



Virtual Meeting  
25 April 2013

*REPORT*

# Technical Panel on Phyosanitary Treatments April 2013



Food and Agriculture Organization of the United Nations

**CONTENTS**

|   |    |
|---|----|
| 1. Opening of the meeting .....   | 3  |
| 1.1 Virtual meeting information for Adobe Connect.....                                      | 3  |
| 1.2 Welcome by the IPPC Secretariat.....  | 3  |
| 1.3 Introductions .....   | 3  |
| 1.4 Election of the rapporteur .....  | 3  |
| 2. Secretariat Maintenance and Updates from Relevant Bodies .....                           | 3  |
| 2.1 Eighth Session of the Commission on Phytosanitary Measures (CPM-8 (2013)).....          | 3  |
| 2.2 Update from the IPPC Secretariat.....   | 4  |
| 3. Prioritization criteria for proposed phytosanitary treatment and score definitions ..... | 4  |
| 4. TPPT Work Programme .....  | 5  |
| 5. Other business .....   | 8  |
| 5.1 July 2013 meeting preparation.....  | 8  |
| 5.2 July 2014 TPPT meeting .....  | 8  |
| 6. Follow-up Actions for next TPPT Virtual Meeting .....                                    | 8  |
| 6.1 Date for next virtual meeting.....  | 8  |
| 6.2 TPPT work programme .....   | 8  |
| 7. Close of the Meeting and Feedback .....  | 8  |
| Appendix 1. Agenda.....   | 9  |
| Appendix 2. TPPT Work Programme .....   | 10 |

## 1. Opening of the meeting

### 1.1 Virtual meeting information for Adobe Connect

Before beginning the meeting, the Secretariat of the International Plant Protection Convention (IPPC) (hereafter Secretariat) gave a brief overview of the virtual meeting tool Adobe Connect.

### 1.2 Welcome by the IPPC Secretariat

The Secretariat welcomed the participants to the meeting. The following five members of the Technical Panel on Phytosanitary Treatments (TPPT), one invited expert and two Secretariat staff participated in the meeting:

- Mr Patrick GOMES (Member) USA
- Mr Andrew JESSUP (Member) AUSTRALIA
- Mr Guy HALLMAN (Member) USA
- Mr Michael ORMSBY (Member) NEW ZEALAND
- Mr Eduardo WILLINK (Member) ARGENTINA
- Mr Andrew PARKER (Invited Expert) FAO/IAEA
- Mr Artur SHAMILOV (Secretariat Lead)
- Ms Stephanie DUBON (Secretariat Support)

The following members were unable to attend:

- Mr Antario Dikin (Steward) Indonesia
- Mr Jan Bart Rossel (Assistant Steward ) AUSTRALIA
- Mr Min-Goo PARK (Member) REPUBLIC OF KOREA
- Mr Yuejin WANG (Member) CHINA

The panel approved the agenda (see Appendix 1 to this report).

### 1.3 Introductions

The meeting participants introduced themselves and agreed to update their contact information on the International Phytosanitary Portal (IPP, [www.ippc.int](http://www.ippc.int)) if necessary<sup>1</sup>. The TPPT Secretariat lead was elected as a chair for this virtual meeting as well as future virtual meetings.

### 1.4 Election of the rapporteur

The panel elected Mr. Mike Ormsby (New Zealand) as the rapporteur.

## 2. Secretariat Maintenance and Updates from Relevant Bodies

### 2.1 Eighth Session of the Commission on Phytosanitary Measures (CPM-8 (2013))

#### *Possible criteria to determine whether a formal objection is technically justified*

The Secretariat informed participants that the CPM-8 (2013) approved the *Criteria to help determine if a formal objection is technically justified*. The CPM requested the Standards Committee (SC) to review and clarify the flow charts for formal objections.

