



*REPORT*

Paris, France  
07-12 July 2014

# Technical Panel on Diagnostic Protocols July, 2014



Food and Agriculture Organization of the United Nations

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views of FAO.

## CONTENTS

1.	Opening of the meeting .....	4
1.1	Welcome .....	4
1.2	Selection of the Chair and Rapporteur .....	4
1.3	Review and adoption of agenda .....	4
2.	Administrative Matters .....	4
3.	Updates from other relevant IPPC meetings .....	4
4.	Overview of the TPDP work programme .....	5
4.1	General overview of DPs and next steps.....	5
4.2	Discussion on the future of DPs and panel's work .....	6
5.	Scrutiny of Draft Diagnostic Protocols.....	8
5.1	<i>Sorghum halepense</i> (2006-027), (Priority 1).....	9
5.2	Genus <i>Liriomyza</i> (2006-017), (Priority 1).....	10
5.3	<i>Aphelenchoides besseyi</i> , <i>A. ritzemabosi</i> and <i>A. fragariae</i> (2006-025), (Priority 2).....	12
5.4	<i>Bursaphelenchus xylophilus</i> (2004-016), (Priority 2) .....	13
5.5	<i>Citrus tristeza virus</i> (2004-021), (Priority 2) .....	15
5.6	<i>Xanthomonas fragariae</i> (2004-012), (Priority 3).....	16
5.7	<i>Xiphinema americanum sensu lato</i> (2004-025), (Priority 3).....	18
6.	Update on the Development of Diagnostic Protocols under the TPDP Work Programme .....	19
6.1	General overview of status of protocols.....	19
6.2	Call for authors.....	21
7.	Procedures and Guidance Related to TPDP .....	22
7.1	TPDP procedures .....	22
7.2	Draft table template format for PCR reaction conditions.....	22
7.3	Quality Assurance issues.....	22
7.4	TPDP SWOT and Gap analysis .....	23
8.	Update on the Work of other Organisations .....	24
9.	TPDP Work plan 2014-2015 .....	26
10.	Date and Location of Next Meeting .....	26
11.	Other Business .....	26
11.1	Virtual tools.....	26
12.	Recommendations to the SC.....	27
13.	Close of the meeting.....	27

## LIST OF APPENDIXES

APPENDIX 1: Agenda.....	29
APPENDIX 2: Documents list .....	32
APPENDIX 3: Participants list .....	35
APPENDIX 4: TPDP work plan 2014-2015 .....	37

## 1. Opening of the meeting

### 1.1 Welcome

- [1] The International Plant Protection Convention (IPPC) Secretariat opened the meeting, welcomed the participants to the ninth meeting of the TPDP and presented apologies from Ms Ana Lia TERRA (Uruguay) who was not able to attend.
- [2] Mr Martin WARD, Director-General of the European and Mediterranean Plant Protection Organization (EPPO), also welcomed all the participants noting that while this will be the last meeting hosted by EPPO for the time being, the panel would be most welcome again.
- [3] Participants introduced themselves briefly.

### 1.2 Selection of the Chair and Rapporteur

- [4] Ms Géraldine ANTHOINE (France) was selected as chairperson and Mr Norman BARR (USA) as rapporteur.

### 1.3 Review and adoption of agenda

- [5] The TPDP adopted the Agenda presented as Appendix 1 to this report.

## 2. Administrative Matters

### *Local information*

- [6] The organizer provided additional information on the meeting venue and arrangements<sup>1</sup>.

### *Documents list*

- [7] The list of documents is attached as Appendix 2 to this report.

### *Participants list*

- [8] The list of participants and their contact information is presented in Appendix 3 of this report.

## 3. Updates from other relevant IPPC meetings

- [9] The TPDP Steward presented a summary<sup>2</sup> of the discussion points of relevance for the TPDP arising from the 2014 May Standards Committee (SC) meeting<sup>3</sup>. She also transmitted profound thanks from the SC to the panel and authors for the immensely important work they do and the high quality protocols they develop. Other highlights were:
- A second five-year term of TPDP membership was proposed to Mr Delano JAMES (Canada – Virology). He will consider and notify the Secretariat by the end of July 2014.
  - Four draft DPs had been approved by the SC for the 2014 member consultation:
    - Diagnostic protocol for *Erwinia amylovora* (2004-009)
    - Diagnostic protocol for Genus *Anastrepha* spp (2004-015).
    - Diagnostic protocol for *Ditylenchus destructor/D. dipsaci* (2004-017)
    - Diagnostic protocol for Phytoplasmas (general) (2004-018)
  - Two drafts DPs were submitted to the notification period from 1 July to 15 August:
    - Diagnostic protocol for *Phyllostica citricarpa* (McAlpine) Aa on fruit (2004-023)
    - Diagnostic protocol for *Xanthomonas citri* subsp. *citri* (2004-011)

---

<sup>1</sup> 02\_TPDP\_2014\_Jul

<sup>2</sup> 05\_TPDP\_2014\_Jul

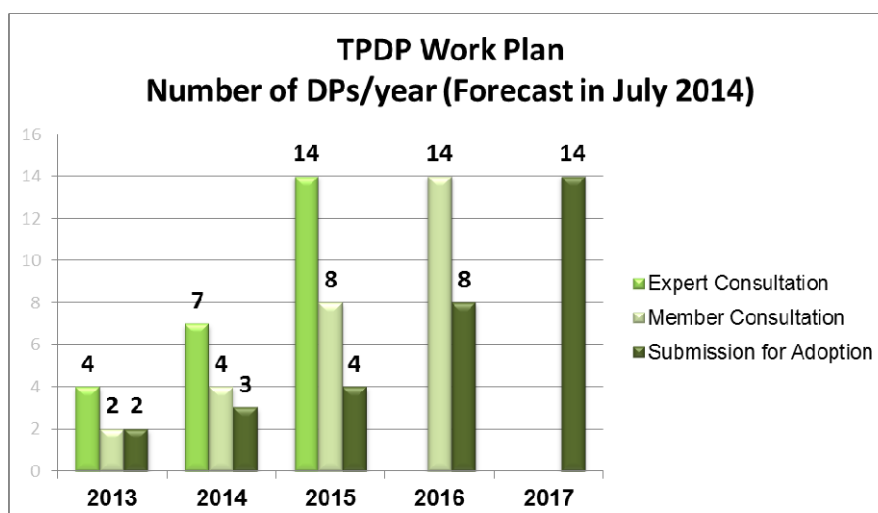
<sup>3</sup> 2014 May SC meeting report: <https://www.ippc.int/publications/2014-05-report-standards-committee>

- Possibly one draft will be submitted to the notification period from 15 December to 30 January:
- Diagnostic protocol for *Potato spindle tuber viroid* (2006-022)

## 4. Overview of the TPDP work programme

### 4.1 General overview of DPs and next steps

- [10] The Secretariat presented the current status of the TPDP work programme (see Figure 1 and Table 1). The Secretariat highlighted the dates when it is expected the 31 DPs will reach the various steps in the standard setting process (i.e. expert consultation, member consultation, submission to the SC for approval for adoption, notification period)<sup>4</sup> noting that all DPs are expected to be submitted for adoption by 2017. The Secretariat recalled that there will be two member consultation periods in 2015, starting on 1 February and 1 July.
- [11] It was noted that the responses to comments from member consultation will be presented to the SC for their review, and that the SC responses to comments will be posted publicly on the International Phytosanitary Portal (IPP – [www.ippc.int](http://www.ippc.int)) following this review. All agreed that this change was a positive step towards increased transparency.
- [12] Several panel members were concerned about the time frames for incorporating comments from the DP drafting groups after this meeting and before the scheduled SC e-decisions. This revision period coincides with summer vacations and travel schedules for many authors, and could impact author availability for timely and thorough review. It was explained that the deadlines are set to accommodate possible SC face-to-face discussions of major issues identified during SC e-decisions.
- [13] The Secretariat also reinforced that engaging experts in the DP drafting groups is crucial to reach the established deadlines and thus facilitate the adoption process, highlighting that deadlines are naturally negotiated between panel members and DP drafting groups as long as it is noted that when deadlines are not met the protocols may be postponed.
- [14] **Figure 1.** Number of diagnostic protocols under the TPDP work programme per year (forecast) - 31 DPs in total, excluding the DPs with “pending status” in the *List of topics for IPPC standards*.



<sup>4</sup> Presentation available at the restricted TPDP work area: <https://www.ippc.int/work-area-pages/2014-july-paris>

[15] **Table 1.** Number of DPs per discipline under the TPDP work programme forecast per year and steps in the Standard Setting process (excluding the DPs with “pending status” in the *List of topics for IPPC standards*)

	2014			2015			2016			2017		
	EC	MC	SA	EC	MC	SA	EC	MC	SA	EC	MC	SA
<b>Bacteriology</b>	1	1	1	3	1	1	-	3	1	-	-	3
<b>Mycology</b>	0	-	1	3	-	-	-	3	-	-	-	3
<b>Entomology</b>	1	1	-	5	1	1	-	5	1	-	-	5
<b>Nematology</b>	3	1	-	1	3	1	-	1	3	-	-	1
<b>Botany</b>	1	-	-	1	1	-	-	1	1	-	-	1
<b>Virology &amp; Phytoplasmas</b>	1	1	1	1	2	1	-	1	2	-	-	1
<b>TOTAL</b>	7	4	3	14	8	4	-	14	8	-	-	14

Legend: **EC** = Expert Consultation; **MC** = Member Consultation; **SA** = Submission for Adoption

## 4.2 Discussion on the future of DPs and panel’s work

- [16] The Standards Officer expressed his sincere thanks to all panel members and authors for the important work they do. He noted that the standard setting process may seem inappropriately slow (some DPs have been on the work programme for 10 years) and frustrate authors who are unfamiliar with it but recalled that this was to ensure transparency and consultation on all levels. He summarized some of the changes to the standard setting process that aim to address this issue, such as SC e-decisions. The panel expressed appreciation for the expert consultation period, which helps improve the drafts and advance them more quickly. The Standards Officer reminded the panel that due to the steps in the process, protocols may be delayed by one year should the set deadlines not be met.
- [17] The Standards Officer further underlined the importance of managing expectations between all parties involved, especially in the coming years where many DPs will be submitted for adoption. It was stressed that the DP drafting groups need to be fully informed on the time frames, the fact that their opinions/recommendations may be overturned in the revision process and that international standards seek harmonization, which means that the best standard that all can agree to are adopted. He also affirmed the need for all panel members to have full support from their supervisors.
- [18] The Standards Officer recalled that all DPs are expected to be submitted for adoption by 2017, highlighting the enormous amount of work that is expected from the panel.
- [19] As a result of the current work load and lack of information on implementation of adopted DPs by IPPC contracting parties, the Standards Officer proposed that the panel focus its efforts on the protocols under development. New protocol topics might become a priority after 2017 when implementation data are available as the DPs under development are intended to be adopted. The issue of revising adopted DPs must also be considered. Technical revisions<sup>5</sup> in the current process are processed directly via the TPDP to the SC for adoption; hence there is no member consultation. The panel did not discuss the revision process, because it was felt to be premature at this stage where only four are adopted but did note that they would address any technical issues brought up by IPPC members.
- [20] The Standards Officer queried why some draft DPs had been discussed at several TPDP face-to-face meetings. His understanding was that DPs would be discussed at a face-to-face meeting only when the drafts were at a very advanced stage. It was commented by some members that discussions in the face-

<sup>5</sup> IPPC Standard Setting Procedure Manual: <https://www.ippc.int/core-activities/ippc-standard-setting-procedure-manual>

to-face meetings can result in significant changes to DP direction and content requiring additional scrutiny. The panel agreed that draft DPs at an advanced stage should be submitted for one face-to-face meeting and efforts would be made to this effect.

- [21] Some panel members queried the prioritization of DPs and it was agreed that where there are advanced drafts available, these should be given high priority to reflect the extensive author engagement. In this connection, the Secretariat noted that for several calls for experts no responses had been received and asked whether the panel thought that these protocols should be taken off the work programme. The panel felt that the lack of response to calls did not mean that the protocol would not be a priority for countries. It could be the result of issues with the call process. The panel found that identifying and approaching authors directly had proved very successful in the past and could be used in cases where the call for authors did not generate a sufficient number of experts.
- [22] Based on the suggestion of the Standards Officer, the panel discussed the following points:
- [23] Whether to increase the TPDP membership to better cope with the steep increase in work load. Several panel members felt that the transition period between new and leaving TPDP members was very helpful and that this overlap concretely increases the understanding of the TPDP and IPPC work. Some members felt it would be beneficial to have two members with the same expertise, not only because of the support to ensure high quality standards but also to share the workload. Others did not see the need for two members on the same topic, but agreed that this would depend on the topic. Others noted that the work depends largely on the engagement of the authors, and that this would not change by adding membership. Increasing the number of referees may be helpful. Lastly, the panel agreed to the need for an additional TPDP member for entomology with expertise in insect morphology identification.
- [24] Whether a brochure to introduce the expected work and timelines for DP development to authors would be useful to better manage expectations and communicate the needs for the adoption of DPs. The panel agreed that this would be very useful. This brochure would be provided to authors at the initiation of the DP drafting group when the TPDP discipline lead would explain timelines and expectations. The panel found that it would be helpful for the strong engagement of authors that the author should formally accept the position, and also indicate whether the person would accept to become lead.
- [25] The panel confirmed that they already communicate the outcomes of the TPDP meetings to the lead authors.
- [26] How to better engage experts. The amount of work for drafting groups can be substantial and author engagement during the drafting process can be complicated by competing work assignments and lack of resources. Support of authors through recognition of effort can be important. The panel suggested that official appreciation should be given to the members of the DP drafting groups. It was agreed that the IPPC Secretariat should send a letter of recognition when the DP drafting groups is formed and a thank you letter once the DP has been adopted. As regards acknowledging comments from the expert consultations it was explained that the experts who are currently added to the status box (which is available only until adoption) may be added to the *Acknowledgements* section if the TPDP deems that a major contribution had been made. This is already reflected in the current TPDP procedure.
- [27] The TPDP:
- (1) *invited* the IPPC Secretariat to create an introductory brochure to be shared with new authors of DPs, as explained above.
  - (2) *invited* the Secretariat to open a call for TPDP member under *Insects and mites* (2006-007) with the following specific expertise:
    - classical entomological taxonomy
    - experience in diagnosis
    - experience in writing protocols for regulatory purposes.

