



**Food and Agriculture
Organization of the
United Nations**



**International
Plant Protection
Convention**

Report

Technical Panel on Diagnostic Protocols

15 October 2025

Virtual Meeting

IPPC Secretariat

Required Citation:

IPPC Secretariat. 2025. *Report of the meeting of the Technical Panel on Diagnostic Protocols, 15 October 2025*. FAO on behalf of the Secretariat of the International Plant Protection Convention.

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 or policies of FAO.

© FAO, 2025



Some rights reserved. This work is made available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo/legalcode>).

Under the terms of this licence, this work may be copied, redistributed and adapted for non-commercial purposes, provided that the work is appropriately cited. In any use of this work, there should be no suggestion that FAO endorses any specific organization, products or services. The use of the FAO logo is not permitted. If the work is adapted, then it must be licensed under the same or equivalent Creative Commons licence. If a translation of this work is created, it must include the following disclaimer along with the required citation: "This translation was not created by the Food and Agriculture Organization of the United Nations (FAO). FAO is not responsible for the content or accuracy of this translation. The original English edition shall be the authoritative edition."

Disputes arising under the licence that cannot be settled amicably will be resolved by mediation and arbitration as described in Article 8 of the licence except as otherwise provided herein. The applicable mediation rules will be the mediation rules of the World Intellectual Property Organization <https://www.wipo.int/amc/en/mediation/rules> and any arbitration will be conducted in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL).

Third-party materials. Users wishing to reuse material from this work that is attributed to a third party, such as tables, figures or images, are responsible for determining whether permission is needed for that reuse and for obtaining permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

Sales, rights and licensing. FAO information products are available on the FAO website (<https://www.fao.org/publications>) and can be purchased through publications-sales@fao.org. Requests for commercial use should be submitted via <https://www.fao.org/contact-us/licence-request>. Queries regarding rights and licensing should be submitted to: copyright@fao.org

Contents

1.	Opening of the meeting	4
1.1	Welcome by the IPPC Secretariat	4
2.	Meeting arrangements	4
2.1	Selection of chairperson	4
2.2	Selection of the rapporteur	4
2.3	Adoption of the agenda	4
3.	Administrative matters	4
4.	Updates	4
4.1	IPPC Updates	4
4.2	Update on draft DPs in the work programme.....	4
5.	Review of new DP topic proposals – recommendations to SC	5
5.1	Tomato mottle mosaic virus.....	5
5.2	Tomato leaf curl New Delhi virus.....	6
6.	Any other business.....	6
7.	Close of the meeting	7
	Appendix 1: Agenda.....	8

1. Opening of the meeting

1.1 Welcome by the IPPC Secretariat

- [1] Marina MARTINO, IPPC Phytosanitary Standard Setting Specialist, opened the virtual meeting of the Technical Panel on Diagnostic Protocols (TPDP). She welcomed all participants and explained that the main objective of the meeting was to welcome the new virology expert, discuss the topic submissions received during the IPPC Call for Topics, as well as to update on the development status of DPs.

2. Meeting arrangements

2.1 Selection of chairperson

- [2] The TPDP selected Géraldine ANTHOINE as the chairperson.

2.2 Selection of the rapporteur

- [3] The TPDP selected Juliet GOLDSMITH as rapporteur.

2.3 Adoption of the agenda

- [4] The TPDP adopted the agenda (Appendix 1).

3. Administrative matters

- [5] No administrative matters were discussed.

4. Updates

4.1 IPPC Updates

- [6] The IPPC Secretariat (hereafter referred to as the “secretariat”) reminded that two TPDP e-decisions are currently open to review the draft diagnostic protocols for *Bactrocera zonata* and *Bactrocera correcta* (2021-013) and *Drosophila suzukii* (2021-017) and recommend them to the Standards Committee for approval for consultation period in 2026. For the members who didn't have the chance to look at the protocols yet, the secretariat reminded deadlines to submit feedback and comments.
- [7] The secretariat suggested that members raise any comments they already have on the drafts during agenda item 6 (Any Other Business) to allow for real-time, interactive discussion among TPDP members.
- [8] The secretariat shared the 2025-2026 TPDP work plan¹ that was compiled following the July face to face meeting in Angers, summarizing the upcoming deadlines and DPs planned for Expert Consultation period in 2025 and Country Consultation periods in January and July 2026. TPDP members who were discipline leads for those DPs provided updates on the stage of development of the drafts, and the work plan was adjusted to reflect those.
- [9] The TPDP:
- (1) *requested* the secretariat to get in contact with NPPOs of non-responsive authors to inquire about their continued involvement in the development of DPs.