In regards to treatments the CPM-8 (2013) adopted the revision of Annex 1 (*Approved treatments associated with wood packaging material*) to ISPM 15:2009 (*Regulation of wood packaging material in international trade*) (2006-011) and consequential revision of Annex 2 (*The mark and its application*) to ISPM 15:2009.

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<sup>1</sup> The TPPT membership list, which includes contact information, can be found on the IPP at <https://www.ippc.int/index.php?id=1110739>

One member noted the importance of adopting the treatments, such as dielectric heating for ISPM 15:2009, and noted that this treatment is already on the List of Topics to be included as an annex to ISPM 28:2007 as a treatment of any wood products. The Secretariat noted that the ISPM 28:2007 dielectric heating had been on hold until the ISPM 15:2009 Annex was adopted, so work on this dielectric heating can resume.

## 2.2 Update from the IPPC Secretariat

### *SC E-decisions*

The SC had approved (by SC e-decision (2013\_eSC\_May\_05)) the draft phytosanitary treatment *Irradiation for Dymicoccus neobrevipes Beardsley, Planococcus lilacinus (Cockerell) and Planococcus minor (Maskell) (Hemiptera: Pseudococcidae)* (draft annex to ISPM 28:2007) (2012-011) to be added to the *List of topics for IPPC standards* and sent for member consultation.

### *Expert Consultation on Cold Treatments*

During CPM-8 (2013), the Secretariat gave a side session to present the Concept note on the planned Expert Consultation on Cold Treatments (ECCT). Approximately 45 participants attended the side session. Additionally, the National Plant Protection Organization (NPPO) of Argentina offered to host the meeting, tentatively scheduled for early December 2013 in Buenos Aires, Argentina.

In addition, a Steering Committee for the ECCT has been selected, and one TPPT member was selected as a facilitator for the meeting.

One panel member noted that it is important to harmonize the implementation of cold treatments and methods of reporting them, and it is obvious that in literature there are large variation efficacies on the different species of fruit fly as well as within the same species or products. The panel hopes the ECCT can address some of these issues.

One member informed the panel that the United States Department of Agriculture (USDA) has been developing guidelines for cold treatments and offered to share them with the panel. The Secretariat will forward this information to all ECCT participants for discussion.

## 3. Prioritization criteria for proposed phytosanitary treatment and score definitions

The Secretariat reminded the panel that each of the recommended subjects (phytosanitary treatment submission) for the *List of topics for IPPC standards* should have a priority of 1 to 4, with 1 being the highest priority and 4 being the lowest.

The Secretariat asked the panel to determine the priority for the following treatments, which were currently recommended to the SC to be added to the *List of topics for IPPC standards*:

- Irradiation for *Dymicoccus neobrevipes* Beardsley, *Planococcus lilacinus* (Cockerell) and *Planococcus minor* (Maskell) (Hemiptera: Pseudococcidae) (2012-011)
- Irradiation for *Ostrinia nubilalis* (2012-009)

The panel discussed this issue and one member suggested that priority 1 should be given to 2012-011 because the irradiation dose of 231Gy may decrease existing irradiation doses from 400Gy. He also suggested that, for 2012-009, there is no high interest among countries to explore this treatment because methyl bromide is still used for the same purpose. Therefore, it should be made a lower priority.

The Secretariat noted that, because this treatment is considered an alternative to methyl bromide, it may be acceptable to give it high priority.

One member noted that many irradiation treatments are used for a limited range of pests instead of widely using methyl bromide and suggested that the high priority will motivate the use of new

treatments such as irradiation. After the discussion, the panel agreed that both treatments should be assigned priority 1.