## 5. Scrutiny of Draft Diagnostic Protocols

[28] The TPDP reviewed seven draft DPs (reported in the individual sections below), which had been submitted to the expert consultation on draft DPs<sup>6</sup> in 2014. For all draft DPs, discipline leads will work with the respective DP drafting groups to revise the drafts after this meeting, and the modified drafts will then be submitted to the SC via electronic decision tools for their approval for member consultation.

[29] From the discussions, one general concern was voiced regarding sequencing as a technique, and whether it was possible to truly state when a sample is negative. If the sequence does not match the sequence for a species, this may mean two things: (i) the sample is negative or (ii) there are errors with the assay or the sequences which means that the result is not necessarily negative for the organism. The panel mentioned that if a negative result is obtained from a sequence, it should be further examined and that a sequencing method is a confirmation of a positive but not a confirmation of a negative result.

[30] The panel considered this was an important issue and suggested to develop a discussion paper for the next face-to-face meeting.

[31] Additionally, the following general comments were made in reference to all the draft DPs:

- DPs should not have Standard Operational Procedure (SOP) formats, because countries may have slightly different ways to implement the DPs in their laboratories.
- Headers and content of sections should be consistent between the draft DPs, and in accordance with the *Instructions to authors*<sup>7</sup>.
- In the *Pest information* section, the panel suggested to not mention a large number of countries, but instead refer to a pest's regional distribution. This because some references to the presence of a pest in country may not be officially reported by IPPC contracting parties.
- Information on and illustrations of symptoms should be included only if essential for the diagnosis.
- The use of vendor and brand names should be avoided unless extremely necessary for the test performance. One paragraph at the beginning of the *Detection section* should be included to cover all mentions of brand names. The generic wording as per *Instructions to authors* should be:

In this diagnostic protocol, methods (including reference to brand names) are described as published, as these defined the original level of sensitivity, specificity and/or reproducibility achieved. Use of names of reagents chemicals or equipment in these diagnostic protocols implies no approval of them to the exclusion of others that may also be suitable. Laboratory procedures presented in the protocols may be adjusted to the standards of individual laboratories, provided that they are adequately validated.

- Specificity and sensitivity of serological and molecular methods should be included in the draft DPs where available, and clearly expressed.
- If a diagnosis in a draft relies on detection and identification concomitantly, the sections should be merged.
- If a draft DP has a flow diagram, each method mentioned in the flow diagram should be accompanied by a cross-reference to the section number where this method is described, for ease of reference and enhanced clarity of the diagnostic process.
- Discipline leads should revise the status box of draft DPs as regards “consultation on technical level” and “main discussion points during development of the diagnostic protocol”. The

---

<sup>6</sup> Expert consultation on draft DPs: <https://www.ippc.int/core-activities/expert-consultation-draft-diagnostic-protocols>

<sup>7</sup> Instruction to authors of IPPC diagnostic protocols: <https://www.ippc.int/publications/tp-diagnostic-protocols-instructions-authors-diagnostic-protocols>



Secretariat will update and revise the other sections of the status box. Guidance on how to revise the status box is available in Appendix 1 of the *Instructions to authors*.

- Contact points for further information should preferably be part of the DP drafting group. The contact point must agree to act in this capacity.
- The number of references should be less than 40 preferably, in accordance with the *Instructions to authors*.

[32] The TPDP:

- (3) *agreed* to develop a paper on *Best practices for sequencing* for the next face-to-face meeting and *assigned* Mr Norman BARR and Mr Hans de GRUYTER as leads.

### 5.1 *Sorghum halepense* (2006-027), (Priority 1)

[33] The discipline lead for *Plants* (2007-001), Ms Yin LIPING, introduced the draft DP, the summary of comments from expert consultation<sup>8</sup> and the checklist for discipline leads and referees<sup>9</sup>. She noted that two experts provided comments during the expert consultation, and she thanked panel members and experts who had helped improve the protocol. She informed the panel that the ring test performed by different laboratories in China had been validated and that the results would be published soon. As a general comment, the panel felt that this draft was suitable for member consultation after some modifications by the panel and DP drafting group.

[34] The main discussions points were as follows:

[35] Sample size. The panel discussed whether reference to a precise number of seeds was needed and how to indicate it if needed. The panel considered whether it was optimal indicating seeds sample sizes in weight because the weight of seeds varies between crop species. It was also mentioned that there are two sampling procedures (i) sampling in a consignment, and (ii) sampling for laboratory analysis, which may have different ways of referencing size. It was noted that for the International Seed Testing Association (ISTA) protocols, sample size commonly refers to the number of seeds rather than weight. However, it was also recalled that ISTA protocols target the quality of seeds, and do not refer to consignments. The panel discussed the weight of the sample size, because the requirements may vary greatly between countries (one country may use 1 kg samples, another 5 kg). In reviewing the ISTA rules, the TPDP noted that for the crops mentioned in the draft DP, the sampling is for about 1 kg of seeds. For these reasons, the panel agreed to keep the same wording “sample generally of no less than 1 kg” and refer to ISTA protocols.

[36] Minimum requirements for detection. The TPDP queried the minimum requirements for detection and the discipline lead explained that these are morphology methods, hence molecular and biochemical tests are possible tests that can be performed if necessary. The TPDP found that clarification on this should be included in the flow diagram and in the text.

[37] Morphological identification. The proper nomenclature of hybrids was queried and clarified. The panel questioned the reliability of some numbers and rates reported in the tables because there were several numbers in parenthesis. The discipline lead will ask the DP drafting group to address the issue and revise the tables as appropriately.

[38] The discipline lead mentioned that karyotype tests (number of chromosomes) can be performed as a last attempt to identify the species in question. The discipline lead will ask the lead author if this is a routine test and consider including it in the draft DP.

[39] A comment made during the expert consultation to include a reference authored by Flora of North America was discussed. The discipline lead will check if this reference is publically available and then decide if it should be incorporated into the draft DP.

---

<sup>8</sup> 16\_TPDP\_2014\_Jul

<sup>9</sup> 12\_TPDP\_2014\_Jul

- [40] Molecular assays. It was highlighted that the text in the draft DP should clearly state that molecular or biochemical tests are used if the results by morphology are not conclusive and these tests should not be used as stand-alone tests for this DP.
- [41] Use of single seed or multiple seed in assays based on DNA marker. In addressing an expert consultation comment regarding the possibility of cross contamination in bulk tests compared to individual seeds, the TPDP found that clarification was needed on the fact that the assays in the draft DP are to be run using DNA prepared from individual seeds and not bulk. It was recalled that confirmation of identity using molecular assays is by individual seed and extracting a single seed means that the DNA is pure for the species that needs to be determined. If more than one seed is included in the extraction, the DNA is comprised of more than one individual, and this may potentially create a mixture of multiple species, and dilute the purity of the DNA.
- [42] It was also noted that this applies to DNA assays and protein-based assays. The TPDP suggested that a general sentence on this should be included and the discipline lead will address these comments to the lead author and DP drafting group.
- [43] Controls for molecular assays. It was noted that this section should be revised to be adjusted for detection of plants as pests, as the current text is written for pathogen detection. Additionally, it should be clear that internal controls are part of the minimum requirements. The panel discussed the use of internal controls, and queried if the internal control primer “matk-trnK” was the only one that could be used. It was agreed that there may be other suitable internal controls. The panel discussed the need for an internal control of the ISSR method; unlike the SCAR method, false negatives should not be a concern for the ISSR method. The discipline lead will address these comments to the lead author and DP drafting group.
- [44] Biochemical identification. Some members queried if this method was only applied to the four species mentioned in the reference (*Sorghum halepense* from closely related species: *S. bicolor*, *S. sudanense* and *S. alnum*). If not, an exhaustive list should be included because it impacts the specificity of the test. It was agreed that this will need further revision from the DP drafting group.
- [45] Morphological identification. It was agreed to put in chronological order the morphological characters, starting with seedlings.
- [46] Flow diagram. Some panel members met in parallel and produced a revised version of the flow diagram. It was mentioned that apart from the SCAR method, which does not distinguish between *S. halepense* and another *Sorghum* sp., this method should be kept in the flow diagram as it is a method that can be performed in with other tests and an asterisk (\*) should be included indicating this. So, if SCAR is used and the result is positive another test should still be performed to confirm that the species is in fact *S. halepense*. The discipline lead will communicate these comments back to the lead author and request the DP drafting group to revise and adjust the flow diagram to clarify which test(s) to perform and at which stage.
- [47] The revised draft protocol will be sent back to the panel members selected at this meeting as reviewers for this draft DP: Ms Geraldine ANTHOINE and Mr Brendan RODONI by end July 2014.
- [48] The TPDP:
- (4) *invited* the DP drafting group to consider the TPDP recommendations and consequently adjust the draft DP on *Sorghum halepense* (2006-027) by end July 2014 at which point it is sent to the reviewers Ms Geraldine ANTHOINE and Mr Brendan RODONI. The finalized draft DP will be forwarded to the SC for approval for member consultation.

## 5.2 Genus *Liriomyza* (2006-017), (Priority 1)

- [49] The Chairperson welcomed the Co-author Mr Dominique COLLINS (United Kingdom) to the meeting. The panel noted that this draft DP is in an advanced stage and it is very well written thus it is, foreseen that it will be moved to be presented to the SC for approval for member consultation in at the beginning of next year. She also thanked the Food and Environment Research Agency (FERA) for giving the time and support to the Co-author to draft this DP and to attend the meeting.

- [50] Because the discipline lead for *Insects and mites* (2006-007), Ms Ana Lía TERRA (Uruguay), was unable to attend this meeting, Mr Norman BARR (USA - DP referee), introduced the draft DP for genus *Liriomyza* and the checklist for discipline leads and referees<sup>10</sup>. He summarized the comments from the three experts received during the expert consultation<sup>11</sup> and noted that most of the comments had been incorporated into the draft. A document on molecular methods including DNA barcoding was distributed during the meeting.
- [51] The author explained that the scope of this protocol is to diagnose the genus *Liriomyza*, and that the species level identification in this protocol is restricted to four species of *Liriomyza* that are listed in plant quarantine legislation in different parts of the world: *Liriomyza bryoniae*, *L. huidobrensis*, *L. sativae* and *L. trifolii*. It was explained that *L. strigata* had been included in the draft DP because it is also polyphagous and closely related to two of the four quarantine species in the DP. Because it is not one of the major pests, the panel recommended it be removed from *Taxonomic information* and that the text be revised to focus attention on diagnosis of the four major pests.
- [52] The main discussion points were as follows:
- [53] Name of the plants or pests species. It was recalled that the first mention of plants or pests should be in latin name, and in parenthesis, the common name. Also the authority should be inserted.
- [54] Pest information. Eventhough *L. strigata* was removed from the draft DP, it was agreed that information about the species should be kept in this section because it is important for methods that diagnose the target pests due to its close relation with both *L. bryoniae* and *L. huidobrensis*. It is a species that a diagnostician must be able to eliminate when seeking to positively identify the quarantine species.
- [55] Morphological characteristics of the immature stages of the four species of *Liriomyza*. Panel members questioned if these characteristics should be listed in the *Identification* section, as they could relate to detection. The author explained that this information is important for the detection and also for identification to exclude some other species, especially for quarantine purposes. The author noted that insect identification can depend on multiple sources of information and uncertainty in some methods does not preclude diagnosis; this had also been an issue when drafting DP 1:2010 for *Thrips palmi* Karny. The TPDP suggested the DP drafting group add more guidance for operators of the protocol on how to use these data and whether a confirmation trial is needed. It was also recommended by the panel that the tables should be in alphabetical order by *Liriomyza* species.
- [56] Molecular assays for identifying *Liriomyza* species. The panel made some modifications and adjustments based on the document on DNA barcoding molecular methods distributed at the meeting. It was discussed whether molecular methods are the minimum requirements for *Liriomyza* species detection and identification. The author explained that molecular methods for this DP may be used as stand-alone for detection and identification or as complimentary methods, as for morphological methods for diagnosis of Genus *Liriomyza*. With reference to section 4.2 of DP 1:2010 *Thrips palmi* Karny which mentions that a negative molecular test result does not exclude the possibility of identification by morphological methods, the panel suggested the DP drafting group may consider if this is valid also for this protocol. Based on these discussions, the panel raised the necessity or not to have a flow diagram for this draft DP (see “flow diagram” comments below).
- [57] It was noted that information on DNA extraction, controls, accession numbers for DNA sequences and interpretation of results should be included in the draft. It was pointed out that some of the information for the sequences might not be available or, depending on the test, several sequences could be used. It was suggested that some of the barcoding data might not be reliable for diagnosis of all four species. According to ongoing scientific work there is evidence to suggest cryptic species in *L. trifolii* as well

---

<sup>10</sup> 09\_TPDP\_2014\_Jul

<sup>11</sup> 15\_TPDP\_2014\_Jul

as *L. huidobrensis*. If DNA sequence methods are to be included in the DP, additional instructions on the process is required from the drafting team.

