



# COMMISSION ON PHYTOSANITARY MEASURES

## Twelfth Session

**Incheon, Republic of Korea , 5-11 April 2017**

**Adoption of International Standards for Phytosanitary Measures**

**Agenda item 09.2**

**Prepared by the IPPC Secretariat**

## I. Introduction

1. This document presents the drafts proposed by the Standards Committee (SC) for adoption as International Standards for Phytosanitary Measures (ISPMs) by the Commission on Phytosanitary Measures (CPM). It also presents the diagnostic protocols that have been adopted by the SC on behalf of the CPM, as well as activities related to adopted standards.

## II. Sixteen draft ISPMs (including annexes) are being recommended for adoption, presented in attachments 01 to 16 to this paper (CPM 2017/03).

### Draft ISPMs

2. Background information on the drafts can be found in the status boxes of each draft.
3. Comments received during the June-September 2016 consultations are posted on the International Phytosanitary Portal (IPP).<sup>1</sup>

<sup>1</sup> Compiled consultation comments: <https://www.ippc.int/en/core-activities/standards-setting/member-consultation-draft-ispm/>

4. Summaries of the discussions and reasons for the proposed revisions are in the reports of both the SC and the Standards Committee Working Group (SC-7), which are also posted on the IPP.<sup>2</sup>

5. To streamline processing, the draft ISPMs are presented as unformatted texts with numbered paragraphs. After adoption, they will be formatted for publication.

6. This document contains an appendix outlining all the experts who participated in the development of the ISPMs presented in this document.

7. The SC recommends the following five draft ISPMs to the CPM for adoption:

**CPM 2017/03\_01:** *International movement of seeds* (2009-003)

**CPM 2017/03\_02:** *International movement of used vehicles, machinery and equipment* (2006-004)

**CPM 2017/03\_03:** *Annex 1 Arrangements for verification of compliance of consignments by the importing country in the exporting country* (2005-003) to ISPM 20 (*Guidelines for a phytosanitary import regulatory system*)

**CPM 2017/03\_04:** *International movement of wood* (2006-029)

**CPM 2017/03\_05:** *International movement of growing media in association with plants for planting* (2005-004)

#### **Phytosanitary Treatments (annexes to ISPM 28)**

8. Background information on the drafts can be found in the status boxes of each draft.

9. Responses to consultation comments received on the draft phytosanitary treatments during the consultations are posted on the IPP.<sup>3</sup>

10. Responses to objections received for some of the draft phytosanitary treatments are also available on the IPP.<sup>4</sup>

11. Refer also to the reports from the Technical Panel on Phytosanitary Treatments (TPPT) meetings for additional information on the discussions underpinning the draft phytosanitary treatments.

12. The SC recommends the following 11 draft phytosanitary treatments for inclusion as annexes to ISPM 28 (*Phytosanitary treatments for regulated pests*) to the CPM for adoption:

**CPM 2017/03\_06** Heat treatment of wood using dielectric heating (2007-114)

**CPM 2017/03\_07** Sulfuryl fluoride fumigation treatment for insects in debarked wood (2007-101A)

**CPM 2017/03\_08** Sulfuryl fluoride fumigation treatment for nematodes and insects in debarked wood (2007-101B)

**CPM 2017/03\_09** Cold treatment for *Ceratitidis capitata* on *Citrus sinensis* (2007-206A)

<sup>2</sup> Reports of the SC and the SC-7: <https://www.ippc.int/core-activities/standards-setting/standards-committee>

<sup>3</sup> Compiled consultation comments and SC responses: <https://www.ippc.int/en/core-activities/standards-setting/substantial-concerns-commenting-period-sccp-draft-ispms/>

<sup>4</sup> Responses to objections: <https://www.ippc.int/en/core-activities/standards-setting/objections-draft-ispms-prior-cpm/>

