



**Report of the meeting of the Technical panel on Diagnostic Protocols,
24-28 September 2007, Buenos Aires, Argentina.**

1. Introduction

The technical panel on diagnostic protocols was welcomed by Diana Guillen, Directora Nacional de Protección Vegetal, Servicio Nacional de Sanidad y Calidad Agroalimentaria, (SENASA) and also by the host, Maria Elena Manna, from SENASA. The TPDP had a visit to the phytosanitary laboratories of SENASA.

Ana Lia Terra was elected as chair. The TPDP agreed the Agenda with some modifications to the order (Annex 1).

2. Report of the last meeting and update on meetings of the Commission on Phytosanitary Measures (CPM) and Standards Committee (SC)

The steward summarised the report of the last meeting and commented on the benefits of discussing the development of diagnostic protocols (DPs) with the main authors. He noted that the Instructions to Authors had been completed and the *Thrips palmi* protocol had been sent for member consultation, with a final date for responses of 30th September 2007.

The steward informed the panel that CPM-2 had adopted new DPs on to the IPPC Standard-setting programme and a call for authors for the new DPs had been made by the Secretariat with a closing date for receipt of nominations of 30th September. CPM-2 had discussed the standard setting process and had decided to hold a focus group meeting in July 2007 to review the procedures used for standard setting and make recommendations for improvements to the process.

The SC had reviewed the composition of technical panels at their meeting in May 2007 and had asked the TPDP to consider whether there was a need for another virologist on the panel following the resignation of Daphne Wright. The SC had also asked the TPDP to produce criteria for prioritizing subjects for DPs and this had been placed on the agenda.

3. Update on the focus group on standard setting

The steward, rapporteur and IPPC Secretariat, who had been involved in the focus group meeting, updated the TPDP on the outcome of the meeting. The recommendations from the focus group and any outstanding issues to be resolved would be discussed by the informal working group on strategic planning and technical assistance (SPTA) in October 2007 and their recommendations would be discussed by the SC in November 2007 and referred to CPM-3 for adoption.

The main recommendations from the focus group that affect the TPDP were amendments to the Terms of Reference and Rules of Procedure for Technical Panels, including clarification of who could participate in TP meetings and clarification of the role of the SC in overseeing the work of TPs. The possibility of extending the standard setting process by one year had also been discussed.

4. Diagnostic protocol development

4.1 *Thrips palmi* member consultation

The IPPC Secretariat informed the TPDP that formal objections had been received in response to the member consultation of the *Thrips palmi* protocol. In addition a number of NPPOs had sent comments without formal objections. The panel was concerned that under normal circumstances a three month period would be required to deal with technical comments and resolve them. However, because this was the first protocol and in order not to delay adoption for one year, the TPDP was keen for the discipline lead and main author to work together to find solutions to the formal objections so that the draft could be considered by the SC at their meeting in November 2007.

The IPPC Secretariat was opposed to this proposal because no resources were available to collate comments and the SC needed as much time as possible to consider the draft and any proposed solutions. It was finally agreed that in order to attempt to resolve the objections, the Secretariat would collate the comments and the discipline lead and main author would consider them and propose a revised text. The Secretariat would then contact the NPPOs that had sent formal objections in time for the revised draft to be considered at the November SC meeting.

The TPDP noted that the SC had made an editorial change to the draft DP prior to member consultation which had changed the meaning of one paragraph and this had resulted in one of the formal objections. The formal objections had raised some points of principle relating to DPs, which the panel discussed. These included:

4.1.1 Brand/trade names should not be used unless technically required

ISPM No. 27 states that mention of a particular chemical or equipment does not endorse the product.

In some cases a DP includes the name of a piece of equipment or a diagnostic kit, which had been quoted in a particular scientific publication and/or which has been ring tested and the sensitivity, specificity and reliability are known (and indicated). If this is the case and the equipment/kit cannot be interchanged with other brands of equipment/kit and achieve the same result, then it should be quoted in the DP. Therefore, if a particular piece of equipment or chemical is vital to the success of the test, then it should be mentioned. In these cases, the DP may indicate that other options (brands) may give the same results but they should be validated.

In cases where several options are available and products can be used interchangeably, named products can be given as examples or the brand should not be quoted.

Where commercial kits are quoted, the DP does not need to include detailed methodology; the DP should state that the method should follow manufacturers' instructions.

4.1.2 Use of molecular techniques (for insects); need for these to be combined with morphological examination

The TPDP did not have any concerns with the principle of using molecular techniques alone for diagnosis of pests when the methods had been adequately tested and the limits of the techniques were indicated in the DP.

The TPDP noted that even when molecular techniques cannot be used for reliable diagnosis of a pest, they can provide information for the diagnostician and may also be useful within a country for surveillance. The panel also agreed that the limitations of molecular techniques need to be clearly explained in the text.

For *Thrips palmi*, there are no keys for immature stages and the current state of knowledge of molecular techniques is insufficient to identify the organism, due to limitations in the specificity of the tests.

The TPDP discussed the fact that the larvae can be reared to adults reasonably quickly and this may allow identification in some circumstances. They noted, however, that rearing may not be appropriate for diagnosis of pests on traded material.

The TPDP noted that Chinese work on COI sequences show that the quoted sequence would fail to detect a number of *Thrips palmi* isolates.