4.2 Update on draft DPs in the work programme

- [10] The TPDP reviewed their entire work programme². The discipline leads gave updates on the progress of each topic, and the IPPC secretariat provided the schedule and upcoming deadlines for the development of these DPs.

¹ 07_TPDP_2025_Oct

² 06_TPDP_2025_Oct

The TPDP:

- (2) *agreed* to review candidates being proposed by the lead author of the Citrus leprosis virus (2018-025) DP to be part of the drafting group, as the current rest of the team is not responsive; and
- (3) *agreed* to include Mr Hironobu YANAGISAWA, newly selected TPDP expert for virology, as the referee for Citrus leprosis virus (2018-025), Tomato brown rugose fruit virus (2021-025) and Avocado sun blotch viroid (2023-026) DPs.

5. Review of new DP topic proposals – recommendations to SC

5.1 Tomato mottle mosaic virus

- [11] The secretariat recently received a new DP topic proposal on Tomato mottle mosaic virus (ToMMV), submitted by Japan as part of the IPPC Call for Topics³. To support the panel's consideration of the proposal, TPDP virology expert presented an analysis assessing it against the relevant IPPC criteria⁴.
- [12] He explained that considering the number of countries regulating the pest, the significant trade volume of its hosts (such as tomato and peppers) and the existence of multiple, uncoordinated molecular tests, it is imperative to work on an internationally recognized diagnostic protocol to ensure effective detection and surveillance. He also noted that since ToMMV can be easily confused with tomato mosaic virus (ToMV) and other tobamoviruses, the diagnostic protocol should provide clear guidance on how to accurately discriminate ToMMV from such species.
- [13] Tomato mottle mosaic virus, first detected in 2013, has rapidly spread worldwide affecting, among others, tomato and pepper crops across the Americas, Asia, Europe, and Africa. Likely more widespread than reported, this seed-borne virus can survive in soil and spread via contaminated tools, making management critical. Additionally, ToMMV can overcome resistance mechanisms in some cultivars previously effective against related tobamoviruses.
- [14] In terms of feasibility, the existing knowledge, expertise, and access to reference genomes and sequence databases represent a strong basis for the development of this DP. However, harmonizing and validating the various available tests across laboratories remains a challenge to ensure their reliability for regulatory and quarantine use.
- [15] In conclusion, he proposed this subject to be added to the List of Topics (LoT) with the highest priority 1.
- [16] The secretariat noted that the current TPDP work programme includes 21 subjects, 12 of which are already assigned Priority 1. This means that over half of the work programme is currently designated as highest priority. In light of this, the Secretariat emphasized the importance of carefully justifying the assignment of Priority 1 to new topics and encouraged more detailed rationale to support such proposals when they are submitted to the Standards Committee (SC).
- [17] One member questioned whether assigning priority 1 to this topic was realistic, considering both virology expert's analysis and the fact that three existing virology DPs are already classified as priority 1. The member also raised concerns about the current lack of validation and harmonization of available tests, and noted that since the TPDP does not conduct validations itself, additional sources of validation data would be necessary.
- [18] In response, TPDP virology expert reaffirmed that the proposed priority reflects the significant impact of ToMMV in several countries and emphasized that sufficient resources are currently available to support the development of a diagnostic protocol.
- [19] The TPDP:

³ 02_TPDP_2025_Oct

⁴ 03_TPDP_2025_Oct

- (4) *recommended* to the SC to include the subject on Tomato mottle mosaic virus (ToMMV) in the List of Topics with priority one.

