

**Submissions for topics for Standards and Implementation****1. General information**

<b>Submission number</b>	2023-022
<b>Title of Proposal</b>	Guidance material for ISPM 26 (Establishment of pest free areas for fruit flies (Tephritidae))
<b>Submitted by</b> (Country or Organization)	IPPC Contracting Party
<b>IPPC Official Contact Point or RPPO</b>	Australia
<b>Supported by</b>	New Zealand

**2. Contact information**

<b>Name</b>	Gabrielle Vivian-Smith
<b>Position and organization</b>	Australian Chief Plant Protection Officer
<b>Postal address</b>	70 Northbourne Ave Canberra AUSTRALIA 2601
<b>Phone</b>	+61262724671
<b>Email of the IPPC Official Contact Point or RPPO</b>	ippc.contactpoint@aff.gov.au

**3. Summary of proposal**

<b>Summary of justification for the proposal</b>	<p>The revision of ISPM 26 (Establishment of pest free areas for fruit flies (Tephritidae)) (2021-010) is currently in progress with the Expert Working Group (EWG) meeting occurring in July 2023. The specification outlines the purpose for the revision of ISPM 26 including the determination of whether the annexes and appendices should remain as part of the ISPM or be repurposed as implementation material.</p> <p>This proposal aims to begin the process of replacing and updating the material removed from ISPM 26 as a result of the ongoing revision of ISPM 26. By submitting this proposal in 2023 rather than 2025, the material for the implementation of ISPM 26 will be available for country consultation alongside the second consultation of ISPM 26. This will allow for better analysis of available information by countries during the country consultation.</p>
--	---

	This will also avoid a potential information gap caused by the removal of information in the Annexes and Appendices of ISPM 26 by adoption of the implementation material alongside the updated ISPM 26. The material removed from ISPM 26 for implementation as guidance material will be reviewed and updated in accordance to any technical changes made by the ongoing revision to ISPM 26 as well as providing clarification and incorporating updated fruit fly, fruit fly trapping and fruit sampling information in accordance to the literature.
<b>Expected outcome of standard / implementation resource</b>	The availability of renewed implementation material repurposed from ISPM 26 annexes and appendices removed as a result of the ongoing revision of ISPM 26.
<b>Contribution to filling gaps in the Framework for Standards and Implementation</b>	The guide will be replacing information currently in ISPM 26 and is classified under the A1 key result area of the Framework for Standards and Implementation.

#### 4. Type of proposed material

<b>Proposed material</b>	Implementation resources
--------------------------	--------------------------

#### 5. Standard/ Implementation

<b>Type of implementation resource</b>	New implementation resource
<b>New implementation resource</b>	Guide
<b>Convention articles, ISPMs or CPM</b>	Based on: ISPM 26 Establishment of pest free areas for fruit flies (Tephritidae) Related to: ISPM 4 Requirements for the establishment of pest free areas ISPM 8 Determination of pest status in an area ISPM 11 Pest risk analysis for quarantine pests ISPM 2 Framework for pest risk analysis

