clarification should include consideration of the following five proposed points relating to potential environmental risks of pests:

- reduction or elimination of endangered (or threatened) native plant species;
- reduction or elimination of a keystone plant species (a species which plays a major role in the maintenance of an ecosystem);
- reduction or elimination of a plant species which is a major component of a native ecosystem;
- causing a change to plant biological diversity in such a way as to result in ecosystem destabilization;
- resulting in control, eradication or management programmes that would be needed if a quarantine pest was introduced, and impacts of such programmes (e.g. pesticides, non-indigenous predators or parasites) on biological diversity.

Thus it is clear, with respect to plant pests, that the scope of the IPPC covers the protection of cultivated plants in agriculture, horticulture and forestry, uncultivated/unmanaged plants, wild flora, habitats and ecosystems.

4. Economic considerations in PRA

4.1 Types of economic effect

In PRA, economic effects should not be interpreted to be only market effects. Goods and services not sold in commercial markets can have economic value, and economic analysis encompasses much more than the study of market goods and services. The use of the term *economic effects* provides a framework in which a wide variety of effects (including environmental and social effects) may be analysed. Economic analysis uses a monetary value as a measure to allow policy makers to compare costs and benefits from different types of goods and services. This does not preclude the use of other tools such as qualitative and environmental analyses that may not use monetary terms.

4.2 Costs and benefits

A general economic test for any policy is to pursue the policy if its benefit is at least as large as its cost. Costs and benefits are broadly understood to include both market and non-market aspects. Costs and benefits can be represented by both quantifiable measurements and qualitative measurements. Non-

market goods and services may be difficult to quantify or measure but nevertheless are essential to consider.

Economic analysis for phytosanitary purposes can only provide information with regard to costs and benefits, and does not judge if one distribution is necessarily better than another distribution of costs and benefits of a specific policy. In principle, costs and benefits should be measured regardless to whom they occur. Given that judgements about the preferred distribution of costs and benefits are policy choices, these should have a rational relationship to phytosanitary considerations.

Costs and benefits should be counted whether they occur as a direct or indirect result of a pest introduction or if a chain of causation is required before the costs are incurred or the benefits realized. Costs and benefits associated with indirect consequences of pest introductions may be less certain than costs and benefits associated with direct consequences. Often, there is no monetary information about the cost of any loss that may result from pests introduced into natural environments. Any analysis should identify and explain uncertainties involved in estimating costs and benefits and assumptions should be clearly stated.

5. Application

The following criteria¹ should be met before a pest is deemed to have *potential economic importance*:

- a potential for introduction in the PRA area;
- the potential to spread after establishment;
- a potential harmful impact on plants, for example:
 - crops (for example loss of yield or quality),
 - the environment, for example damage to ecosystems, habitats or species,
 - some other specified value, for example recreation, tourism, aesthetics.

As stated in section 3, environmental damage, arising from the introduction of a pest, is one of the types of damage recognized by the IPPC. Thus, with respect to the third criterion above, contracting parties to the IPPC have the right to adopt phytosanitary measures even with respect to a pest that only has the potential for environmental damage. Such action should be based upon a pest risk analysis that includes the consideration of evidence of potential environmental damage. When indicating the direct and indirect impact of pests on the environment, the nature of the harm or losses arising from a pest introduction should be specified in pest risk analysis.

In the case of regulated non-quarantine pests, because such pest populations are already established, introduction in an area of concern and environmental effects are not relevant criteria in the consideration of *economically unacceptable impacts* (see ISPM 16 and ISPM 21).

¹ With respect to the first and second criteria, IPPC (1997) Article VII.3 states that for pests that may not be capable of establishment, measures taken against these pests must be technically justified.

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

APPENDIX TO SUPPLEMENT 2

This appendix provides additional clarification of some terms used in this supplement.

Economic analysis: It primarily uses monetary values as a measure to allow policy makers to compare costs and benefits from different types of goods and services. It encompasses more than the study of market goods and services. Economic analysis does not prevent the use of other measures that do not use a monetary value; for example, qualitative or environmental analysis.

Economic effects: This includes market effects as well as non-market effects, such as environmental and social considerations. Measurement of the economic value of environmental effects or social effects may be difficult to establish. For example, the survival and well-being of another species or the value of the aesthetics of a forest or a jungle. Both qualitative and quantitative worth may be considered in measuring economic effects.

Economic impacts of plant pests: This includes both market measures as well as those consequences that may not be easy to measure in direct economic terms, but which represent a loss or damage to cultivated plants, uncultivated plants or plant products.

Economic value: This is the basis for measuring the cost of the effect of changes (e.g. in biodiversity, ecosystems, managed resources or natural resources) on human welfare. Goods and services not sold in commercial markets can have economic value. Determining economic value does not prevent ethical or altruistic concerns for the survival and well-being of other species based on cooperative behaviour.

Qualitative measurement: This is the valuation of qualities or characteristics in other than monetary or numeric terms.

Quantitative measurement: This is the valuation of qualities or characteristics in monetary or other numeric terms.

This appendix was adopted by the Fourth Session of the Commission on Phytosanitary Measures in March–April 2009.

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

APPENDIX 1: Terminology of the Convention on Biological Diversity in relation to the Glossary of phytosanitary terms

1. Introduction

Since 2001, it has been made clear that the scope of the IPPC extends to risks arising from pests that primarily affect the environment and biological diversity, including harmful plants. The Technical Panel for the Glossary, which reviews ISPM 5 (*Glossary of phytosanitary terms*, hereinafter referred to as the Glossary), therefore examined the possibility of adding new terms and definitions to the standard to cover this area of concern. In particular, it considered the terms and definitions that are in use by the Convention on Biological Diversity (CBD)*, with a view to adding them to the Glossary, as has previously been done in several cases for the terminology of other intergovernmental organizations.

However, study of the terms and definitions available from the CBD has shown that they are based on concepts different from those of the IPPC, so that similar terms are given distinctly different meanings. The CBD terms and definitions could not accordingly be used directly in the Glossary. It was decided instead to present these terms and definitions in the present Appendix to the Glossary, providing explanations of how they differ from IPPC terminology.

This Appendix is not intended to provide a clarification of the scope of the CBD, nor of the scope of the IPPC.

2. Presentation

In relation to each term considered, the CBD definition is first provided. This is placed alongside an “Explanation in IPPC context”, in which, as usual, Glossary terms (or derived forms of Glossary terms) are shown in **bold**. These explanations may also include CBD terms, in which case these are also in **bold** and followed by “(CBD)”. The explanations constitute the main body of this Appendix. Each is followed by notes, providing further clarification of some of the difficulties.