The TPPT:

- (1) *Recommended* to the SC to assign priority 1 to the draft treatment *Irradiation for Dysmicoccus neobrevipes* *Beardsley*, *Planococcus lilacinus* (*Cockerell*) and *Planococcus minor* (*Maskell*) (*Hemiptera: Pseudococcidae*) (2012-011)
- (2) *Recommended* to the SC to assign priority 1 to the *Irradiation* for *Ostrinia nubilalis* (2012-009)

#### 4. TPPT Work Programme

##### *Revision to the TPPT position paper on adult emergence after irradiation*

Since the 2012 December TPPT meeting, the panel has been discussing whether the stated treatment end-point would be acceptable because surveillance is undertaken using a pheromone, and surviving adult that were reproductively sterile, could be detected at the import location. During 2013 February virtual meeting some issues arose regards the treatment end-point and the lead for the TPPT position paper on adult emergence after irradiation, informed the panel that he had reviewed the comments received from the panel members and suggested this paper be discussed again and agreed to provide the revised version of this paper for discussion at the next meeting.

##### *Cold tolerance of Tephritidae (Preliminary summary of Cold Disinfestations)*

At its December 2012 meeting, the panel had discussed whether the form of artificial inoculation used to estimate life-stage may have impacted relative susceptibility. The panel considered that this issue needed to be resolved because available literature was mixed on which life stage was the most heat tolerant. In addition, the panel agreed to do a similar literature search for cold tolerance in Tephritidae which would be useful for the ECCT. One panel member presented a paper on cold tolerance of Tephritidae and informed the panel that the concept was to compile the data on all cold treatments. Therefore, two TPPT members, in collaboration with other scientist, are doing this work to try to find the reason of variation between laboratory tests, but within one species. He informed the panel that the updated information will be provided for the next meeting. He also encouraged the panel members to provide any information on this issue such as published articles, experimental protocols, treatment manuals etc.

##### *Revisiting Vapour heat treatment for Bactrocera cucurbitae on Cucumismelo var. reticulatus (2006-110)*

In 2012, the SC was unable to recommend this treatment for adoption and returned it to the panel with concerns regarding treatment efficacy and about which was the most tolerant life stage. At the 2013 February TPPT virtual meeting, one panel member presented the discussion paper on the *most heat-tolerant life stage of Tephritidae*, concluding that the egg stage was the most thermotolerant or the next most thermotolerant in studies done with insects reared in fruit, using a common measure of efficacy. The ramifications for 2006-110 were not discussed at that meeting because of the uncertainty of the most heat-tolerant stage.

During the 2013 April virtual meeting, after further research, the panel member gave an update on a discussion paper which was presented previously at the 2013 February TPPT Virtual Meeting. It was hoped that this new information on heat tolerance answered the key technical issues that have kept the draft treatment *Vapour heat treatment for Bactrocera cucurbitae on Cucumismelo var. reticulatus* (2006-110) from moving forward in the approval process.

Based on numerous studies that used common measures of efficacy among the stages, and reared and treated stages within fruit, it was determined that, in seven of the nine studies, the egg was the most thermotolerant stage or of equal tolerance as other stages. In two studies, the egg was the second most tolerant.

All of the treatments in this review involved heated air, which is the same type of treatment proposed in 2006-110. All of the species (except one) are in the genus *Bactrocera*, the same genus 2006-110 is proposed to control.

One member noted that one of the issues was regarding replication during the experiments and different infestation methodology. The treatment lead explained that, in one replication, the third instars were treated differently and an artificial diet was used, but there was no impact because the information clearly showed that the most tolerant stage is the egg.

One member referred to the 2012 December TPPT meeting report and highlighted that it was decided that the ED values need to be re-calculated because the first replication should not be included.

The panel agreed that the ED values should be recalculated without including the first replication. One panel member agreed to provide updated data for the next TPPT meeting.

### ***Proposal for Revision to ISPM 18:2003***

Two panel members presented a paper on *Observations on revisions to ISPM 18:2003* with suggestions on why the ISPM 18:2003 should be put forward for revision. They highlighted the following points::

- Subsection 3.1: Penultimate paragraph reference to Annex 1 as well as Annex 1 because treatments are not entered there but in ISPM 28
- Appendix 1: The list of doses required for control of different pest groups need to be updated
- Appendix 2 (Research protocol), could be updated and expanded in light of discussions about what constitutes good irradiation research practices during recent TPPT meetings. It is not critical to update the research protocol, but it would be helpful to researchers

One member noted that a revision would help add some additional information on , would be useful. There was also concern that Appendix 1 to ISPM 18:2003 has been causing difficulties with regards to or sterilized adult emergence.