## 6. Literature review

Literature review	<p>ISPM 26 is currently under review with the EWG drafting the updated standard in July 2023. Based on the recommendation from the specification for ISPM 26 and the outcome from the EWG it is proposed that the following sections be adopted as implementation material:</p> <ul style="list-style-type: none"> <li>-Annex 3 Phytosanitary procedures for fruit fly management</li> <li>-Appendix 1 Fruit fly trapping</li> <li>-Appendix 2 Fruit sampling</li> </ul> <p>The last addition to these sections was in 2015 with the addition of Annex 3. Given the relative age of the sections proposed and the continuous availability of new research on this topic it is considered timely for a full review of the material against the literature. A full revision will allow for information to be updated to reflect updated technology and understanding according to the literature. The revision should aim to assist NPPO's in the understanding of ISPM 26 through an in-depth explanation of the procedures involved for fruit fly management, trapping and fruit sampling.</p> <p>Specific topics for review include:</p> <ul style="list-style-type: none"> <li>-New trapping methodologies and techniques including lures, wafers, traps.</li> <li>-The effect of climatic conditions and its effect on lure longevity. For example the appropriateness of figures provided for field longevity (Appendix 1 - Table 3) including a review and explanation of the figures provided for field longevity i.e., lures will last longer in cold weather and shorter in hot and humid conditions. The specific timings of field longevity should be reviewed based on a global context noting that NPPO's will use the data based on local conditions and this should be clearly explained.</li> <li>-Trap densities and effective geospatial arrangements, including an explanation of how recommended trap densities can change based on the target species, weather, location, and any other variables.</li> <li>-Efficacy of chemical and biological treatments.</li> <li>-Control techniques used in combination or as part of a systems based approach</li> </ul> <p>References:</p> <p>ISPM 26. Establishment of pest free areas for fruit flies (Tephritidae)  <a href="https://www.ippc.int/en/publications/594/">https://www.ippc.int/en/publications/594/</a></p> <p>Broughton, S., and T. Rahman. 2016. Evaluation of lures and traps for male and female monitoring of Mediterranean fruit fly in pome and stone fruit. <i>Journal of Applied Entomology</i> 141: 441-449.  <a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/jen.12360">https://onlinelibrary.wiley.com/doi/abs/10.1111/jen.12360</a></p> <p>Camac, J, Clarke, S, Niranjane, A and de Majnik, J. 2019. Estimating probabilities of pest absence across geographic space, Centre of Excellence for Biosecurity Risk Analysis.</p> <p>Enkerlin W.R., Reyes, J. and Ortiz, G. (eds). 2019. Fruit Sampling Guidelines for Area-Wide Fruit Fly Programmes, Vienna, FAO/IAEA.  <a href="https://www.iaea.org/sites/default/files/ca5716en.pdf">https://www.iaea.org/sites/default/files/ca5716en.pdf</a></p> <p>Francis, A, Levy, A, Martin, RM, Mosser, L, Bazelet, C and Shelly, T. 2023.</p>
-------------------	--

	<p>"Relationship between Field Captures of Mediterranean Fruit Flies (Diptera: Tephritidae) and the Residual Amount and Release Rate of Trimedlure from Polymeric Plugs," Florida Entomologist, 106(2), 97-103.  <a href="https://doi.org/10.1653/024.106.0205">https://doi.org/10.1653/024.106.0205</a></p> <p>John A. Byers 2009. Modeling distributions of flying insects: Effective attraction radius of pheromone in two and three dimensions, Journal of Theoretical Biology, vol. 256, no. 1, pp. 81-89.  <a href="https://www.sciencedirect.com/science/article/pii/S0022519308004712">https://www.sciencedirect.com/science/article/pii/S0022519308004712</a></p> <p>Shelly, T, Kurashima, R, Fezza, T, Cook, P and Cook, D 2019, 'Wafers in Saddle Bags: A Novel Dispensing System for Male Lures Used to Detect Invasive Fruit Flies (Diptera: Tephritidae)'. Proceedings of the Hawaiian Entomological Society, vol. 51, no. 2, pp. 47-58  <a href="https://www.researchgate.net/publication/350358739_Wafers_in_Saddle_Bags_A_Novel_Dispensing_System_for_Male_Lures_Used_to_Detect_Invasive_Fruit_Flies_Diptera_Tephritidae">https://www.researchgate.net/publication/350358739_Wafers_in_Saddle_Bags_A_Novel_Dispensing_System_for_Male_Lures_Used_to_Detect_Invasive_Fruit_Flies_Diptera_Tephritidae</a></p>
--	--