<b>CPM 2017/03_10</b>	Cold treatment for <i>Ceratitits capitata</i> on <i>Citrus reticulata</i> x <i>C. sinensis</i> (2007-206B)
<b>CPM 2017/03_11</b>	Cold treatment for <i>Ceratitits capitata</i> on <i>Citrus limon</i> (2007-206C)
<b>CPM 2017/03_12</b>	Cold treatment for <i>Ceratitits capitata</i> on <i>Citrus paradisi</i> (2007-210)
<b>CPM 2017/03_13</b>	Cold treatment for <i>Ceratitits capitata</i> on <i>Citrus reticulata</i> (2007-212)
<b>CPM 2017/03_14</b>	Cold treatment for <i>Ceratitits capitata</i> on <i>Citrus clementina</i> (2010-102)
<b>CPM 2017/03_15</b>	Vapour heat treatment for <i>Ceratitits capitata</i> on <i>Mangifera indica</i> (2010-106)
<b>CPM 2017/03_16</b>	Vapour heat treatment for <i>Bactrocera tryoni</i> on <i>Mangifera indica</i> (2010-107)

### Objections (excluding diagnostic protocols)

13. In accordance with the IPPC Standard setting procedure (Section 2.1 (page 10) of the 2016 IPPC Procedure Manual for Standard Setting<sup>5</sup>), contracting parties may submit objections on draft ISPMs (including phytosanitary treatments) along with the technical justification and suggestions for improvement to the IPPC Secretariat ([ippc@fao.org](mailto:ippc@fao.org)) no later than three weeks before the CPM-12 (2017) meeting. Concerned contracting parties should make every effort to seek agreement before the CPM session. The objection will be added to the CPM agenda and the CPM will decide on a way forward.

14. If no objection is received, the CPM will adopt the ISPM without discussion.

15. Objections must be submitted to the IPPC Secretariat ([ippc@fao.org](mailto:ippc@fao.org)) no later than 15 March 2017, 12:00 (GMT+1) with confirmation of receipt by the Secretariat. Contracting parties should send individual documents for each draft ISPM objected to along with the technical justification and suggestions for improvement to the draft ISPM. The Secretariat will post an additional CPM paper detailing the objections on the IPP as soon as possible upon receipt of an objection(s).

### III. Diagnostic protocols (annexes to ISPM 27)

16. Six diagnostic protocols (DPs) for inclusion as annexes to ISPM 27 (*Diagnostic protocols for regulated pests*) were sent for the 45-day DP notification period in 2016 (01 July 2016 – 15 August 2016)<sup>6</sup>. The following five DPs were adopted by the SC on behalf of the CPM:

- DP 13: *Erwinia amylovora*
- DP 14: *Xanthomonas fragariae*
- DP 15: *Citrus tristeza virus*
- DP 16: Genus *Liriomyza* Mik
- DP 17: *Aphelenchoides besseyi*, *A. ritzemabosi* and *A. fragariae*

17. These five adopted DPs are available on the IPP<sup>7</sup>.

<sup>5</sup> 2016 IPPC Procedure Manual for Standard Setting: <https://www.ippc.int/en/publications/82931/>

<sup>6</sup> DP 45-day notification period: <https://www.ippc.int/core-activities/standards-setting/draft-ispms/notification-period-dps>

<sup>7</sup> Adopted DPs: <https://www.ippc.int/core-activities/standards-setting/ispms>

18. The draft DP for *Tomato spotted wilt virus* (TSWV), *Impatiens necrotic spot virus* (INSV) and *Watermelon silver mottle virus* (WSMoV) (2004-019) received an objection<sup>8</sup>. The objection has since been addressed and the draft DP was re-submitted to the 45-day DP notification period on 15 December 2016 to be approved for adoption.

19. At the time this paper was developed, six draft DPs were approved by the SC to be submitted to the 45-day notification period (15 December 2016 – 30 January 2017) and if no objections are received, the following six draft DPs, for inclusion as annexes to ISPM 27, will be adopted by the SC on behalf of CPM:

- Draft DP XX: *Anguina* spp. (2013-003)
- Draft DP XX: *Sorghum halepense* (2006-027)
- Draft DP XX: *Fusarium circinatum* (2006-021)
- Draft DP XX: *Dendroctonus ponderosae* (2006-019)
- Draft DP XX: *Tomato spotted wilt virus* (TSWV), *Impatiens necrotic spot virus* (INSV) and *Watermelon silver mottle virus* (WSMoV) (2004-019)
- Draft DP XX: *Candidatus Liberibacter solanacearum* (2013-001)

#### IV. Copublishing agreements for unofficial translations of ISPMs

20. In 2016, the IPPC Secretariat facilitated a copublishing agreement with the North American Plant Protection Organization for the translation into French and Spanish of the Explanatory document on ISPM 15 (*Regulation of wood packaging material in international trade*). The IPPC Secretariat currently administer eight copublishing agreements.