3. Terminology

3.1 “Alien species”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
A species, subspecies or lower taxon, introduced outside its natural past ¹ or present distribution; includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce	An alien² species (CBD) is an individual ³ or population, at any life stage, or a viable part of an organism that is non-indigenous to an area and that has entered⁴ by human agency ⁵ into the area

Notes:

¹ The qualification concerning “past and present” distribution is not relevant for IPPC purposes, since the IPPC is concerned only with existing situations. It does not matter that the species was present in the past if it is present now. The word “past” in the CBD definition presumably allows for the re-introduction of a species into an area where it has recently become extinct and thus a reintroduced species would presumably not be considered an alien species.

² “Alien” refers only to the location and distribution of an organism compared with its natural range. It does not imply that the organism is harmful.

* The terms and definitions discussed in this document have resulted from discussion on invasive alien species by the Parties of the Convention on Biological Diversity (Secretariat of the Convention on Biological Diversity).

³ The CBD definition emphasizes the physical presence of individuals of a species at a certain time, whereas the IPPC concept of occurrence relates to the geographical distribution of the taxon in general.

⁴ For CBD purposes, an alien species is already present in the **area** that is not within its native distribution (see **Introduction** below). The IPPC is more concerned with organisms that are not yet present in the area of concern (i.e. quarantine pests). The term “alien” is not appropriate for them, and terms such as “exotic”, “non-indigenous” or “non-native” have been used in ISPMs. To avoid confusion, it would be preferable to use only one of these terms, in which case “non-indigenous” would be suitable, especially as it can accompany its opposite “indigenous”. “Exotic” is not suitable because it presents translation problems.

⁵ A species that is non-indigenous and has entered an **area** through natural means is not an **alien species (CBD)**. It is simply extending its natural range. For **IPPC** purposes, such a species could still be considered as a potential **quarantine pest**.

3.2 “Introduction”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
The movement by human agency, indirect or direct, of an alien species ⁶ outside of its natural range (past or present). This movement can be either within a country or between countries or areas beyond national jurisdiction ⁷	The entry of a species into an area where it is non-indigenous , through movement by human agency, either directly from an area where the species is indigenous, or indirectly ⁸ (by successive movement from an area where the species is indigenous through one or several areas where it is not)

Notes:

⁶ The CBD definition suggests that **introduction (CBD)** concerns an **alien species (CBD)**, and thus a species that has already entered the area. However, it may be supposed, on the basis of other documents made available by CBD, that this is not so, and that a non-indigenous species entering for the first time is being **introduced (CBD)**. For CBD, a species can be **introduced (CBD)** many times, but for IPPC a species, once established, cannot be **introduced** again.

⁷ The issue of “areas beyond national jurisdiction” is not relevant for the IPPC.

⁸ In the case of indirect movement, it is not specifically stated in the definition whether all the movements from one **area** to another must be **introductions (CBD)** (i.e. by human agency, intentional or unintentional), or whether some can be by natural movement. This question arises, for example, where a species is **introduced (CBD)** into one **area** and then moves naturally to an adjoining **area**. It seems that this may be considered as an indirect **introduction (CBD)**, so that the species concerned is an **alien species (CBD)** in the adjoining area, despite the fact that it **entered** it naturally. In the IPPC context, the intermediate country, from which the natural movement occurs, has no obligation to act to limit the natural movement, though it may have obligations to prevent intentional or unintentional **introduction (CBD)** if the importing country concerned establishes corresponding **phytosanitary measures**.

3.3 “Invasive alien species”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
An alien species whose introduction and/or spread threaten ⁹ biological diversity ^{10, 11}	An invasive¹² alien species (CBD) is an alien species (CBD) that by its establishment or spread has become injurious to plants¹³ , or that by risk analysis (CBD)¹⁴ is shown to be potentially injurious to plants

Notes:

⁹ The word “threaten” does not have an immediate equivalent in IPPC language. The IPPC definition of a **pest** uses the term “injurious”, while the definition of a **quarantine pest** refers to “economic importance”. ISPM 11 makes it clear that **quarantine pests** may be “injurious” to **plants** directly, or indirectly (via other components of ecosystems), while Supplement 2 of the Glossary explains that “economic importance” depends on a harmful impact on crops, or on the environment, or on some other specific value (recreation, tourism, aesthetics).

¹⁰ **Invasive alien species (CBD)** threaten “biological diversity”. This is not an IPPC term, and the question arises whether it has a scope corresponding to that of the IPPC. “Biological diversity” would then have to be given a wide meaning, extending to the integrity of cultivated plants in agro-ecosystems, non-indigenous **plants** that have been imported and **planted** for forestry, amenity or habitat management, and indigenous **plants** in any **habitat**, whether “man-made” or not. The **IPPC** does protect **plants** in any of these situations, but it is not clear whether the scope of the CBD is as wide; some definitions of “biological diversity” take a much narrower view.

¹¹ On the basis of other documents made available by CBD, **invasive alien species** may also threaten “ecosystems, habitats or species”.

¹² The CBD definition and its explanation concern the whole term **invasive alien species** and do not address the term “invasive” as such.

¹³ The context of the IPPC is the protection of **plants**. It is clear that there are effects on biological diversity that do not concern **plants**, and so there are **invasive alien species (CBD)** that are not relevant to the **IPPC**. The IPPC is also concerned with **plant products**, but it is not clear to what extent the CBD considers **plant products** as a component of biological diversity.

¹⁴ For the IPPC, organisms that have never entered the **endangered area** can also be considered as potentially injurious to **plants**, as a result of **pest risk analysis**.

3.4 “Establishment”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
The process ¹⁵ of an alien species in a new habitat successfully producing viable offspring ¹⁶ with a likelihood of continued survival	The establishment of an alien species (CBD) in a habitat in the area it has entered , by successful reproduction

Notes:

¹⁵ **Establishment (CBD)** is a process, not a result. It seems that a single generation of reproduction can be **establishment (CBD)**, provided the offspring have a likelihood of continued survival (otherwise there would be a comma after “offspring”). The CBD definition does not express the **IPPC** concept of “perpetuation for the foreseeable future”.

¹⁶ It is not clear how far “offspring” applies to organisms that propagate themselves vegetatively (many **plants**, most fungi, other microorganisms). By using “perpetuation”, the **IPPC** avoids the question of reproduction or replication of individuals altogether. It is the species as a whole that survives. Even the growth of long-lived individuals to maturity could be considered to be perpetuation for the foreseeable future (e.g. plantations of a non-indigenous **plant**).

3.5 “Intentional introduction”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
Deliberate movement and/or ¹⁷ release by humans of an alien species outside its natural range	Deliberate movement of a non-indigenous species into an area , including its release into the environment ¹⁸

Notes:

¹⁷ The “and/or” of the CBD definition is difficult to understand.

¹⁸ Under most phytosanitary import regulatory systems the intentional introduction of regulated pests is prohibited.

