



Virtual Meeting  
28 February 2013

*REPORT*

# Technical Panel on Phyosanitary Treatments February 2013



Food and Agriculture Organization of the United Nations

**CONTENTS**

1. Opening of the meeting .....	3
1.1 Virtual meeting information for GoToTraining.....	3
1.2 Welcome by the IPPC Secretariat.....	3
1.3 Introductions .....	3
2. Secretariat Maintenance and Updates from Relevant Bodies .....	3
3. Expert Consultation on Cold Treatments .....	3
4. Update on Cold Treatments.....	5
5. Update on latest SC e-decisions .....	5
6. Update on the Most Heat Tolerant Life Stage of Tephritidae .....	6
7. TPPT Position Paper on Adult Emergence in Irradiation.....	6
8. Proposals for the 2013 Call for Topics.....	7
9. CPM-8 (2013) Items Relevant to the TPPT .....	7
10. Other Business.....	7
11. Follow-up Actions for next TPPT Virtual Meeting .....	7
11.1 TPPT work programme .....	7
11.2 Date for next virtual meeting.....	7
12. Close of the Meeting and Feedback .....	8
Appendix 1: Agenda.....	9
Appendix 2. Documents list .....	10
Appendix 3. TPPT Work Programme .....	11

## 1. Opening of the meeting

### 1.1 Virtual meeting information for GoToTraining

Before beginning the meeting, the IPPC Secretariat (hereafter Secretariat) gave a brief overview/refresher of the virtual meeting tool GoToTraining.

### 1.2 Welcome by the IPPC Secretariat

The Secretariat welcomed the participants to the meeting. Six members of the Technical Panel on Phytosanitary Treatments (TPPT), one invited expert and five Secretariat staff participated in the (see list below).

Mr Patrick GOMES (TPPT Member) USA  
Mr Andrew JESSUP (TPPT Member) AUSTRALIA  
Mr Guy HALLMAN (TPPT Member) USA  
Mr Michael ORMSBY (TPPT Member) NEW ZEALAND  
Mr Eduardo WILLINK (TPPT Member) ARGENTINA  
Mr Scott WOOD (TPPT Member) USA  
Mr Andrew PARKER (Invited Expert) AUSTRIA  
Mr Brent LARSON (IPPC Standard officer) ITALY  
Mr Artur SHAMILOV (IPPC Secretariat Lead) ITALY  
Ms Stephanie DUBON (IPPC Secretariat Lead) USA  
Mr Larry ZETTLER (IPPC Secretariat Expert) USA  
Ms Adriana MOREIRA (IPPC Secretariat) ITALY

The panel approved the agenda (see Appendix 1 to this report) and reviewed the documents list (see Appendix 2 to this report).

### 1.3 Introductions

The meeting participants introduced themselves and agreed to update their contact information on the IPP if necessary (full contact information can be found on IPP).

## 2. Secretariat Maintenance and Updates from Relevant Bodies

### 2012 December TPFQ Virtual Meeting

One TPPT member, who is also a member of the TPFQ, gave a brief update of items discussed at the TPFQ virtual meeting:

- Draft revision of Annex 1 (*Approved treatments associated with wood packaging material*) (2006-011) to ISPM 15:2009 (*Regulation of wood packaging material in international trade*) will be presented to CPM-8 (2013) for adoption. This annex will include new information on dielectric heating treatments
- TPFQ will recommend the draft standard *Management of phytosanitary risks in the international movement of wood* (2006-029) to the SC for member consultation
- TPFQ will meet in June 2013 to finalize the drafting of the revision of ISPM 15:2009 related to *Criteria for treatments for wood packaging material in international trade* (2006-010).

## 3. Expert Consultation on Cold Treatments

### Concept note

At its April 2012 meeting, the Standards Committee (SC) agreed that a meeting of cold treatments experts (Expert consultation on cold treatments, ECCT) should be organized under the auspices of the Secretariat. This should involve the best experts in the world on cold treatments used by national plant

protection organizations (NPPOs) and relevant experts from the TPPT and the Technical Panel on Fruit Flies (TPFF). It was noted that the members of both panels could help identify the cold treatment experts.

