

Technical Working Party for Ornamental Plants and Forest Trees

Fifty-Seventh Session

Roelofarendsveen, Kingdom of the Netherlands, March 31 to April 3, 2025

TWP/9/1

Original: English**Date:** March 11, 2025**Technical Working Party on Testing Methods and Techniques**

Third Session

Beijing, China, April 28 to May 1, 2025

Technical Working Party for Vegetables

Fifty-Ninth Session

Virtual meeting, May 5 to 8, 2025

Technical Working Party for Agricultural Crops

Fifty-Fourth Session

Arusha, United Republic of Tanzania, May 19 to 22, 2025

Technical Working Party for Fruit Crops

Fifty-Sixth Session

Bursa, Türkiye, June 23 to 26, 2025

PROCEDURES FOR DUS EXAMINATION*Document prepared by the Office of the Union**Disclaimer: this document does not represent UPOV policies or guidance***EXECUTIVE SUMMARY**

1. The purpose of this document is to provide an overview of the development of guidance and information materials and to report on developments in UPOV relevant for DUS examination since the 2024 sessions of the Technical Working Parties.

Matters for consideration by the Technical Working Parties:

2. The TWPs are invited to consider proposals to revise or develop guidance on the following matters:

- Revision of the UPOV Report on Technical Examination and UPOV Variety Description (revision of document TGP/5 “Experience and Cooperation in DUS Testing”, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description” ([document TGP/5, Section 6 \(draft 1\)](#)).
- Revision of the Guidance Note on “Example Varieties” (Test Guidelines) in document TGP/7 “Development of Test Guidelines” ([document TWP/9/5](#)).
- Molecular Techniques: Development of guidelines for the validation of characteristic-specific molecular marker for DUS examination ([document TWP/9/4](#)).

3. Molecular Techniques: Policies on confidentiality and access to molecular data: Following the invitation from the Technical Committee, UPOV members and observers are invited to report examples of policies on confidentiality and access to molecular data at the TWP sessions in 2025.

Matters for information

4. The Technical Working Parties are invited to note developments reported in this document concerning:

- Discussion on disease resistance characteristics in DUS examination
- Matters arising from the technical working parties at their sessions in 2024
- Seminar on cooperation with breeders in DUS examination (October 2025)

- Measures to improve support provided for DUS examination

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6. The following abbreviations are used in this document:

CAJ:	Administrative and Legal Committee
TC:	Technical Committee
TWA:	Technical Working Party for Agricultural Crops
TWF:	Technical Working Party for Fruit Crops
TWM:	Technical Working Party on Testing Methods and Techniques
TWO:	Technical Working Party for Ornamental Plants and Forest Trees
TWV:	Technical Working Party for Vegetables
TWPs:	Technical Working Parties

GUIDANCE AND INFORMATION MATERIALS – MATTERS FOR CONSIDERATION

TGP Documents

Document TGP/5 “Experience and Cooperation in DUS Testing”, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description” (Revision)

See [document TGP/5, Section 6 \(draft 1\)](#)

7. The TC¹ agreed with the proposal to include additional explanations for document TGP/5, Section 6, item 16 “Similar varieties and differences from these varieties”, reproduced as follows:

“16. Similar Varieties and Differences from These Varieties

Denomination(s) of variety(ies) similar to the candidate variety	Characteristic(s) in which the candidate variety differs from the similar variety(ies)1)	State of expression of the characteristic(s) for the similar variety(ies) 2)	State of expression of the characteristic(s) for the candidate variety2)
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[...]

18. Explanatory Notes to the Annex: UPOV Variety Description

[...]

“(d) Ad Number 16 (Annex: UPOV Variety Description)

“1) A similar variety(ies) should be indicated. If no similar variety was identified, ‘none’ should be stated.

“2) In the case of identical states of expression of both varieties, please indicate the size of the difference.

“3) The state of expression of the candidate variety and similar variety(ies) relate to the DUS examination conducted at the testing station/place facility and period of testing indicated in 11 and 12.

“4) Only those characteristics that show sufficient differences to establish distinctness should be given. Information on differences between two varieties should always contain the states of expression with their notes for both varieties; if possible, in columns if more varieties are mentioned.”