4.1.3 DNA Barcoding

The TPDP noted that the IPPC Secretariat had met with experts in DNA barcoding who had visited the Food and Agriculture Organization. The panel were aware that there have been several barcoding projects, but they are dependent on the quality of the reference material used. Although they acknowledged that DNA barcoding had potential value in the future, the TPDP agreed that it is premature to require inclusion of DNA barcoding in all protocols at this stage.

4.1.4 The need to include more than one method for diagnoses with different purposes

The TPDP recognized that DPs will be used for different purposes, ranging from surveillance of a pest known to occur in a country to the first finding of a pest on a continent or interception of a pest in an imported consignment. DPs will also be produced for a range of organisms. In some cases one method will be sufficient for reliable diagnosis of the pest; in others more than one method will be required. The number of methods needed to provide the minimum requirements for a diagnosis depends on the organism, the purpose of the diagnosis and should be addressed on a case by case basis.

4.1.5 Inclusion of photographs and/or line drawings

The panel recommended that if photographs are essential to the diagnosis, then they should be included in the DP. However, if line drawings are sufficient, then these should be included instead. Photographs which provide additional information, but are not essential, should be posted on the IPP. The main author should be the person responsible for the photos and obtaining from the source of the image any required permissions needed for to publication.

The TPDP noted that some websites have good photographs of pests. However, they were reminded by the IPPC Secretariat that the IPPC has no control over the information on such websites and they can change at any time. For ISPMs, it is essential that any required information (e.g. photographs) is under the control of the IPPC. In some cases links could be provided for information.

4.1.6 Reference to data sheets

ISPM 27 states that reference to data sheets should be included, where available. The TPDP restated that DPs should provide a summary of pest information and not provide the level of information normally contained in data sheets. This is referred to in the Instructions to Authors. They noted that published data sheets can sometimes include information on pest distribution that is not supported by NPPOs. They also noted that some data sheets refer to diagnostic methods and were concerned that reference to these could mean that these methods are endorsed. The panel therefore agreed that data sheets referred to in DPs should be freely available and should have undergone a degree of scrutiny and have some status e.g. those published by an RPPO.

4.1.7 Use of should/shall/must

The TPDP noted that there is a general issue of the use of should, shall and must in ISPMs and a policy paper is being written for CPM-3. In the case of the use of positive and negative controls in DPs, the panel agreed it was appropriate to change the “should” to “must”.

4.1.8 Records (and evidence) to be kept

The panel agreed that DPs should provide guidance on the specific records and minimum evidence that should be kept for the pest, for example for a bacterium, cultures, DNA extracts and photographs of gels. This is particularly important in cases of findings of pests when other NPPOs are involved.

4.1.9 The number of methods to be included in a DP

For some pests there are a large number of methods available, particularly molecular methods. For example, for *Phytophthora ramorum* there are 8-10 PCR protocols in use globally. The authors of the DP had proposed including one reliable example for each type of molecular method and to mention the others as alternatives.

The TPDP agreed that this approach was sensible, but it was important to include different types of methods so that NPPOs with different capacities have options. Also, to include methods for which sensitivity, specificity and reliability information was available.

4.1.10 Issues associated with PCR methods

The TPDP discussed various issues associated with PCR methods including:

- the need to include information on measures to prevent contamination of PCR reactions
- detection of faint bands and interpretation
- troubleshooting e.g. smears and high concentration of salts
- dealing with mixed specimens
- commonly encountered substances that can influence PCR

- the need for new users to set up protocols adapted to local conditions.

The TPDP agreed that the authors should assume that users of the DPs would have some molecular knowledge and DPs should only include the minimum information required for an expert. They considered it was important to include information on interpreting positive and negatives. The specificity of each test should also be indicated, particularly differentiation of the pest from common organisms found with the pest and related species. In addition, if there are particular difficulties e.g. inhibitors for certain plant hosts, solutions should be provided. The panel noted that these principles apply to other methods for example, ELISA.

4.2 General overview of DP development

Discipline leads gave an overview of the development of the DPs in their discipline (Annex 3). The TPDP congratulated the authors on the progress made and on the quality of the drafts. They recognised that the process of developing DPs was lengthy and the panel was still learning what to include in DPs and their format.

The panel discussed the procedures to be used when disagreement arose with a DP. Firstly, the discipline lead should discuss it with the main author, then, if necessary, the whole editorial team. The discipline lead should make a decision based on the scientific evidence and present this to the TPDP. In some cases the disagreement will not be resolved and the DP will have to be put aside until there is a scientific resolution to this issue.

The TPDP discussed DPs for genera and which species to include in these DPs. It was pointed out that some regions regulate the genera as a whole and diagnosis to genus is all that is required. However, other regions may regulate species within the genus and further diagnostic information would be required. For example, South America regulates the genus *Ips* because it does not occur on the continent; however, other regions regulate only certain *Ips* species. The technical panel on forest quarantine (TPFQ) had discussed the species of *Ips* to include in the DP and had produced a document summarising their discussion that would be sent to the discipline lead for consideration by the authors. The document was based on the organisms listed as regulated pests and that had been intercepted most frequently in international trade (which may be considered for regulation). The TPDP agreed that the discipline lead and authors should agree on what to include in DPs.