The consultation would provide a forum for discussion of cold treatments, to build confidence in them and establish mutual understanding of any related issues.

The Secretariat noted that financial resources are available to support the development of phytosanitary treatments and that a consultant could be hired to organize the consultation.

Because the panel had some concerns about the objectives of the ECCT, the Secretariat drafted a concept paper detailing its objectives and results:

#### Objectives

- provide a forum for experts of cold treatments from developing and developed countries to discuss cold treatments in international trade
- provide an overview of cold treatments currently used in trade
- increase mutual understanding of issues related to cold treatments
- build confidence in the cold treatments processes
- identify critical requirements for operation of cold treatments
- identify methodologies used internationally, including statistical analyses of data and their limitations
- build an international scientific network on cold treatments and make recommendations for any research.

#### Results

- identification of cold treatments currently used internationally and the critical requirements for operation of cold treatments for fruit flies in international trade
- agreement on scientific methodologies and statistical analyses of data used internationally
- agreement on a common approach in the development of cold treatments
- identification of potential issues caused by cold treatment affecting product quality
- recommendations to the TPPT

Experts would be expected to provide an overview of cold treatments they have developed or used and to identify the main issues that need to be considered when developing, evaluating and implementing such treatments.

The Secretariat noted that there is no known community for cold treatments experts where experts can collaborate on challenges and issues. The ECCT would also help identify the most important issues in cold treatments and would target cold treatment experts and researchers, not NPPOs.

#### **Agenda and provisional programme**

The panel reviewed the provisional ECCT agenda and programme and agreed it was suitable.

#### **Meeting dates**

The meeting is tentatively scheduled for late November or early December 2013 in South Africa.

#### **Steering Committee**

A Steering Committee will be established and some panel members will be invited to assist in further development the ECCT programme.

#### **TPPT proposals and recommendations**

The TPPT had no additional proposals to add to the concept paper.

The TPPT:

- (1) *agreed* that an Expert consultation on cold treatments (ECCT) would be a valuable way to encourage cold treatment experts and researchers to collaborate on cold treatment challenges and issues
- (2) *agreed* to provide the Secretariat with information from their NPPOs (such as approved cold treatments, manuals, experimental guidelines etc.) that may be used in the preparation of the ECCT.

#### 4. Update on Cold Treatments

##### Returned from 2011 Nov SC e-decision

The Secretariat updated the panel on the status of the four cold treatments that had been rejected by the SC in November 2011 via e-decision because of issues regarding ED values and chilling injury to lemons. The panel had finalized the TPPT response to the SC's concerns and updated the ED values at its December 2012 meeting. The Secretariat noted that these four treatments would be sent to the SC for their consideration and possible recommendation to CPM for adoption. See also Section 5 of this report for more information on e-decisions.

##### Formal objections at CPM-7 (2012)

The Secretariat updated the panel on the status of the four cold treatments that had received formal objections prior CPM-7 (2012). The panel had previously drafted the TPPT response to the formal objections at its September 2012 virtual meeting, but the formal objection from China had indicated that the treatments each had two schedules (2°C for 16 days and 3°C for 16 days) and that the ED values may not be accurate. The Secretariat informed the panel that the treatments presented to CPM-7 (2012) only included one treatment schedule (3°C for 16 days), so there may have been some confusion. The panel revised and finalized the TPPT responses to the formal objections.

The Secretariat noted that these four treatments would be sent to the SC for their consideration and possible recommendation to CPM for adoption. See also Section 5 of this report for more information on e-decisions.

The TPPT:

- (1) *finalized* its response to the formal objections received during CPM-7 (2012).

#### 5. UPDATE ON LATEST SC E-DECISIONS

##### **Irradiation for *Dysmicoccus neobrevipes* Beardsley, *Planococcus lilacinus* (Cockerell) and *Planococcus minor* (Maskell) (Hemiptera: Pseudococcidae) (2012-011)**

The Secretariat informed the panel that the draft treatment *Irradiation for Dysmicoccus neobrevipes Beardsley, Planococcus lilacinus (Cockerell) and Planococcus minor (Maskell) (Hemiptera: Pseudococcidae)* (2012-011) had recently be sent for SC e-decision for approval for member consultation. The treatment had received minor comments from the SC during the forum stage of the e-decision and the panel addressed them. The treatment lead will make revisions to the treatment and then the Secretariat will submit the treatment to the SC as a poll.

