



REPORT

Technical Panel on Phytosanitary Treatments

**Virtual meeting
4 March 2021**

IPPC Secretariat

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CONTENTS

1. Opening of the Meeting	4
1.1. Welcome by the IPPC Secretariat	4
1.2. Adoption of the agenda and election of the rapporteur	4
2. TPPT work programme – PTs for approval for second consultation	4
2.1 Draft PT: Irradiation treatment for <i>Tortricidae</i> on fruits (2017-011)	4
2.2 Draft PT: Cold treatment for <i>Thaumatotibia leucotreta</i> on <i>Citrus sinensis</i> (2017-029)	5
2.3 Draft PT: Cold treatment for <i>Bactrocera zonata</i> on <i>Citrus sinensis</i> (2017-013).....	6
2.4 Draft PT: Irradiation treatment for <i>Sternochetus frigidus</i> (2017-036).....	6
3. Updates	7
3.1 Update from the Ozone Secretariat and the MBTOC.....	7
4. Close of the Meeting.....	7
Appendix 1: Agenda.....	8

1. Opening of the Meeting

1.1. Welcome by the IPPC Secretariat

[1] The International Plant Protection Convention (IPPC) Secretariat (hereafter referred to as “Secretariat”) lead for the Technical Panel on Phytosanitary Treatments (TPPT) chaired the meeting and welcomed the following participants:

1. Mr David OPATOWSKI (TPPT Steward)
2. Ms Andrea BEAM (USA)
3. Mr Toshiyuki DOHINO (Japan)
4. Mr Walther ENKERLIN HOEFLICH (IAEA)
5. Mr Peter LEACH (Australia)
6. Mr Scott MYERS (USA)
7. Mr Michael ORMSBY (New Zealand)
8. Mr Matthew SMYTH (Australia)
9. Mr Eduardo WILLINK (Argentina)
10. Ms Janka KISS (IPPC Secretariat, lead)
11. Mr Artur SHAMILOV (IPPC Secretariat, support)

[2] The full list of TPPT members and their contact details can be found on the International Phytosanitary Portal (IPP)¹.

1.2. Adoption of the agenda and election of the rapporteur

[3] The Secretariat introduced the agenda and it was adopted as presented in Appendix 1 to this report.

[4] Mr Eduardo WILLINK was elected as the Rapporteur.

2. TPPT work programme – PTs for approval for second consultation

[5] The TPPT was addressing comments and revising 4 of the PTs coming from first consultation at this meeting.

2.1 Draft PT: Irradiation treatment for *Tortricidae* on fruits (2017-011)

[6] Mr Matthew SMYTH, the Treatment Lead introduced the Treatment Lead summary, the responses to the consultation comments, and the draft PT².

[7] In total there were 32 comments. The majority of comments supported the adoption of Draft PT and there were some editorial proposals. There comments requiring the TPPT’s discussion are described below:

[8] One comment requested to change the Spanish translation of the footnote from ‘*consideration*’ to ‘*test*’, however it was noted that this is a standard text, and should be consistent with previous PTs. The review of the Technical Panel on the Glossary confirmed this approach.

[9] Another comment suggested that the PT should cite the underlying research to support the proposed dose, however the TPPT agreed that the current wording adequately addresses this concern and is consistent with previous PTs.

[10] Another comment queried whether the maintenance of modified atmosphere restrictions are still supported. The TPPT noted that the restrictions still apply for all other pest groups, then the Tephritidae.

¹ TPPT membership list: <https://www.ippc.int/en/publications/81655/>

² 02_TPPT_2021_Mar, 03_TPPT_2021_Mar, 2017-011

- [11] One comment sought to revise the standard text on the extrapolation of irradiation to all commodities to discuss instead the extrapolation to the level of family, however the TPPT did not agree, as this section is included in all irradiation PTs and is covering extrapolation to commodities. Extrapolation of the data to all pests in the family is included in the previous paragraphs, where all of the relevant references are cited – an approach that is consistent with previous PTs.
- [12] Another comment was concern that all hosts commodities have not been tested at the proposed dose, however the TPPT agreed that the wording is consistent with previous PTs and international consensus.
- [13] One country commented on the reference but the comment was not incorporated, as the citing of references is correct (referencing the overview study for species in the family (Hallman *et al.* 2013), and the other reference (Hallman 2004 on *Grapholita molesta*) as the basis for the efficacy calculation.
- [14] One commenter sought to revise the wording in regarding the outcome of the treatment (preventing the emergence of normal looking adults) however the TPPT agreed that the text of the PT does describe the outcome that the research supporting this treatment, and so they agreed to leave the text as it was.
- [15] Another comment considered more large-scale confirmatory data is required to enable extrapolation to the family Tortricidae. The TPPT agreed that the agreed method of extrapolation (using data for the most resistant species of the group) can be applied, in particular noting the detailed review work by Hallman *et al.* (2013).
- [16] The TPPT
- (1) *approved* the responses to consultation comments as the TPPT responses
 - (2) *recommended* to the SC to approve the Draft PT: Irradiation treatment for *Tortricidae* on fruits (2017-011) for second consultation.