3.6 “Unintentional introduction”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
All other introductions which are not intentional	Entry of a non-indigenous species with a traded consignment , which it infests or contaminates , or by some other human agency including pathways such as passengers’ baggage, vehicles, artificial waterways ¹⁹

Notes:

¹⁹ The prevention of unintentional introduction of regulated pests is an important focus of phytosanitary import regulatory systems.

3.7 “Risk analysis”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
1) the assessment of the consequences ²⁰ of the introduction and of the likelihood of establishment of an alien species using science-based information (i.e., risk assessment), and 2) the identification of measures that can be implemented to reduce or manage these risks (i.e., risk management), taking into account socio-economic and cultural considerations ²¹	Risk analysis (CBD) ²² is: 1) evaluation of the probability of establishment and spread , within an area ²³ , of an alien species (CBD) that has entered that area , 2) evaluation of the associated potential undesirable consequences, and 3) evaluation and selection of measures to reduce the risk of such establishment and spread

Notes:

²⁰ It is not clear what kinds of consequences are considered.

²¹ It is not clear at what stages in the process of **risk analysis (CBD)** socio-economic and cultural considerations are taken into account (during assessment, or during management, or both). No explanation can be offered in relation to ISPM 11 or Supplement 2 of ISPM 5.

²² This explanation is based on the IPPC definitions of **pest risk assessment** and **pest risk management**, rather than on that of **pest risk analysis**.

²³ It is unclear whether **risk analysis (CBD)** may be conducted prior to **entry**, in which case the probability of **introduction** may also need to be assessed, and measures evaluated and selected to reduce the risk of **introduction**. It may be supposed (on the basis of other documents made available by CBD) that **risk analysis (CBD)** can identify measures restricting further introductions, in which case it relates more closely to **pest risk analysis**.

4. Other concepts

The CBD does not propose definitions of other terms, but does use a number of concepts that do not seem to be considered in the same light by the IPPC and the CBD, or are not distinguished by the IPPC. These include:

- border controls
- quarantine measures
- burden of proof
- natural range or distribution
- precautionary approach
- provisional measures
- control
- statutory measures
- regulatory measures
- social impact
- economic impact.

5. References

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CBD (Convention on Biological Diversity). 2008. Glossary of terms. In: *Convention on Biological Diversity* [online]. [Cited November 2008]. <http://www.cbd.int/invasive/terms.shtml>

ISPM 28

Phytosanitary treatments for regulated pests

PT 33: Irradiation treatment for *Bactrocera dorsalis*

Adopted 2021; published 2021

Scope of the treatment

This treatment describes the irradiation of fruits and vegetables at 116 Gy minimum absorbed dose to prevent the emergence of adults of *Bactrocera dorsalis* at the stated efficacy.¹

Treatment description

Name of treatment	Irradiation treatment for <i>Bactrocera dorsalis</i>
Active ingredient	n/a
Treatment type	Irradiation
Target pest	<i>Bactrocera dorsalis</i> (Hendel, 1912) (Diptera: Tephritidae)
Target regulated articles	All fruits and vegetables that are hosts of <i>Bactrocera dorsalis</i>

Treatment schedule

Minimum absorbed dose of 116 Gy to prevent the emergence of adults of *Bactrocera dorsalis*.

There is 95% confidence that the treatment according to this schedule prevents emergence of the adult stage from not less than 99.9963% of eggs and larvae of *Bactrocera dorsalis*.

This treatment should be applied in accordance with the requirements of ISPM 18 (*Guidelines for the use of irradiation as a phytosanitary measure*).

Other relevant information

Because irradiation may not result in outright mortality, inspectors may encounter live but non-viable *Bactrocera dorsalis* (eggs, larvae or puparia) during the inspection process. This does not imply a failure of the treatment.

The Technical Panel on Phytosanitary Treatments based its evaluation of this treatment on the research reported by Zhao *et al.* (2017), which determined the efficacy of irradiation as a treatment for this pest in *Psidium guajava*. In addition, the work of Follett and Armstrong (2004) supports this schedule.

The efficacy of this schedule was calculated based on a total of 100 684 third-instar larvae treated with no adult emergence; the control emergence was 81%.

¹ The scope of phytosanitary treatments does not include issues related to pesticide registration or other domestic requirements for contracting parties' approval of treatments. Treatments adopted by the Commission on Phytosanitary Measures may not provide information on specific effects on human health or food safety, which should be addressed using domestic procedures before contracting parties approve a treatment. In addition, potential effects of treatments on product quality are considered for some host commodities before their international adoption. However, evaluation of any effects of a treatment on the quality of commodities may require additional consideration. There is no obligation for a contracting party to approve, register or adopt the treatments for use in its territory.

Extrapolation of treatment efficacy to all fruits and vegetables was based on knowledge and experience that radiation dosimetry systems measure the actual radiation dose absorbed by the target pest independent of host commodity, and evidence from research studies on a variety of pests and commodities. These include studies on the following pests and hosts: *Anastrepha fraterculus* (*Eugenia pyriformis*, *Malus pumila* and *Mangifera indica*), *Anastrepha ludens* (*Citrus paradisi*, *Citrus sinensis*, *Mangifera indica* and artificial diet), *Anastrepha obliqua* (*Averrhoa carambola*, *C. sinensis* and *Psidium guajava*), *Anastrepha suspensa* (*Averrhoa carambola*, *C. paradisi* and *Mangifera indica*), *Bactrocera tryoni* (*C. sinensis*, *Solanum lycopersicum*, *Malus pumila*, *Mangifera indica*, *Persea americana* and *Prunus avium*), *Cydia pomonella* (*Malus pumila* and artificial diet), *Grapholita molesta* (*Malus pumila* and artificial diet), *Pseudococcus jackbeardsleyi* (*Cucurbita* sp. and *Solanum tuberosum*) and *Tribolium confusum* (*Triticum aestivum*, *Hordeum vulgare* and *Zea mays*) (Bustos *et al.*, 2004; Gould and von Windeguth, 1991; Hallman, 2004a, 2004b, 2013; Hallman and Martinez, 2001; Hallman *et al.*, 2010; Jessup *et al.*, 1992; Mansour, 2003; Tunçbilek and Kansu, 1996; von Windeguth, 1986; von Windeguth and Ismail, 1987; Zhan *et al.*, 2016). It is recognized, however, that treatment efficacy has not been tested for all potential fruit and vegetable hosts of the target pest. If evidence becomes available to show that the extrapolation of the treatment to cover all hosts of this pest is incorrect, the treatment will be reviewed.

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

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Publication history

This is not an official part of the standard

2017-06 Treatment submitted in response to 2017-02 call for treatments.

2018-01 Technical Panel on Phytosanitary Treatments (TPPT) reviewed and requested further information from submitter.

2018-04 Submitter supplied additional information.

2018-05 Standards Committee (SC) added the topic *Irradiation treatment for oriental fruit fly Bactrocera dorsalis on all fresh commodities* (2017-015) to the TPPT work programme.

2018-06 TPPT revised the draft and recommended to SC for consultation.

