Submissions for topics for Standards and Implementation

1. General information

Submission number	2021-002
Title of Proposal	Revision of ISPM 26 Establishment of pest free areas for fruit flies (Tephritidae)
Submitted by	IPPC Contracting Party New Zealand
Submission supported by	NPPO of Australia, RPPO of Pacific Plant Protection Organization

2. Contact information

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3. Summary of proposal

Summary of justification for the proposal	[1] New Zealand considers there are several general and specific problems with ISPM 26 (International Standards for Phytosanitary Measures) that justify consideration of a revision of the standard. [2] General problems with ISPM 26 include: [3] While the purpose of an ISPM is to provide a harmonised approach to international trade, the requirements set in ISPM 26 are too open and broad and leave too much for country interpretation. [4] Some key parts should be greatly expanded to enhance international harmonisation e.g. section 2.4. [5] It was intended for (and written by experts from) countries where fruit flies are present/endemic, and a Pest Free Area (PFA) is used as a measure within its territory. As such the standard is inadequate to provide guidance in the management and eradication of fruit flies in countries, which do not generally have the fruit fly species under examination. [6] The ISPM is ambiguous and may be interpreted differently by fruit fly-free and fruit fly-endemic countries when a detection or incursion occurs. [7] The Appendices and parts of the Annexes in the current standard have become out of date quickly and will require constant updates as new information becomes available. [8] The Annexes contain much guidance information that would be better contained in a linked guidance document, which can be updated without the need to revise the standard itself. [9] Specific problems with ISPM 26 include: [10] The lack of adequate details in the requirements on what evidence should be considered to indicate an incursion (in a fruit fly free country) or outbreak has led to significant inconsistencies in members' responses to fruit fly detection in PFAs. [11] The lack of adequate details in the requirements on the evidence that should be used to determine the affected area of an incursion or outbreak has led to significant inconsistencies in contracting parties' trade responses to incursions or outbreaks in PFAs. [12] The lack of adequate details in the requirements on the evidence that should be used to determine when an incursion or outbreak has been eradicated has led to significant inconsistencies in the length of time it has taken members' to recognise a new or reinstated PFA.

Expected outcome of standard / implementation resource	It is New Zealand's contention that these general and specific problems with member countries' interpretation of ISPM 26 are potentially creating a considerable financial burden to contracting parties. A revision of ISPM 26 could resolve these issues and minimise this potential financial burden on contracting parties in response to fruit fly incursions or outbreaks. Additionally, it is considered that this text should be considered for presenting as an Annex to ISPM 4, to ensure it is explicitly linked to this overarching PFA standard.
Contribution to filling gaps in the Framework for Standards and Implementation	ISPM 26 currently lacks adequate information regarding the evidence requirements that should be used for PFAs for Tephritid fruit flies and this has led to significant inconsistencies in members' trade responses to outbreaks in countries or PFAs.

4. Type of proposed material

Proposed material	Standards
Type	Revision/Amendment of standard ISPM 26

5. Literature review

Literature review	Since the drafting of ISPM 26 in 2004, contracting parties and regional organisations have developed significant volumes of scientific literature and reports on the establishment of pest free areas for fruit flies. This body of literature now renders much of the content of the appendices and aspects of the annexes to ISPM 26 obsolete. It also provides an opportunity to include details in the body of the standard that would add significant value to contracting parties establishing pest free areas or re-instating country pest freedom status. The economic impacts of any trade restrictions imposed by importing countries are confounded by the absence of consistent and accepted criteria for the degree and duration of any trade restrictions. For example, differences between countries in the size of the area upon which export restrictions are imposed (the export restriction zone or ERZ) increases the transaction costs to exporters as they are forced to implement multiple layered compliance systems (Dominiak & Fanson 2014, 2020). A recent paper by Ormsby (2021) describes models that can be used to establish criteria for the management of Tephritid fruit fly outbreaks as outlined in ISPM 26. The models enable contracting parties to develop criteria on when to recognise an incursion has occurred and establish export restrictions, what area or radius an export restriction zone (ERZ) should cover, and for the conditions required to enable an ERZ to be rescinded and the area's pest free status reinstated. References (including those cited within these references): - Dominiak B.C., Fanson B.G. (2014) Revised quarantine distances for domestic and international trading Queensland fruit fly. 9th International Symposium on Fruit Flies of Economic Importance, Bangkok, Thailand, 12 - 14 May, 2014. - Dominiak B.C., Fanson B.G. (2020) Current quarantine and suspension distances are excessive for incipient populations of Queensland fruit fly (Bactrocera tryoni (Froggatt)) (Diptera: Tephritidae) in southern New South Wales, Australia. Crop Protection 138: 105341 - Clarke A.R., Powell K.S., Weldon C.W., Taylor P.W. (2011) The ecology of Bactrocera tryoni (Diptera: Tephritidae): What do we know to assist pest management? Annals of Applied Biology 158: 26–54 - Kean J. (2015) The effective sampling area of traps: estimation and application. In Beresford R. M., Froud K. J., Kean J. M., Worner S. P., New Zealand Plant Protection Society. The plant protection data toolbox. New Zealand Plant Protection Society Incorporated. pp 176 - Meats A., Edgerton J.E. (2008) Short- and long-range dispersal of the Queensland fruit fly, Bactrocera tryoni and its relevance to invasive potential, sterile insect technique and surveillance trapping. Australian Journal of Experimental Agriculture, 2008, 48, 1237–1245 - Ormsby (2021) Establishing criteria for the management of Tephritid fruit fly outbreaks. CABI- Special Issue: Eradication of Arthropods: Science and Society.