The TPDP noted that they were aware of certain experts who had not been nominated by their NPPOs. In some cases panel members had contacted experts directly asking them to seek nomination from their NPPOs. The TPDP noted that some NPPOs did not support the process because of the long time scale for development of DPs and the fact that there were no adopted DPs yet.

The discipline lead for plants as pests presented a document listing regulated plants. This contained information from 46 countries obtained from the IPP and had originally comprised a list of more than 300 plants. The panel agreed this document would be useful for prioritizing DPs on plants as pests. The TPDP discussed the content of DPs for plants as pests and, although the main use for a DP might be to identify seed in consignments, DPs may be used for a number of purposes including surveillance. In these cases characteristics of the living plant would also be needed. Production of DPs for plants based solely on the identification of seed was attractive in being a simple approach and would result in short DPs. The TPDP, however, agreed that DPs for plants as pests should include the minimum diagnostic information necessary for identification of all parts of the plants, but, where possible, reference should be made to appropriate reference sources.

4.3 Review of discipline lead responsibilities, need for additional virology lead

The TPDP discussed whether there was a need for an additional virologist on the panel and decided that this was not necessary. The panel welcomed the new quality assurance expert, who was an entomologist, and agreed he would assist as the discipline lead for three insect DPs (Annex 3).

The TPDP agreed that it would be useful to have a second member of the panel to act as a “referee” for drafts once they were nearing completion and agreed referees for the draft DPs expected to be completed in

2008 (Annex 3). The role of this panel member would be to check that the DP met the requirements in ISPM No. 27 and the other horizontal issues identified by the panel.

4.4 Update of authors and editorial team information, including review of new nominations

The TPDP noted that one member of an editorial team had moved laboratory. Because the final date for nomination of authors for DPs was 30th September, the panel agreed to an email consultation and approval process for the authors of new DPs. Discipline leads would thank unsuccessful nominees for their interest and initiate the process for the development of the new DPs.

4.5 Detailed scrutiny of draft protocols

The TPDP reviewed draft protocols on *Trogoderma granarium*, *Bursaphelenchus xylophilus*, *Plum pox virus* and *Anastrepha* spp. and made suggestions for improvements to the texts. The discipline leads will contact the main authors and will seek a revised draft for consideration by the TPDP. An early draft of *Phytophthora ramorum* DP was also considered. The early draft of the *Tilletia indica* DP will be reviewed by the discipline lead in the light of the comments on the other drafts.

Several further horizontal issues were identified in addition to those noted earlier in discussions on the *T palmi* protocol (section 4.1):

- geographical information should be as general as possible
- the DP should avoid providing instructions to NPPOs
- in the detection section, DPs should not provide guidelines for inspection, but for example can indicate the part of a plant that is likely to be infested and the symptoms. DPs are to be used by diagnosticians
- the DP should not be a sampling manual
- methods should not be written in standard operating procedure format
- methods should provide enough information to be used by an expert; commonly used methods do not need to be described. Where commercial kits are used, reference should be made to manufacturers' instructions
- specificity, sensitivity and reliability should be clearly stated and the scope of any ring tests should be indicated
- authors should avoid any apparent conflict of interest in choice of methods
- guidance should be given on the usefulness and limitations for methods, for example, monoclonal antibodies for *Xanthomonas axonopodis* pv. *citri* are not reliable for detection, but may be used for identification of a pure culture
- DPs should concentrate on identification of the organism; references can be included for strain identification (e.g. strains of *Plum pox virus*)
- tables of primer combinations can be useful e.g. for differentiating *Liberibacter* species
- if molecular methods are not currently available for the pest, then this should be indicated.

The TPDP agreed a procedure for further refinement of these DPs and an email consultation. The panel hoped that a number of them will be ready for member consultation in 2008.

4.6 Discussion of *Liberibacter* spp and *Xanthomonas axonopodis* pv. *citri* DPs with authors

The TPDP heard presentations by Rita Lanfranchi and Enrique Verdier on the draft DPs for *Liberibacter* spp and *Xanthomonas axonopodis* pv. *citri* respectively. The panel welcomed the opportunity to discuss the drafts with the authors because it provided an opportunity to hear about problems with protocol development and to understand any issues associated with diagnosis of the pests concerned. The panel agreed a time scale for further development of these protocols.

4.7 Action to be taken on *Erwinia amylovora* DP

The TPDP did not receive the draft of the *Erwinia amylovora* DP in time for consideration at the meeting. However, this protocol will be considered by the panel during its email consultation.

5. Criteria for prioritization of DPs and recommendations for new DPs

The TPDP discussed the process they had used previously to prioritize DPs and agreed the criteria for prioritization of new protocols (Annex 4).

The panel considered the four subjects for DPs that had been put forward by NPPOs in the 2007 call for topics and priorities for standards. They recommended that the SC should propose a new DP on *Striga* spp for adoption by CPM-3. The reasons for this are

- it is feasible; there is a regional protocol available(COSAVE)
- it was proposed in the call for topics in 2007
- there is currently only one DP on plants as pests on the work programme and more should be included.

6. QA issues related to DPs

6.1 Combination of methods

The TPDP discussed a paper presented by the steward on the problems that can arise when a combination of methods is specified in a DP. This followed from the discussion at the last meeting on false negatives and false positives. Following comments on the document, the steward will develop the document further for consideration at the next meeting.