The TPPT:

- (1) *revised* the draft treatment *Irradiation for Dysmicoccus neobrevipes Beardsley, Planococcus lilacinus (Cockerell) and Planococcus minor (Maskell) (Hemiptera: Pseudococcidae)* (2012-011) to reflect the concerns by the SC during e-decision
- (2) *asked* the treatment lead to make further revisions to the treatment and submit it to the Secretariat for SC e-decision (poll).

### *Upcoming SC e-decisions on treatments*

The Secretariat notified the panel of upcoming SC e-decisions to be submitted in May and June 2013 on eight cold treatments.

## **6. Update on the Most Heat Tolerant Life Stage of Tephritidae**

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. One panel member had agreed to contact researchers in the field to seek their opinion on this issue and any other data they may have available, and presented his findings (PPT\_2013\_Feb\_07) to the panel.

He concluded that the eggs were the most thermotolerant or the next most thermotolerant in studies done with insects reared in fruit using a common measure of efficacy and noted that the egg itself can vary considerably in thermotolerance depending on age and usually increases in thermotolerance as it develops. He also noted that:

- It was not possible to compare all of the studies as they are presented because the methodologies and measures of efficacy differ considerably.
- Many of the studies were done *in vitro* where stages were heated under the same conditions; this arrangement may artificially favor egg tolerance.
- In some of the studies done in fruit, 3<sup>rd</sup> instars were reared on diet for several days before being inserted into the fruit.
- Operational considerations may tend to favor concentration of treatment efficacy on the 3<sup>rd</sup> instar because the 3<sup>rd</sup> instar is the stage likely to be found by inspectors and it is the stage of those present in fruit closest to the adult, thus, closest to successful colonization.
- One of the most illustrative studies is a PhD thesis (Corcoran, 2001) that was not published in any journal. It is illustrative because it is the only study where results using *in vitro* and in-fruit techniques can be compared, thus, shedding light on the relevance of the abundant heat *in vitro* studies in the literature.

The panel agreed this paper was very thorough and thanked the member for his work. In addition, the panel agreed to do a similar literature search for cold tolerance in Tephritidae which would be useful for the ECCT. However, the panel noted that, for cold treatments, cold tolerance can be host derived and a pattern may not be established, as the panel found in heat treatments.

The TPPT:

- (1) *agreed* that it would be useful to do a similar literature search for cold tolerance in Tephritidae for the Expert Consultation on Cold Treatments.

## **7. TPPT Position Paper on Adult Emergence in Irradiation**

At its December 2012 meeting, one panel member had agreed to prepare a paper for the SC supporting the panel's position on irradiation end-point acceptability (i.e. adult emergence) with various scenarios and their issues. The panel reviewed the draft paper (TPPT\_2013\_Feb\_08), which addressed the treatment endpoint and its suitability to international trade and that an endpoint for irradiation treatments with no adult emergence would not be practical for some pest species, including Lepidoptera. For some treatments, the endpoint is the absence of the emergence of normal adults able to disperse, which may not have been reported in most papers and may not be acceptable to IPPC members.

The panel provided comments regarding the target audience for the paper and other endpoint options and the member who drafted the paper agreed to revise it. The panel also recognized the lack of a practical method to identify irradiated insects that have been caught in monitoring traps. This is a significant impediment to endpoints that include sterile insects that may emerge. The panel

recommended that research to develop methods to identify irradiated insects should be encouraged. The Secretariat will post the revised document for a TPPT forum discussion and, once finalized, it is hoped this paper will accompany all future irradiation treatments to the SC, member consultation, etc.