Subsection “UPOV Variety Description”, item 17 “Additional Information”

8. The TC agreed with the proposal to amend document TGP/5, Section 6, item 17 “Additional information” as follows:

“Ad. Number 17 (Annex: UPOV Variety Description)

“Further situations and type of additional information to be provided may be agreed bilaterally, according to the crop type and variety examined.”

Structure of document TGP/5, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description”

9. The TC agreed to invite the Office of the Union to revise the structure of document TGP/5, Section 6, to clarify that the “UPOV Variety Description” was an Annex to the “UPOV Report on Technical Examination” and item 18 “Explanatory Notes to the Annex: UPOV Variety Description” was another separate section of the guidance.

10. *The TWPs are invited to consider the revision of document TGP/5 “Experience and Cooperation in DUS Testing”, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description”, on the basis of [document TGP/5, Section 6 \(draft 1\)](#).*

¹ TC, sixtieth session, held in Geneva on October 21 and 22, 2024.

Document TGP/7: Development of Test Guidelines (Revision): Guidance Note (GN) 28 “Example Varieties” – Example varieties for asterisked quantitative characteristics when illustrations are provided

See [document TWP/9/5](#) “Proposal for a revision of document TGP/7, GN 28 ‘Example Varieties’”

11. The TC¹ noted the discussions on a proposal to amend document TGP/7, Guidance Note (GN) 28 “Example Varieties” to address situations where illustrations could replace example varieties, as reported in document SESSIONS/2024/2, Annex IV, paragraphs 16 to 25.

12. The TC noted the invitation for the drafter from Germany to provide further explanations on the criteria for decision and examples when illustrations could replace example varieties.

13. The TWPs are invited to consider a proposal to amend document TGP/7, Guidance Note (GN) 28 “Example Varieties”, as provided in [document TWP/9/5](#).

MOLECULAR TECHNIQUES

Guidelines for the validation of a new characteristic-specific molecular marker protocol as an alternative method for observation

See [document TWP/9/4](#) “Guidelines for the validation of a new characteristic-specific molecular marker protocol as an alternative method for observation”

14. The TC¹ agreed to request the TWPs, at their sessions in 2025, to consider the proposal for guidelines for the validation of new characteristic-specific molecular marker protocol for DUS examination, as provided in document TWP/9/4.

15. The TWPs are invited to consider the proposal for guidelines for the validation of new characteristic-specific molecular marker protocol for DUS examination, as provided in [document TWP/9/4](#).

Confidentiality and Ownership of Molecular Information

16. The TC¹ noted the request from breeders’ organizations for the development of guidance in UPOV on confidentiality of molecular data and the offer to propose a draft model agreement template, to be presented at the third session of the TWM.

17. The TC agreed to renew the invitation for presentations and reports from members and observers on examples of policies on confidentiality and access to molecular data at the TWP sessions in 2025.

18. UPOV members and observers are invited to report examples of policies on confidentiality and access to molecular data at the TWP sessions in 2025.

GUIDANCE AND INFORMATION MATERIALS – MATTERS FOR INFORMATION

TGP Documents

Document TGP/7: Development of Test Guidelines (Revision)

Additional Standard Wording (ASW) 3 “Explanation of the growing cycle”

19. The Council adopted a revision of [document TGP/7/9](#) “Development of Test Guidelines”, on the basis of the proposed amendments reproduced below (additions indicated with highlighting and underline; and deletions indicated with highlighting and ~~strike through~~):

“(a) Fruit species with clearly defined dormant period

“3.1.2 The growing cycle is considered to be the duration of a single growing season, beginning with the dormancy period, followed by bud burst (flowering and/or vegetative), flowering and fruit harvest and concluding when the following dormant period starts ends with the swelling of new season buds.”

Additional Standard Wording (ASW) 7(b) “Number of plants / parts of plants to be examined”

20. The TC¹ noted the discussions on possible amendments to document TGP/7, Additional Standard Wording (ASW) 7(b) “Number of plants / parts of plants to be examined”, as considered by the TWPs at their sessions in 2024.