2.2 Draft PT: Cold treatment for *Thaumatotibia leucotreta* on *Citrus sinensis* (2017-029)

- [17] Mr Peter LEACH, the Treatment Lead introduced the Treatment Lead summary, the responses to the consultation comments, and the draft PT³.
- [18] In total there were 34 comments. Eighteen of the 34 comments endorsed the draft unreservedly and were noted. Two comments referred to using acronyms correctly and were incorporated into the document. Eight comments referred to reordering the treatment schedule to include the lowest temperature first (as per PT 24). These comments were accepted and incorporated into the document. Six comments were considered but not incorporated into the document.
- [19] Two comments sought the inclusion of the term “fruit” beside the commodity species name, and the TPPT agreed that this was not the consistent way to refer to the target commodity.
- [20] Two comments requested the use of “fruit core” temperature or “internal” temperature when referring to monitoring of consignments. The TPPT considered that ISPM 42 is referenced in the Treatment schedule of this PT and does cover issues such as monitoring core temperature. Additionally, there was a request to include directions on what to do if the treatment schedule is not met. The TPPT felt that the issue of corrective actions required if the fruit temperature exceeds the stated level should be addressed at bilateral negotiations between National Plant Protection Organizations.
- [21] One comment questioned the efficacy of the treatment based on unpublished information from monitoring of commercial consignments. Based on the unpublished information they considered that the cold treatment should be part of a systems approach. The TPPT noted that the draft PT lists two treatment schedules based on published information provided by the submitter. The decision to use

³ 04_TPPT_2021_Mar, 05_TPPT_2021_Mar, 2017-029

this treatment schedule as a standalone treatment or as part of a systems approach is a decision for National Plant Protection Organizations involved in bilateral negotiations.

- [22] One comment questioned the validity of using artificial diet rather than fruit. The TPPT agreed that the data provided does show that at LD50 larvae are significantly harder to kill. However the TPPT agreed that the use of LD50 is no longer recommend as the area of interest is in the upper range of efficacy. It is not unusual to find that regression lines cross, so that a stage which is less tolerant than another at LD50 is more tolerant at the LD99 or higher (dose response lines are not parallel). This is exactly the case presented by Moore *et al.* (2016) for new and historical data sets. As such the evaluation that is most important in this data set is the LD99.9 estimate. While the LD99.9 estimate in fruit is arithmetically higher it is not significantly different from the estimate in diet based on overlap of the fiducial limits. Additionally, this finding is supported by research from Myburgh (1965) that found no significant difference between larval tolerance on fruit or diet.
- [23] The TPPT agreed to request further clarification form the author of the paper referenced above on the calculation method and the original data used to address further concerns (submitted directly to the TPPT after the consultation). The TPPT decided to put this treatment on hold until this question is clarified.

2.3 Draft PT: Cold treatment for *Bactrocera zonata* on *Citrus sinensis* (2017-013)

- [24] Mr Toshiyuki DOHINO, the Treatment Lead introduced the Treatment Lead summary, the responses to the consultation comments, and the draft PT⁴.
- [25] A total of 34 comments were submitted from the member countries in the first consultation on July-September 2020. 14 substantive, 10 technical and 10 editorial comments were submitted.
- [26] The TPPT addressed following comments in detail at the meeting.
- [27] One comment suggested to specify further the place and interval of the temperature measurements, the temperature recording interval, and what to do if the temperature exceeds the stated level. The TPPT considered that ISPM 42 is referenced in the Treatment schedule of this PT and the TPPT felt that the issue of corrective actions required if the fruit temperature exceeds the stated level should be addressed at bilateral negotiations between National Plant Protection Organizations. It was also noted that the core temperature could be included in this case as the research supporting the treatment indicates the place to measure the temperature.
- [28] One comment suggested to include the cultivars which were used for the development of treatment schedule as reference information. The TPPT agreed to include the orange cultivars used in Hallman *et al.* (2013a) and revised the draft PT.