- [58] Flow diagram. Some members found that a flow diagram would be a useful source of information and should be developed. Others found that flow diagrams may not be useful if the diagnostic assays that need to be performed are very complex. The panel did not recommend the inclusion of a flow diagram for this draft DP (see “Molecular PCR assays for identifying *Liriomyza* species” comments above).
- [59] References. Because of the high number of references the panel suggested the DP drafting group consider removing some. The author explained that this DP includes four pests and as a result may require more references to adequately describe the DP, the TPDP agreed. Additionally, a subsection on website references had been added and since this is not normally included DPs, the panel suggested removing this subsection and revising the References section accordingly by including them as necessary.
- [60] The TPDP:
- (5) *invited* the DP drafting group to consider the TPDP recommendations and consequently adjust the draft DP on Genus *Liriomyza* (2006-017). The revised draft DP will then be forwarded to the SC for approval for member consultation.

### **5.3 *Aphelenchoides besseyi*, *A. ritzemabosi* and *A. fragariae* (2006-025), (Priority 2)**

- [61] The discipline lead for *Nematodes* (2006-008), Ms Geraldine ANTHOINE (France), introduced the draft DP, the summary of comments from experts received during the Expert consultation<sup>12</sup> and the checklist for discipline leads and referees<sup>13</sup>. Four experts had provided comments during the Expert consultation via the IPP and one via email, and the discipline lead acknowledged that these comments had not been incorporated before the meeting because of lack of time. As a general comment, the panel felt that this draft was suitable for member consultation after some modifications by the panel and DP drafting group.
- [62] The main discussion points were as follows:
- [63] Pest information. The panel found that this section contained information that was better suited in other sections (e.g. identification information), and suggested the text should be revised and shortened.
- [64] Taxonomic information. The panel found the large number of synonyms and common names could be reduced and asked the drafting group to consider this.
- [65] Detection. The panel made suggestions as to the placement, number and quality of the figures for the drafting group to consider together, noting that photos/figures should be avoided unless they are relevant to the diagnosis. It was agreed to ask the discipline lead and DP drafting group to revise the detection section, specially the symptoms description. Additionally, it was noted that some EPPO protocols that were referred to had been withdrawn (e.g. EPPO Bulletin 38). These references were removed from the text and other references should be included. Generally, the panel found that the section would benefit from being reduced, while for some detection methods, e.g. extraction methods, more details should be included.
- [66] Identification. The panel felt the general considerations in this section were too prescriptive and agreed that the section should be revised to be more in line with an international standard. It was also highlighted that the information used for the development of DPs should be peer-reviewed.
- [67] Morphological identification. It was suggested to remove the mention of scanning electron microscope (SEM), because it is not necessarily available or used for routine analysis. For consistency, it was

---

<sup>12</sup> 17\_TPDP\_2014\_Jul

<sup>13</sup> 22\_TPDP\_2014\_Jul

suggested to the DP drafting to consider the information on the number of specimens to be prepared for diagnosis.

- [68] Identification of the order Aphelenchida. The panel removed this section from the draft DP because it was felt that this was “basic” information for nematode diagnosticians and thus not needed in this DP. It was noted that this was also mentioned in one comment during the Expert consultation.
- [69] Keys for identification. Some of the members found that the large number of keys could confuse the operator when conducting the diagnosis. It was explained that there may be cases where the dichotomous and polytomous keys overlap (when the dichotomous and polytomous keys might give provisional results) and operators may need to go to the description of each species key, to make a definite diagnosis. The panel recommended to the DP drafting group to consider the need to include all the keys in the draft DP and possibly a flow diagram explaining the options.
- [70] Molecular identification. Some members felt that the draft DP should more clearly state that morphological methods are used for *Aphelenchoides* identification. It was explained that molecular methods can be used for identification, however first nematode extraction and morphological identification must be carried out, and subsequently molecular methods can be performed.
- [71] DNA extraction. The panel queried from which nematodes life stages DNA could be extracted. It was explained that any developmental stage can be subjected to the molecular assays and text was proposed to clarify this.
- [72] Soil as a possible pathway. Some members queried whether *Aphelenchoides* may have other pathways than plant material because these nematodes are typically foliar nematodes species. It was explained that soil might be another pathway. The panel suggested the drafting group to confirm if this is the case and add guidance on nematode extraction from soil, noting that this should apply for all methods of detection and identification described. The TPDP agreed to ask the DP drafting group to confirm if soil can be a pathway for *Aphelenchoides* and to address the relevancy of nematode extraction from soil in this draft DP.
- [73] Sequence analysis. Some members wondered if sequences are really fundamental to reach the final diagnosis, as they are not used in routine analyses. It was noted that for these nematodes, sequencing is not a minimum requirement to the diagnosis. The panel agreed that this information be kept but that clarification should be included to highlight that sequence analysis is an additional method that can be performed.
- [74] Controls for molecular assays. It was noted that this section in the draft DP needs to be revised and adjusted to be in line with other draft DPs and to the information in the *Instruction to authors*.
- [75] Flow diagram. The structure of the diagnosis was not clear in this draft DP, and the Panel suggested developing a flow diagram highlighting the minimum requirements for the diagnosis of *A. besseyi*, *A. ritzemabosi* and *A. fragariae*. The diagram should show the different methods to allow reaching the minimum requirements for the diagnosis.
- [76] The TPDP:
- (6) *invited* the DP drafting group to consider the TPDP recommendations and consequently adjust the draft DP on *Aphelenchoides besseyi*, *A. ritzemabosi* and *A. fragariae* (2006-025). The draft DP will then be revised via TPDP e-decision for recommendation to the SC for approval for member consultation.

#### **5.4 *Bursaphelenchus xylophilus* (2004-016), (Priority 2)**

- [77] The discipline lead for Nematodes (2006-008), Ms Geraldine ANTHOINE (France), introduced the draft DP, the checklist for discipline leads and referees<sup>14</sup> and the summary of comments from six

---

<sup>14</sup> 11\_TPDP\_2014\_Jul

experts received during the Expert consultation<sup>15</sup>. It was mentioned that there were technical comments on the molecular methods, and the discipline lead together with the DP drafting group will revise them. As a general comment, the panel felt that this draft was suitable for member consultation after some modifications by the panel and DP drafting group.

- [78] The main discussion points were as follows:
- [79] Pest information. The panel suggested reducing the number of countries mentioned, preferably refer to regional distribution.
- [80] Taxonomic information. The panel suggested adjusting this section to be consistent with other draft DPs and with the *Instruction to authors*.
- [81] Detection by the use of trap logs and samples from sawmills and timber yards. It was noted that the use of trap logs and sawmills and timbers can be used for wood or wood material, not only for wood packaging material, hence the panel agreed to remove the wording “wood packaging material” from the title.
- [82] Direct detection in wood, wooden products and solid wood packaging. It was mentioned that countries can sample by low-speed drill, borer, saw, axe or hook but that this was not really considered part of the diagnosis. Hence, the correct wording was “can” instead of “should”.
- [83] Identification. Regarding the footnote describing a method for rearing *Bursaphelenchus* species, the panel noted that this type of footnote is generally not used in DPs. The Discipline lead explained that this method is an option for rearing nematodes in case few individuals are obtained, but it is not linked to any other sections. The panel suggested that the information should be incorporated into the main text of the *Preparation of specimens* section. As to the identification keys to families within the “xylophilus group” the panel agreed that clarification should be added for “small projection” and “mucro”, highlighting the difference among them. Also, the tables of *B. xylophilus* characters should be checked for consistency of the units used. It was noted that EPPO is developing a new version of the *B. xylophilus* protocol which will include a new key for identification based on morphological methods. The discipline lead and the DP drafting group were asked to analyse this information.
- [84] It was noted that there is a mention of SEM and that SEM is not used for routine analysis. It was explained that the information on SEM serves as background information only and the panel agreed to keep it for this purpose.
- [85] Identification by molecular method. It was noted that confirmation by molecular methods may be required, but that it is up to each NPPO to choose these methods. Normally, for nematodes these methods are carried out after morphological examination. This should be addressed by the DP drafting group in order to clarify the minimum requirements for performing the *B. xylophilus* diagnosis.
- [86] It was also noted that the amount of DNA was missing and should be included. It was pointed out that the DP drafting group wished to include some agarose gel pictures. The panel felt that not all were relevant for the DP and asked the discipline lead to make a decision on the figures. It was also noted that levels of sensitivity for some methods should be checked and included in the draft DP. The discipline lead will clarify this with the DP drafting group.
- [87] Sequencing. The panel discussed issues associated with sequencing and what to conclude if something does not match the sequence for a species (i.e. is it a negative? is it a problem with the assay or the quality of the sequence?). It was explained that without specific instructions and specified sequence resources it is not necessarily possible to conclude that the result is negative for the organism. Thus, a sequencing method is a confirmation of a positive result but not a confirmation of a negative result.

---

<sup>15</sup> 18\_TPDP\_2014\_Jul

[88] The TPDP:

- (7) *invited* the DP drafting group to consider the TPDP recommendations and consequently adjust the draft DP on *Bursaphelenchus xylophilus* (2004-016). The revised draft DP will then be forwarded to the SC for approval for member consultation.

## 5.5 *Citrus tristeza virus* (2004-021), (Priority 2)

[89] The discipline lead for *Viruses and phytoplasmas* (2006-009), Mr Delano JAMES (Canada), introduced the draft DP, the summary of comments from experts received during the Expert consultation<sup>16</sup> and the checklist for discipline leads and referees<sup>17</sup>. It was noted that five experts provided comments during the Expert consultation. He acknowledged and thanked the expert's comments and also panel member's comments. Overall, the panel felt that this draft was suitable for member consultation after some modifications by the panel and DP drafting group.

[90] As general comments, the panel stressed that for *Citrus tristeza virus* (CTV) the minimum requirement for diagnosis is a single test: biological indexing, serological or molecular testing. The panel noted that in this protocol the conventional reverse-transcription polymerase chain reaction (RT-PCR) was not recommended, but only the immunocapture (IC)-RT-PCR. It was pointed out this could reflect in a limitation to implement this DP for some countries that do not have (IC)-RT-PCR capabilities or could not afford to buy the antibodies. The panel recommended to the DP drafting group to include information on conventional RT-PCR and its limitations (if there are any), so that countries can make a decision on the test to use and not be excluded from the protocol. This information on RT-PCR should be included preferably with ring tests and with *primers* examples. It was pointed out that these instructions are in the *Instructions to Authors*.

[91] Other main discussion points are as follow:

[92] Pest information. It was noted that some CTV strains are regulated in some parts of the world, and thus it was included in this section as information. There were some comments on the relevance for diagnosis on cross-protection. It was noted that this practice is not relevant to diagnosis but a pest management practice, however, for this virus it is a common practice and thus it was acknowledged that it can be useful information for countries. The panel agreed to keep this information in the draft DP.

[93] Taxonomic information. It was noted that information related to the genus and description of the virus particle should be moved to the *Pest information* section because can be used for the diagnosis.

[94] Detection and diagnosis. It was mentioned that for CTV, the detection and diagnosis are done concomitantly. Thus, the sections in this draft DP were merged and in consistency with DP 2:2014 *Plum pox virus* the name of this section was changed to *Detection and Identification*.

[95] Biological indexing. There was concern that the "biological indexing" is also used for production of pathogen-free plants. It was explained that in this draft DP this method is referred to in relation to testing for virus detection.

[96] Sample preparation. Some panel felt the section *Preparation of plant extracts for serological or nucleic acid based testing* could cause confusion because the sampled preparation described could be used for serological methods and for IC-PCR (serological and molecular methods), but not for conventional PCR (molecular). On this, the heading of this section was re-worded to make it more precise.

[97] Serological tests. Some members questioned if references were available for the validation data for the kits mentioned in this section for inclusion. Furthermore, the panel suggested to the DP drafting group

---

<sup>16</sup> 19\_TPDP\_2014\_Jul

<sup>17</sup> 23\_TPDP\_2014\_Jul

to include a sentence stating that other kits may also be available for the detection and identification of CTV.