5.2 Tomato leaf curl New Delhi virus

- [20] The secretariat recently received a new DP topic proposal on Tomato leaf curl New Delhi virus (ToLCNDV), submitted by Japan as part of the IPPC Call for Topics⁵. To support the panel's consideration of the proposal, TPDP virology expert presented an analysis assessing it against the relevant IPPC criteria⁶.
- [21] The virus has been reported to infect a large number of economically important crops, over a wide range of families (such as Cucurbitaceae, Solanaceae, Malvaceae, Fabaceae and Euphorbiaceae) resulting in significant yield losses. The development of a diagnostic protocol for ToLCNDV is highly feasible given the extensive knowledge and expertise already existing. Several serological and molecular techniques have been developed, validated, and optimized for both laboratory and field use.
- [22] However, given the presence of multiple variants of the virus (particularly in India, where four to five variants have already been identified), it would be beneficial to broaden the scope of the topic to include other begomoviruses that could induce leaf curl symptoms alongside ToLCNDV. This approach would avoid the inefficiency of addressing each variant individually.
- [23] The proposed priority level for this topic is 2, as the virus is already endemic in several countries.
- [24] The Secretariat recalled that Begomoviruses had previously been included in the TPDP work programme but was later removed by the SC due to difficulties in establishing an effective drafting team and the topic's overly broad scope. TPDP virology expert clarified that the current proposal focuses specifically on variants of tomato leaf curl viruses rather than the entire Begomovirus genus.
- [25] When a member raised concerns about whether these variants pose the same level of risk as the New Delhi variant, an issue the SC might question if the scope is expanded, TPDP virology expert responded that these variants also present significant risks to tomato production and trade, supporting their inclusion in the proposed scope.
- [26] One member expressed concern that referring too broadly to tomato leaf curl viruses could create confusion about the specific viruses covered by the diagnostic protocol.
- [27] To prevent confusion, the Secretariat emphasized that the taxonomic section of the diagnostic protocol should clearly cover both the species level (the New Delhi species) and the sub-species level, specifically the variants, thereby clearly defining what is being diagnosed. This clarification will ensure that the DP is not mistakenly interpreted as addressing all viruses causing leaf curl symptoms, but rather those specifically related to the New Delhi and associated variants.
- [28] The TPDP:
- (5) *recommended* to expand the scope of the proposed subject to encompass Tomato leaf curl New Delhi virus and its related variants; and
- (6) *recommended* to SC to include the expanded subject in the List of Topics with priority two.

6. Any other business

- [29] The chairperson encouraged TPDP members to provide any feedback they may have on the diagnostic protocols currently under review in the ongoing e-decisions.
- [30] One member suggested some modifications in the taxonomy section of DP *Bactrocera zonata* and *Bactrocera correcta* (2021-013). Specifically, the proposal was to remove the information on the

⁵ 04_TPDP_2025_Oct

⁶ 05_TPDP_2025_Oct

combinations included under “Other scientific names” as these references do not provide additional value to the taxonomic classification of the species. The key information to retain under in this section should be limited to the alternative species names (*Dacus zonatus* and *Dacus correctus*) along with their respective authorities. Additional details may cause confusion as such information is not typically included under "Other scientific names" in DPs.

[31] The TPDP:

- (7) *agreed* to remove the information on the combinations included under “Other scientific names” in the taxonomy section of *Bactrocera zonata* and *Bactrocera correcta* (2021-013) DP.

7. Close of the meeting

[32] The chairperson thanked the participants and closed the meeting.

Appendix 1: Agenda

(Meeting documents are available only to TPDP members)

Agenda Item		Document No.	Presenter
1.	Opening of the Meeting		
1.1	Welcome by the IPPC Secretariat	--	IPPC Secretariat
2.	Meeting Arrangements		
2.1	Selection of Chairperson	--	IPPC Secretariat
2.2	Selection of the Rapporteur	--	Chairperson
2.3	Adoption of the Agenda	01_TPDP_2025_Oct	Chairperson
3.	Administrative Matters		
3.1	Connections to Zoom and virtual meetings	Short guidelines for participants	IPPC Secretariat
3.2	Introduction of new TPDP members (tentative)	TPDP membership list	IPPC Secretariat/ Chairperson
4.	Updates		
4.1	IPPC Updates: TPDP e-decisions and TPDP 2025-2026 work programme recap	07_TPDP_2025_Oct	IPPC Secretariat
4.2	TPDP updates from drafting groups	06_TPDP_2025_Oct List of Topics	TPDP
5	Review of new DP topic proposals – recommendations to SC		
5.1	Tomato mottle mosaic virus: <ul style="list-style-type: none"> Submission Consideration of proposals for diagnostic protocols 	List of Topics 02_TPDP_2025_Oct 03_TPDP_2025_Oct	APPIAH
5.2	Tomato leaf curl New Delhi virus: <ul style="list-style-type: none"> Submission Consideration of proposals for diagnostic protocols 	List of Topics 04_TPDP_2025_Oct 05_TPDP_2025_Oct	APPIAH
6.	Any other business	--	Chairperson
7.	Closing of the meeting	--	IPPC Secretariat / Chairperson