2018-11 TPPT final review via e-forum (2018_eTPPT_Oct_02).

2019-01 SC approved the draft for consultation via e-decision (2019_eSC_May_06).

2019-07 First consultation.

2020-02 TPPT reviewed and approved the responses to consultation comments and recommended the draft for second consultation.

2020-06 SC approved for second consultation via e-decision (2020_eSC_May_22).

2020-07 Second consultation.

2020-11 TPPT virtual meeting recommended to SC for approval for adoption by the CPM.

2021-03 CPM-15 adopted the phytosanitary treatment.

ISPM 28. Annex 33. *Irradiation treatment for Bactrocera dorsalis* (2021). Rome, IPPC, FAO.

2021-04 IPPC Secretariat applied ink amendments as noted by CPM-15 (2021).

Publication history last updated: 2021-04

ISPM 28

Phytosanitary treatments for regulated pests

PT 34: Cold treatment for *Ceratitis capitata* on *Prunus avium*, *Prunus salicina* and *Prunus persica*

Adopted 2021; published 2021

Scope of the treatment

This treatment describes the cold treatment of fruit of *Prunus avium* (cherry), *Prunus salicina* (Japanese plum) and *Prunus persica* (peach and nectarine) to result in the mortality of eggs and larvae of *Ceratitis capitata* at the stated efficacy.¹

Treatment description

Name of treatment	Cold treatment for <i>Ceratitis capitata</i> on <i>Prunus avium</i> , <i>Prunus salicina</i> and <i>Prunus persica</i>
Active ingredient	n/a
Treatment type	Physical (cold)
Target pest	<i>Ceratitis capitata</i> (Wiedemann, 1824) (Diptera: Tephritidae)
Target regulated articles	Fruit of <i>Prunus avium</i> (cherry), <i>Prunus salicina</i> (Japanese plum) and <i>Prunus persica</i> (peach and nectarine)

Treatment schedules

Schedule 1: 1 °C or below for 16 continuous days

For *Prunus avium* there is 95% confidence that the treatment according to this schedule kills not less than 99.9979% of eggs and larvae of *Ceratitis capitata*.

For *Prunus salicina* there is 95% confidence that the treatment according to this schedule kills not less than 99.9984% of eggs and larvae of *Ceratitis capitata*.

For *Prunus persica* there is 95% confidence that the treatment according to this schedule kills not less than 99.9983% of eggs and larvae of *Ceratitis capitata*.

Schedule 2: 3 °C or below for 20 continuous days

For *Prunus avium* there is 95% confidence that the treatment according to this schedule kills not less than 99.9982% of eggs and larvae of *Ceratitis capitata*.

¹ The scope of phytosanitary treatments does not include issues related to pesticide registration or other domestic requirements for contracting parties' approval of treatments. Treatments adopted by the Commission on Phytosanitary Measures may not provide information on specific effects on human health or food safety, which should be addressed using domestic procedures before contracting parties approve a treatment. In addition, potential effects of treatments on product quality are considered for some host commodities before their international adoption. However, evaluation of any effects of a treatment on the quality of commodities may require additional consideration. There is no obligation for a contracting party to approve, register or adopt the treatments for use in its territory.

For *Prunus salicina* there is 95% confidence that the treatment according to this schedule kills not less than 99.9978% of eggs and larvae of *Ceratitis capitata*.

For *Prunus persica* there is 95% confidence that the treatment according to this schedule kills not less than 99.9986% of eggs and larvae of *Ceratitis capitata*.

For both schedules, the fruit must reach the treatment temperature before treatment exposure time commences. The fruit core temperature should be monitored and recorded, and the temperature should not exceed the stated level throughout the duration of the treatment.

This treatment should be applied in accordance with the requirements of ISPM 42 (*Requirements for the use of temperature treatments as phytosanitary measures*).

Other relevant information

In evaluating this treatment, the Technical Panel on Phytosanitary Treatments considered issues associated with temperature regimes and thermal conditioning, taking into account the work of Hallman and Mangan (1997).

Schedules 1 and 2 were based on the work of De Lima (2011) and developed using failure to pupariate as the measure of mortality.

The efficacy of schedule 1 was calculated based on the following estimated numbers of treated *Ceratitis capitata* with no survivors:

- for *Prunus avium*: 143 810
- for *Prunus salicina*: 185 646
- for *Prunus persica*: 174 710.

The efficacy of schedule 2 was calculated based on the following estimated numbers of treated *Ceratitis capitata* with no survivors:

- for *Prunus avium*: 163 906
- for *Prunus salicina*: 133 798
- for *Prunus persica*: 218 121.

Schedules 1 and 2 were developed using the following commodities and cultivars:

- *Prunus avium* (cherry) (cultivars ‘Sweetheart’ and ‘Lapin’)
- *Prunus salicina* (Japanese plum) (cultivars ‘Angelino’ and ‘Tegan Blue’)
- *Prunus persica* (peach) (cultivars ‘Snow King’ and ‘Zee Lady’)
- *Prunus persica* var. *nectarina* (nectarine) (cultivars ‘Arctic Snow’ and ‘August Red’).

In this treatment, *Prunus persica* includes all cultivars and varieties, including nectarines (Vendramin *et al.*, 2014).

References

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

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Publication history

This is not an official part of the standard

2017-06 Treatment submitted in response to 2017-02 call for treatments (*Cold treatment of Australian stone fruit against Mediterranean fruit fly and Queensland fruit fly*).

2017-10 Technical Panel on Phytosanitary Treatments (TPPT) reviewed the submission (virtual meeting).

2018-05 Standards Committee (SC) added topic *Cold treatment of stone fruit against Ceratitis capitata* (2017-022A) to the TPPT work programme.

2018-06 TPPT revised the draft and recommended it to SC for consultation.

2018-11 TPPT final review via e-forum (2018_eTPPT_Oct_01).

2019-03 SC approved the draft for consultation via e-decision (2019_eSC_May_08).

2019-07 First consultation.

2020-02 TPPT reviewed the responses to consultation comments and the draft and recommended it to the SC for approval for second consultation.

2020-03 TPPT finalized the responses to consultation comments via e-forum (2020_eTPPT_Feb_01).

2020-04 SC approved the responses to comments and the draft for second consultation via e-decision (2020_eSC_May_13).

2020-07 Second consultation.

2020-11 TPPT meeting reviewed and recommended to the SC for approval for adoption by the CPM.

2021-03 CPM-15 adopted the phytosanitary treatment.

ISPM 28. Annex 34. *Cold treatment for Ceratitis capitata on Prunus avium, Prunus salicina and Prunus persica* (2021). Rome, IPPC, FAO.