- [29] The TPPT

- (3) *approved* the responses to consultation comments as the TPPT responses
- (4) *recommended* to the SC to approve the Draft PT: Cold treatment for *Bactrocera zonata* on *Citrus sinensis* (2017-013) for second consultation.

2.4 Draft PT: Irradiation treatment for *Sternochetus frigidus* (2017-036)

- [30] Mr Walther ENKERLIN, the Treatment Lead introduced the Treatment Lead summary, the responses to the consultation comments, and the draft PT⁵.

⁴ 06_TPPT_2021_Mar, 07_TPPT_2021_Mar, 2017-013

⁵ 08_TPPT_2021_Mar, 09_TPPT_2021_Mar, 2017-036

- [31] Most of the countries were supportive of the proposed irradiation treatment schedule for *Sternochetus frigidus* on mango. The treatment schedule is based on research published by Obra *et al.* 2014 in the Journal of Economic Entomology.
- [32] One comment suggested that less than 99 level of efficacy was not acceptable, however the TPPT agreed that it is not necessary to achieve “99” level efficacy in treatments.
- [33] One comment suggested to include that the treatment is targeted to “young aged adults” and it was explained that only sexually immature females are found inside the fruit, where they pose quarantine concern. The TPPT noted the comment and agreed to provide more explanation in the response of the comment on the biology of the pest, but decided not to change the text as it clearly says in the scope that it prevents oviposition of any females emerging from the fruit, and that this would address the comment.
- [34] It was also noted that the efficacy was recalculated from figures other than the ones in the supporting publication, that were later provided by the submitter and the calculation is attached to the TPPT report of 2020-03⁶.
- [35] The TPPT
- (5) *approved* the responses to consultation comments as the TPPT responses
 - (6) *recommended* to the SC to approve the Draft PT: Irradiation treatment for *Sternochetus frigidus* (2017-036) for second consultation.

3. Updates

- [36] The Secretariat incited the TPPT to follow the CPM via webcast taking advantage of the virtual mode this year. The TPPT was informed of the progress with the ISPM 15 guide development.

3.1 Update from the Ozone Secretariat and the MBTOC

- [37] The Secretariat informed the TPPT of the paper submitted by the Ozone Secretariat to the CPM⁷ and that they are still seeking members for the MBTOC.

4. Close of the Meeting

- [38] The Secretariat thanked the TPPT members for their participation and closed the meeting.

⁶ TPPT Virtual Meeting report 2020-03: <https://www.ippc.int/en/publications/88441/>

⁷ CPM 2021/INF/08: <https://www.ippc.int/en/cpm-sessions/cpm-15/>

Appendix 1: Agenda**2021 MARCH VIRTUAL MEETING OF THE TECHNICAL PANEL
ON PHYTOSANITARY TREATMENTS (TPPT)****AGENDA**

AGENDA ITEM	DOCUMENT NO.	PRESENTER
1. Opening of the meeting		
1.1 Welcome by the IPPC Secretariat		KISS / ALL
1.2 Adoption of the agenda and election of the rapporteur	01_TPPT_2021_Mar	KISS / ALL
2. TPPT work programme – PTs for approval for second consultation	All submissions: https://www.ippc.int/en/work-area-pages/draft-phytosanitary-treatments-and-relevant-documents/	
2.1 Draft PT: Irradiation treatment for <i>Tortricidae</i> on fruits (2017-011) - Compiled comments - Treatment Lead summary - Draft PT	02_TPPT_2021_Mar 03_TPPT_2021_Mar 2017-011	SMYTH
2.2 Draft PT: Cold treatment for <i>Thaumatotibia leucotreta</i> on <i>Citrus sinensis</i> (2017-029) - Compiled comments - Treatment Lead summary - Draft PT	04_TPPT_2021_Mar 05_TPPT_2021_Mar 2017-029	LEACH
2.3 Draft PT: Cold treatment for <i>Bactrocera zonata</i> on <i>Citrus sinensis</i> (2017-013) - Compiled comments - Treatment Lead summary - Draft PT	06_TPPT_2021_Mar 07_TPPT_2021_Mar 2017-013	DOHINO
2.4 Draft PT: Irradiation treatment for <i>Sternochetus frigidus</i> (2017-036) - Compiled comments - Treatment Lead summary - Draft PT	08_TPPT_2021_Mar 09_TPPT_2021_Mar 2017-036	ENKERLIN
3. Updates		KISS
3.1 Update from the Ozone Secretariat and the MBTOC	CPM 2021/INF/08 https://www.ippc.int/en/cpm-sessions/cpm-15/	KISS
4. Close of the meeting	-	KISS