## 8. Proposals for the 2013 Call for Topics

In anticipation of the 2013 IPPC Call for topics to take place in June and July 2013, the panel discussed proposals following the 2012 December TPPT meeting and a 2013 January forum discussion. The following topics were identified:

- revision to ISPM 18:2003 (*Guidelines for the use of irradiation as a phytosanitary measure*)
- pests other than fruit flies
- wood treatments
- plants for planting
- sea containers
- new ISPMs for treatment types other than irradiation (similar to ISPM 18:2003) (e.g. heat treatment, cold treatment, etc.).

Members agreed to draft the submissions for topics as assigned in the TPPT work programme (see Appendix 3). These draft submissions will be discussed at the next TPPT meeting.

## 9. CPM-8 (2013) Items Relevant to the TPPT

The Secretariat informed the panel that the proposed criteria to help determine whether a formal objection is technically justified will be considered at CPM-8 (2013). If the criteria are adopted, the Secretariat will inform the panel of impacts this may have on the panel.

## 10. Other Business

The Secretariat reminded the panel to submit good quality images of phytosanitary treatments (e.g. MeBr, heat, etc.) to the Secretariat for use on the IPP (International Phytosanitary Portal – <https://www.ippc.int/>).

The Secretariat noted that the panel may try using a different virtual meeting tool (Adobe Connect) for the next TPPT virtual meeting because it is less expensive and FAO provides technical support.

The Standards Officer thanked all members whose terms were expiring at the end of March 2013 and thanked them for their hard work and dedication over the last five years:

- Ms Alice Baxter (South Africa)
- Mr Ray Cannon (United Kingdom)
- Mr Mohammad Katbeh-Bader (Jordan)
- Mr Scott Wood (USA)

The Standards Officer also thanked Mr Larry Zettler for his work as TPPT Secretariat Technical Expert, carried out until December 2012.

## 11. Follow-up Actions for next TPPT Virtual Meeting

### 11.1 TPPT work programme

The panel reviewed and updated the TPPT work programme (see Appendix 3 to this report).

### 11.2 Date for next virtual meeting

The next TPPT virtual meetings are scheduled for:

25 April 2013

19 June 2013.

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

The panel agreed to adopt the meeting report virtually.

The panel agreed the virtual meeting went well and 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>	-	DUBON
1.1 Virtual meeting information for GoToTraining	2013_TPPT_Feb_04	DUBON
1.2 Welcome by the IPPC Secretariat	2013_TPPT_Feb_01 2013_TPPT_Feb_02	DUBON
1.3 Introductions	2013_TPPT_Feb_03	DUBON
<b>2. Secretariat Maintenance and Updates from relevant Bodies</b>	-	SHAMILOV
<b>3. Expert consultation on cold treatments</b> <ul style="list-style-type: none"> <li>• Concept note</li> <li>• Agenda and provisional program</li> <li>• Hold in November 2013?</li> <li>• TPPT proposals and recommendations</li> </ul>	2013_TPPT_Feb_06	SHAMILOV
<b>4. Update on cold treatments</b> <ul style="list-style-type: none"> <li>• returned from 2011 Nov SC e-decision</li> <li>• formal objections at CPM-7 (2012)</li> </ul>	2013_TPPT_Feb_05	SHAMILOV
<b>5. Update on latest SC e-decisions</b> <ul style="list-style-type: none"> <li>• Irradiation for <i>Dysminococcus neobrevipes</i> Beardsley, <i>Planococcus lilacinus</i> (Cockerell) and <i>Planococcus minor</i> (Maskell) (Hemiptera: Pseudococcidae) (2012-011)</li> <li>• Upcoming SC e-decisions on treatments</li> </ul>	2013_TPPT_Feb_05	SHAMILOV
<b>6. Update on most tolerant life stage of Tephritidae</b>	2013_TPPT_Feb_07	HALLMAN
<b>7. TPPT position paper on adult emergence in irradiation</b>	2013_TPPT_Feb_08	JESSUP
<b>8. Proposals for the 2013 Call for Topics</b>	2013_TPPT_Feb_05	SHAMILOV
<b>9. CPM-8 (2013) items relevant to the TPPT</b>	2013_TPPT_Feb_05	SHAMILOV
<b>10. Other business</b>	-	DUBON
<b>11. Follow-up Actions for next TPPT Virtual Meeting</b>	-	DUBON
11.1 TPPT Work Programme	2013_TPPT_Feb_05	DUBON
11.2 Date for next virtual meeting	-	DUBON
<b>12. Close of the meeting and Feedback</b>	-	DUBON