Publication history last updated: 2021-04

ISPM 28

Phytosanitary treatments for regulated pests

PT 35: Cold treatment for *Bactrocera tryoni* on *Prunus avium*, *Prunus salicina* and *Prunus persica*

Adopted 2021; published 2021

Scope of the treatment

This treatment describes the cold treatment of fruit of *Prunus avium* (cherry), *Prunus salicina* (Japanese plum) and *Prunus persica* (peach and nectarine) to result in the mortality of eggs and larvae of *Bactrocera tryoni* at the stated efficacy.¹

Treatment description

Name of treatment	Cold treatment for <i>Bactrocera tryoni</i> on <i>Prunus avium</i> , <i>Prunus salicina</i> and <i>Prunus persica</i>
Active ingredient	n/a
Treatment type	Physical (cold)
Target pest	<i>Bactrocera tryoni</i> (Froggatt, 1897) (Diptera: Tephritidae)
Target regulated articles	Fruit of <i>Prunus avium</i> (cherry), <i>Prunus salicina</i> (Japanese plum) and <i>Prunus persica</i> (peach and nectarine)

Treatment schedules

Schedule 1: 1 °C or below for 14 continuous days

For *Prunus persica* there is 95% confidence that the treatment according to this schedule kills not less than 99.9928% of eggs and larvae of *Bactrocera tryoni*.

Schedule 2: 3 °C or below for 14 continuous days

For *Prunus avium* there is 95% confidence that the treatment according to this schedule kills not less than 99.9966% of eggs and larvae of *Bactrocera tryoni*.

For *Prunus salicina* there is 95% confidence that the treatment according to this schedule kills not less than 99.9953% of eggs and larvae of *Bactrocera tryoni*.

For *Prunus persica* there is 95% confidence that the treatment according to this schedule kills not less than 99.9917% of eggs and larvae of *Bactrocera tryoni*.

¹ The scope of phytosanitary treatments does not include issues related to pesticide registration or other domestic requirements for contracting parties' approval of treatments. Treatments adopted by the Commission on Phytosanitary Measures may not provide information on specific effects on human health or food safety, which should be addressed using domestic procedures before contracting parties approve a treatment. In addition, potential effects of treatments on product quality are considered for some host commodities before their international adoption. However, evaluation of any effects of a treatment on the quality of commodities may require additional consideration. There is no obligation for a contracting party to approve, register or adopt the treatments for use in its territory.

For both schedules, the fruit must reach the treatment temperature before treatment exposure time commences. The fruit core temperature should be monitored and recorded, and the temperature should not exceed the stated level throughout the duration of the treatment.

This treatment should be applied in accordance with the requirements of ISPM 42 (*Requirements for the use of temperature treatments as phytosanitary measures*).

Other relevant information

In evaluating this treatment, the Technical Panel on Phytosanitary Treatments considered issues associated with temperature regimes and thermal conditioning, taking into account the work of Hallman and Mangan (1997).

Schedules 1 and 2 were based on the work of NSW DPI (2008, 2012) and developed using failure to pupariate as the measure of mortality.

The efficacy of schedule 1 was calculated based on the following estimated numbers of treated *Bactrocera tryoni* with no survivors:

- for *Prunus persica*: 41 820.

The efficacy of schedule 2 was calculated based on the following estimated numbers of treated *Bactrocera tryoni* with no survivors:

- for *Prunus avium*: 89 322
- for *Prunus salicina*: 64 226
- for *Prunus persica*: 35 987.

Schedules 1 and 2 were developed using the following commodities and cultivars:

- *Prunus avium* (cherry) (cultivar ‘Sweetheart’)
- *Prunus salicina* (Japanese plum) (cultivar ‘Angelino’)
- *Prunus persica* var. *nectarina* (nectarine) (cultivar ‘Arctic Snow’).

In this treatment, *Prunus persica* includes all cultivars and varieties, including nectarines (Vendramin *et al.*, 2014).

References

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

Hallman, G.J. & Mangan, R.L. 1997. Concerns with temperature quarantine treatment research. In G.L. Obenauf, ed. *Proceedings of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reduction*. San Diego, CA, 3–5 November 1997, pp. 79–179–4.

NSW DPI (New South Wales Department of Primary Industries). 2008. *Cold treatment of Australian summerfruit (plums, nectarines / peaches) infested with eggs and larvae of the Queensland fruit fly (Bactrocera tryoni (Froggatt)) Diptera: Tephritidae*. Gosford, Australia, NSW DPI. 132 pp.

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Vendramin, E., Pea, G., Dondini, L., Pacheco, I., Dettori, M.T., Gazza, L., Scalabrin, S., Strozzi, F., Tartarini, S., Bassi, D., Verde, I. & Rossini, L. 2014. A unique mutation in a MYB gene cosegregates with the nectarine phenotype in peach. *PLoS ONE*, 9(3): e90574 [online]. [Cited 27 November 2020]. <https://doi.org/10.1371/journal.pone.0090574>

Publication history

This is not an official part of the standard

2017-06 Treatment submitted in response to 2017-02 call for treatments (*Cold treatment of Australian Stone fruit against Mediterranean fruit fly and Queensland fruit fly*).

2017-10 Technical Panel on Phytosanitary Treatments (TPPT) reviewed the submission (virtual meeting).

2018-05 SC added topic *Cold treatment of stone fruit against Bactrocera tryoni* (2017-022B) to the TPPT work programme with priority 1.

2018-06 TPPT revised the draft and recommended it to SC for consultation.

2018-11 TPPT final review via e-forum (2018_eTPPT_Oct_01).

2019-03 SC approved the draft for consultation via e-decision (2019_eSC_May_09).

2019-07 First consultation.

2020-02 TPPT reviewed the responses to consultation comments and the draft and recommended it to the SC for approval for second consultation.

2020-03 TPPT finalized the responses to consultation comments via e-forum (2020_eTPPT_Feb_01).

2020-04 SC approved the responses to comments and the draft for second consultation via e-decision (2020_eSC_May_14).

2020-07 Second consultation.

2020-11 TPPT meeting reviewed and recommended to the SC for approval for adoption by the CPM.

2021-03 CPM-15 adopted the phytosanitary treatment.

ISPM 28. Annex 35. *Cold treatment for Bactrocera tryoni on Prunus avium, Prunus salicina and Prunus persica* (2021). Rome, IPPC, FAO.

Publication history last updated: 2021-04

ISPM 28

Phytosanitary treatments for regulated pests

PT 36: Cold treatment for *Ceratitis capitata* on *Vitis vinifera*

Adopted 2021; published 2021

Scope of the treatment

This treatment describes the cold treatment of fruit of *Vitis vinifera* (table grapes) to result in the mortality of eggs and larvae of *Ceratitis capitata* at the stated efficacy.¹

Treatment description

Name of treatment	Cold treatment for <i>Ceratitis capitata</i> on <i>Vitis vinifera</i>
Active ingredient	n/a
Treatment type	Physical (cold)
Target pest	<i>Ceratitis capitata</i> (Wiedemann, 1824) (Diptera: Tephritidae)
Target regulated articles	Fruit of <i>Vitis vinifera</i> (table grapes)

Treatment schedules

Schedule 1: 1 °C or below for 16 continuous days

There is 95% confidence that the treatment according to this schedule kills not less than 99.9987% of eggs and larvae of *Ceratitis capitata*.