- [98] Direct-tissue print ELISA. The panel discussed the requirement to use polyclonal antibodies, since the text mentioned the use of monoclonal antibodies also. It was noted that the possibility to use polyclonal antibodies for direct-tissue print Enzyme-linked immunosorbent assay (ELISA) was not reflected in the current flow diagram (see “flow diagram” comment below).
- [99] Comments were raised on some concepts such as *accuracy*, *sensitivity ratio*, *positive / negative predictive value*. The discipline lead explained that *accuracy* is defined as the “number of true positives and true negatives diagnosed by the technique/number of samples tested”. As to *sensitivity*, it was suggested to add more clarification on the *sensitivity ratio* and, a reference was included. For the *positive / negative predictive value* it was suggested to add a reference to the proposed definition as “The positive and negative predictive values are the proportions of positive and negative results in statistics and diagnostic tests that are true positive and true negative results”.
- [100] Additionally, some references in this section were found not to be publicly available and they should be removed from this draft.
- [101] Real-time RT-PCR. Some members queried the appropriateness of including Cut-off (Ct) values and the panel removed their mention from the draft DP, noting that DPs should not refer to Ct values because they can vary and need to be validated.
- [102] Identification of strains. There were comments on the possibility to have sequencing or other methods to differentiate aggressive and mild strains, rather than using serology as described in the draft. It was pointed out this information would be very useful for countries that may want to distinguish the strains. However, the discipline lead explained that the DP drafting group had confirmed that it was not currently possible to differentiate CTV aggressive and mild strains by other methods as there are no validation data available.
- [103] Flow diagrams. The panel sought clarification on the wording *confirmation* for the biological indexing, as the draft states that this method can lead to identification –but not confirmation. It was agreed that the flow diagram should be modified to leave the possibility of using polyclonal and monoclonal antibodies in the serological tests. It was also clarified that sequencing is not an additional step for identification of CTV, and should be deleted from the flow diagram. Also, sequencing does not have correlation between genotype and aggressiveness of strains.
- [104] The TPDP:
- (8) *invited* the DP drafting group to consider the TPDP recommendations and consequently adjust the draft DP on *Citrus tristeza virus* (2004-021). The revised draft DP will then be forwarded to the SC for approval for member consultation.

## 5.6 *Xanthomonas fragariae* (2004-012), (Priority 3)

- [105] The discipline lead for Bacteria (2006-005), Mr Robert TAYLOR (New Zealand), introduced the draft DP, the summary of comments received during the expert consultation<sup>18</sup>, in which one comment was received, and the checklist for discipline leads and referees<sup>19</sup>. He mentioned that this draft was first presented to the TPDP in its 2008 meeting and another version has been developed. He thanked the expert’s comments and also all panel member’s comments. Overall, the panel felt that this draft was suitable for member consultation after some modifications by the panel and DP drafting group.
- [106] As general comments, the panel noted that information on the minimum requirements for a positive diagnosis should be clearer in the draft DP. The panel suggested that for all molecular tests, especially under identification test, information and references for validation data should be included or

---

<sup>18</sup> 20\_TPDP\_2014\_Jul

<sup>19</sup> 13\_TPDP\_2014\_Jul



specificity and sensitivity data for these tests should be provided. It was also suggested to include some figures of symptoms or link to websites, as the panel felt that this would help to diagnosis. The panel noted that the tests in the draft are recommended but other test may be performed, this should be clarified in the draft.

[107] Other main discussion points were as follow:

[108] Pest Information. The panel asked whether this draft DP could be used for asymptomatic plants and thus to detect the latent forms of *X. fragariae*, which can reflect other pathways than fruits. It was suggested to add some information and references on the distribution of the pathogen.

[109] Detection. The panel found that the minimum requirements should be clarified additionally. Also, it was noted that the minimum requirements should be in line with the flow diagram (see “flow diagram” comment below).

[110] Sampling. As to the enrichment test being a requirement, it was mentioned that it is a useful method where it is needed to go back to the same sample to perform other tests. However, that does not necessarily make it a requirement and clarification on this was solicited from the DP drafting group.

[111] Isolation. The panel noted that two isolation methods in two different media are described in the draft DP. It was suggested that the DP drafting group consider clarifying when to use either of the two methods.

[112] Interpretation of results. It was noted that in the negative result, no colonies grow if inhibition for *X. fragariae* can be observed due to competition or antagonism. The sentence was modified to clarify this concept. It was also suggested to cross-reference the sections to refer back in the text.

[113] Detached leaf assay. The panel found that more explanation was needed on how to perform this test in the field samples. It was also suggested to cross-reference the sections to refer back in the text.

[114] Enzyme-linked Immunosorbent Assay (ELISA). Some members queried whether the polyclonal antibodies would be still available and valid by the time this DP will be adopted. It was noted that during the expert consultation there was a comment on this issue. The TPDP agreed to ask the DP drafting group to address this and to consider indicating references for the validation data. For Indirect ELISA and double antibody sandwich (DAS)-ELISA, information on the use of the antibodies was missing (e.g. dilution). It was also noted that inclusion of reference to manufactures should be considered. The panel recommended that this section should be revised taking in consideration the DP 2:2012 *Plum pox virus* and the draft DP on CTV.

[115] Interpretation of ELISA results. There were comments on the thresholds for positive and negative results and it was mentioned that the threshold for the positive control  $> 1$  does not invalidate the test. Thus, this mention was removed. On the negative results, the panel agreed that the threshold  $\geq 2$  is necessary to assume that a sample is negative, and the text was modified accordingly.

[116] Interpretation of the Immunofluorescence test results. The panel suggested adding some information on what the morphology looks like for the Immunofluorescence (IF) method.

[117] DNA extraction. It was noted that validation data were not provided in the draft DP. The panel suggested including validation data or providing specificity and sensitivity data.

[118] Nested PCR and interpretation of results. The panel questioned it was nested or semi-nested PCR that was described in this section and clarification by the DP drafting group was requested. Also, it was noted that more information was needed on the PCR mix and amplification conditions, and that the interpretation of results was missing, because the amplicons size are different from the ones described.

[119] Controls section. The panel asked the DP drafting group to include a section on controls.

- [120] FAME profiling. Comments on the real use of this technique (Fatty acid methyl ester, FAME) were made, as this is not routinely used for bacterial identification. The panel asked the DP drafting group to consider whether it useful information to include in the draft, in which case it should be clear that this technique is not a minimum requirement for the diagnosis. The panel also suggested checking the possibility of using other and less specific equipment/software equipment could be used.
- [121] Flow diagram. The panel discussed the content and presentation of information in the flow diagram, because the minimum requirements for the diagnosis of the pest were not clear in the text and because some tests lead to several others tests. It was suggested to have two flow diagrams, one in symptomatic and one in asymptomatic plants and asked the DP drafting group to consider this possibility.
- [122] The TPDP:
- (9) *invited* the DP drafting group to consider the TPDP recommendations and consequently adjust the draft DP on *Xanthomonas fragariae* (2004-012). The draft DP will then be revised via TPDP e-decision for recommendation to the SC for approval for member consultation.

### 5.7 *Xiphinema americanum sensu lato* (2004-025), (Priority 3)

The Chairperson welcomed the lead author, Mr Thomas PRIOR (United Kingdom) and thanked the Food and Environment Research Agency (FERA) for giving the time and support to the lead author to draft this DP and to attend the meeting. The discipline lead for Nematodes (2006-008), Ms Geraldine ANTHOINE (France), introduced the summary of comments from the three experts received during the Expert consultation<sup>20</sup> and the checklist for discipline leads and referees<sup>21</sup>. Overall, the panel felt that this draft was suitable for member consultation after some modifications by the panel and DP drafting group.

- [123] The lead author introduced the draft DP and mentioned that there are some issues regarding the taxonomy. He explained that in the broad sense, *sensu lato*, the taxonomy for *X. americanum* can be reached, but that it is not currently possible to differentiate the species within the group. It was mentioned that some studies on the molecular aspects and morphological characteristic for this group are under development. Although, it was stressed the main issue is that at the moment, it is not possible to differentiate the species within the group. The panel therefore agreed to limit the scope of the protocol to *sensu lato (s.l.)*, while acknowledging that the protocol can be modified once the molecular and morphological studies are completed. The panel consequently agreed suggested to ask the SC to note the change of the title of this draft DP to “*Xiphinema americanum sensu lato*” due the current information available on the taxonomy (see agenda point 6.1 *General overview of status of protocols*). The lead author also explained that the identification of *X. americanum s.l.* is based on an limited morphological identification because no reliable molecular tests to distinguish between members of the *X. americanum* group can be recommended.

- [124] The main discussion points were as follow:

- [125] Pest information. Some members suggested that a reference be added to support the information that the *X. americanum s.l.* is considered to comprise 56 nominal species. It was explained that this is a personnel communication from the lead author and that all 56 species were in listed in Tables 1 to 4, the reference was added accordingly. Some members queried the terms “species”, “members” and “group”. Because the group *X. americanum s.l.* can have putative species it is mentioned as “group” and the wording was adjusted to make this information clear and consistent throughout and the lead author asked to review the section. The panel also suggest that information on the biology such as (i) that the organism is a free living ectoparasite, (ii) how deep these nematodes can go into the soil and (iii) life cycle should be added to the text, as this can be useful for countries for surveillance.

---

<sup>20</sup> 21\_TPDP\_2014\_Jul

<sup>21</sup> 10\_TPDP\_2014\_Jul

- [126] Taxonomic information. Due to the change in scope, this section would need to be revised accordingly.
- [127] Detection. It was noted that information on extraction methods should be included in this section because some countries may not be familiar with them. This information should also include from which to extract the nematodes, for example how deep the nematodes can go into the soil, because this influences extraction.
- [128] Identification. It was noted by the author that molecular methods are not reliable for *X. americanum s.l.*, thus not recommended in this draft DP. However, molecular methods and Q-bank sequence data are available for some species in the genus but do not match the taxonomic scope for the current DP. On this, it was suggested to revise the structure according to the amended scope, starting with the group identification and then species within the group. The panel found the text needed clarification on this point.
- [129] Preparation of material. It was suggested that information for Longidoridae family should be included. It was explained that in the text there are elements for this and that nematologists would not need this information, hence this family is easily identified. Some members queried whether it is possible to confuse the identification to closely-related species in the genus *Xiphinema*. It was explained that is not an issue, however critical characters must be met for identification of this group. The panel suggested to add some guidance on these criteria and to include information about the species that are most easily confused.
- [130] Figures. The panel expressed appreciation for the high quality images provided by Mr PRIOR (United Kingdom) for this DP and asked that credits be added.
- [131] The TPDP:
- (10) *invited* the DP drafting group to consider the TPDP recommendations and consequently adjust the draft DP on *Xiphinema americanum sensu lato* (2004-025). The revised draft DP will then be forwarded to the SC for approval for member consultation.

## 6. Update on the Development of Diagnostic Protocols under the TPDP Work Programme

### 6.1 General overview of status of protocols

#### *Reports on individual DPs status by discipline leads (scope and status of protocols)*

- [132] The Secretariat presented the status of DPs and reviewed the experts associated with the work programme<sup>22</sup>.
- Draft DP for Potato spindle tuber viroid (2006-022), (Priority 1): Addressing member comments***
- [133] The Secretariat introduced the draft DP for *Potato spindle tuber viroid* (PSTVd) (2006-022) because there were a few points that needed to be addressed before forwarding the draft to the SC for approval for adoption.
- [134] It was explained by the Steward that during the 2013 member consultation, Australia had made a substantive comment about the number of seeds for sampling needed to perform the tests. The panel discussed the amount of seeds needed for sampling, but finally agreed not to define the sample size to not be too restrictive, while retaining the reference to 1, 000 seeds needed to perform the test.
- [135] Another comment regarded the inclusion of validation data or other scientific information which has not been peer reviewed. The panel discussed this topic in detail and agreed that while peer-reviewed published validation data are always strongly preferred, other national data accessible via websites

---

<sup>22</sup> 06\_TPDP\_2014\_Jul

(such as the EPPO website) will be considered if no peer-reviewed data are available and the data are necessary to proceed with the protocol.

[136] The TPDP:

(11) *agreed* to review and finalize the draft DP for PSTVd (2006-022) and the responses to the member comments in an e-decision. The draft DP will then be forwarded to the SC for approval for adoption.

#### ***Review of experts associated with the work programme***

[137] Each discipline lead provided updates on their DP drafting groups highlighting that some authors had not been in contact with the discipline leads. It was agreed that the panel members would try to establish contact with these authors by the beginning of August 2014 and follow up on this with the Secretariat if they encountered difficulties. Regarding unresponsive authors, it was suggested that the Secretariat request their feedback whether they continue to be committed to the appointment. It was also agreed that the authors who are not interested in participating in the process any longer should formally resign from the appointment.

[138] The panel members agreed to confirm the information of the DP drafting groups by 15 August 2014 to the Secretariat. The panel noted that the Secretariat will post information about the DP drafting groups publically on the TPDP page of the IPP.