6.2 Sensitivity/specificity/reliability, validation of methods and ring testing

The TPDP discussed these concepts and related issues including the limits of detection of a method and sensitivity of a method in practice. The panel agreed that it would be useful to have a document that summarised the terms and explained the TPDP's understanding of how they are used in the context of IPPC DPs. The panel acknowledged that there were different uses of the terms e.g. validation by ring testing and validation of a method in a laboratory. A document would help to provide consistency of the use of the terms in DPs. If appropriate, this document could be sent to the SC and recommended as an annex to ISPM No. 27. The discipline lead for QA issues agreed to produce a document for discussion at the next meeting.

6.3 Accreditation of laboratories

The TPDP discussed issues associated with accreditation of laboratories undertaking diagnosis of regulated pests. They agreed that accreditation of laboratories is relevant because DPs may be used for accreditation of laboratories so it is important that the panel ensures that the DPs are suitable for that purpose. The topic of accreditation of laboratories was not a priority for the panel at the moment, but should be considered once some DPs had been adopted.

7. Report on the cooperation with the Technical Consultation (TC) among RPPOs

The steward reported that there had been no progress with this topic. He noted that it was not now a priority for EPPO and it had not been on the agenda for the recent TC meeting. The TPDP considered that it would not be appropriate to set up a series of regional reference laboratories for organisms along the model used by the World Organization for Animal Health (OIE). The rapporteur informed the panel that the TC meeting in 2006 had discussed the issue of regional reference laboratories and had also considered it was not necessary for plant pests. The TC had, however, considered that it would be useful to combine the regional databases on diagnostic capacity to provide a global resource.

The steward informed the panel that the EU had been considering the requirements for national reference laboratories. The TPDP considered that this was another longer term issue, but accepted an offer by the steward of a paper for their next meeting.

8. Publication on the IPP of internationally adopted and regional and national protocols

The IPPC Secretariat demonstrated a new website that was being created (<http://www.phytopsanitary.info>) where NPPOs and RPPOs could post their diagnostic protocols and phytosanitary treatments. Adopted DPs would also be posted, but would be identified as official documents in a different way (with a different background). In considering whether DPs should be searchable, the TPDP proposed that the genus and species should be searchable, but they thought it was not appropriate to search within a DP, because essential information relevant to the diagnosis could be lost.

9. Procedural issues

9.1 Fast track process

In the light of their experiences with the member consultation of the *T. palmi* DP, the TPDP discussed the fast track process and made some suggested amendments to the process proposed by the focus group (Annex 5). The panel asked the IPPC Secretariat to take forward these proposals at the SPTA meeting in October 2007.

9.2 Possibility of consultation with other panels where expertise exists

The IPPC Secretariat had been asked by experts in other technical panels whether the TPDP would consider sending relevant draft DPs to the TP prior to approval by the TPDP, for example for DPs for fruit fly species to be circulated to the technical panel on pest free areas and systems approaches for fruit flies. The TPDP did not wish to add another step to the process for production of DPs and noted that the other TPs had been created for other purposes and they would not necessarily include experts in pest diagnosis. The TPDP encouraged authors of DPs to circulate their drafts as widely as possible prior to sending a final draft to the TPDP for approval. If relevant experts exist in other panels it would be appropriate for the authors to send them a draft for their comments.

10. Work plan for 2008

The TPDP agreed a work plan for 2008 (Annex 6).

11. Date and location of the next meeting

The panel agreed tentatively that the next meeting should be held in South Africa during the third week October 2008.

Recommendations for SC:

1. *Note* progress with DPs (Annex 3)
2. *Approve* the criteria for prioritization of DPs (Annex 4)
3. *Recommend* to the CPM a new protocol (*Striga* spp) for adoption on the IPPC Standard setting work programme
4. *Agree* improvements to the fast track standard setting process taking into account the recommendations from the TPDP (Annex 5).

Technical Panel on Diagnostic Protocols, Buenos Aires, 24-28 September 2007
Agenda (as updated in the meeting)