21. Copublishers are reminded to seek information on adopted standards through the CPM reports or the IPP. MS Word files of adopted standards will be sent to the co-publishers upon request.

22. Any country or regional plant protection organization that would wish to sign a co-publishing agreement for the unofficial translation of ISPMs and related documents may find the necessary information on the IPP<sup>9</sup>.

#### V. Decisions

23. The CPM is invited to:

- 1) adopt ISPM XX on the *International movement of seeds* (2009-003) contained in CPM 2017/03\_01.
- 2) adopt ISPM XX on the *International movement of used vehicles, machinery and equipment* (2006-004) contained in CPM 2017/03\_02.
- 3) adopt annex 1 *Arrangements for verification of compliance of consignments by the importing country in the exporting country* (2005-003) to ISPM 20 (*Guidelines for a phytosanitary import regulatory system*) contained in CPM 2017/03\_03.
- 4) adopt ISPM XX on the *International movement of wood* (2006-029) contained in CPM 2017/03\_04.

<sup>8</sup> Objections received: <https://www.ippc.int/en/publications/82787/>

<sup>9</sup> Copublishing agreements: <https://www.ippc.int/en/core-activities/governance/standards-setting/ispms/copublishing-agreements/>

- 5) *adopt* ISPM XX on the *International movement of growing media in association with plants for planting* (2005-004) contained in CPM 2017/03\_05.
- 6) *adopt* the PT XX Heat treatment of wood using dielectric heating (2007-114) as Annex XX to ISPM 28 (*Phytosanitary treatments for regulated pests*), contained in CPM 2017/03\_06.
- 7) *adopt* the PT XX Sulfuryl fluoride fumigation treatment for insects in debarked wood (2007-101A) as Annex XX to ISPM 28, contained in CPM 2017/03\_07.
- 8) *adopt* the PT XX as Sulfuryl fluoride fumigation treatment for nematodes and insects in debarked wood (2007-101B) as Annex XX to ISPM 28, contained in CPM 2017/03\_08.
- 9) *adopt* the PT XX Cold treatment for *Ceratitis capitata* on *Citrus sinensis* (2007-206A) as Annex XX to ISPM 28, contained in CPM 2017/03\_09.
- 10) *adopt* the PT XX Cold treatment for *Ceratitis capitata* on *Citrus reticulata x C. sinensis* (2007-206B) as Annex XX to ISPM 28, contained in CPM 2017/03\_10.
- 11) *adopt* the PT XX Cold treatment for *Ceratitis capitata* on *Citrus limon* (2007-206C) as Annex XX to ISPM 28, contained in CPM 2017/03\_11.
- 12) *adopt* the PT XX Cold treatment for *Ceratitis capitata* on *Citrus paradisi* (2007-210) as Annex XX to ISPM 28, contained in CPM 2017/03\_12.
- 13) *adopt* the PT XX Cold treatment for *Ceratitis capitata* on *Citrus reticulata* (2007-212) as Annex XX to ISPM 28, contained in CPM 2017/03\_13.
- 14) *adopt* the PT XX Cold treatment for *Ceratitis capitata* on *Citrus clementina* (2010-102) as Annex XX to ISPM 28, contained in CPM 2017/03\_14.
- 15) *adopt* the PT XX Vapour heat treatment for *Ceratitis capitata* on *Mangifera indica* (2010-106) as Annex XX to ISPM 28, contained in CPM 2017/03\_15.
- 16) *adopt* the PT XX Vapour heat treatment for *Bactrocera tryoni* on *Mangifera indica* (2010-107) as Annex XX to ISPM 28, contained in CPM 2017/03\_16.
- 17) *note* that the SC adopted on behalf of CPM the following five diagnostic protocols (DPs) as Annexes to ISPM 27:
  - DP 13: *Erwinia amylovora*
  - DP 14: *Xanthomonas fragariae*
  - DP 15: *Citrus tristeza virus*
  - DP 16: Genus *Liriomyza* Mik
  - DP 17: *Aphelenchoides besseyi*, *A. ritzemabosi* and *A. fragariae*
  - DP XX: *Anguina* spp. (2013-003)
  - DP XX: *Sorghum halepense* (2006-027)
  - DP XX: *Fusarium circinatum* (2006-021)
  - DP XX: *Dendroctonus ponderosae* (2006-019)
  - DP XX: *Tomato spotted wilt virus* (TSWV), *Impatiens necrotic spot virus* (INSV) and *Watermelon silver mottle virus* (WSMoV) (2004-019)
  - DP XX: *Candidatus Liberibacter solanacearum* (2013-001)
- 18) *acknowledge* the contributions of contracting parties, regional plant protection organizations and organizations who hosted or helped organize standard setting meetings in 2016: Australia