[139] The main points raised on individual draft DPs were as follow:

[140] - *Striga* spp. (2008-009). It was noted that as the current DP drafting group is not fully formed, and the lead author has not been identified. She will try to contact the group again and should there not be a reply the Secretariat will get involved. The TPDP identified that a call for authors would possible be made (see agenda item 6.2 *Call for authors*).

[141] - *Puccinia psidi* (2006-018). A call for authors will be made because the lead author has retired (see agenda item 6.2 *Call for authors*).

[142] - *Phytophthora ramorum* (2004-013). The lead author is no longer available and the discipline lead recommended inviting Ms Tricia GILTRAP (United Kingdom) to be part of the DP drafting group as lead author because she has the same level of expertise and comes from the same institution. The TPDP agreed to this recommendation and Ms Tricia GILTRAP will be contacted accordingly.

[143] - *Bactrocera dorsalis* complex (2006-026). The protocol is currently not being drafted because the taxonomy is being studied and the coauthors do not wish to initiate developing a DP before the taxonomy is confirmed. This will only be after the finalization of an IAEA project in mid-2015, which means that the draft DP would not be ready for member consultation before mid-2016. The panel recommended that the DP drafting group work on the scope for *B. dorsalis sensu lato*, due to the current taxonomic issues. Additionally, one of the co-authors has left her institution and the discipline lead proposed to invite Mr Luc LEBLANC (from Canada, now working for the University of Hawaii) because he has the same level of expertise. The TPDP agreed to this recommendation and Mr Luc LEBLANC will be contacted accordingly.

[144] - *Conotrachelus nenuphar* (2013-002). The drafting group has not yet been formed because only one expert had been nominated through two calls and because the discipline lead had not been able to identify additional experts. The TPDP members were encouraged to identify potential experts to Mr BARR (USA) by 15 September 2014. The TPDP will then review the proposals in a virtual meeting.

[145] - Begomoviruses transmitted by *Bemisia tabaci* (2006-023). The discipline lead is having difficulties in stablishing contact with the authors. He will try to contact the group again and should there not be a reply the Secretariat will get involved.

- [146] - *Anoplophora* spp. (2004-020). The drafting group needs additional experts and no nominations had been received at a recent call. The TPDP members were encouraged to identify potential experts to Ms TERRA (Uruguay) by 15 September 2014. The TPDP will then review the proposals in a virtual meeting. Ms LINGPING (China) notified the panel that the former Chinese expert would probably still be available, and the panel asked the Secretariat to contact him for confirmation once Ms LIPING has established contact.
- [147] - *Gymnosporangium* spp. (2004-008). Because of the low priority of this DP and because there are no new risks or outbreaks identified, the TPDP recommended to the SC to remove this topic from the TPDP work programme.
- [148] - *Xiphinema americanum* (2004-025). The TPDP invited the SC to note that the title of the topic changed to *Xiphinema americanum sensu lato* (2004-025) (see agenda item 5.7 *Xiphinema americanum sensu lato* (2004-025), (Priority 3)).
- [149] - *Xylella fastidiosa* (2004-024). The discipline lead is having difficulties in establishing contact with the DP drafting group. He will try to contact the group again and should there not be a reply the Secretariat will get involved. The TPDP identified that a call for authors would possibly be made (see agenda item 6.2 *Call for authors*).
- [150] The TPDP:
- (12) recommended to the SC that *Gymnosporangium* spp. (2004-008) be removed from the TPDP work programme.
  - (13) invited the SC to note that the title of the topic *Xiphinema americanum* (2004-025) was changed to *Xiphinema americanum sensu lato* (2004-025).

## 6.2 Call for authors

- [151] The Secretariat introduced the paper<sup>23</sup> on the call for authors issued on 16 January 2014, noting that the following number of nominations had been received: three for *Liberibacter solanacearum* (2013-001); zero for *Conotrachelus nenuphar* (2013-002); one for *Anguina* spp. (2013-003), and; three for *Fusarium moniliformis* / *moniforme* syn. *F. circinatum* (2006-021).
- [152] The TPDP discussed the various nominations in relation to their experience and geographical representation, and the discipline leads gave their preferences based on the expertise needed.
- [153] *Liberibacter solanacearum* (2013-001): Mr Joseph MUNYANEZA (USA) was selected to be part of the DP drafting group. The panel discussed whether to include another of the nominated experts, who were both very valid nominations, however, it was decided that three would suffice for this topic.
- [154] *Anguina* spp. (2013-003): Ms Andrea SKANTAR (USA) was selected to be part of the DP drafting group. Because only one nomination had been received at the call, the discipline lead proposed two additional experts she had identified. The panel agreed to select Mr Thomas PRIOR (UK) and Mr Colin Craig FLEMING (UK). It was suggested that the lead author should be Ms SKANTAR and the discipline lead will enquire with Ms SKANTAR if she agrees.
- [155] *Fusarium moniliformis* / *moniforme* syn. *F. circinatum* (2006-021): the TPDP agreed to add all three nominations, because the current drafting group has proven difficult to contact. The three new authors selected to be part of the DP drafting group were: Ms Mónica Berbegal MARTÍNEZ (Spain), Mr James Wanjohi MUTHOMI (Kenya) and Mr Renaud IOOS (France).
- [156] It was suggested that the lead author should be Ms Ana Maria PEREZ (UK). The discipline lead will enquire with Ms PEREZ if she agrees.

---

<sup>23</sup> 07\_TPDP\_2014\_Jul

[157] New calls. As identified under 6.1 *General overview of status of protocols*, a call for authors will be made for *Puccinia psidi* (2006-018). Possible call for authors will be made for *Striga* spp. (2008-009) and *Xylella fastidiosa* (2004-024).

[158] The TPDP:

- (14) *selected* Mr Joseph MUNYANEZA (USA) to complete the DP drafting group for *Liberibacter solanacearum* (2013-001).
- (15) *selected* Ms Andrea SKANTAR (USA), Mr Thomas PRIOR (UK) and Mr Colin Craig FLEMING (UK) to compose the DP drafting group for *Anguina* spp. (2013-003) and *invited* Ms Andrea SKANTAR (USA) to be the lead author of the DP drafting group.
- (16) *selected* Ms Mónica Berbegal MARTÍNEZ (Spain), Mr James Wanjohi MUTHOMI (Kenya) and Mr Renaud IOOS (France) to complete the DP drafting group for *Fusarium moniliformis / moniforme* syn. *F. circinatum* (2006-021) and *invited* Ms Ana Maria PEREZ (UK) to be the lead author of the DP drafting group.
- (17) *asked* the Secretariat to open a call for authors for *Puccinia psidi* (2006-018)
- (18) *noted* the possibility to a call for authors for *Striga* spp. (2008-009) and *Xylella fastidiosa* (2004-024).

## 7. Procedures and Guidance Related to TPDP

### 7.1 TPDP procedures

[159] The TPDP discussed the *TPDP Working procedures* and *TPDP Instructions to authors* (Checklist for authors, Criteria for prioritization of protocols and Draft standardized template for draft diagnostic protocols)<sup>24</sup>, available in the Standard Setting Procedure Manual<sup>25</sup>.

[160] The TPDP agreed that it would be preferable not to introduce changes to these procedures at this time, so as to not confuse authors (with the exception of the tables for mix composition for PCR, RT-PCR or RFLP, see agenda item 7.2).

### 7.2 Draft table template format for PCR reaction conditions

[161] The discipline lead for *Nematodes*, Ms Geraldine ANTHOINE (France), introduced the draft table template format for PCR reaction conditions<sup>26</sup>.

[162] One TPDP member queried the meaning of PCR mix because a reaction mixture is complex for those labs that create their own mixtures.

[163] The TPDP:

- (19) *agreed* that the Tables 1-3 for description of PCR, RT-PCR or RFLP reactions should be included in the TPDP working procedures (Instruction for authors as a suggestion for authors to use in IPPC diagnostic protocols and to be used as a quality check tool).

### 7.3 Quality Assurance issues

[164] The *Insects and mites* discipline lead, Mr Norman BARR (USA) introduced the paper<sup>27</sup> related to issues of quality assurance terms in the IPPC diagnostic protocols and mentioned that a small group composed of Mr Mallik MALIPATIL (Australia), Ms Ana Lía TERRA (Uruguay), Mr Norman BARR (USA) and Ms Geraldine ANTHOINE (France) had been formed some years ago to discuss this.

---

<sup>24</sup> 08\_TPDP\_2014\_Jul

<sup>25</sup> Standard Setting Procedure Manual IPP link: <https://www.ippc.int/core-activities/ippc-standard-setting-procedure-manual>; [TPDP Instruction to authors](#); [Checklist for discipline leads and referees](#)

<sup>26</sup> 14\_TPDP\_2014\_Jul

<sup>27</sup> 24\_TPDP\_2014\_Jul

[165] The TPDP:

- (20) *revised* the document on *Quality assurance terms* associated with diagnostic protocols for regulated pests, and *agreed* that additional modifications were needed.
- (21) *encouraged* TP members to submit comments on when to use the specific terms (e.g. sensitivity) to the lead (Mr BARR) by 15 September 2015, at which point the first version of the document will be finalized.
- (22) *asked* the Secretariat to make the document available as an internal TPDP document on the IPP to be used as a guidance document for DP drafting groups when finalized.

#### 7.4 TPDP SWOT and Gap analysis

[166] The Secretariat introduced the paper<sup>28</sup> noting that the idea to analyse the TPDP's strengths, weaknesses, opportunities and threats ("SWOT analysis"), had formed due to the very high volume of DPs that the panel will be developing in the coming years. The Secretariat highlighted a number of initial considerations such as, geographical representation of the authors, TPDP member participation in virtual meetings over the past year, TPDP member's participation in the face-to-face meetings the past five years. She also demonstrated the outcomes from the Implementation Review and Support System (IRSS) survey on ISPM 19:2003 (*Guidelines on lists of regulated pests*) and ISPM 17:2002 (*Pest Reporting*)<sup>29</sup> in regards to the question "Which are the five pests on your regulated pest list which are the most concern?". Forty-two countries responded to the survey and indicated the regulated pest of most concern to their country<sup>30</sup>. The results demonstrated that 58% of the regulated pests of major concern are already subjects on the TPDP work programme. Of the five pests of major concern, the TPDP work programme covers 34%. Hence it was apparent that the protocols on the TPDP work programme are for pests that are of major concern to contracting parties, and the TPDP found that this was very positive information obtained.

[167] The panel brainstormed on the its strengths, weaknesses, opportunities and threats (see Table 2). This analysis will be a helpful tool to set up an action plan and guide the TPDP towards its goal. As there was not enough time at the meeting, the full gap analysis was not performed.

---

<sup>28</sup> 25\_TPDP\_2014\_Jul

<sup>29</sup> <http://irss.ippc.int/activities>

<sup>30</sup> IRSS Survey on ISPM 19 & ISPM 17: Respondents of answer choice 1 represented 100% of all respondents; Respondents of answer choice 5 represented 83% of all respondents for the question number 6 of this survey.

**Table 2:** TPDP SWOT analysis (July TPDP meeting, 2014 – Paris, France)

SWOT	Positive / Helpful aspects to achieve the goal	Negative / Harmful / Risks to achieve the goal
<b>INTERNAL</b> Origin facts/factors of the TPDP	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>- Enthusiasm of members</li> <li>- Broad expertise of members (specific and horizontal expertise)</li> <li>- Commitments of NPPOs to support the members</li> <li>- Global representation</li> <li>- Harmonized approach of development of DPs</li> <li>- Use of new technologies (i.e. tools) to communicate intercessional</li> <li>- Background diversity of DP authors (e.g. NPPOs, Universities, Research Institutes, taxonomists, practical diagnosticians)</li> <li>- IPPC Secretariat keeping the work on track</li> <li>- Inclusive and transparency process</li> <li>- Almost 50% coverage of DPs subjects as identified in the IRSS survey (ISPM 17 &amp; ISPM 19)</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>- Lack of experience in the process (juvenile stage)</li> <li>- Restricted audience - poll of experts in plant quarantine (diagnostics is a small part of plant quarantine)</li> <li>- Availability expertise for the authors drafting the DPs (Limited expertise available)</li> <li>- Lack of incentives (preparation)</li> <li>- Long process: can lead to out of date info, demotivation of drafting groups</li> <li>- Harmonized process (can be difficult to reach the harmonization)</li> <li>- Various customers</li> <li>- Lack of validation data</li> <li>- Language barriers (within regions, especially in Asia)</li> <li>- Lack of succession planning for TPDP and especially for DP drafting groups</li> </ul>
<b>EXTERNAL</b> Origin facts/factors of the environment in which the TPDP operates	<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>- Create more synergies with other organizations and groups or RPPOs (e.g. International Seed Testing Association (ISTA), International Seed Federation (ISF), National Plant Diagnostic Network (NPDN), and CAB International (CABI)).</li> <li>- As a consequence of the above, to forecast and have more coordination the next “wave” of the development of DPs.</li> <li>- Public databases (to share more data, e.g. Q-banks).</li> <li>- Strategically to plan the next steps stage of the work plan.</li> <li>- To work on the implementation side.</li> <li>- Start thinking more in succession planning's.</li> <li>- There is room for the development of other DPs as identified in the IRSS survey (ISPM 17 &amp; ISPM 19).</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>- Long process: can lead to out of date info by the time is adopted and may not be used by CPs</li> <li>- No visibility by 2017 (what to do after the draft DPs were submitted for adoption? Is this list exhaustive?)</li> <li>- Lack of resources of TPDP members' organizations and IPPC's lack of resources</li> </ul>

## 8. Update on the Work of other Organisations

### *ISO (especially regarding draft ISO standard 13484)*

[168] The discipline lead for *Viruses and phytoplasmas* (2006-009), Mr Delano JAMES (Canada), explained that ISO under the project ISO/TC 34/SC 16 *Horizontal methods for molecular biomarker analysis* had initiated drafting a standard on *General requirements for molecular biology analysis for detection and identification of destructive organisms in plants and derived products*, which overlapped with IPPC DPs. He noted that the draft standard had not been finalized and work on it had been suspended, although it had then been reinitiated after a voting process among ISO international community this year.



