

Technical Committee

TC/61/5

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PROGRESS REPORTS ON THE WORK OF THE TECHNICAL WORKING PARTIES

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EXECUTIVE SUMMARY

1. The purpose of this document is to present the reports from the chairs and propose the approval of the programs of work in 2026 of the Technical Working Party for Agricultural Crops (TWA), Technical Working Party for Fruit Crops (TWF), Technical Working Party on Testing Methods and Techniques (TWM), Technical Working Party for Ornamental Plants and Forest Trees (TWO) and Technical Working Party for Vegetable Crops (TWV).

2. The TC is invited to:

(a) note the reports from the chairs of the TWA, TWF, TWM, TWO and TWV, at their sessions in 2025, as presented in the Annexes to this document;

(b) consider the programs of work for the TWA, TWF, TWM, TWO and TWV, at their sessions in 2026, as proposed in the Annexes to this document;

3. The structure of this document is as follows:

EXECUTIVE SUMMARY 1

Annex I	Report from the chair and proposed program of work for the TWA in 2026
Annex II	Report from the chair and proposed program of work for the TWF in 2026
Annex III	Report from the chair and proposed program of work for the TWM in 2026
Annex IV	Report from the chair and proposed program of work for the TWO in 2026
Annex V	Report from the chair and proposed program of work for the TWV in 2026

4. The following abbreviations are used in this document:

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

[Annexes follow]

FIFTY-FOURTH SESSION OF THE TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS (TWA)

Report by Mr. Ľubomír Bašta (Slovakia), Chair of the TWA

1. The TWA held its fifty-fourth session, in Arusha, United Republic of Tanzania, from May 19 to 22, 2025, and was chaired by Mr. Ľubomír Bašta (Slovakia). The report of the session is provided in document TWA/54/7 "Report".
2. The session was attended by 128 participants from 33 members of the Union, 3 observer States and 4 observer organizations.
3. The TWA considered the proposed guidelines for validating assessment methods of characteristic-specific molecular markers for DUS examination, as presented by an expert from the Netherlands and agreed that there should be flexibility for different validation types or procedures to be used as the basis for including molecular markers in Test Guidelines. Further consideration would be required in case a molecular marker with restricted access would be proposed for inclusion in Test Guidelines.
4. The item Notification of Additional Characteristics and States of Expression presented by the expert from the United Kingdom notified the additional characteristics on the Test Guidelines for Barley and Test Guidelines for Oilseed Rape. Following the procedure for "Notification of Additional Characteristics and States of Expression", the TWA agreed that one barley characteristic and the three oilseed rape characteristics proposed should be posted on the TG Drafters' webpage of the UPOV website. The use of further seed characteristics in DUS examination of barley should be reported at the fifty-fifth session of the TWA, as they had not yet been used in decisions related to the granting of Plant Breeder's Rights.
5. The TWA discussed 8 draft Test Guidelines and agreed that the draft Test Guidelines for Bent (revision), *Festulolium* (revision) and Maize (partial revision) should be submitted to the TC for adoption.
6. The TWA agreed to discuss the draft Test Guidelines for Fodder Beet (revision), Grain Amaranth (revision), Mung Bean, Sugarcane (revision), White Clover, White Mustard and Sweet Potato (partial revision) at its fifty-fifth session.
7. The TWA noted that no invitations for the venue of its fifty-fifth session had been received. The TWA noted that a decision on the date and place of its next session would be taken by the Council, at its fifty-ninth session, to be held on October 24, 2025.
8. The TWA agreed that UPOV members could contact the Office of the Union with offers of date and place to host the next TWA session until August 31, 2025. The TWA agreed that its fifty-fifth session should be held via electronic means, from June 15 to 18, 2026, if no alternative offer was received from a member of the Union.
9. On July 15, 2025, the Office of the Union issued Circular E-25/052 to the TC and TWA reporting the proposal received from the Republic of Korea to host the fifty-fifth session of the TWA, from June 15 to 18, 2026. The proposal will be put forward for consideration by the Technical Committee, along with the program of work for the Technical Working Parties in 2026.
10. In order to allow sufficient time in advance of the meeting to post the documents and provide comments, all documents and presentations invited or to be prepared should be sent to the Office of the Union by May 1, 2026.
11. The TWA proposed to discuss the following items at its next session:
 1. Opening of the session
 2. Adoption of the agenda
 3. Procedures for DUS examination (presentations invited)
 4. Technical Questionnaire, section 4.2: "Method of propagating the variety" (document to be prepared by the United Kingdom)
 5. Variety description databases (presentations invited)