(EWG Grain), Canada (TPFQ), Japan (TPPT), Jamaica (TPDP) and IAEA/FAO joint division (TPFF)

19) *acknowledge* the contributions of the members of the Standards Committee (SC) who have left the SC in 2016:

- Algeria, Ms Nadia HADJERES
- Canada, Ms Marie-Claude FOREST
- Costa Rica, Mr Guillermo SIBAJA CHINCHILLA
- Ghana, Ms Ruth WOODE
- Iran, Ms Maryam Jalili MOGHADAM
- New Zealand, Mr John HEDLEY
- Norway, Ms Hilde Kristin PAULSEN
- Papua New Guinea, Mr Pere KOKOA
- Poland, Mr Piotr WLODARCZYK
- Sudan, Mr Kamaleldin Abdelmahmoud Amein BAKR
- Yemen (Republic of), Mr Gamil Anwar Mohammed RAMADHAN

20) *acknowledge* the contributions of the members of the Technical Panel on Forest Quarantine (TPFQ) who have left in 2016:

- Brazil, Mr Edson Tadeu IEDE
- Chile, Marcos Beéche CISTERNAS
- Germany, Mr. Thomas SCHRÖDER
- Norway, Mr. Sven Christer MAGNUSSON

21) *acknowledge* the contributions of individual experts for their efforts (specific roles are noted) in the development of the ISPMs to be adopted at CPM-12 (2017) as presented in Appendix 1 to this paper (to be annexed to CPM-12 (2017) report).

## Appendix 1

**Recognition related to Standard Setting activities**

Gratitude is expressed to the experts of the drafting groups for their active contribution in the development of the following ISPMs, or Annexes to ISPMs, adopted in 2016/2017:

**1. ISPM on the *International movement of seeds* (2009-003)**

<b>Country</b>	<b>Expert</b>	<b>Role</b>
Australia	Mr Bruce HANCOCKS	EWG member
Brazil	Mr Edson Tadeu IEDE	TPFQ member
Cameroon	Ms Alice Ntoboh Siben NDIKONTAR	EWG member
Canada	Mr Eric ALLEN	Member as Chair of IFQRG
Canada	Ms Marie-Claude FOREST	TPFQ member
Canada	Mr Shane SELA	TPFQ member
Chile	Mr Juan Pablo LÓPEZ	Host representative
Chile	Mr Marcos Beéche CISTERNAS	TPFQ member
China	Mr Lifeng WU	TPFQ member
China	Ms Wenxia ZHAO	Host representative
China	Mr Yuejin WANG	Organizer representative
France	Ms Valérie GRIMAUULT	EWG member
Germany	Mr Thomas Schröder	TPFQ member
Ghana	Mr Joseph Mireku ASOMANING	EWG member
Ghana	Mr Victor AGYEMAN	TPFQ member
Italy	Mr Lucio MONTECCHIO	TPFQ member
Japan	Mr Masahiro SAI	EWG member and TPFQ member
New Zealand	Mr Michael ORMSBY	TPFQ member
Norway	Mr Sven Christer MAGNUSSON	TPFQ member
Paraguay	Ms Ana Peralta	Organizer representative
Poland	Mr Krzysztof SUPRUNIUK	TPFQ member
Poland	Mr Piotr WLODARCZYK	TPFQ member
Republic of Korea	Ms Mi Chi YEA	EWG member
South Africa	Ms Phindile N.B. NGESI	EWG member
USA	Mr Edward PODLECKIS	EWG member
USA	Mr John Tyrone JONES	TPFQ member
USA	Ms Marina ZLOTINA	TPFQ member
The Netherlands	Mr Gerard MEIJERINK	Invited expert
The Netherlands	Mr Corné VAN ALPHEN	Organizer representative
The Netherlands	Mr Nico HORN	Host representative
Zambia	Mr Arundel SAKALA	Steward (2008-11)
Australia	Mr David PORRITT	Steward (2010-04) and Assistant Steward (2012-04)
Cameroon	Mr Marcel BAKAK	Assistant Steward (2011-05)
Chile	Ms Soledad CASTRO- DOROCHESSI	Steward (2012-04) and Assistant Steward (2013-11)
Japan	Mr Motoi SAKAMURA	Assistant Steward (2012-11)
USA	Ms Julie ALIAGA	Steward (2013-11) and Assistant Steward (2012-11)
Argentina	Mr Ezequiel FERRO	Assistant Steward (2014-11)
The Netherlands	Mr Nico HORN	Steward 2015-05