[169] He mentioned that a meeting to define the scope and terms of reference of the project is scheduled for 2-4 September 2014 at Research Triangle Park in the USA<sup>31</sup>.

[170] The TPDP:

- (23) *noted* the updated on ISO, especially on the project ISO/TC 34/SC 16 *Horizontal methods for molecular biomarker analysis*.
- (24) *asked* Mr Delano JAMES to inform the TPDP on the outcomes of the meeting on *Horizontal methods for molecular biomarker analysis* (ISO/TC 34/SC 16).

### ***Global Taxonomy Initiative***

[171] The Secretariat informed the panel that the first phase of the Global Taxonomy Initiative<sup>32</sup> has been concluded and the second phase is scheduled to be initiated. The Convention on Biological Diversity Secretariat, of which the Global Taxonomy Initiative is part, seeks interaction from the TPDP.

[172] The TPDP:

- (25) *invited* Mr Norman BARR (USA) to be the TPDP contact for liaison with the Global Taxonomy Initiative. He will consider and inform the Secretariat accordingly by the end of July 2015.

### ***European Biosafety Association***

[173] The TPDP Steward informed that the European Biosafety Association has developed a standard for laboratory bio risk management with the intention for making it an ISO standard, and had approached her on the possibility of having collaboration with the TPDP on this.

[174] The TPDP:

- (26) *noted* this information, but did not feel that the standard on laboratory bio risk management related to the remit of the TPDP.

### ***EPPO***

[175] Ms Françoise PETER (EPPO) presented updates on EPPO annual meetings for taxonomic disciplines and topics. She started by outlining the EPPO standard setting process, noting that specialized panels meet on topics and that the authors of protocols are chosen from these. She also mentioned that they do not have drafting teams, but usually only one author per protocol. Furthermore, she explained that the protocol development process takes about two years and all protocols are published in English only.

[176] She furthermore informed the panel that, at an EPPO workshop on setting Ct values for real-time PCR, experts recommended that discrete Ct values are not necessary based on available science. Instead evidence of an exponential curve is sufficient for diagnostics.

[177] The TPDP:

- (27) *noted* the EPPO update.

### ***EUPHRESKO***

Mr Baldissera GIOVANI (EPPO) explained that the EUPHRESKO network of partners was created to help coordinate research projects managed by national programs in Europe to limit redundancy and improve collaboration among partners<sup>33</sup>. It started as an European initiative funded through the EU from 2006-2013. It is now a self-supporting organization hosted by EPPO in Paris. The organization functions by generating funding from partners, receiving suggestions from countries, and setting

---

<sup>31</sup> [http://www.iso.org/iso/home/standards\\_development/list\\_of\\_iso\\_technical\\_committees/iso\\_technical\\_committee.htm?commid=560239](http://www.iso.org/iso/home/standards_development/list_of_iso_technical_committees/iso_technical_committee.htm?commid=560239)

<sup>32</sup> <http://www.cbd.int/gti/>

<sup>33</sup> <http://www.euphresco.net>

priorities based on a panel that considers impacts and overlaps in country support. EUPHRESKO is not limited to European countries and countries with interest in coordinated research are invited to participate.

[178] The TPDP:

(28) *noted* the EUPHRESKO update.

## **9. TPDP Work plan 2014-2015**

[179] The TPDP reviewed their work plan for 2014-15 and modified it according to decisions taken in the meeting (Appendix 4).

## **10. Date and Location of Next Meeting**

[180] The next TPDP meeting is scheduled for 22-26 June 2015 to be hosted by the NPPO of China, in Shanghai. The panel discussed the possibility of inviting Françoise PETTER (EPPO) to participate in the meeting. The panel agreed that it would be positive for Ms PETTER to participate because she had contributed with valuable input into the last three meetings, is aware of the TPDP procedures and, due to the large programme she manages, would help ensure synergies on an international level. The panel generally found that participation from regional plant protection organizations as observers may prove beneficial.

[181] The panel discussed options for preparing for this meeting, because the agenda would possibly contain over 10 draft DPs. The panel agreed to meet virtually once or twice to revise DPs to reduce the face-to-face meeting agenda.

[182] The TPDP:

(29) *invited* the SC to consider that Ms Françoise PETTER (EPPO) be invited to the 2015 TPDP face-to-face meeting, as invited expert.

(30) *invited* the SC to consider inviting representatives from regional plant protection organizations to the TPDP 2015 face-to-face meeting.

## **11. Other Business**

### **11.1 Virtual tools**

#### ***TPDP forums on IPP***

[183] The Secretariat asked the continuous engagement of the panel members in the discussions via the IPP forum and that email discussions be kept at a minimum. Tentative dates for the TPDP forums are indicated in the 2014-2015 TPDP work plan (Appendix 4).

#### ***Virtual meeting participation***

[184] The TPDP agreed that it would be appropriate for TPDP panel members to email opinions on specific agenda points to the Secretariat before virtual meetings if attendance is not possible and a decision needs to be made at the meeting. Under these circumstances, the correspondence can be taken into account and can count towards of the quorum.

#### ***Date and number of further virtual meetings***

[185] The panel discussed the tentative dates for the virtual meetings for the coming year. Tentative dates are indicated in the 2014-2015 TPDP work plan (Appendix 4).

[186] Some of the panel members asked that only critical points are discussed in virtual meetings, whereas more general updates or information may be provided by the Secretariat in written form and circulated.

## 12. Recommendations to the SC

[187] Recommendations to the SC are reported from previous sections of this report, for easy reference.

[188] The SC is invited to:

- (1) *note* that eight draft DPs are intended to be submitted for approval for member consultation in 2015. The draft DPs are:
  - *Sorghum halepense* (2006-027)
  - *Liriomyza* spp. (2006-017)
  - *Aphelenchoides besseyi*, *A. ritzemabosi* and *A. fragariae* (2006-025)
  - *Bursaphelenchus xylophilus* (2004-016)
  - *Citrus tristeza virus* (2004-021)
  - *Xanthomonas fragariae* (2004-012)
  - *Xiphinema americanum sensu lato* (2004-025)
  - *Tomato spotted wilt virus*, *Impatiens necrotic spot virus*, *Watermelon silver mottle virus* (2004-019)
- (2) *note* that one draft DP is intended to be submitted for approval for adoption in 2014. The draft DP is:
  - *Potato spindle tuber viroid* (2006-022)
- (3) *note* that four draft DPs are intended to be submitted for approval for adoption in 2015. The draft DPs are:
  - *Anastrepha* spp. (2004-015)
  - Phytoplasmas (general) (2004-018)
  - *Ditylenchus destructor* / *D. dipsaci* (2004-017)
  - *Erwinia amylovora* (2004-009)
- (4) *note* the name of the draft DP “*Xiphinema americanum* (2004-025)” was changed to “*Xiphinema americanum sensu lato* (2004-025)”;
- (5) *consider* removing the topic *Gymnosporangium* spp. (2004-008) from the TPDP work programme.
- (6) *note* the results of the call for authors.
- (7) *consider* that Ms Françoise PETER (EPPO) be invited to the 2015 TPDP face-to-face meeting;
- (8) *consider* inviting representatives from regional plant protection organizations to the TPDP 2015 face-to-face meeting.

## 13. Close of the meeting

### *Evaluation of the meeting*

[189] The Secretariat informed the panel of the proposed deadlines for adopting the meeting report. The panel did not agree to the dates proposed due to the short deadlines during summer holiday season. All will make an attempt to have the report adopted by 5 September, but the general feeling was that it would be very difficult to meet this deadline.

[190] The Secretariat distributed an evaluation form asking the panel to fill it out. The panel felt the meeting had run smoothly and were appreciative of the Secretariat support and the general active participation of all members. The panel, however, noted that a prerequisite for a successful meeting was that the participants were well prepared. It was mentioned that for some drafts, this had been a challenge for this meeting because of the little time available to review the drafts after the expert consultation and before posting for the face-to-face meeting. The Secretariat invited the TPDP members to consider this when setting up the drafts for the next Expert consultations.

*Close*

- [191] On behalf of the TPDP, the Chairperson thanked EPPO for hosting the meeting and for the hospitality provided, all panel members for their continued dedication and the Secretariat for their support.
- [192] The IPPC Secretariat thanked the whole panel and asked that the member extend the appreciation to all DP authors. The Secretariat also thanked the Chairperson for managing successfully to get through the very full agenda, the steward and the EPPO Secretariat for hosting the TPDP meetings since 2012.

**APPENDIX 1: Agenda****Technical Panel on Diagnostic Protocols****EPPO Headquarters, Paris, France****07-12 July 2014**

Opening: Monday 07 July 2014 at 10:00

Daily Schedule (Tuesday – Saturday): 09:00-12:30 and 13:30-17:30

**AGENDA**

<b>AGENDA ITEM</b>	<b>DOCUMENT NO.</b>	<b>PRESENTER</b>
<b>1. Opening of the meeting</b>		LARSON
1.1 Welcome	-	EPPO Secretariat (WARD)
1.2 Selection of the Chairperson	-	MOREIRA
1.3 Selection of the Rapporteur		CHAIRPERSON
1.3 Review and adoption of the agenda	01_TPDP_2014_Jul	CHAIRPERSON
<b>2. Administrative Matters</b>		CHAIRPERSON
- Local information	02_TPDP_2014_Jul	PETTER
- Documents list	03_TPDP_2014_Jul	MOREIRA
- Participants list (and membership)	04_TPDP_2014_Jul	MOREIRA
<b>3. Updates from relevant Bodies</b>		CHAIRPERSON
3.1 Updates from other relevant IPPC meetings	05_TPDP_2014_Jul	Steward (CHARD)
<b>4. Overview of the TPDP work programme</b>		CHAIRPERSON
4.1 General overview of DPs and next steps	(presentation)	MOREIRA
4.2 Discussion on the future of DPs and panel's work	-	LARSON
<b>5. Scrutiny of draft diagnostic protocols</b>		CHAIRPERSON
5.1 <i>Sorghum halepense</i> (2006-027) (Priority 1)	2006-027	Botany discipline lead (Ms YIN)
- Summary of comments from expert consultation	16_TPDP_2014_Jul	
- Checklist for discipline leads and referees	12_TPDP_2014_Jul	
5.2 Genus <i>Liriomyza</i> spp. (2006-017) (Priority 1)	2006-017	Entomology discipline lead (Mr BARR)
- Summary of comments from expert consultation	15_TPDP_2014_Jul	
- Checklist for discipline leads and referees	09_TPDP_2014_Jul	
5.3 <i>Aphelenchoides besseyi</i> , <i>A. ritzemabosi</i> and <i>A. fragariae</i> (2006-025) (Priority 2)	2006-025	Nematology discipline lead (Ms ANTHOINE)
- Summary of comments from expert consultation	17_TPDP_2014_Jul	
- Checklist for discipline leads and referees	22_TPDP_2014_Jul	