1. Welcome
2. Local arrangements (Host)
3. Background to TPDP, roles and outcomes from the meeting (IPPC Secretariat)
4. Selection of chair
5. Report of the last meeting and update on meetings of the CPM and SC (Steward) (2007-TPDP-05 and 06)
6. Update on the focus group on standard setting (IPPC Secretariat)
7. Diagnostic protocol (DP) development
 - 7.1 *Thrips palmi* (member consultation)
 - 7.2 general overview with reports on individual DPs by discipline leads (2007-TPDP-11)
 - 7.3 review of discipline lead responsibilities, need for additional virology lead
 - 7.4 update of authors and editorial team information, including review of new nominations
 - 7.5 Detailed scrutiny of draft protocols:
 - Trogoderma granarium* (2007-TPDP-08);
 - Bursaphelenchus xylophilus* (2007-TPDP-09 and 09a);
 - Plum pox virus* (2007-TPDP-16);
 - Anastrepha* spp (2007-TPDP-17, 17a, 23, 24),
 - and early drafts (*Tilletia indica* (2007-TPDP-20) and *Phytophthora ramorum* (2007-TPDP-21))
 - 7.6 Thursday 27th September discussion of DPs with authors
Xanthomonas axonopodis pv. *citri* (2007-TPDP-15, 15a and 15b) and *Liberibacter* spp / *Liberobacter* spp. (2007-TPDP-19)
 - 7.7 action to be taken on *Erwinia amylovora* DP (near-final draft in 2006)
8. Criteria for prioritization and priorities for new protocols or other documents
 - 8.1 criteria for prioritization of protocols (SC request) (2007-TPDP-12)
 - 8.2 priorities for new protocols (2007-TPDP-07)
 - 8.3 DNA barcoding (2007-TPDP-13, 14, 2007-TPDP-22)
 - 8.4 need for other standards or documents (including explanatory documents).
9. QA issues related to DPs (M Malipatil)
 - 9.1 combination of methods (J Unger) (2007-TPDP-10)
 - 9.2 sensitivity/specificity/reliability
 - 9.3 validation of methods (2007-TPDP-18)
 - 9.4 ring testing
 - 9.5 accreditation of laboratories.
10. Report on the cooperation with the TC of RPPOS (Steward).
11. Publication issues
 - 11.1 publication on the IPP of internationally adopted and regional and national protocols.
 - 11.2 receipt of copies by authors (reprints); policy on photographs and diagrams; pictorial keys (use of the internet) (from 2006 meeting).
12. Procedural issues
 - 12.1 Process – fast track
 - 12.2 Possibility of consultation with other panels where expertise exists
13. Work plan for 2008
14. Date and location of next meeting (skip a year? if held in 2008, possibly 4th week September, location?)

LIST OF DOCUMENTS
(Updated 2007-09-28)

DOC. NUMBER	AGENDA ITEM	TITLE	DATE POSTED / DISTRIBUTED
01 REV 1	-	Draft Agenda	18-09-07
02 REV 4	-	List of Documents	28-09-07
03	-	Draft Participants list for the TPDP meeting, Buenos Aires, Argentina, 24-28 September 2007	09-08-07
04	-	General information for the meeting of the IPPC Technical Panel on Diagnostic Protocols, Buenos Aires, Argentina	09-08-07
04a	-	Buenos Aires Guide in English	09-08-07
05	5	Report of the meeting of the Technical Panel on Diagnostic Protocols, 16-20 October 2006, Valencia, Spain	09-08-07
06	5	Extracts from SC report, May 2007	15-08-07
07	8	List of plants as pests	15-08-07
08	7	<i>Trogoderma granarium</i> (draft protocol)	15-08-07
09	7	<i>Bursaphelenchus xylophilus</i> (draft protocol)	15-08-07
09a	7	Flowchart for identification of <i>B. xylophilus</i> from sampling to determination	15-08-07
10	9	Discussion paper: Combination of methods in diagnostic protocols	15-08-07
11	7	Table of experts for Diagnostic Protocols and progress of protocol development (updated 070823)	23-08-07
12	8	Criteria for determining priorities of diagnostic protocols (extracts from report of TPDP meeting in York, 2004)	23-08-07
13	8	DNA barcoding and the renaissance of taxonomy (Miller, S (2007) PNAS 104, 4775-4776)	23-08-07
14	8	Consortium for the barcode of life (www.barcoding.si.edu)	30-08-07
15	7	<i>Xanthomonas axonopodis</i> pv <i>citri</i> (draft protocol)	30-08-07
15a	7	Figure 1. Scheme for detection and identification of <i>Xanthomonas axonopodis</i> pv <i>citri</i> (also Figures 2 & 3)	30-08-07
15b	7	Figures 4. Twig symptoms of <i>Xac</i> young lesions on grapefruit (also figures 5 & 6)	30-08-07
16	7	<i>Plum pox virus</i> (draft protocol)	03-09-07
17	7	Diagnostic protocol <i>Anastrepha</i> spp (draft protocol)	03-09-07
17a	7	Proposal by Alicia Basso regarding <i>Anastrepha</i> protocol	03-09-07
18	9	Explanatory document for the Validation of detection methods for plant pathogens and pests – CONFIDENTIAL - TPDP USE ONLY	05-09-07
19	7	Diagnostic protocol <i>Candidatus Liberibacter</i> spp (draft protocol)	12-09-07
20	7	<i>Tilletia indica</i> (draft protocol)	12-09-07
21	7	International Plant Protection Convention diagnosis protocol for <i>Phytophthora ramorum</i> (draft protocol)	12-09-07
21a	7	Fig 23. Flow diagram for diagnosis of <i>Phytophthora ramorum</i> on plants and plant products	12-09-07
22	8	Call for collaboration from Plant Research International, The Netherlands	12-09-07
23	7	Note from Professor Quesada on the <i>Anastrepha</i> DP	18-09-07
24	7	Note from Vicente Hernández-Ortiz (lead author) on the <i>Anastrepha</i> DP	18-09-07
25		E amylovora IPPC protocol	24-09-07
26		Fast track standard setting process (text adopted by ICPM-6 and extract from the report of the focus group)	24-09-07
27		Criteria for the prioritization of diagnostic protocols	25-09-07
28 rev 1		Suggested improvements to the fast track standard setting	28-09-07

Table of experts for Diagnostic Protocols and progress of protocol development
(updated 070928 and by IPPC Secretariat)