Schedule 2: 2 °C or below for 18 continuous days

There is 95% confidence that the treatment according to this schedule kills not less than 99.9987% of eggs and larvae of *Ceratitis capitata*.

Schedule 3: 3 °C or below for 20 continuous days

There is 95% confidence that the treatment according to this schedule kills not less than 99.9986% of eggs and larvae of *Ceratitis capitata*.

For all three schedules, the fruit must reach the treatment temperature before treatment exposure time commences. The fruit core temperature should be monitored and recorded, and the temperature should not exceed the stated level throughout the duration of the treatment.

¹ The scope of phytosanitary treatments does not include issues related to pesticide registration or other domestic requirements for contracting parties' approval of treatments. Treatments adopted by the Commission on Phytosanitary Measures may not provide information on specific effects on human health or food safety, which should be addressed using domestic procedures before contracting parties approve a treatment. In addition, potential effects of treatments on product quality are considered for some host commodities before their international adoption. However, evaluation of any effects of a treatment on the quality of commodities may require additional consideration. There is no obligation for a contracting party to approve, register or adopt the treatments for use in its territory.

This treatment should be applied in accordance with the requirements of ISPM 42 (*Requirements for the use of temperature treatments as phytosanitary measures*).

Other relevant information

In evaluating this treatment, the Technical Panel on Phytosanitary Treatments (TPPT) considered issues associated with temperature regimes and thermal conditioning, taking into account the work of Hallman and Mangan (1997).

The efficacy of the schedules was calculated based on the following estimated numbers of treated larvae with no survivors: 223 523 for schedule 1, 227 190 for schedule 2 and 217 881 for schedule 3.

Schedules 1, 2 and 3 were based on the work of De Lima (2007) and De Lima *et al.* (2011) and were developed using the cultivars ‘Red Globe’, ‘Crimson Seedless’ and ‘Thompson Seedless’, and using failure to pupariate as the measure of mortality.

The TPPT also considered De Lima, Mansfield and Poogoda (2017).

References

The present annex may refer to ISPMs. ISPMs are available on the International Phytosanitary Portal (IPP) at <https://www.ippc.int/core-activities/standards-setting/ispm>.

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De Lima, C.P.F., Jessup, A.J., Mansfield, E.R. & Daniels, D. 2011. Cold treatment of table grapes infested with Mediterranean fruit fly *Ceratitis capitata* (Wiedemann) and Queensland fruit fly *Bactrocera tryoni* (Froggatt) Diptera: Tephritidae. *New Zealand Journal of Crop and Horticultural Science*, 39 (2): 95–105.

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Hallman, G.J. & Mangan, R.L. 1997. Concerns with temperature quarantine treatment research. In G.L. Obenauf, ed. *Proceedings of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reduction*. San Diego, USA, 3–5 November 1997, pp. 79-1–79-4.

Publication history

This is not an official part of the standard

2017-06 Treatment submitted in response to 2017-02 call for treatments (*Cold treatment of Australian Table grapes against Mediterranean fruit fly and Queensland fruit fly*).

2017-07 Technical Panel on Phytosanitary Treatments (TPPT) reviewed the submission.

2018-05 SC added the topic *Cold treatment of Ceratitis capitata on table grapes* (2017-023A) to the TPPT work programme with priority 1.

2018-06 TPPT revised the draft and recommended it to SC for consultation.

2018-11 TPPT final review via e-forum (2018_eTPPT_Oct_01).

2019-03 SC approved the draft for consultation via e-decision (2019_eSC_May_10).

2019-07 First consultation.

2020-02 TPPT reviewed the responses to consultation comments and the draft and recommended it to the SC for approval for second consultation.

2020-03 TPPT finalized the responses to consultation comments via e-forum (2020_eTPPT_Feb_01).

2020-04 SC approved the responses to comments and the draft for second consultation via e-decision (2020_eSC_May_15).

2020-07 Second consultation.

2020-11 TPPT meeting reviewed and recommended to the SC for approval for adoption by the CPM.

2021-03 CPM-15 adopted the phytosanitary treatment.

ISPM 28. Annex 36. *Cold treatment for Ceratitis capitata on Vitis vinifera* (2021). Rome, IPPC, FAO.

Publication history last updated: 2021-04

ISPM 28

Phytosanitary treatments for regulated pests

PT 37: Cold treatment for *Bactrocera tryoni* on *Vitis vinifera*

Adopted 2021; published 2021

Scope of the treatment

This treatment describes the cold treatment of fruit of *Vitis vinifera* (table grapes) to result in the mortality of eggs and larvae of *Bactrocera tryoni* at the stated efficacy.¹

Treatment description

Name of treatment	Cold treatment for <i>Bactrocera tryoni</i> on <i>Vitis vinifera</i>
Active ingredient	n/a
Treatment type	Physical (cold)
Target pest	<i>Bactrocera tryoni</i> (Froggatt, 1897) (Diptera: Tephritidae)
Target regulated articles	Fruit of <i>Vitis vinifera</i> (table grapes)

Treatment schedules

Schedule 1: 1 °C or below for 12 continuous days

There is 95% confidence that the treatment according to this schedule kills not less than 99.9964% of eggs and larvae of *Bactrocera tryoni*.

Schedule 2: 3 °C or below for 14 continuous days

There is 95% confidence that the treatment according to this schedule kills not less than 99.9984% of eggs and larvae of *Bactrocera tryoni*.

For both schedules, the fruit must reach the treatment temperature before treatment exposure time commences. The fruit core temperature should be monitored and recorded, and the temperature should not exceed the stated level throughout the duration of the treatment.

This treatment should be applied in accordance with the requirements of ISPM 42 (*Requirements for the use of temperature treatments as phytosanitary measures*).

¹ The scope of phytosanitary treatments does not include issues related to pesticide registration or other domestic requirements for contracting parties' approval of treatments. Treatments adopted by the Commission on Phytosanitary Measures may not provide information on specific effects on human health or food safety, which should be addressed using domestic procedures before contracting parties approve a treatment. In addition, potential effects of treatments on product quality are considered for some host commodities before their international adoption. However, evaluation of any effects of a treatment on the quality of commodities may require additional consideration. There is no obligation for a contracting party to approve, register or adopt the treatments for use in its territory.

Other relevant information

In evaluating this treatment, the Technical Panel on Phytosanitary Treatments considered issues associated with temperature regimes and thermal conditioning, taking into account the work of Hallman and Mangan (1997).

The efficacy of the schedules was calculated based on the following estimated numbers of treated larvae with no survivors: 82 863 for schedule 1 and 182 450 for schedule 2.