## 7. Criteria for justification and prioritization of proposed topics

### 7.1. Core criteria

Criteria	Information provided by Submitter
<b>1. Contribution to the purpose of the IPPC as described in article I.1</b>	<p>Appropriate guidance material replacing the information removed from ISPM 26 will ensure ongoing support to countries in the implementation of ISPM 26. The review of the text will ensure information is current and accurate to reflect NPPO needs. Updates are suggested to assist in NPPO understanding of ISPM 26.</p>
<b>2. Linkage to IPPC SOs and Organizational results demonstrated</b>	<p>Drafting of ISPM 26 guidance material update information removed from ISPM 26 including the appendices and annexes. Implementation material will include appropriate guidance to assist NPPO's in the establishment and maintenance of pest free areas and response to pest invasions.</p> <ul style="list-style-type: none"> <li>• 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. A2: All NPPOs have strong capacities to monitor, detect, diagnose, report, and prepare rapid responses to pest incursions, so that these pests do not have major impacts on food supplies and they do not spread and thereby threaten other regions and trading partners</li> <li>• Strategic objective C: Facilitate Safe Trade, Development and Economic Growth. Key result area C1: Commodity specific standards with</li> </ul>

	harmonised phytosanitary measures have facilitated and accelerated trade negotiations and simplified safe trade in plant product
<b>3. Feasibility of implementation at the global level</b>	ISPM 26 is currently under review, with irrelevant and outdated information anticipated to be removed. Removed information relevant to the assistance and guidance of NPPO's in the implementation of ISPM 26 is suggested to be used in implementation material to ensure continuation of availability of information to NPPO's.
<b>4. Clear identification of the problems that need to be resolved through the development of the standard or implementation resource</b>	Information contained within ISPM 26, including the annexes and appendices may be removed. This information is still relevant to the guidance of NPPO's in the implementation of ISPM 26. Redrafting of the removed material as implementation material will ensure no gaps in material available to NPPO's for ISPM 26 implementation. Removed material may be outdated or inaccurate to the updated ISPM 26 text. This material can be replaced and updated to future proof implementation material, where possible.
<b>5. Availability of, or possibility to collect, information in support of the proposed standard or implementation resource</b>	Since the development of ISPM 26 a considerable volume of technical information and scientific literature have been developed regarding fruit flies, pest free areas and their establishment and maintenance. This information should be utilised to maintain the relevance of any implementation material produced in support of ISPM 26.

## 7.2. Supporting criteria

Supporting Criteria	Information provided by Submitter
<b>Practical</b>	1) Archived text – RSPM 17 (2010) Guidelines for the establishment, maintenance and verification of fruit fly PFAs in North America. NAPPO Regional Standards for Phytosanitary Measures. The Secretariat of the North American Plant Protection Organization. 2) Expertise in this area is available from all FAO regions including countries that do not have resident populations of Tephritid fruit flies
<b>Economic</b>	Tephritid fruit flies are considered the most economically important group of pests impacting on the global trade of fresh produce exported for consumption. In 2018 the economic value of trade in fresh produce for human consumption was estimated at over \$US 100 billion. Over

	70% of the value of trade resides in developed countries and regions.
<b>Environmental</b>	The use of PFAs as phytosanitary measures have considerably less environmental impacts than the application of many pre or post-harvest phytosanitary measures such as pesticide application and methyl bromide fumigation. PFAs are considered a highly cost-effective measure for managing the risk of the introduction and spread of economically important Tephritid fruit fly species.
<b>Strategic</b>	<p>1). Support TBA.</p> <p>2) The international trade in fresh fruit and vegetables is heavily restricted and disrupted by the presence or spread/invasion of pest species in the Tephritid fruit fly group. Many major exporting countries experience regular trade disruptions due to fruit fly incursions. Many countries have limited access to markets due to domestic fruit fly populations or the inability to establish a PFA.</p> <p>3) The development of PFAs for fruit flies is an economically important tool to enable trade of fresh fruit and vegetables. Implementation material meeting the requirements of ISPM 26 can assist developing countries in the use of PFAs for fruit fly enabling safe trade of fresh fruit and vegetables.</p> <p>4) Tephritid fruit fly's are found in most horticultural growing areas worldwide and affect over 350 fruit and vegetable species.</p> <p>5) Complements ISPM 26.</p> <p>7) This implementation resource will replace the material removed from ISPM. Acceptance of the specification will allow implementation material for ISPM 26 to be available for country consultation alongside the second consultation of ISPM 26.</p>

### 8. Financial/in-kind resources

<b>Commitment for financial/in-kind resources to support the development of the proposed standards or implementation resource</b>	n/a
---	-----