## 2. ISPM on the *International movement of used vehicles, machinery and equipment (2006-004)*

Country	Expert	Role
Australia	Mr Adam BROADLEY	EWG member
Republic of Korea	Mr Jae-Seung LEE	EWG member
Finland	Mr Ralf Lothar LOPIAN	EWG member
New Zealand	Ms Melanie Jane NEWFIELD	EWG member
USA	Mr Tim N. STEVENS	EWG member
Nigeria	Mr Gabriel ADEJARE	Steward (2007-05)
Uganda	Mr Robert KARYEJJA	Steward (2007-11)
Argentina	Mr Guillermo ROSSI	Steward (2009-05)
Cook Islands	Mr Ngatoko NGATOKO	Steward (2012-11)
Brazil	Mr Alexandre PALMA	Steward (2015-05) and Assistant Steward (2012-11)
Chile	Mr Álvaro SEPÚLVEDA LUQUE	Steward (2015-11) and Assistant Steward (2015-05)
Papua New Guinea	Mr Pere KOKOA	Assistant Steward 2015-11

## 3. Annex 1 Arrangements for verification of compliance of consignments by the importing country in the exporting country (2005-003) to ISPM 20 (Guidelines for a phytosanitary import regulatory system)

Country	Expert	Role
Brazil	Mr Gilvio Westin COSENZA	EWG member
New Zealand	Mr Wayne HARTLEY	EWG member
Chile	Ms Sylvia Soledad FERRADA Chamorro	EWG member
Republic of Korea	Ms Kyu-Ock KIM	EWG member
France	Ms Clara PACHECO	EWG member
USA	Mr Paul Gerard MCGOWAN	EWG member
Zambia	Mr Kenneth MSISKA	Host representative
South Africa	Mr Mike Holtzhausen	Steward (2005-04) and Assistant Steward (2012-04)
Zambia	Mr Arundel SAKALA	Assistant Steward (2008-11)
Australia	Mr Bart ROSSEL	Assistant Steward (2012-04)
Chile	Ms Soledad Castro-Dorochessi	Assistant Steward (2012-04)
Canada	Ms Marie-Claude FOREST	Steward (2012-04)
New Zealand	Mr Stephen BUTCHER	Assistant Steward (2012-11)
Mexico	Ms Ana Lilia MONTEALEGRE	Assistant Steward (2012-11)
Argentina	Mr Ezequiel FERRO	Steward (2016-05)

## 4. ISPM on the *International movement of wood (2006-029)*

Country	Expert	Role
Ghana	Mr Victor AGYEMAN	TPFQ member
Brasil	Mr Edson Tadeu IEDE	TPFQ member
Canada	Mr Eric ALLEN	TPFQ member
Chile	Mr Marcos Beéche CISTERNAS	TPFQ member
Japan	Mr Mamoru MATSUI	TPFQ member
Germany	Mr Thomas SCHRÖDER	TPFQ member
China	Mr Yuejin WANG	Organizer representative