Title	Main Author	Editorial Team	Progress of protocol
Bacteria Discipline lead: Lum Keng-Yeang (MY)			
<i>Erwinia amylovora</i> (referee: Yin Liping)	Maria Lopez (ES)	Robert Taylor (NZ) Rodney Roberts (US)	Draft presented by author at 2006 meeting, final draft, which has incorporated the comments of the editorial team, received late Sept. 2007. Not discussed at the meeting.
<i>Liberibacter</i> spp.	Rita Christina Lanfranchi (AR)	Solke de Boer (CA) Jancek Planzinski (AU)	Draft presented to 2005 meeting. Revised draft discussed at the meeting.
<i>Xanthomonas axonopodis</i> pv. <i>citri</i> (referee: Hans de Gruyter)	Enrique Francisco Verdier Rossi (UY)	Rita Christina Lanfranchi (AR) Maria Lopez (ES)	Draft presented at 2006 meeting. Revised draft discussed at the meeting.
<i>Xanthomonas fragariae</i>	Ed Civerolo (US)	Solke de Boer (CA) Maria Lopez (ES) John Elphinstone (UK)	Draft presented at 2006 meeting, revised draft sent late Sept. Not discussed at the meeting.
<i>Xyllela fastidiosa</i>	Marta Isabel Francis Mastalli (UY/US)	Helga Reizenzein (AT) John Hartung (US)	Author contacted, but no reply yet. Main author has moved laboratory (Florida).
Fungi and fungus-like organisms Discipline lead : Hans de Gruyter (NL)			
<i>Fusarium moniliformis</i> / <i>moniforme</i> syn. <i>F. circinatum</i>	Call for authors – closing date 15 September 2007		Authors to be selected from nominations.
<i>Guignardia citricarpa</i>	Irene Vloutoglou (GR)	Johan Meffert (NL) Luis E Diaz Morales (UY)	Main author and editorial team accepted and started. First draft (for discussion in team and with discipline lead) in progress, version to be send for email consultation planned end of November.
<i>Gymnosporangium</i> spp	Call for Asian and North American experts – closing date 15 September 2007		Literature search indicated no colleagues working actively on this genus. Authors to be selected from nominations.
<i>Phytophthora ramorum</i>	Kelvin Hughes (UK)	Stephan Brière (CA) Mary Palm (US)	Main author and editorial team accepted and started. First draft discussed at the meeting.

Title	Main Author	Editorial Team	Progress of protocol
<i>Puccinia psidii</i>	<i>Call for authors – closing date 15 September 2007</i>		Authors to be selected from nominations. Australian protocol received during nomination process.
<i>Tilletia indica / T. controversa</i>	Dominie Wright (AU)	Kelvin Hughes (UK) Guiming Zhang (CN)	Main author and editorial team accepted. First draft produced and circulated for the meeting, but not discussed.
Insects and mites Discipline leads: Ana Lía Terra (UY) and Mallik Malipatil (AU)			
<i>Anastrepha</i> spp. Ana Lía Terra (UY)	Vicente Hernández-Ortiz (MX)	Norma Christina Vaccaro (AR) Alicia Leonor Basso (UY)	Draft protocol produced based on morphology. Difference of opinion on the inclusion of molecular methods. Solution proposed to allow the protocol to proceed while further information is obtained on results of molecular studies.
<i>Anoplophora</i> spp. Ana Lía Terra (UY)	Hannes Krehan (AT)	Stephen Lingafelter (US) Alba Enrique Briano (AR) Yulin An (CN) Briggita Wessels-Berk (NL)	Authors working on the protocol, awaiting approval to be able to include molecular methods.
<i>Bactrocera dorsalis</i> complex Mallik Malipatil (AU)	<i>Call for authors – closing date 15 September 2007</i>		Authors to be selected from nominations.
<i>Dendroctonus ponderosae</i> syn. <i>Scolytus scolytus</i> Mallik Malipatil (AU)	<i>Call for authors – closing date 15 September 2007</i>		Authors to be selected from nominations.
<i>Ips</i> spp. Mallik Malipatil (AU)	<i>Call for authors – closing date 15 September 2007</i>		Authors to be selected from nominations.
<i>Liriomyza</i> spp. Ana Lía Terra (UY)	<i>Call for authors – closing date 15 September 2007</i>		Authors to be selected from nominations.
Tephritidae: Identification of immature stages of fruit flies of economic importance by molecular techniques Ana Lía Terra (UY)/ Mallik Malipatil (AU)	<i>Call for authors – closing date 15 September 2007</i>		Authors to be selected from nominations.