One member suggested that the footnote also needed to be updated and updated to provide clarification regarding the recommendation to use the irradiation treatment.

Another member noted that, in Appendix 1, the provided existing standard formulation of “minimum dose range” rather than “minimum dose” is difficult to interpret.

The panel agreed that two of the panel members will prepare the paper for the panel review at the next TPPT meeting.

The Secretariat explained the process to get a standard revised and explained the call for topics in 2013 and how a proposal for a revision would have to be submitted. The Secretariat agreed to provide necessary information for the submission of a new topic.

The Secretariat reminded the panel that, during the last call for treatments in 2012, the USA submitted two new treatments concerning the Control Atmosphere Temperature Treatment Systems, but the panel could not recommend them to be added to the list of topics because these treatments do not fall under the existing TPPT topics. Some panel members informed that they are developing a paper suggesting the elimination of topics from the List of topics. This may also serve as a motivation to submit new, innovative treatments.

The panel agreed that this proposal could be useful.

### ***Update from treatment leads***

The Secretariat requested that all treatment leads provide an update on their respective treatments.

The lead of the treatment *Sulfuryl fluoride fumigation of wood packaging material* (2007-101) informed the panel that the submitter asked to the panel to approve the experimental protocol which the submitter is planning to use. The treatment lead explained to the submitter that the panel does not have such authority and recommended asking the International Forest Quarantine Research Group (IFQRG) for advice on experimental design. The treatment lead noted that due to the limited resources, the submitter will be able to provide additional information no earlier than 2014.

The treatment lead for the *High temperature forced air treatment for selected fruit fly species (Diptera: Tephritidae) on fruit* (2009-105) informed the panel that the evaluation report will be ready for the 2013 July TPPT meeting. One member noted that the paper for thermotolerance on Tephritidae could be useful during the evaluation of the treatment *High temperature forced air treatment for selected fruit fly species (Diptera: Tephritidae) on fruit* (2009-105).

The lead for *Methyl isothiocyanate and sulfuryl fluoride (Ecotwin mixture) fumigation for Bursaphelenchus xylophilus, Coleoptera: Cerambycidae, and Coleoptera: Scolytinae of wood packaging material* (2007-102) was concerned of the fact had not yet responded to requests for information.

The Secretariat reminded the panel that, in February 2013, it had sent requests for further information to Australia, Japan, Spain and the United States requesting more information related to treatment submissions.

In addition, the Secretariat sent final notice letters to Japan and the Philippines with the warning that, if the Secretariat does not receive communication from the submitter before 1 May 2013, the treatments would be proposed for deletion from the *List of Topics*.

One member, expressing concern that these treatments would be removed from the List of topics without attempting all possible ways to contact the submitters, suggested to the Secretariat to phone to submitters and ask why they were not responding. Another member noted that even after face-to-face meeting with submitters, it is not guaranteed that they will provide responses. The Secretariat highlighted that, before recommending deletions, the Secretariat sent the multiple letters to the submitters over the course of several years, and only after no response is received after numerous letters, the treatments are recommended for deletion.

The panel agreed that the treatments for which the final notice has been sent will be discussed at the next TPPT meeting.

The Secretariat agreed to prepare a paper for the next TPPT meeting with a description of the existing process of requesting additional information from submitters and possible suggestions for improvement in communications with submitters.

### ***Equipment cleaning manual***

One panel member noted that the United States Department of the Interior had developed a manual on Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species<sup>2</sup> and noted that his suggestion to review this manual was with regards to the quarantine problems which occur regularly during transportation of equipment.