Document TGP/12: Guidance on Certain Physiological Characteristics (Revision)

Equivalence table for states of expression in quantitative disease resistance characteristics in Test Guidelines

21. The Council adopted a revision of [document TGP/12/4](#) “Guidance on Certain Physiological Characteristics”, on the basis of the proposal considered by the TWPs, at their sessions in 2024, with the amendments agreed by the TC and the CAJ, as follows:

“Table 2: States of expression in Test Guidelines and terminology used in the vegetable seed sector:

<i>States of expression in Test Guidelines:</i>		
Resistance to [disease name]	note	state
	1	absent or low
	2	medium
	3	high
<i>Terminology used in the vegetable seed sector:</i>		
Reaction of a plant variety to a specific pest ²	Susceptibility (S)	
	Intermediate Resistance (IR)	
	High Resistance (HR)	

Access to plant material for the purpose of management of variety collections and DUS examination

22. The TC¹ noted the discussions on elements for inclusion in requests for the submission of plant material of candidate varieties and varieties of common knowledge for DUS examination, as considered by the TWPs at their sessions in 2024.

23. The TC noted the comments from the TWA, TWO and TWV on particular requirements from domestic regulations and that it would not be appropriate to develop guidance on the matter.

Information Documents

UPOV/INF/16: Exchangeable Software (Revision)

24. The Council noted that the TC and the CAJ, at their sessions in 2024, had approved the revision of document UPOV/INF/16/12 “Exchangeable Software”, on the basis of document UPOV/INF/16/13 Draft 1, and adopted the proposed revision (document [UPOV/INF/16/13](#)).

² Source: <https://worldseed.org/>

UPOV/INF/22: Software and Equipment Used by Members of the Union (Revision)

25. The Council noted that the TC and the CAJ, at their sessions in 2024, had approved the revision of document UPOV/INF/22/10 “Software and equipment used by members of the Union”, on the basis of document UPOV/INF/22/11 Draft 1, and adopted the proposed revision (document [UPOV/INF/22/11](#)).

Explanatory Notes

UPOV/EXN/DEN: Explanatory Notes on Variety Denominations under the UPOV Convention (Revision): New variety denomination classes for Prunus

26. The Council noted that the TC and the CAJ, at their sessions in 2024, had approved the revision of document UPOV/EXN/DEN/3 “Explanatory Notes on Variety Denominations under the UPOV Convention” with the following amendment (additions indicated with highlighting and underline; and deletions indicated with highlighting and ~~strike through~~):

“c) The ~~registered~~ proposed ~~denominations~~ of ~~an~~ interspecific hybrids ~~variety~~ with parents from different classes within a genus should be different from introduced denominations in ~~all~~ the classes ~~within a genus~~ of all the parent species. The UPOV code for an interspecific hybrid variety with parents from different classes within a genus should be associated with the variety denomination classes of all the parent species.

27. The Council adopted a revision of document UPOV/EXN/DEN/3 “Explanatory Notes on Variety Denominations under the UPOV Convention” ([document UPOV/EXN/DEN/4](#)), with the amendments agreed by the TC and the CAJ.

DISCUSSION ON DISEASE RESISTANCE CHARACTERISTICS IN DUS EXAMINATION

28. The TC received the following presentations on disease resistance characteristics in DUS examination:

Disease resistance characteristic in DUS examination - Introduction	UPOV (Mr. Leontino Taveira)
Disease resistance characteristic in DUS examination - Argentina	Argentina (Mr. Alberto Ballesteros)
Disease resistance characteristics in DUS examination: CPVO experience	European Union (Ms. Celine Morineau)
Current experience at GEVES concerning the use of disease resistance characteristics in DUS examination France	France (Ms. Clarisse Leclair)
Use of resistance characteristics in DUS in Germany	Germany (Ms. Swenja Tams)
Physiological characteristics and Disease resistance characteristics in PVP - Japan	Japan (Mr. Yoshiyuki Ohno)
Importance of disease resistance characteristics for DUS examination - Netherlands	Netherlands (Kingdom of the) (Mr. Raoul Haegens)
Disease resistance characteristics used in DUS examinations - United States of America	United States of America (Mr. Jeffery Haynes)
Disease Resistance Characteristics in DUS Examination: Breeders’ Perspectives - ISF	International Seed Federation (Mr. Ben Rivoire)