6. Image analysis and new technologies in DUS examination (document to be prepared United Kingdom and presentations invited)
7. Molecular techniques in DUS examination (presentations from Italy, the United Kingdom and presentations invited)
8. Reports on existing policies on confidentiality of molecular information (presentations invited)
9. Using the COYU-Splines method in DUS examination (presentation from the United Kingdom and presentations invited)
10. Experiences with new types and species (oral reports invited)
11. Experiences and notification of additional characteristics or states of expression (reports invited)
12. Discussion on draft Test Guidelines (Subgroups)
13. Recommendations on draft Test Guidelines
14. Date and place of the next session
15. Future program
16. Adoption of the Report on the session (if time permits)

Matters for information

17. Reports from members and observers (written reports to be prepared by members and observers)
18. Report on developments in UPOV (general developments, including variety denominations, information databases, exchange and use of software and equipment)
19. Closing of the session

[Annex II follows]

FIFTY-SIXTH SESSION OF THE TECHNICAL WORKING PARTY FOR FRUIT CROPS (TWF)

Report by Ms. Carole Dirwimmer (France), Chair of the TWF

1. The TWF held its fifty-sixth session, in Bursa, Türkiye, from June 23 to 26, 2025, and was chaired by Ms. Carole Dirwimmer (France). The report of the session is provided in document TWF/56/8 "Report".
2. The session was attended by 92 participants from 30 members of the Union, one observer State and two observer organizations.
3. The TWF considered the standard wording for number of growing cycles in Test Guidelines, in particular the sentences on "number of growing cycles" and that "The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test." The TWF agreed that the guidance in Test Guidelines could be improved to further clarify that authorities could conclude the examination of fruit crops earlier than two growing cycles, when that was recommended in Test Guidelines.
4. The TWF considered the use of the terms "minimum" and "normally" in relation to the minimum duration of tests and agreed to propose amending document TGP/7, Additional Standard Wording (ASW) 2 to replace the term "normally" by "generally".
5. The TWF also considered the sequence of standard wording in order to highlight the possibility to conclude the testing when the authority can determine the outcome of the test with certainty. Finally, the TWF agreed to propose amending the definition of a "satisfactory crop of fruits", with added notions of quality and quantity.
6. The TWF considered the proposals for amending the UPOV codes for *Citrus* and related genera and species. This amendment is the opportunity to revise the scope of *Citrus* Test Guidelines, integrating the most current and scientifically rigorous classification proposal with practical and commercial use.
7. The TWF agreed to include an agenda item for its fifty-seventh session inviting UPOV members to present characteristics, approaches or challenges for DUS examination relevant for drafting national test guidelines. The aim of this new item is to support UPOV members drafting efforts when a species is, for the time being, only of interest of a national or local authority.
8. The TWF discussed 7 draft Test Guidelines and agreed that the draft Test Guidelines for Passion fruit (revision), Goji and Hazelnut (revision) should be submitted to the TC for adoption.
9. The TWF agreed to discuss the draft Test Guidelines for Argan, Blueberry (revision), European Pear (revision), Guava (revision), Japanese Pear (revision), Japanese Plum (revision), Lemon (partial revision), Mandarin (partial revision), Trifoliate Orange (partial revision), Oranges (partial revision) and Pummelo (partial revision) at its fifty-seventh session.
10. At the invitation of Germany, the TWF agreed to hold its fifty-seventh session in Leipzig, Germany, from September 7 to 10, 2026.
11. The TWF agreed that documents for its fifty-seventh session should be submitted to the Office of the Union by July 24, 2026. The TWF noted that items would be deleted from the agenda if the planned documents did not reach the Office of the Union by the agreed deadline.
12. The TWF proposed to discuss the following items at its next session:
 1. Opening of the Session
 - Matters for discussion
 2. Adoption of the agenda
 3. Date and place of the next session
 4. Procedures for DUS examination (presentations invited)
 5. Methods of observation in fruit crops (MS/MG) (Germany to provide a document and presentations invited)
 6. Number of growing cycles and concluding examination of fruit crops (documents invited)