AGENDA ITEM	DOCUMENT NO.	PRESENTER
5.4 <i>Bursaphelenchus xylophilus</i> (2004-016) (Priority 2) - Summary of comments from expert consultation - Checklist for discipline leads and referees	2004-016 18_TPDP_2014_Jul 11_TPDP_2014_Jul	Nematology discipline lead (Ms ANTHOINE)
5.5 <i>Citrus tristeza virus</i> (2004-021) (Priority 2) - Summary of comments from expert consultation - Checklist for discipline leads and referees	2004-021 19_TPDP_2014_Jul 23_TPDP_2014_Jul	Virology discipline lead (Mr JAMES)
5.6 <i>Xanthomonas fragariae</i> (2004-012) (Priority 4) - Summary of comments from expert consultation - Checklist for discipline leads and referees	2004-012 20_TPDP_2014_Jul 13_TPDP_2014_Jul	Bacteriology discipline lead (Mr TAYLOR)
5.7 <i>Xiphinema americanum</i> (2004-025) (Priority 4) - Summary of comments from expert consultation - Checklist for discipline leads and referees	2004-025 21_TPDP_2014_Jul 10_TPDP_2014_Jul	Nematology discipline lead (Ms ANTHOINE)
<b>6. Update on the development of diagnostic protocols under the TPDP work programme</b>		CHAIRPERSON
6.1 General overview of status of protocols - Reports on individual DPs status by discipline leads (scope and status of protocols) <ul style="list-style-type: none"> <li>PSTVd draft DP (2006-022): Addressing Member Comments</li> </ul> - Review of DP drafting groups associated with the work programme	06_TPDP_2014_Jul	Discipline leads / IPPC Secretariat
6.2 Call for authors	07_TPDP_2014_Jul	Discipline leads / IPPC Secretariat
<b>7. Procedures and guidance related to TPDP</b>		CHAIRPERSON
7.1 TPDP procedures: - TPDP Working procedures - TPDP Instructions to authors (Checklist for authors, Criteria for prioritization of protocols and Draft standardized template for draft diagnostic protocols) - Checklist for discipline leads and referees	08_TPDP_2014_Jul <a href="#">TPDP Working procedures</a> <a href="#">TPDP Instruction to authors</a> <a href="#">Checklist for discipline leads and referees</a> <sup>34</sup>	IPPC Secretariat / CHARD
7.2 Draft table template format for PCR reaction conditions	14_TPDP_2014_Jul	Nematology discipline lead (Ms ANTHOINE)
7.3 Quality Assurance issues	24_TPDP_2014_Jul	Entomology discipline lead (Mr BARR)
7.4 TPDP SWOT and Gap analysis	25_TPDP_2014_Jul	MOREIRA

<sup>34</sup> Checklist for discipline leads and referees is available on the TPDP restricted IPP work area page: <https://www.ippc.int/work-area-publications/tpdp-procedure-checklist-discipline-leads-and-referees-0>

AGENDA ITEM	DOCUMENT NO.	PRESENTER
<b>8. Update on the work of other organisations</b>		CHAIRPERSON
<ul style="list-style-type: none"> <li>- ISO (especially regarding draft ISO standard 13484)</li> <li>- Global Taxonomy Initiative (GTI)</li> <li>- European Biosafety Association</li> <li>- EPPO</li> <li>- EUPHRESKO</li> </ul>	-	Virology discipline lead (Mr JAMES) MOREIRA CHARD EPPO Secretariat
<b>9. TPDP work plans</b>		CHAIRPERSON
<ul style="list-style-type: none"> <li>- Review of the List of Topics</li> <li>- TPDP 2014-2015 work plan</li> </ul>	<a href="#">List of topics for IPPC Standards</a> (To be prepared during the meeting)	MOREIRA
<b>10. Date and location of next meeting</b>	-	CHAIRPERSON
<b>11. Other business</b>	-	CHAIRPERSON
11.1 Virtual tools <ul style="list-style-type: none"> <li>- TPDP forums on IPP</li> <li>- Virtual meeting participation</li> <li>- Date and number of further virtual meetings</li> </ul>	-	CHAIRPERSON / MOREIRA
<b>12. Recommendations to the SC</b>		CHAIRPERSON
<b>13. Close of the meeting</b> <ul style="list-style-type: none"> <li>- Evaluation of the meeting</li> <li>- Close</li> </ul>	-	EPPO Secretariat IPPC Secretariat CHAIRPERSON

**APPENDIX 2: Documents list****Technical Panel on Diagnostic Protocols****EPPO Headquarters, Paris, France****07-12 July 2014**

Opening: Monday 07 July 2014 at 10:00

Daily Schedule (Tuesday – Saturday): 09:00-12:30 and 13:30-17:30

**DOCUMENTS LIST**

<b>DOCUMENT NO.</b>	<b>AGENDA ITEM</b>	<b>DOCUMENT TITLE</b>	<b>POSTED</b>
<b>Draft Diagnostic Protocols</b>			
2004-012	5.6	<i>Xanthomonas fragariae</i> (2004-012)	2014-06-16
2004-016	5.4	<i>Bursaphelenchus xylophilus</i> (2004-016)	2014-06-13
2004-021	5.5	<i>Citrus tristeza virus</i> (2004-021)	2014-06-23
2004-025	5.7	<i>Xiphinema americanum</i> (2004-025)	2014-06-13
2006-017	5.2	<i>Liriomyza spp.</i> (2006-017)	2014-06-13
2006-025	5.3	<i>Aphelenchoides besseyi</i> , <i>A. ritzemabosi</i> and <i>A. fragariae</i> (2006-025)	2014-06-19
2006-027	5.1	<i>Sorghum halepense</i> (2006-027)	2014-06-13
<b>Other documents</b>			
01_TPDP_2014_Jul	1.3	Agenda	2014-05-29
02_TPDP_2014_Jul_Rev1	2	Local information	2014-05-29
03_TPDP_2014_Jul	2	Documents list	2014-06-13
04_TPDP_2014_Jul	2	Participants list	2014-05-29
05_TPDP_2014_Jul	3	Updates from other relevant IPPC meetings	2014-06-13
06_TPDP_2014_Jul	6.1	General overview of status of protocols	2014-06-13
07_TPDP_2014_Jul	6.2	Summary: Call for authors	2014-06-13
08_TPDP_2014_Jul	7.1	TPDP procedures	2014-06-13



DOCUMENT NO.	AGENDA ITEM	DOCUMENT TITLE	POSTED
09_TPDP_2014_Jul	5.2	Checklist for discipline leads and referees – <i>Liriomyza spp.</i> (2006-017)	2014-06-13
16_TPDP_2014_Jul	5.1	Summary of comments from expert consultation system – <i>Sorghum halepense</i> (2006-027)	2014-06-19
12_TPDP_2014_Jul	5.1	Checklist for discipline leads and referees - <i>Sorghum halepense</i> (2006-027)	2014-06-16
15_TPDP_2014_Jul	5.2	Summary of comments from expert consultation system – <i>Liriomyza spp.</i> (2006-017)	2014-06-19
17_TPDP_2014_Jul	5.3	Summary of comments from expert consultation system – <i>Aphelenchoides besseyi</i> , <i>A. ritzemabosi</i> and <i>A. fragariae</i> (2006-025)	2014-06-19
22_TPDP_2014_Jul	5.3	Checklist for discipline leads and referees – <i>Aphelenchoides besseyi</i> , <i>A. ritzemabosi</i> and <i>A. fragariae</i> (2006-025)	2014-06-23
18_TPDP_2014_Jul	5.4	Summary of comments from expert consultation system – <i>Bursaphelenchus xylophilus</i> (2004-016)	2014-06-19
11_TPDP_2014_Jul	5.4	Checklist for discipline leads and referees – <i>Bursaphelenchus xylophilus</i> (2004-016)	2014-06-16
19_TPDP_2014_Jul	5.5	Summary of comments from expert consultation system – <i>Citrus tristeza virus</i> (2004-021)	2014-06-19
23_TPDP_2014_Jul	5.5	Checklist for discipline leads and referees - <i>Citrus tristeza virus</i> (2004-021)	2014-06-23
20_TPDP_2014_Jul	5.6	Summary of comments from expert consultation system – <i>Xanthomonas fragariae</i> (2004-012)	2014-06-19
13_TPDP_2014_Jul	5.6	Checklist for discipline leads and referees - <i>Xanthomonas fragariae</i> (2004-012)	2014-06-16
21_TPDP_2014_Jul	5.7	Summary of comments from expert consultation system – <i>Xiphinema americanum</i> (2004-025)	2014-06-19
10_TPDP_2014_Jul	5.7	Checklist for discipline leads and referees - <i>Xiphinema americanum</i> (2004-025)	2014-06-16
14_TPDP_2014_Jul	7.2	Draft table template format for PCR reaction conditions	2014-06-19
24_TPDP_2014_Jul	7.3	Quality Assurance issues	2014-06-23
25_TPDP_2014_Jul	7.4	TPDP SWOT and gap analysis	2014-06-26

**Other documents**

<b>DOCUMENT NO.</b>	<b>AGENDA ITEM</b>	<b>DOCUMENT LINK</b>
TPDP Working procedures	7.1	<a href="#">TPDP Working procedures</a>
TPDP Instructions to authors	7.1	<a href="#">TPDP Instruction to authors</a>
Checklist for discipline leads and referees	7.1	<a href="#">Checklist for discipline leads and referees</a>
List of Topics for IPPC Standards	9	<a href="#">List of topics for IPPC Standards</a>

**APPENDIX 3: Participants list****Technical Panel on Diagnostic Protocols****07-12 July 2014****EPPO Headquarters, Paris, France****PARTICIPANTS LIST**

A check (✓) in column 1 indicates confirmed attendance at the meeting.

	Participant role	Name (Country)	Email address	Term begins	Term ends
<b>TPDP members</b>					
✓	Steward	Ms Jane CHARD (GBR)	<a href="mailto:jane.chard@sasa.gsi.gov.uk">jane.chard@sasa.gsi.gov.uk</a> ;		
✓	Bacteriology	Mr Robert TAYLOR (NZL)	<a href="mailto:Robert.Taylor@maf.govt.nz">Robert.Taylor@maf.govt.nz</a> ;	May 2011	May 2016
✓	Nematology	Ms Géraldine ANTHOINE (FRA)	<a href="mailto:geraldine.anthoine@anses.fr">geraldine.anthoine@anses.fr</a> ;	April 2009	April 2014 (2 <sup>nd</sup> term April 2014-April 2019)
✓	Virology	Mr Delano JAMES (CAN)	<a href="mailto:Delano.James@inspection.gc.ca">Delano.James@inspection.gc.ca</a> ;	Nov 2010	Nov 2015
✓	Virology and backup bacteriology	Mr Brendan RODONI (AUS)	<a href="mailto:Brendan.Rodoni@dpi.vic.gov.au">Brendan.Rodoni@dpi.vic.gov.au</a> ;	July 2012	July 2017
✓	Botany	Ms Liping YIN (CHN)	<a href="mailto:yinlp@shciq.gov.cn">yinlp@shciq.gov.cn</a> ; <a href="mailto:yinlp2013@hotmail.com">yinlp2013@hotmail.com</a> ;	April 2008	April 2018 (2 <sup>nd</sup> term)
	Entomology	Ms Ana Lía TERRA (URY)	<a href="mailto:alt2912@live.com">alt2912@live.com</a> ;	April 2008	April 2018 (2 <sup>nd</sup> term)
✓	Entomology	Mr Norman B. BARR (USA)	<a href="mailto:Norman.B.Barr@aphis.usda.gov">Norman.B.Barr@aphis.usda.gov</a> ;	July 2012	July 2017
✓	Mycology	Mr Johannes DE GRUYTER (NLD)	<a href="mailto:j.de.gruyter@minlv.nl">j.de.gruyter@minlv.nl</a> ;	April 2008	April 2018 (2 <sup>nd</sup> term)

<b>Other participants</b>					
✓	Invited expert	Mr Dominique COLLINS Author for the draft diagnostic protocol for Genus <i>Liriomyza</i> (2006-017) Senior Entomologist /Leader- Entomology sub-team, Pest & Disease Identification Team (PLHB), Central Scientific Laboratory (CSL) Sand Hutton United Kingdom	<a href="mailto:dom.collins@csl.gov.uk">dom.collins@csl.gov.uk</a> ;		
✓	Invited expert	Mr Thomas PRIOR Lead author for the draft diagnostic protocol for <i>Xiphinema americanum</i> (2004-025) 02FA01/5, The Food and Environment Research Agency, Sand Hutton, YO41 1LZ United Kingdom	<a href="mailto:thomas.prior@fera.gsi.gov.uk">thomas.prior@fera.gsi.gov.uk</a> ;		

Other participants			
✓	Host/Organizer	Ms Françoise PETER European and Mediterranean Plant Protection Organization (EPPO) 21 boulevard Richard Lenoir 75011 Paris France Tel: +33 1 45 20 77 94 / Fax: +33 1 70 76 65 47	<a href="mailto:petter@epo.int">petter@epo.int</a> ;
✓	IPPC Secretariat	Mr Brent Larson Standard Setting Officer - IPPC Secretariat FAO, Viale delle Terme di Caracalla 00153 Rome, Italy Tel: +39 06 570 54915	<a href="mailto:Brent.Larson@fao.org">Brent.Larson@fao.org</a> ;
✓	IPPC Secretariat	Ms Adriana MOREIRA Standard Setting - IPPC Secretariat FAO, Viale delle Terme di Caracalla 00153 Rome, Italy Tel: +39 06 570 55809	<a href="mailto:Adriana.Moreira@fao.org">Adriana.Moreira@fao.org</a> ;
✓	IPPC Secretariat	Ms Eva MOLLER Standard Setting - IPPC Secretariat FAO, Viale delle Terme di Caracalla 00153 Rome, Italy Tel: +39 06 570 52855	<a href="mailto:Eva.Moller@fao.org">Eva.Moller@fao.org</a> ;