**Appendix 2. Documents list**

<b>DOCUMENT NUMBER</b>	<b>AGENDA ITEM</b>	<b>DOCUMENT TITLE (PREPARED BY)</b>
TPPT_2013_Feb_01	1.2	Agenda (DUBON)
TPPT_2013_Feb_02	1.3	Documents list (DUBON)
TPPT_2013_Feb_03	1.4	Participant list (DUBON)
TPPT_2013_Feb_04	1.1	Virtual meeting information (DUBON)
TPPT_2013_Feb_05	4, 5, 8, 9, 11.1	TPPT considerations (DUBON and SHAMILOV)
TPPT_2013_Feb_06	3.0	Expert Consultation on Cold Treatments: Concept note, agenda and provisional programme (SHAMILOV)
TPPT_2013_Feb_07	6.0	Update regarding most tolerant life stage of Tephritidae (HALLMAN)
TPPT_2013_Feb_08	7.0	TPPT position paper on adult emergence in irradiation (JESSUP)

### Appendix 3. TPPT Work Programme

Updated: 2013 February TPPT Virtual Meeting

2013 DUE DATE	RESPONSIBLE	ACTION
7 Mar	ORMSBY	Send latest version of Cardiff Protocol to all TPPT members
15 Mar	SHAMILOV	2012 Dec TPPT meeting report posted on IPP
15 Mar	SHAMILOV	2013 Feb TPPT virtual meeting report posted on IPP
22 Mar	SHAMILOV	Update from TPPT for SC May – All members to review
1 Apr	DUBON	Revise internal TPPT documents and action items from 2012 Dec TPPT meeting: <ul style="list-style-type: none"> <li>• Re-format Checklist for treatments and other templates (Dubon)</li> <li>• Create FTP server for draft PTs and relevant docs, templates, working docs, etc. (Dubon)</li> <li>• Template for guidance documents (Dubon)</li> </ul>
1 Apr	HALLMAN	Paper on cold tolerance in Tephritidae (Hallman, Jessup, Willink)
1 Apr	All members	Initial draft of TPPT submissions for 2013 Call for topics <ul style="list-style-type: none"> <li>• Revision to ISPM 18:2003 (Hallman and Jessup)</li> <li>• Pests other than fruit flies (Gomes and Wang)</li> <li>• Wood treatments (Gomes)</li> <li>• Plants for planting (Willink and Park)</li> <li>• Sea containers (Willink)</li> <li>• Treatment guidelines for treatment types other than irradiation (similar to ISPM 18:2003) (e.g. heat treatment, cold treatment, etc.) (Ormsby)</li> </ul>
1 Apr	JESSUP	Revision of TPPT position paper on adult emergence in irradiation treatments posted on IPP forum for TPPT discussion
1 Apr	SHAMILOV	Follow-up email for letters to submitters (reminder of 1 May due date)
1 Apr	SHAMILOV	Pending the outcome of CPM, email for letters to submitters that their treatment was not recommended for the List of Topics <ul style="list-style-type: none"> <li>• 2012-010 (Dubon)</li> <li>• 2012-013 (Dubon)</li> </ul>
8-12 Apr		CPM-8 (2013) meeting (Rome)
25 Apr	All members	TPPT virtual meeting (tentative)
1 May		Data from submitters due for discussion at 2013 July TPPT meeting
6-10 May		2013 May SC meeting (Rome)
1 Jun	SHAMILOV	Send letters to submitters notifying them that their treatment was removed from the list of topics by the SC <ul style="list-style-type: none"> <li>• 2007-103 (JESSUP)</li> <li>• 2007-105 (PARKER)</li> </ul>
1 Jun	All members	Discussion papers, checklists, updates, etc. to be discussed at 2013 July TPPT meeting are due
19 Jun	All members	TPPT virtual meeting (tentative)
8-12 Jul	All members	2013 July TPPT meeting (Fukuoka, Japan)