7. Harmonization of content in Technical Questionnaires, Section 7 (document to be prepared by the European Union and presentations invited)
8. Variety collections (presentations invited)
9. Information databases (presentations invited)
10. Information on mutant varieties of apple useful for DUS examination (presentations invited)
11. Image analysis and new technologies in DUS examination (presentation by Hungary and presentations invited)
12. Molecular techniques in DUS examination (presentations invited)
13. Experiences with new types and species (oral reports invited)
14. Support for developing national test guidelines (presentations invited)
15. Discussion on draft Test Guidelines
16. Recommendations on draft Test Guidelines
17. Future program
18. Adoption of the Report on the session (if time permits)

Matters for information

19. Reports from members and observers (written reports to be prepared by members and observers)
20. Report on developments in UPOV (general developments, including variety denominations, information databases, exchange and use of software and equipment)
21. Closing of the session

[Annex III follows]

ANNEX III

THIRD SESSION OF THE TECHNICAL WORKING PARTY ON TESTING METHODS AND TECHNIQUES (TWM)

Report by Ms. Nuria Urquía Fernández (European Union), Chair of the TWM

1. The TWM held its third session, in Beijing, China, from April 28 to May 1, 2025, and was chaired by Ms. Nuria Urquía Fernández (European Union). The report of the session is provided in document TWM/3/29 "Report".
2. The session was attended by 139 participants from 27 members of the Union, 2 observer States and 7 observer organizations. The increased participation both online and in person confirms the growing consideration of new techniques for DUS testing by UPOV members.
3. The chair thanked the Chinese authorities for their hospitality during the meeting, including various field visits, greatly contributing to its success. The TWM was preceded by a two days' workshop on international cooperation on DUS matters that provided a very interesting overview of the current situation in China and other UPOV members.
4. The meeting discussed updates on software and statistical analysis methods, such as: the combined over years uniformity criterion with Splines (COYUs); and the combined over years distinctness criterion with genetic prediction (COYD-GP), enhanced distinctness criterion for cross-pollinated agricultural crops. The TWM noted that testing would continue and be reported at future sessions.
5. The chair noted an increased interest in phenotyping and image analysis tools. A presentation on "A new perspective on the DUS test of eggplant fruit color based on lab color parameters" provided the basis for the discussion of the TG on eggplant, currently being revised. The arrival of artificial intelligence combined with image analysis is also producing promising results. The TWM agreed that the introduction of phenotyping tools in variety examination requires sufficient amount of variety data for training the algorithms and validation of the analysis generated. Once validated, the algorithm can be used for complex measurements using images. Other interesting examples on experience gained included a mobile phone application prototype to assess volume and shape ratios of fruits, for images captured from a top-down perspective.
6. The use of Artificial Intelligence is not limited to image analysis. Some presentations showed that the combination of AI, molecular markers and phenotypical traits could be used for the potential genetic prediction of morphological characteristics, such as the presence of spines in Raspberry, or specific phenotypical characteristics in tomato. The results proved extremely promising in this area.
7. Of particular interest were research efforts addressing the use of molecular techniques in the assessment of genetic distance thresholds to assess essential derivation. Various presentations from members' representatives and breeders' organizations addressed the need to assess pedigree ancestors to analyze genetic distance and establish genetic thresholds. Varieties' pedigrees are key factor going beyond high degrees of phenotypic similarity to assess essential derivation. In this exercise, the TWM agreed on the importance of breeders' contributions to determine thresholds and avoiding disputes on EDVs.
8. An additional area of growing interest is the use of molecular markers and in some cases image analysis for enforcement of plant breeder's rights. Several presentations showed that the time required for the identification of the sample is key, particularly for fruits on their route to be exported, inviting cooperation among UPOV members.
9. The TWM also discussed challenges and opportunities on the use of DNA-based information as the basis to optimize variety collections and the organization of growing trials. The TWM discussed the use of DNA-based information to reduce the number of growing cycles for crops that would normally be examined in two growing trials. The shared use of molecular databases among countries amplifies the benefits, and greatly optimize the costs/effectiveness of this practice.
10. As to the confidentiality of molecular information, the TWM recalled the guidance provided by UPOV in document TGP/5, section 1. It agreed on the importance of safeguarding the confidentiality of parent lines and hybrid formulas and noted that a similar discussion was being held at OECD.