**APPENDIX 4: TPDP work plan 2014-2015***(Prepared during the meeting)*

<b>DUE DATE</b>	<b>ACTION</b>	<b>RESPONSIBLE</b>
<b>Section 1. 2014 TPDP July meeting report</b>		
<b>18 July 2014</b>	To Rapporteur, Chair and Steward	Secretariat
<b>22 July 2013</b>	Comments to Secretariat	Chair, Steward and Rapporteur
<b>01 August 2014</b>	To TPDP	Secretariat
<b>22 August 2014</b>	Comments to Secretariat	ALL
<b>05 September 2014</b>	Final (posting on IPP)	Secretariat
<b>Section 2. 2014-2015 Diagnostic Protocols (DPs) overall management</b>		
<b>Ongoing</b>	All TPDP members to update lead authors and DP drafting groups on the outcomes of the 2014 TPDP meeting and inform the deadlines for the lead authors.	TPDP members
<b>15 August (and ongoing)</b>	TP leads inform Secretariat if have not been successful in establishing contact with some authors and members of DP drafting groups (email, telephone)	TPDP members
<b>15-30 August 2014 (and ongoing)</b>	Secretariat to write to some NPPOs to check status of some authors and members of editorial teams	Secretariat
<b>15 August 2014</b>	<ul style="list-style-type: none"> <li>❖ Draft DP + responses to MC intended to be submitted to SC for approval for adoption – PSTVd (see section 4)</li> <li>❖ Draft DPs intended to be submitted to the February 2015 member consultation to the Secretariat (see section 6);</li> <li>❖ Revision of table information regarding the DP drafting groups and send back to Secretariat</li> </ul>	Discipline leads
<b>30 August 2014</b>	<p>Call for authors and TPDP members (45-60 days call):</p> <ol style="list-style-type: none"> <li>1. Possibly <i>Puccinia psidi</i> (2006-018)</li> <li>2. Possibly <i>Xylella fastidiosa</i> (2004-024)</li> <li>3. Possibly Begomoviruses transmitted by <i>Bemisia tabaci</i> (2006-023)</li> <li>4. TPDP member for entomology</li> </ol>	Secretariat
<b>Section 2.1. TPDP e-decisions</b>		

DUE DATE	ACTION	RESPONSIBLE
<b>18 August – 05 September 2014</b> (3 weeks)	<u>TPDP e-decision:</u> Draft DPs to SC for approval for adoption (see section 4) <ol style="list-style-type: none"> <li><i>Potato spindle tuber viroid</i> (2006-022)</li> </ol>	Secretariat
<b>18 August – 05 September 2014</b> (3 weeks)	<u>TPDP e-decision:</u> DPs intended to be submitted to the 2015 member consultation (MC) period (see section 6) <ol style="list-style-type: none"> <li><i>Tomato spotted wilt virus, Impatiens necrotic spot virus, Watermelon silver mottle virus</i> (2004-019)</li> </ol>	
<b>January/ February 2015</b>	<u>TPDP e-decisions:</u> DPs intended to be submitted to the 2015 member consultation (MC) period (see section 6): <ol style="list-style-type: none"> <li><i>Aphelenchoides besseyi, A. ritzemabosi and A. fragariae</i> (2006-025)</li> <li><i>Xanthomonas fragariae</i> (2004-012)</li> </ol>	Secretariat
<b>01 – 10 April 2015</b>	<u>TPDP e-decisions:</u> Draft DPs to SC for approval for adoption (see section 5) <ol style="list-style-type: none"> <li><i>Anastrepha</i> spp. (2004-015)</li> <li>Phytoplasmas (general) (2004-018)</li> <li><i>Ditylenchus destructor / D. dipsaci</i> (2004-017)</li> <li><i>Erwinia amylovora</i> (2004-009)</li> </ol>	Secretariat
<b>Section 2.2. TPDP Virtual meetings</b>		
<b>03 or 04 September 2014</b>	Tentative: TPDP virtual meeting (Provisional agenda: DP notification period)	Secretariat
<b>23 or 24 September 2014</b>	TPDP virtual meeting	Secretariat
<b>05 November 2014</b>	TPDP virtual meeting	Secretariat
<b>03 or 04 February 2015</b>	TPDP virtual meeting	Secretariat
<b>07 or 08 April 2015</b>	TPDP virtual meeting	Secretariat
<b>September 2015</b>	Tentative TPDP virtual meeting	Secretariat
<b>November 2015</b>	Tentative TPDP virtual meeting	Secretariat
<b>Section 3. 2014-2015 DPs for approval for adoption by the SC (on behalf of CPM)</b> (Notification period: 01 July – 15 August 2014)		

DUE DATE	ACTION	RESPONSIBLE
<b>Draft DPs:</b> <ol style="list-style-type: none"> <li><i>Phyllosticta citricarpa</i> (McAlpine) Aa on fruit (2004-023)</li> <li><i>Xanthomonas citri</i> subsp. <i>citri</i> (2004-011)</li> </ol>		
<b>01 July -15 August 2014</b>	DP notification period	-
<p align="center"><b>Section 4. 2014-2015 DPs for approval for adoption by the SC (on behalf of CPM)</b>  <b>(Notification period: 15 December 2014 – 30 January 2015)</b></p>		
<b>Draft DPs:</b> <ol style="list-style-type: none"> <li><i>Potato spindle tuber viroid</i> (2006-022)</li> </ol>		
<b>15 August 2014</b>	Revised draft DP + responses to member comments to the Secretariat (to be submitted to TPDP e-decision. See section 2)	Discipline lead
<b>October 2014</b>	Secretariat opens a SC e-decision for approval for adoption in 2014	Secretariat
<b>15 December 2014 – 30 January 2015</b>	Secretariat opens the 45-days diagnostic protocol notification period	Secretariat
<p align="center"><b>Section 5. DPs submitted for 2014 member consultation (MC) and for submission for adoption in July 2015</b>  <b>(Intended to Notification period: 01 July – 15 August 2015)</b></p>		
<b>Draft DPs:</b> <ol style="list-style-type: none"> <li><i>Anastrepha</i> spp. (2004-015)</li> <li>Phytoplasmas (general) (2004-018)</li> <li><i>Ditylenchus destructor</i> / <i>D. dipsaci</i> (2004-017)</li> <li><i>Erwinia amylovora</i> (2004-009)</li> </ol>		
<b>01 July – 30 November 2014</b>	Member consultation period	-
<b>05 December 2014</b>	Secretariat submits the compiled comments to discipline leads	Secretariat
<b>05 December 2014 – 28 February 2015</b>	Revision of draft DP and member comments	Discipline leads + DP drafting groups
<b>01 March 2015</b>	Submission of the revised draft DP and responses to member comments to the Secretariat	Discipline leads
<b>15 – 30 March 2015</b>	Revision of draft DP with editor's comments	Discipline leads + DP drafting groups

DUE DATE	ACTION	RESPONSIBLE
<b>30 March 2015</b>	Submission of the revised draft DP to the Secretariat	Discipline leads
<b>01 – 10 April 2015</b>	TPDP e-decision for approval to submit the draft DP to the SC for adoption (see section 2)	Secretariat
<b>April 2015</b>	SC e-decision for approval for adoption	Secretariat
<b>1 July to 15 August 2015</b>	DP notification period	Secretariat
<b>September 2015</b>	TPDP virtual meeting	Secretariat
<b>Section 6. DPs intended to be submitted to the 2015 member consultation (MC) period</b>		
<p><b>Draft DPs:</b></p> <ol style="list-style-type: none"> <li>1. <i>Sorghum halepense</i> (2006-027)</li> <li>2. <i>Liriomyza</i> spp. (2006-017)</li> <li>3. <i>Aphelenchoides besseyi</i>, <i>A. ritzemabosi</i> and <i>A. fragariae</i> (2006-025)</li> <li>4. <i>Bursaphelenchus xylophilus</i> (2004-016)</li> <li>5. <i>Citrus tristeza virus</i> (2004-021)</li> <li>6. <i>Xanthomonas fragariae</i> (2004-012)</li> <li>7. <i>Xiphinema americanum</i> sensu lato (2004-025)</li> <li>8. <i>Tomato spotted wilt virus</i>, <i>Impatiens necrotic spot virus</i>, <i>Watermelon silver mottle virus</i> (2004-019)</li> </ol> <p>Note: MC starts on 01 February 2015 or 01 July 2015</p>		
<b>Section 6.1. February 2015 Member Consultation on draft ISPMs</b>		
<b>14 July – 15 August 2014</b>	Revision of the drafts DP by DP drafting groups	Discipline leads + DP drafting groups
<b>15 August 2014</b>	Revised version of the draft DP to the Secretariat for editing	Discipline leads
<b>15 – 30 August 2014</b>	IPPC editor (for those drafts not going for TPDP e-decision)	Secretariat
<b>19-26 August 2014</b>	TPDP e-decisions (see section 2): <ol style="list-style-type: none"> <li>1. Possible for: <i>Tomato spotted wilt virus</i>, <i>Impatiens necrotic spot virus</i>, <i>Watermelon silver mottle virus</i> (2004-019)</li> </ol>	Secretariat
<b>30 Aug – 15 Sep 2014</b>	Discipline lead / lead author to work on the editor's comments	Discipline leads + DP drafting groups
<b>15 September 2014</b>	Revised version of the draft DP to the Secretariat for e-decisions (SC or TPDP e-decisions)	Discipline leads
<b>September/October 2014</b>	SC e-decision for approval for 2015 February MC (before SC November meeting)	Secretariat
<b>04 or 05 November 2014</b>	TPDP virtual meeting	Secretariat



DUE DATE	ACTION	RESPONSIBLE
01 February-30 June 2015	Member Consultation on draft ISPMs	Secretariat
<b>Section 6.2. July 2015 Member Consultation on draft ISPMs</b>		
14 July – 15 January 2015	Revision of the drafts DP by DP drafting groups	Discipline leads + DP drafting groups
15 January 2015 (preferably before)	Revised version of the draft DP to the Secretariat	Discipline leads
January/ February 2015	Possible TPDP e-decisions (see section 2): 1. <i>Aphelenchoides besseyi</i> , <i>A. ritzemabosi</i> and <i>A. fragariae</i> (2006-025) 2. <i>Xanthomonas fragariae</i> (2004-012)	Secretariat
February/March 2015 (after TPDP e-decisions)	IPPC editor	Secretariat
27 February – 13 March 2015	Discipline lead / lead author to work on the editor's comments	Discipline leads + DP drafting groups
15 March 2015	Revised version of the draft DP to the Secretariat for SC e-decision	Discipline leads
March/April/May 2015	SC e-decisions for approval for 2015 July MC (before 2015 SC May meeting)	Secretariat
01 July -30 November 2015	Member Consultation on draft ISPMs	Secretariat
<b>Section 7. 2015 TPDP preparation Shanghai, China Date: 22-26 June 2015 (5 days meeting)</b>		
<b>Tentative draft DPs:</b> 1. <i>Xylella fastidiosa</i> (2004-024) 2. <i>Liberibacter</i> spp. / <i>Liberobacter</i> spp. on <i>Citrus</i> spp. (2004-010) 3. <i>Fusarium moniliformis</i> / <i>moniforme</i> syn. <i>F. circinatum</i> (2006-021) 4. <i>Phytophthora ramorum</i> (2004-013) 5. <i>Puccinia psidi</i> (2006-018) 6. Begomoviruses transmitted by <i>Bemisia tabaci</i> (2006-023)	7. <i>Bactrocera dorsalis</i> complex (2006-026) 8. <i>Anoplophora</i> spp. (2004-020) 9. <i>Striga</i> spp. (2008-009) 10. <i>Ips</i> spp. (2006-020) 11. <i>Dendroctonus ponderosae</i> syn. <i>Scolytus scolytus</i> (2006-019) 12. <i>Conotrachelus nenuphar</i> (2013-002) 13. <i>Liberibacter solanacearum</i> (2013-001) 14. <i>Anguina</i> spp. (2013-003)	
15 September 2014	Feedback on a more realistic scenario of the draft DPs	All

<b>DUE DATE</b>	<b>ACTION</b>	<b>RESPONSIBLE</b>
<b>15 January 2015</b> (preferably before)	Submission of the revised draft DP to the Secretariat the Expert Consultation on draft DPs on the IPP <i>Note:</i> 2 months ECS	Discipline leads
<b>February 2015</b>	Secretariat opens Expert Consultation System (ECS) on the IPP	Secretariat
<b>March 2015</b>	Invitation sent (+ draft agenda)	Secretariat
<b>April 2015</b>	Comments from experts sent by Secretariat to the discipline leads	Secretariat
<b>April – 22 May 2015</b>	Discipline leads and DP drafting groups revise the drafts associated with the comments	Discipline leads + DP drafting groups + referees
<b>22, 23 or 24 April 2015</b>	April Virtual Meeting (possible invited experts contacted with pre-announcement (provided DP expected to be ready for the meeting)	All
<b>25 May 2015</b>	DEADLINE FOR THE MEETING: <ul style="list-style-type: none"> <li>- Revised drafts DPs + checklist (completed by referees &amp; discipline leads)</li> <li>- Any other discussion paper</li> </ul>	Discipline leads
<b>01-05 June 2015</b>	Secretariat posts draft DPs + meeting documents on IPP (TPDP restricted work area)	Secretariat
<b>22-26 June 2015</b>	TPDP meeting, Shanghai, China	-