The Secretariat inform the panel that an expert working group on the International movement of used vehicles, machinery and equipment (2006-004) will be meeting at the end of May 2013 and this information could be forwarded to the participants. Some panel members also suggested adding a topic for treatments of used vehicles, machinery and equipment.

One panel member noted that, a few years ago, the topic for wood treatments had been submitted, but the CPM had decided that there is no need for wood treatments at that time if there were no adopted

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<sup>2</sup> <http://www.usbr.gov/mussels/prevention/docs/EquipmentInspectionandCleaningManual2012.pdf>

ISPMs on wood. However, it was noted that the topic Soil and Growing media in associated with plants (2009-006) has been added to the list of topic without an adopted standard.

The panel agreed to develop submission of topics and a draft specification for review at the next TPPT meeting.

## **5. Other business**

### **5.1 July 2013 meeting preparation**

#### *Statement of commitment*

The Secretariat reminded the panel members that the statement of commitment should be sent to the Secretariat before the 1 July 2013.

#### *Visa preparation*

The Secretariat informed the panel that the NPPO of Japan has requested all participants to provide their travel information and to confirm their attendance to the 2013 July TPPT meeting in Fukuoka (Japan). The Secretariat asked panel members to provide this information to the Secretariat by 26 April 2013.

### **5.2 July 2014 TPPT meeting**

The Secretariat, on behalf of the TPPT Steward and the Head of the NPPO of Indonesia, informed the panel that the TPPT face-to-face meeting in 2014 will be hosted by the NPPO of Indonesia. The tentative date is 14-18 July 2014, Jakarta, Indonesia.

## **6. Follow-up Actions for next TPPT Virtual Meeting**

### **6.1 Date for next virtual meeting**

The next TPPT virtual meeting is scheduled for 19 June 2013.

### **6.2 TPPT work programme**

The Secretariat will update the TPPT work programme and provide it to the panel members (see Appendix 2 to this report).

## **7. Close of the Meeting and Feedback**

The panel agreed to adopt the meeting report using the forum on the restricted work area of the IPP.

The panel agreed the virtual meeting went well, except for temporary internet connection problems during the meeting. The panel noted that these types of meetings are very valuable for the work of the panel.

The Secretariat thanked the members for participating and closed the meeting.

## Appendix 1. Agenda

| AGENDA ITEM   | DOCUMENT NO.  | PRESENTER  |
|---|---|--|
| <b>1. Opening of the meeting</b>  | -   | SHAMILOV   |
| 1.1 Virtual meeting information for Adobe Connect   | 2013_TPPT_Apr_03  | SHAMILOV   |
| 1.2 Welcome by the IPPC Secretariat   | 2013_TPPT_Apr_01  | SHAMILOV   |
| 1.3 Introductions   | 2013_TPPT_Apr_02  | SHAMILOV   |
| 1.4 Election of Rapporteur  | -   | SHAMILOV   |
| <b>2. Secretariat maintenance and updates from relevant bodies</b>  | -   | SHAMILOV   |
| <b>2.1 Update from CPM-8 (2013)</b> <ul style="list-style-type: none"> <li>Possible criteria to determine whether a formal objection is technically justified</li> </ul>  | 2013_TPPT_Apr_04  | SHAMILOV   |
| <b>2.2 Update from Secretariat</b> <ul style="list-style-type: none"> <li>SC E-decisions</li> <li>Expert Consultation on Cold Treatments</li> </ul>   | 2013_TPPT_Apr_04  | SHAMILOV   |
| <b>3. Prioritization criteria for proposed phytosanitary treatments and score definitions</b>   | 2013_TPPT_Feb_04  | SHAMILOV   |
| <b>4. TPPT Work Programme</b> <ul style="list-style-type: none"> <li>Paper on cold tolerance in Tephritidae</li> <li>Revisit Netted Melon treatment (2006-110)</li> <li>Revision to ISPM 18:2003</li> <li>Update from treatment leads</li> <li>Status of proposals for the 2013 Call for Topics</li> <li>Equipment cleaning manual</li> </ul> | 2013_TPPT_Apr_04<br>2013_TPPT_Apr_06<br>2013_TPPT_Apr_05<br>2013_TPPT_Apr_07<br><br><a href="http://www.usbr.gov/mussels/prevention/docs/EquipmentInspectionandCleaningManual2012.pdf">http://www.usbr.gov/mussels/prevention/docs/EquipmentInspectionandCleaningManual2012.pdf</a> | JESSUP<br>HALLMAN<br>HALLMAN<br><br>ALL<br>ALL<br>JESSUP |
| <b>5. Other business</b>  | -   | SHAMILOV   |
| <b>5.1 2013 July meeting preparation</b> <ul style="list-style-type: none"> <li>Statement of commitment</li> <li>Visa preparation</li> </ul>  |   | SHAMILOV   |
| <b>5.2 2014 July TPPT meeting (Indonesia, tentative)</b>  |   | SHAMILOV   |
| <b>6. Follow-up actions for next TPPT virtual meeting</b>   | -   | SHAMILOV   |
| 6.1 Date for next virtual meeting   | -   | SHAMILOV   |
| <b>7. Close of the meeting and feedback</b>   | -   | SHAMILOV   |