Schedules 1 and 2 were based on the work of De Lima *et al.* (2011) and NSW DPI (2007) and developed using failure to pupariate as the measure of mortality.

Schedule 1 was developed using the cultivars ‘Ruby Seedless’, ‘Flame Seedless’ and ‘Thompson Seedless’.

Schedule 2 was developed using the cultivars ‘Red Globe’, ‘Crimson Seedless’ and ‘Thompson Seedless’.

References

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

De Lima, C.P.F., Jessup, A.J., Mansfield, E.R. & Daniels, D. 2011. Cold treatment of table grapes infested with Mediterranean fruit fly *Ceratitis capitata* (Wiedemann) and Queensland fruit fly *Bactrocera tryoni* (Froggatt) Diptera: Tephritidae. *New Zealand Journal of Crop and Horticultural Science*, 39 (2): 95–105.

Hallman, G.J. & Mangan, R.L. 1997. Concerns with temperature quarantine treatment research. In G.L. Obenauf, ed. *Proceedings of the Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reduction*. San Diego, USA, 3–5 November 1997, pp. 79–1–79-4.

NSW DPI (New South Wales Department of Primary Industries). 2007. *Cold treatment of Australian table grapes infested with eggs and larvae of the Queensland fruit fly (Bactrocera tryoni (Froggatt)) Diptera: Tephritidae*. Gosford, Australia, NSW DPI. 120 pp.

Publication history

This is not an official part of the standard

2017-06 Treatment submitted in response to 2017-02 call for treatments (*Cold treatment of Australian Table grapes against Mediterranean fruit fly and Queensland fruit fly*).

2017-07 Technical Panel on Phytosanitary Treatments (TPPT) reviewed the submission.

2018-05 SC added topic *Cold treatment of Bactrocera tryoni on table grapes* (2017-023B) to the TPPT work programme with priority 1.

2018-06 TPPT revised the draft and recommended it to SC for first consultation.

2018-11 TPPT final review via e-forum (2018_eTPPT_Oct_01).

2019-03 SC approved the draft for consultation via e-decision (2019_eSC_May_11).

2019-07 First consultation.

2020-02 TPPT reviewed the responses to consultation comments and the draft and recommended it to the SC for approval for second consultation.

2020-03 TPPT finalized the responses to consultation comments via e-forum (2020_eTPPT_Feb_01).

2020-04 SC approved the responses to comments and the draft for second consultation via e-decision (2020_sSC_May_16).

2020-07 Second consultation.

2020-11 TPPT meeting reviewed and recommended to the SC for approval for adoption by the CPM.

2021-03 CPM-15 adopted the phytosanitary treatment.

ISPM 28. Annex 37. *Cold treatment for Bactrocera tryoni on Vitis vinifera* (2021). Rome, IPPC, FAO.

Publication history last updated: 2021-04

ISPM 28

Phytosanitary treatments for regulated pests

PT 38: Irradiation treatment for *Carposina sasakii*

Adopted 2021; published 2021

Scope of the treatment

This treatment describes the irradiation of fruits and vegetables at 228 Gy minimum absorbed dose to prevent the emergence of viable adults of *Carposina sasakii* at the stated efficacy.¹

Treatment description

Name of treatment	Irradiation treatment for <i>Carposina sasakii</i>
Active ingredient	n/a
Treatment type	Irradiation
Target pest	<i>Carposina sasakii</i> Matsumura, 1900 (Lepidoptera: Carposinidae)
Target regulated articles	All fruits and vegetables that are hosts of <i>Carposina sasakii</i>

Treatment schedule

Minimum absorbed dose of 228 Gy to prevent the emergence of viable adults of *Carposina sasakii*.

There is 95% confidence that the treatment according to this schedule prevents development of viable adults from not less than 99.9893% of eggs and larvae of *Carposina sasakii*.

This treatment should be applied in accordance with the requirements of ISPM 18 (*Guidelines for the use of irradiation as a phytosanitary measure*).

This treatment should not be applied to fruit and vegetables stored in a modified atmosphere because the modified atmosphere may affect the treatment efficacy.

Other relevant information

Because irradiation may not result in outright mortality, inspectors may encounter live but non-viable *Carposina sasakii* (eggs, larvae or deformed adults) during the inspection process. This does not imply a failure of the treatment.

The Technical Panel on Phytosanitary Treatments based its evaluation of this treatment on the research reported by Zhan *et al.* (2014), which determined the efficacy of irradiation as a treatment for this pest

¹ The scope of phytosanitary treatments does not include issues related to pesticide registration or other domestic requirements for contracting parties' approval of treatments. Treatments adopted by the Commission on Phytosanitary Measures may not provide information on specific effects on human health or food safety, which should be addressed using domestic procedures before contracting parties approve a treatment. In addition, potential effects of treatments on product quality are considered for some host commodities before their international adoption. However, evaluation of any effects of a treatment on the quality of commodities may require additional consideration. There is no obligation for a contracting party to approve, register or adopt the treatments for use in its territory.

in *Malus pumila* ‘Red Fuji’. Additional information on the most tolerant life stage was also considered from Li *et al.* (2016).

The efficacy of this schedule was calculated based on a total of 30 580 late fifth-instar larvae treated with no viable adult emergence; the control emergence was 91.4%.

Extrapolation of treatment efficacy to all fruits and vegetables was based on knowledge and experience that radiation dosimetry systems measure the actual radiation dose absorbed by the target pest independent of host commodity, and evidence from research studies on a variety of pests and commodities. These include studies on the following pests and hosts: *Anastrepha fraterculus* (*Eugenia pyrifomis*, *Malus pumila* and *Mangifera indica*), *Anastrepha ludens* (*Citrus paradisi*, *Citrus sinensis*, *Mangifera indica* and artificial diet), *Anastrepha obliqua* (*Averrhoa carambola*, *C. sinensis* and *Psidium guajava*), *Anastrepha suspensa* (*Averrhoa carambola*, *C. paradisi* and *Mangifera indica*), *Bactrocera tryoni* (*C. sinensis*, *Solanum lycopersicum*, *Malus pumila*, *Mangifera indica*, *Persea americana* and *Prunus avium*), *Cydia pomonella* (*Malus pumila* and artificial diet), *Grapholita molesta* (*Malus pumila* and artificial diet), *Pseudococcus jackbeardsleyi* (*Cucurbita* sp. and *Solanum tuberosum*) and *Tribolium confusum* (*Triticum aestivum*, *Hordeum vulgare* and *Zea mays*) (Bustos *et al.*, 2004; Gould and von Windeguth, 1991; Hallman, 2004a, 2004b, 2013; Hallman and Martinez, 2001; Hallman *et al.*, 2010; Jessup *et al.*, 1992; Mansour, 2003; Tunçbilek and Kansu, 1996; von Windeguth, 1986; von Windeguth and Ismail, 1987; Zhan *et al.*, 2016). It is recognized, however, that treatment efficacy has not been tested for all potential fruit and vegetable hosts of the target pest. If evidence becomes available to show that the extrapolation of the treatment to cover all hosts of this pest is incorrect, the treatment will be reviewed.