Title	Main Author	Editorial Team	Progress of protocol
<i>Thrips palmi</i> Ana Lía Terra (UY)	Dominique Collins (UK)	Bert Vierbergen (NL) Norma Christina Vaccaro (AR)	Member consultation – closing date 30 September 2007.
<i>Trogoderma granarium</i> Ana Lía Terra (UY) (referee: Mallik Malipatil)	Andras Szito (AU)	Witold Karnovski (PL) Alba Enrique Briano (AR)	Final draft for discussion at the meeting.
Nematodes Discipline lead: Esther van den Berg (ZA)			
<i>Aphelenchoides besseyi</i> , <i>A. ritzemabosi</i> and <i>A. fragariae</i>	Call for authors – closing date 15 September 2007		Authors to be selected from nominations.
<i>Bursaphelenchus xylophilus</i>	Thomas Schroeder (DE)	Vladimir Gaar (CZ) David McNamara (ex EPPO) Maria Elena Manna (AR)	Draft discussed at the meeting.
<i>Ditylenchus destructor</i> / <i>D. dipsaci</i>	Antoinette Swart (ZA)	Maria Elena Manna (AR) Eliseo Jorge Chaves (AR)	Final drafts of <i>D. destructor</i> and <i>D. dipsaci</i> will be presented when molecular work is complete (likely to be in 2008). The discipline lead was made aware of a Canadian protocol on <i>D. dipsaci</i> and once the draft is nearing completion the Canadian protocol will be taken into account.
<i>Xiphinema americanum</i>	Sue Hockland (UK)	Antoinette Swart (ZA) Saša Širca (SI) Eliseo Jorge Chaves (AR)	Draft presented at 2005 meeting; further collaboration between experts is required before the final draft will be complete. A draft will be presented to the EPPO panel on nematology in September 2007.
Plants Discipline lead: Yin Liping (CN)			
<i>Sorghum halepense</i>	Call for authors – closing date 15 September 2007		Authors to be selected from nominations.
Viruses and Phytoplasmas Discipline lead: Gerard Clover (NZ) (and formerly Daphne Wright (UK))			
<i>Citrus tristeza virus</i>	Mariano Cambra (ES)	Stephanus Petrus van Vuuren (ZA) Marta Isabel Francis Mastalli (UY/US) Laurene Levy (US)	Original main author could not act and Mariano Cambra selected as replacement. Draft to be prepared upon completion of PPV DP.

Title	Main Author	Editorial Team	Progress of protocol
Phytoplasmas (general)	Philip Jones (UK)	Wilhelm Jelkmann (DE) Ester Torres (ES) Fiona Constable (AU) Jacobus Verhoeven (NL) Lia Liefing (NZ)	New group is working well and a draft has been produced, but still needs to be refined. Anticipate completion in 2008.
<i>Plum pox virus (referee: Esther van den Berg)</i>	Mariano Cambra (ES)	Laurene Levy (US) Sergio Luis Lenardon (AR) Noland Africander (ZA)	Draft presented by author at 2006 meeting. Revised draft discussed at the meeting.
<i>Potato spindle tuber viroid</i>	<i>Call for authors – closing date 15 September 2007</i>		Authors to be selected from nominations.
Tospoviruses (TSWV, INSV, WSMV)	Tom German (US)	Jane Morris (UK) Concepción Jordá-Gutiérrez (ES) Gerhard Pietersen (ZA)	Initial draft presented to 2005 meeting. Author contacted during 2006, but no reply received. Discipline lead has been concentrating on the PPV DP, so will follow up on this once the PPV protocol has been agreed.
Viruses transmitted by <i>Bemisia tabaci</i>	<i>Call for authors – closing date 15 September 2007</i>		Authors to be selected from nominations.

Criteria for the prioritisation of diagnostic protocols

(agreed by the TPDP and submitted to (and modified by) the SC in November 2007)

1.	Relevance of the diagnosis to the protection of plants including to measures to limit the impact of the pest.
2.	Importance of the plants protected on the global level (e.g. relevant to many countries or of major importance to a few countries).
3.	Volume/importance of trade of the commodity that is subjected to the diagnostic procedures (e.g. relevant to many countries or of major importance to a few countries).
4.	Need for international harmonization of the diagnostic techniques for the pest (due to difficulties in diagnosis or disputes on methodology).
5.	Other criteria for topics as determined by CPM that are relevant to determining priorities
6.	Balance between the disciplines (virology, entomology etc) and pests of importance in different climatic zones (temperate, tropics etc) and commodity classes.
7.	Number of labs undertaking the diagnosis.
8.	Feasibility of production of a protocol, including availability of knowledge and expertise.

DP Development

1. TPDP approves DP
2. DP to Secretariat for editing and formatting (21 days)
3. DP to SC by e-mail (21 days) and copied to discipline lead
- 3.1 If SC do not approve then the DP goes back to TPDP, and the process is restarted. If the SC suggests editorials, these are accepted.
- 3.2 If the SC approves the DP then it goes to the Secretariat for editing, formatting and translation (90 days).
- 4 DP to members for consultation (100 days) in 5 languages
5. Member responses to consultation

If no formal objections¹ are received (except minor editorial improvements and corrections which are made by Secretariat), the draft standard is submitted to the CPM for adoption without discussion. (Rejection needs to be received 14 days prior to CPM - no comments).

If one or more formal objections or comments are received from contracting parties, the Secretariat (in consultation with the technical panel) tries to resolve the issue(s) with the contracting parties concerned.

If these issues are resolved without change to the draft text, the draft standard is submitted to the CPM for adoption without discussion.

If these issues are not resolved, the draft is submitted to the Standards Committee. In consultation with the relevant technical panel, the Standards Committee and/or SC-7 examine the objections and comments and review the draft standard, and if appropriate modifies it.

The Standards Committee decides how to proceed with the modified draft standard.

¹ A formal objection should be a technically supported objection to the adoption of the draft standard in its current form, sent through the official IPPC contact point. The Secretariat would not make any judgement about the validity of the objection – an objection with some technical discussion of the issue would be accepted as a formal objection.