29. The TC agreed the following summary of discussions:

- Disease resistance characteristics are important for DUS. Examples were presented for vegetables and agricultural species.
- There may be different need for international harmonization through UPOV TGs, more clearly for vegetables.
- Complex interaction pathogen x environment x variety may require frequent review of characteristics in test guidelines, including technical questionnaires
- National, regional and international importance should be considered when deciding for whether to include disease resistance characteristics in test guidelines

- Clear definition and harmonization of methods is required for reliable descriptions (involvement of DUS experts, phytopathologists and breeders)
- Development of new technologies, e.g. molecular markers as alternative methods can improve testing
- Cooperation between authorities in disease resistance testing may be considered
- TWP sessions should be used to inform on developments and to consider inclusion in TGs or notification of additional characteristics in the UPOV webpage
- TWPs may consider addressing specific items on disease resistance characteristics in subgroups to advance discussions, including outside of TWP sessions

MATTERS ARISING FROM THE TECHNICAL WORKING PARTIES

Assessing distinctness in disease resistance characteristics

30. The TC¹ agreed with the TWV³ to invite the Office of the Union to provide information on challenges and opportunities for disease resistance characteristics in Test Guidelines, for consideration at the fifty-ninth session of the TWV, as set out in document TC/60/3, paragraph 7.

31. The TC noted that more disease resistance characteristics were being proposed in Test Guidelines, requiring more frequent revision and agreed that subgroups of interested experts should be promoted to advance discussions more expeditiously.

32. The TC noted developments in the TWPs concerning:

- (i) Implementation of Purdy's notation for pedigrees in UPOV PRISMA;
- (ii) DUS tests: one site in two years versus two sites in one year;
- (iii) Number of growing cycles and concluding examination of fruit crops;
- (iv) Procedures for assessment of characteristics with single record (MG) and a number of individual records (MS) for a group of plants or parts of plants;
- (v) Experiences with new types and species;
- (vi) Male sterility in Cauliflower (TG/45/7);
- (vii) Developing new characteristics for Barley variety examination;
- (viii) Information on mutant varieties of apple useful for DUS examination;
- (ix) Image analysis and new technologies in DUS examination;
- (x) Software and statistical analysis methods for DUS examination; and
- (xi) Phenotyping and image analysis

SEMINAR ON COOPERATION WITH BREEDERS IN DUS EXAMINATION

33. The CAJ⁴ agreed to organize a seminar to create awareness on cooperation with breeders in DUS examination. The seminar will take place in the afternoon on Wednesday October 22, 2025. The seminar would be preceded by preparatory webinars that would be recorded. Following the seminar, follow-up actions would be taken such as compiling presentations and documentations that might be used for training purposes. If appropriate, guidance on the cooperation with breeders in examinations might be developed. The following Roadmap can be envisaged.

- Preparatory webinars in 2025
- Seminar October 22, 2025
- Compiling information for training module, by December 2025
- Gathering information / practices / examples to be presented in meetings of UPOV bodies in 2026

³ TWV, at its fifty-eighth session, held via electronic means, from April 22 to 25, 2024.

⁴ CAJ, at its eighty-first session, held in Geneva, on October 23, 2024. See document CAJ/81/7 "Report", paragraph 39

MEASURES TO IMPROVE SUPPORT PROVIDED FOR DUS EXAMINATION

TGP Documents: subgroups and leading experts

34. The TC⁵ agreed to utilize, as appropriate, guidance on the role of the leading expert in document TGP/7 “Development of Test Guidelines” for matters on amending or developing guidance in TGP documents.
35. The TC agreed to request the TWPs to invite experts from members of the Union to lead discussions on proposals for developing or amending guidance, including for TGP documents.

Performance indicators

36. The TC reviewed the work of the TWPs on the basis of the performance indicators and agreed that no further indicators should be established at this stage.
37. The TC noted the satisfaction survey conducted with participants at the meetings of the TWPs in 2024, as presented in Annex V to document TC/60/6 and agreed to invite the Office of the Union to continue regularly surveying members and observer organizations on their satisfaction with the support for DUS examination provided by UPOV through the TC and TWPs.

[End of document]

⁵ TC, at its sixtieth session, held in Geneva on October 21 and 22, 2024. See document TC/60/8 “Report”, paragraphs 41 and 42