	- Qin Y, Paini DR, Wang C, Fang Y, Li Z (2015) Global establishment risk of economically important fruit fly species (Tephritidae). PLoS ONE 10(1): e0116424. doi:10.1371/journal.pone.0116424 - RSPM 17 (2010) Guidelines for the establishment, maintenance and verification of fruit fly pest free areas in North America. NAPPO Regional Standards for Phytosanitary Measures. The Secretariat of the North American Plant Protection Organization; 12 pp. - Suckling D.M., Kean J.M., Stringer L.D, Cáceres-Barrios C., Hendrichs J., Reyes-Floresg J., Dominiak B.C. (2016) Eradication of Tephritid fruit fly pest populations: outcomes and prospects. Pest Management Science 72: 456–465

6. Criteria for justification and prioritization of proposed topics

6.1. Core criteria

Core Criteria	Information provided by Submitter
1. Contribution to the purpose of the IPPC as described in article I.1	An enhanced ISPM 26 is expected to secure common and effective action to prevent the spread and introduction of Tephritid fruit fly pests of plant products, and to promote an appropriate measure for their control.
2. Linkage to IPPC SOs and Organizational results demonstrated	Revision of ISPM 26 to remove outdated information (appendices and annexes) and including more appropriate guidance on how to establish pest free areas and respond to pest invasions would provide considerable benefits to: • Strategic objective A: Enhance Global Food Security and Increase Sustainable Agricultural Productivity. Key result area A1: All NPPOs have effective pest surveillance systems in place for timely detection of new pest arrivals and monitoring spread. • Strategic objective C: Facilitate Safe Trade, Development and Economic Growth. Key result area C1: Commodity specific standards with harmonised phytosanitary measures have facilitated and accelerated trade negotiations and simplified safe trade in plant products.
3. Feasibility of implementation at the global level	ISPM 26 is already being implemented albeit inconsistently by contracting parties. The revision of ISPM 26 should be expected to further enhance the capability for countries to implement this ISPM both by providing the necessary details for consistent understanding and implementation and by removing outdated and irrelevant information.
4. Clear identification of the problems that need to be resolved through the development of the standard or implementation resource	While the purpose of an ISPM is to provide a harmonised approach to international trade, the requirements set in ISPM 26 are too open and broad and leave too much for interpretation. Some key parts of ISPM 26 should be greatly expanded to enhance international harmonisation e.g. section 2.4. ISPM 26 was intended for (and written by experts from) countries where fruit fly is present, and a PFA is used as a measure within its territory. As such it is inadequate in the management of fruit flies in countries that do not have the fruit fly species under examination. As ISPM 26 is open for interpretation, it is often difficult for fruit-fly free countries to explain their interpretation of the standard to trading partners. The appendices in the current standard have become out of date quickly and require constant updates as new information becomes available.
5. Availability of, or possibility to collect, information in support of the proposed standard or implementation resource	Since the development of ISPM 26 a considerable body of scientific literature and technical reports have been developed in this area. Expertise in this area has also increased in countries that do not have resident or persistent populations of economically important Tephritid fruit flies, enabling more diverse perspectives to be included in any revision.

6.2.Supporting criteria

Supporting Criteria	Information provided by Submitter
Practical	RSPM 17 (2010) Guidelines for the establishment, maintenance and verification of fruit fly pest free areas in North America. NAPPO Regional Standards for Phytosanitary Measures. The Secretariat of the North American Plant Protection Organization; 12 pp
Economic	Tephritid fruit flies are considered the most economically important group of pests impacting on the global trade of fresh produce exported for consumption. While developed countries have the expertise to develop and implement cost-effective management systems for fruit flies such as pest free areas, many developing countries do not and are effectively prevented from benefiting from the economic benefits of the international trade in fresh produce. The current economic value of the trade in fresh produce for human consumption is estimated at over $US 100 billion in 2018. Over 70% of the value of trade resides in developed countries and regions (e.g. EU, North America etc.).
Environmental	The use of pest free areas as phytosanitary measures is considered to have considerably less environmental impacts than the application of many pre- or post-harvest phytosanitary measures such as fumigation and chemical sprays. Pest free areas are considered a highly cost-effective measure for managing the risk of the introduction and spread of the economically important invasive alien pest species in the Tephritid fruit fly group.
Strategic	1) Australia and PPPO support New Zealand on this proposal. 2) The international trade in fresh fruit and vegetables is both heavily restricted and disrupted by the presence or spread/invasion of pest species in the Tephritid fruit fly group. Many of the major exporting countries experience regular trade disruptions from fruit fly incursion. Many developing countries have limited access to markets due to domestic fruit fly populations. 3) The development of pest free areas for fruit flies is an economically important tool to enable trade in fresh fruit and vegetables. While the current version of ISPM 26 has provided some benefits to developing countries, the requirements are too open and broad, and leave too much for country interpretation therefore limiting its versatility. 4) Tephritid fruit flies affect almost all fresh fruit and vegetable growing areas globally. 5) Improvements to ISPM 26 are urgently needed to boost the economic benefits of trade and reduce the economic risks to trade from the effective management of Tephritid fruit flies.