WORK PROGRAMME 2007-2008

Agreed by TPDP 28 September 2007

2007	
Oct	<p>1 – Final list of CVs of nominations for authors to be posted on the IPP</p> <p>5 – Final date for comments on <i>T palmi</i> to be sent to discipline lead for consultation with the editorial team</p> <p>12 - 16 discipline lead with editorial team complete consideration of the comments</p> <p>18 - comments from TPDP to discipline lead (copied to the other panel members)</p> <p>19 - discipline lead send responses to comments to IPPC Secretariat</p> <p>22 – IPPC Secretariat to post amended draft DP and responses to comments for the SC meeting</p> <p>29-2nd Nov - SC7</p> <p>31 Draft report to be sent to the TPDP</p>
Nov	<p>5-9 - SC meeting.</p> <p>15 – TPDP discipline leads to send recommendations for authors of DPs to the rest of the TPDP</p> <p>15 Secretariat to consider using web-based editorial programme for TPDP amendments of draft DPs</p> <p>15 Secretariat to consider producing a certificate from IPPC for the editorial team of protocols once they are adopted.</p> <p>30 – TPDP to reply to discipline leads (copied to all panel) on recommendations for authors</p> <p>30 author to send Xac draft to discipline lead</p> <p>30 author to send PPV draft to discipline lead</p> <p>30 author to send <i>T granarium</i> draft to discipline lead</p> <p>30 author to send <i>E amylovora</i> draft to discipline lead</p> <p>30 TPDP send comments on report to Secretariat</p>
Dec	<p>15 – Discipline leads to produce final list of authors for protocols and send to secretariat and copied to TPDP</p> <p>16 onwards - Discipline lead to send letter to successful nominees and thank unsuccessful nominees.</p> <p>31 JU to send a revised copy of document 2007-TPDP-10 (with examples)</p> <p>22 discipline lead to send Xac draft to TPDP</p> <p>22 discipline lead to send PPV draft to TPDP</p> <p>22 discipline lead to send <i>T granarium</i> draft to TPDP</p> <p>22 discipline lead to send <i>E amylovora</i> draft to TPDP</p>
2008	
Jan	
Feb	<p>29 TPDP send comments on Xac protocol to discipline lead</p> <p>29 TPDP send comments on PPV protocol to discipline lead</p> <p>29 TPDP send comments on <i>T granarium</i> protocol to discipline lead</p> <p>29 TPDP send comments on <i>E amylovora</i> protocol to discipline lead</p>
Mar	<p>10 discipline lead to send revised Xac protocol to Secretariat</p> <p>10 discipline lead to send revised PPV protocol to Secretariat</p> <p>10 discipline lead to send revised <i>T granarium</i> protocol to Secretariat</p> <p>10 discipline lead to send revised <i>E amylovora</i> protocol to Secretariat</p> <p>31 authors to send Set B to discipline lead</p> <p>31 Secretariat to send Xac protocol to SC</p> <p>31 Secretariat to send PPV protocol to SC</p> <p>31 Secretariat to send <i>T granarium</i> protocol to SC</p> <p>31 Secretariat to send <i>E amylovora</i> protocol to SC</p>
April	<p>15 SC approve Xac protocol (by email) with no changes</p> <p>15 SC approve PPV protocol (by email) with no changes</p> <p>15 SC approve <i>T granarium</i> protocol (by email) with no changes</p> <p>15 SC approve <i>E amylovora</i> protocol (by email) with no changes</p>

	30 Secretariat sends Xac for translation 30 Secretariat sends PPV for translation 30 Secretariat sends <i>T granarium</i> for translation 30 Secretariat sends <i>E amylovora</i> for translation
May	30 discipline leads send Set B to TPDP
June	30 comments back form TPDP on set B to discipline lead
July	10 Set B to Secretariat for formatting and editing 31 deadline for posting TPDP working papers (draft DPs, QA paper, reference labs)
Aug	1 Send Xac member consultation (100 days) 1 Send PPV member consultation (100 days) 1 Send <i>T granarium</i> member consultation (100 days) 1 Send <i>E amylovora</i> member consultation (100 days)
Sept	
Oct	3 rd week – next TPDP meeting, possibly South Africa Agenda: <ul style="list-style-type: none"> • Protocols – Liberibacter, etc. • Criteria for prioritization of protocols and recommendations for new protocols • Discussion on QA paper • Discussion document on reference labs
Nov	15 Member comments due back on Xac to Sect 15 Member comments due back on PPV to Sect 15 Member comments due back on <i>T granarium</i> to Sect 15 Member comments due back on <i>E amylovora</i> to Sect
Dec	10 Sect compiled Xac comment to discipline lead. 10 Sect compiled PPV comment to discipline lead. 10 Sect compiled <i>T granarium</i> comment to discipline lead 10 Sect compiled <i>E amylovora</i> comment to discipline lead
Jan 2009	10 Discipline lead send final Xac DP to Sect and if changes to SC 10 Discipline lead send final PPV DP to Sect and if changes to SC 10 Discipline lead send final <i>T granarium</i> DP to Sect and if changes to SC 10 Discipline lead send final <i>E amylovora</i> DP to Sect and if changes to SC

Set B

Any DPs complete by 31 March 2008

Participants list for TPDP meeting, Buenos Aires, Argentina, 24-28 September 2007

Panel members

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Other participants

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IPPC Secretariat

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