**Appendix 2. TPPT Work Programme**

| <b>2013 DUE DATE</b> | <b>RESPONSIBLE</b> | <b>ACTION</b>  |
|----------------------|--------------------|--|
| <b>1 Apr</b>         | <b>DUBON</b>       | Revise internal TPPT documents and action items from 2012 Dec TPPT meeting: <ul style="list-style-type: none"> <li>• Create FTP server for draft PTs and relevant docs, templates, working docs, etc. (Dubon)</li> <li>•</li> </ul>  |
| <b>15 June</b>       | <b>JESSUP</b>      | Paper on cold tolerance in Tephritidae (Hallman, Jessup, Willink)  |
| <b>19 May</b>        | <b>All members</b> | Provide available information regarding cold disinfestation treatments to Andrew Jessup (copy to the Secretariat)  |
| <b>15 June</b>       | <b>All members</b> | Initial draft of TPPT submissions for 2013 Call for topics <ul style="list-style-type: none"> <li>• Draft submission form for topic :Revision to ISPM 18:2003 (Hallman and Ormsby)</li> <li>• Draft submission form for topic: Pests other than fruit flies (Gomes and Wang)</li> <li>• Draft submission form for topic: Wood treatments (Gomes)</li> <li>• Draft submission form for topic: Plants for planting (Willink and Park)</li> <li>• Draft submission form for topic: Sea containers (Willink)</li> <li>• Draft specification for the Treatment guidelines for treatment types other than irradiation (similar to ISPM 18:2003) (e.g. heat treatment, cold treatment, etc.) (Ormsby)</li> <li>• Draft submission form for topic: Equipment treatments</li> </ul> |
| <b>6 May</b>         | <b>SHAMILOV</b>    | Provide to TPPT Members all necessary information for Draft Specification for the new topics.  |
| <b>15 June</b>       | <b>JESSUP</b>      | Revision of TPPT position paper on adult emergence in irradiation treatments posted on IPP forum for TPPT discussion   |
| <b>1 June</b>        | <b>DUBON</b>       | Proposal to eliminate treatment topics from the List of Topics   |
| <b>6-10 May</b>      |                    | 2013 May SC meeting (Rome)   |
| <b>1 Jun</b>         | <b>All members</b> | Discussion papers, checklists, updates, etc. to be discussed at 2013 July TPPT meeting are due   |
| <b>19 Jun</b>        | <b>All members</b> | TPPT virtual meeting (tentative)   |
| <b>8-12 Jul</b>      | <b>All members</b> | 2013 July TPPT meeting (Fukuoka, Japan)  |