China	Mr Wenxia ZHAO	Host representative
Chile	Mr Fuxiang WANG	TPFQ member
Paraguay	Mr Juan Pablo LOPEZ	Host representative
Canada	Mr Shane SELA	TPFQ member
Canada	Mr Greg WOLFF	Steward (2006-05) and Assistant Steward (2009-11)
China	Mr Yuejin WANG	Organizer representative
China	Ms Wenxia ZHAO	Host representative
China	Mr Fuxiang WANG	TPFQ member
Chile	Mr Juan Pablo LÓPEZ	Host representative
Paraguay	Ms Ana PERALTA	Organizer representative
Norway	Mr Christer MAGNUSSON	TPFQ member and Assistant Steward (2007-11)
Canada	Ms Marie-Claude FOREST	Steward (2009-11) and TPFQ Assistant steward (2014-11)
India	Mr D.D.K. SHARMA	Assistant Steward (2013-05)
Canada	Mr Rajesh RAMARATHAM	Steward (2016-05)
USA	Ms Marina ZLOTINA	TPFQ Steward (2016-05)
China	Mr Lifeng WU	TPFQ Assistant Steward (2016-05)
Poland	Mr Piotr WLODARCZYK	TPFQ Steward (2014-11) and Assistant Steward (2012-11)
USA	Ms Julie ALIAGA	TPFQ Steward (2012-04)

#### 5. ISPM on the *International movement of growing media in association with plants for planting (2005-004)*

Country	Expert	Role
Iran	Mr Mohammed Reza Asghari	EWG member
Chile	Ms Eliana Bobadilla	EWG member
Australia	Ms Barbara Hall	EWG member
USA	Ms Carissa Marasas	EWG member
Germany	Mr Bjoern Niere	EWG member
Canada	Ms Barbara Peterson	EWG member
Canada	Mr Dominique Pelletier	Host representative
Canada	Ms Rebecca Lee	Organizer representative
Jordan	Mr Mohammad KATBEH-BADER	Steward (2005-04)
Canada	Ms Marie-Claude FOREST	Steward (2008-11)
Norway	Ms Hilde PAULSEN	Steward (2012-11) and Assistant Steward (2016-05)
Indonesia	Mr Antarjo DIKIN	Assistant Steward (2012-11)
Mexico	Ms Ana Lilia MONTEALEGRE	Steward (2016-05) and Assistant Steward (2013-11)
Brazil	Mr Jesulindo DE SOUZA	Assistant Steward (2016-05)

#### ISPMs developed by the Technical Panel on Phytosanitary Treatments as annexes to ISPM 28

##### TPPT Stewards:

Country	Steward
Indonesia	Mr Antarjo DIKIN
Australia	Mr Bart ROSSEL

**6. PT for Heat treatment of wood using dielectric heating (2007-114)**

Country	Expert	Role
New Zealand	Mr Mike ORMSBY	Treatment lead

**7. PT on Sulfuryl fluoride fumigation treatment for insects in debarked wood (2007-101A)**

Country	Expert	Role
New Zealand	Mr Mike ORMSBY	Treatment lead

**8. PT on Sulfuryl fluoride fumigation treatment for nematodes and insects in debarked wood (2007-101B)**

Country	Expert	Role
New Zealand	Mr Mike ORMSBY	Treatment lead

**9. PT for Cold treatment for *Ceratitis capitata* on *Citrus sinensis* (2007-206A)**

Country	Expert	Role
South Africa	Ms Alice BAXTER	Treatment lead
Argentina	Mr Eduardo WILLINK	Treatment lead
USA	Mr Scott MYERS	Assistant Treatment Lead

**10. PT for Cold treatment for *Ceratitis capitata* on *Citrus reticulata* x *C. sinensis* (2007-206B)**

Country	Expert	Role
USA	Mr Scott WOOD (US)	Treatment Lead
USA	Mr Patrick GOMES (US)	Treatment Lead
Argentina	Mr Eduardo WILLINK (AR)	Treatment Lead
New Zealand	Mr Mike ORMSBY	Assistant Treatment Lead

**11. PT for Cold treatment for *Ceratitis capitata* on *Citrus limon* (2007-206C)**

Country	Expert	Role
China	Mr Yuejin WANG	Treatment lead
New Zealand	Mr Mike ORMSBY	Assistant Treatment lead

**12. PT for Cold treatment for *Ceratitis capitata* on *Citrus paradisi* (2007-210)**

Country	Expert	Role
USA	Mr Scott WOOD (US)	Treatment lead
USA	Mr Patrick GOMES (US)	Treatment lead
China	Mr Daojian	Treatment lead
USA	Mr Scott MYERS	Assistant Treatment Lead