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

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- cumulative developmental time: A preliminary investigation. *Florida Entomologist*, 99 (Special Issue 2): 62–66.
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Publication history

This is not an official part of the standard

- 2017-06 Treatment submitted in response to 2017-02 call for treatments.
- 2017-11 Technical Panel on Phytosanitary Treatments (TPPT) reviewed and requested further information from submitter.
- 2018-05 Standards Committee (SC) added topic *Irradiation treatment for Carposina sasakii* (2017-026) to the TPPT work programme.
- 2018-05 Submitter supplied responses to the request for further information.
- 2018-06 TPPT revised the draft and recommended it to SC for first consultation.
- 2018-11 TPPT reviewed via e-forum (2018_eTPPT_Oct_02).
- 2019-01 SC approved the draft for consultation via e-decision (2019_eSC_May_04).
- 2019-07 First consultation.
- 2020-02 TPPT virtual meeting approved the responses to consultation comments and recommended the draft for consultation.
- 2020-06 SC approved for second consultation via e-decision (2020_eSC_May_20).
- 2020-07 Second consultation.
- 2020-11 TPPT reviewed and recommended to SC for approval for adoption by the CPM.
- 2021-03 CPM adopted the phytosanitary treatment.
- ISPM 28. Annex 38.** *Irradiation treatment for Carposina sasakii* (2021). Rome, IPPC, FAO.

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BACKGROUND

The provision of food and other humanitarian aid assists regions or countries that are at risk of food and economic insecurity as a result of conflict, crop failures, and natural disasters including storms, earthquakes, tsunami and volcanic eruptions. Assistance can be urgent and short-term, or ongoing over the long term. The driver for this recommendation is the provision of urgent, disaster-relief assistance, but the principles of phytosanitary preparedness and response apply equally to the provision of ongoing aid.

There has been a significant increase in severe weather events, which may be attributed to climate change, as well as human-induced and natural disasters that have precipitated the urgent need for food, water and machinery to prevent or mitigate humanitarian crises. For example, Tonga has experienced three category-four cyclones and one category-five since 2010, while the Pacific region as a whole is increasingly experiencing damaging storms and storm surges. These events are not limited to lower and lower-middle income countries or the Pacific region and have occurred in all regions of the world. In Africa, for example, various countries suffer political instabilities, drought and seasonal pest outbreaks.

In providing aid, donors should be aware that the provision of aid supplies, unless appropriately prepared to meet the phytosanitary import requirements of the recipient country, can in itself cause long-term damage. There are several examples of long-term impacts on the economy, environment and communities from pests introduced with aid, long after the country has recovered from the emergency situation. Donors should consider this when preparing aid. National plant protection organizations (NPPOs) are impacted by these emergency situations, but are still bound by their role to effectively manage the risk posed by pests associated with relief supplies imported in the aftermath of such disasters. For example, crops and grain provided as food aid may be infested with quarantine pests and should therefore meet the phytosanitary import requirements of the recipient country.

It can be challenging to manage pest risk effectively during an emergency situation. Other government authorities (not the NPPO) may demand that relief supplies are cleared without phytosanitary inspection and provided to those in need. However, under normal circumstances, risk-based clearance processes would be initiated and any pest risk posed would require a treatment to address it or the consignment would otherwise be re-exported or destroyed. Mixed consignments in shipping or air containers, which include a range of goods and pose various pest risks, can experience delays in clearance and release as they need to be fully unpacked to be inspected. Damaged infrastructure may impede the application of treatments to mitigate the pest risks identified, and normal procedures to manage the pest risk associated with diversion from intended use may be similarly impacted. Re-export may not be an option either, leaving the NPPO to deal with the unmanaged pest risk.

National plant protection organizations acknowledge and appreciate the aid from other countries and international organizations. However, to help minimize any unintended phytosanitary consequences of such aid, this Commission on Phytosanitary Measures (CPM) recommendation provides clear guidance on the effective management of pest risk associated with commonly provided food and other humanitarian aid.

ADDRESSED TO

Contracting parties, government agencies and non-governmental organizations involved in humanitarian aid activities.

RECOMMENDATIONS

The Commission notes that countries receiving food and other humanitarian aid may be exposed to the entry of pests that, unless managed appropriately, may become established in their territory and have an impact on the economy, environment and communities long after recovery from the emergency situation. Commonly provided aid includes food (fresh, dried and processed plants and plant products), water, building materials, planting materials (seeds and other plants for planting), support personnel

(e.g. volunteers), vehicles, machinery and equipment. Food and other humanitarian aid should comply with the phytosanitary import requirements of the recipient country.

While natural disasters cannot be foreseen, the Commission *encourages* both potential importing (recipient) and exporting (donor) contracting parties and regional plant protection organizations (as relevant) to:

- (a) *develop* and *maintain* an emergency response plan and *undertake* preparedness activities to reduce the risk of introduction of regulated pests with food and other humanitarian aid in the event of an emergency or disaster;
- (b) *identify* and *engage* with relevant stakeholders (e.g. aid agencies, exporters, importers, regulators) to raise awareness of the pest risk associated with food and other aid materials that are provided to help countries respond and recover after a natural disaster or other emergency, and the need to manage this pest risk effectively;
- (c) *use* the guidance available in adopted International Standards for Phytosanitary Measures (ISPMs) (e.g. ISPM 32 (*Categorization of commodities according to their pest risk*)) and other available material;
- (d) *partner* with relevant stakeholders (e.g. aid and donor agencies) to better plan for the effective operation of their programmes to reduce pest risk, including standardizing supply and distribution operations for multiple countries to increase the efficiency of border clearance processes and potentially reduce regulatory burden;
- (e) *encourage* pre-dispatch treatment, treatment during transit or pre-clearance of food and other humanitarian aid by NPPOs of donor countries, to expedite clearance in the receiving country;
- (f) *establish* mechanisms for providing information to potential donors, aid agencies, importers and exporters to reduce the movement of goods posing a pest risk during emergency situations;
- (g) *encourage* NPPOs of exporting countries, if their domestic legislative framework allows, to urge their foreign food aid agencies to ensure that humanitarian aid materials meet the phytosanitary requirements of the recipient country.

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CPM recommendations and ISPMs are available on the International Phytosanitary Portal (IPP) at <https://www.ippc.int/en/core-activities/governance/cpm/cpm-recommendations-1/cpm-recommendations/> and <https://www.ippc.int/en/core-activities/standards-setting/ispms/>, respectively.

RECOMMENDATION(S) SUPERSEDED BY THE ABOVE

None.