**13. PT for Cold treatment for *Ceratitis capitata* on *Citrus reticulata* (2007-212)**

Country	Expert	Role
New Zealand	Mr Mike ORMSBY	Treatment lead

**14. PT for Cold treatment for *Ceratitis capitata* on *Citrus clementina* (2010-102)**

Country	Expert	Role
UK	Mr Ray CANNON (UK)	Treatment lead
Australia	Mr Andrew JESSUP (AU)	Treatment lead
Argentina	Mr Eduardo WILLINK	Treatment lead
USA	Mr Guy HALLMAN	Assistant Treatment Lead

**15. PT for Vapour heat treatment for *Ceratitis capitata* on *Mangifera indica* (2010-106)**

Country	Expert	Role
(US/IAEA)	Mr Guy HALLMAN	Treatment lead
Republic of Korea	Mr Min-Goo PARK (KR)	Treatment lead
USA	Mr Scott WOOD (US)	Treatment lead

**16. PT for Vapour heat treatment for *Bactrocera tryoni* on *Mangifera indica* (2010-107)**

Country	Expert	Role
(US/IAEA)	Mr Guy HALLMAN	Treatment lead

**ISPMs developed by the Technical Panel on Diagnostic Protocols as annexes to ISPM 27****TPDP Stewards:**

Country	Steward
Germany	Mr Jens-Georg UNGER
UK	Ms Jane CHARD

**17. DP 13 *Erwinia amylovora* 2004-009**

Country	Expert	Role
Spain	Ms Maria M. López GONZÁLEZ	Lead author
New Zealand	Mr Robert Taylor	Co-author
Australia	Mr Brendan RODONI	Discipline lead (TPDP member)
Canada	Mr Delano James	Referee (TPDP member)
Canada	Mr Solke H de Boer	Expert
Canada	Mr Won-Sik Kim	Expert
Germany	Mr Klaus Geider	Expert
Germany	Ms Annette Wensing	Expert
Spain	Mr J. Peñalver	Expert
Spain	Ms M.T. Gorris	Expert
Spain	Mr P. Llop	Expert
Spain	Mr Mariano Cambra	Expert
USA	R. Roberts	Expert
USA	Mr Larry Pusey	Expert
USA	Ms Virginia Stockwell	Expert

18. DP 14 *Xanthomonas fragariae* (2004-012)

Country	Expert	Role
USA	Mr Ed CIVEROLO	Lead author
Spain	Ms María M. López GONZÁLEZ	Co-author
UK	Mr John ELPHINSTONE	Co-author
New Zealand	Mr Robert TAYLOR	Discipline lead (TPDP member)
Netherlands	Mr Hans DE GRUYTER	Referee (TPDP member)
Canada	Mr Solke H. DE BOER	Expert
Canada	Mr Stephan BRIERE	Expert

19. DP 15 *Citrus tristeza virus*

Country	Expert	Role
Spain	Mr Mariano CAMBRA	Lead author
South Africa	Mr Stephanus Petrus	Co-author
USA	Ms Marta Isabel Mastalli	Co-author
USA	Ms Laurene LEVY	Co-author
Canada	Mr Delano JAMES	Discipline lead (TPDP member)
Australia	Mr Brendan RODONI	Referee (TPDP member)
Brazil	Mr Edson BERTOLINI	Expert
South Africa	Mr S.P.Fanie. van Vuuren	Expert
Uruguay	Ms M.I. Francis	Expert

20. DP 16 Genus *Liriomyza* 2006-017

Country	Expert	Role
Australia	Mr Mallik MALIPATIL	Lead author
Australia	Mr Mark Blacket	Co-author
UK	Mr Dominique COLLINS	Co-author
Jamaica	Ms Juliet GOLDSMITH	Discipline lead (TPDP member)
USA	Mr Norman Barr	Referee (TPDP member)
Australia	Mr Anthony Rice	Expert
Japan	Mr Ren Iwaizumi	Expert
Latvia	Ms Ramona Vaitkevica	Expert
USA	Mr Stephen Gaimari	Expert

21. DP 17 *Aphelenchoides besseyi*, *A. ritzemabosi* and *A. fragariae* (2006-025)

Country	Expert	Role
USA	Mr Fengru ZHANG	Lead author
China	Mr Xie HUI	Co-author
South Africa	Mr Rinus KNOETZE	Co-author
UK	Ms Sue HOCKLAND	Co-author
France	Ms Géraldine ANTHOINE	Discipline lead (TPDP member)
Netherlands	Mr Hans DE GRUYTER	Referee (TPDP member)

**22. DP: *Tomato spotted wilt virus (TSWV)*, *Impatiens necrotic spot virus (INSV)* and *Watermelon silver mottle virus (WSMoV)* (2004-019)<sup>10</sup>**

Country	Expert	Role
USA	Mr Thomas GERMAN	Lead author
South Africa	Mr Gerhard PIETERSEN	Co-author
UK	Ms Jane MORRIS	Co-author
Canada	Mr Delano JAMES	Discipline lead (TPDP member)
Australia	Mr Brendan RODONI	Referee (TPDP member)
Netherlands	Mr Richard KORMELINK	Expert
New Zealand	Mr Gerard CLOVER	Expert
South Africa	Mr Gerhard PIETERSEN	Expert
Spain	Ms Concepción JORDÁ-GUTIÉRREZ	Expert
UK	Ms Jane MORRIS	Expert
USA	Mr Thomas GERMAN	Expert
USA	Mr Scott ADKINS	Expert
USA	Mr Hanu PAPU	Expert
USA	Mr John SHERWOOD	Expert

**23. DP: *Fusarium circinatum* (2006-021)<sup>10</sup>**

Country	Expert	Role
UK	Ms Ana Pérez-Sierra	Lead author
France	Mr Renaud Ioos	Co-author
Kenya	Mr James Wanjohi MUTHOMI	Co-author
South Korea	Mr Ik-Hwa HYUN	Co-author
Netherlands	Mr Hans DE GRUYTER	Discipline lead (TPDP member)
New Zealand	Mr Robert Taylor	Referee (TPDP member)
Australia	Ms Jacqueline Edwards	Expert
Kenya	Mr William Muiru	Expert
Spain	Ms Mónica Berbegal Martínez	Expert

**24. DP: *Dendroctonus ponderosae* (2006-019)<sup>10</sup>**

Country	Expert	Role
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Brazil	Mr Edson Tadeu Iede	Co-author
Canada	Mr Hume Douglas	Co-author
France	Mr Jean-Francois Germain	Co-author
Netherlands	Ms Brigitta Wessels-Berk	Co-author
USA	Mr Norman BARR	Discipline lead (TPDP member)
France	Ms Géraldine ANTHOINE	Referee (TPDP member)

<sup>10</sup> The following draft protocols are currently under the notification period process from 15 December 2016 to 30 January 2017 and may be adopted

25. DP: '*Candidatus Liberibacter solanacearum*' (2013-001)<sup>10</sup>

Country	Expert	Role
New Zealand	Ms Lia W. LIEFTING	Lead author
Spain	Ms María M. López GONZÁLEZ	Co-author
USA	Mr Joseph MUNYANEZA	Co-author
New Zealand	Mr Robert TAYLOR	Discipline lead (TPDP member)
Australia	Mr Brendan RODONI	Referee (TPDP member)

26. DP: *Sorghum halepense* (2006-027)<sup>10</sup>

Country	Expert	Role
China	Mr Qiang SHENG	Lead author
Turkey	Mr Ahmet ULUDAG	Co-author
USA	Mr Rodney YOUNG	Co-author
China	Ms Yin Linping	Discipline lead (TPDP member)
France	Ms Géraldine ANTHOINE	Referee (TPDP member)
Canada	Ms Cheryl DOLLARD	Expert
Canada	Ms Ruoqing WANG	Expert
China	Mr Yonghong Zhou	Expert
China	Ms Jianqiu Zou	Expert
China	Ms Xiuling Shao	Expert
China	Mr Guoqi Chen	Expert
China	Mr Hongjie Xie	Expert
China	Mr Fuxiang WANG	Expert

27. DP: *Anguina* spp. (2013-003)<sup>10</sup>

Country	Expert	Role
USA	Ms Andrea Skantar	Lead author
UK	Mr Thomas Prior	Co-author
UK	Mr Colin Fleming	Co-author
France	Ms Géraldine ANTHOINE	Discipline lead (TPDP member)
New Zealand	Mr Robert TAYLOR	Referee (TPDP member)
Kenya	Ms Pamela Kibwage	Expert
Poland	Mr Witold Karnkowski	Expert
Spain	Mr Juan Antonio Lezaun	Expert