11. Finally, in terms of cooperation with other international organizations, the TWM considered possible joint activities with OECD and ISTA and the possible harmonization of terms, definitions and methods in relation to molecular techniques. The TWM agreed to invite the expert from France to lead discussions to organize relevant information on terms and definitions, with expression of interest from the experts from Argentina, China, Germany, Netherlands (Kingdom of the), United Kingdom, CIOFORA and ISF to contribute to the exercise.

12. The TWM discussed the establishment of common sets of molecular markers for variety identification and agreed to invite UPOV, OECD and ISTA to further consider the challenges and opportunities of this initiative, such as crop(s), scale of harmonization (e.g. regional, global); and molecular marker-related aspects. The TWM noted that the molecular markers selected under the projects funded by CPVO were publicly available and noted the offer from China to exchange a selection of KASP markers

13. At the invitation of the United Kingdom, the TWM agreed to hold its fourth session in Cambridge, from June 1 to 4, 2026.

14. The TWM agreed that documents for its fourth session should be submitted to the Office of the Union by April 17, 2026. The TWM noted that items would be deleted from the agenda if the planned documents did not reach the Office of the Union by the agreed deadline.

15. The TWM proposed to discuss the following items at the fourth session:

1. Opening of the session
2. Adoption of the agenda
3. Matters for consideration
 - 3.1 Software and statistical analysis methods for DUS examination
 - 3.2 Phenotyping and image analysis (papers invited)
 - 3.3 Developments in molecular techniques and bioinformatics (papers invited)
 - (a) Cooperation between international organizations (papers invited)
 - (b) Reports of work on molecular techniques in relation to DUS examination (papers invited)
 - (c) Management of databases and exchange of data and material (papers invited)
 - (d) Confidentiality, ownership and access to molecular data
 - (e) The use of molecular techniques in the assessment of essential derivation (papers invited)
 - (f) The use of molecular techniques in variety identification (papers invited)
 - (g) The use of molecular techniques for enforcement (papers invited)
4. Matters for information
 - 4.1 Reports from members and observers (written reports to be prepared by members and observers)
 - 4.2 Report on developments in UPOV (general developments, including variety denominations, information databases, exchange and use of software and equipment, guidance and information materials)
5. Date and place of the next session
6. Future program
7. Adoption of the Report on the session (if time permits)
8. Closing of the session

[Annex IV follows]

ANNEX IV

FIFTY-SEVENTH SESSION OF THE TECHNICAL WORKING PARTY FOR ORNAMENTAL PLANTS AND FOREST TREES (TWO)

Report by Ms. Hilary Papworth (United Kingdom), Chair of the TWO

1. The TWO held its fifty-seventh session, in Roelofarendsveen, Kingdom of the Netherlands, from March 31 to April 3, 2025, and was chaired by Ms. Hilary Papworth (United Kingdom). The report of the session is provided in document TWO/57/10 "Report".
2. The session was attended by 97 participants from 29 members of the Union, 2 observer States and 2 observer organizations.
3. The fifty-seventh session offered the opportunity for participants to attend the meeting in-person for the first time since 2019. This allowed for much greater interaction for those attending as well as very well received technical visits to the DUS trials conducted at Naktuinbouw, the Dutch Flower Bulb Inspection Service (BKD) and the Royal General Bulb Growers' Association (KAVB).
4. The TWO received a presentation from an expert from France on the use of molecular markers in Hydrangea. The project has successfully identified a set of SNP markers that enables the identification of different species within Hydrangea, and an additional set which have been selected to identify varieties within the most common species in this genus.
5. A further draft of the document covering situations where illustrations could complement or replace example varieties was given by the Lead Expert from Germany. The document is of great interest to the TWO as Test Guidelines from this group make extensive use of illustrations. The draft was agreed without change and participants look forward to the adoption of the new wording following consideration by the other TWPs and the TC.
6. The TWO are undertaking the drafting of a number of test guidelines which are complex due to their coverage; progress with these is quite slow. During the fifty-seventh session the TWO discussed 7 draft Test Guidelines and agreed that the draft Test Guidelines for Poinsettia (revision) and Carnation (partial revision) should be submitted to the TC for adoption. Other full TGs were not sufficiently complete to send to the Technical Committee for consideration for adoption. Where additional online subgroup sessions had been held during the drafting period it was clear that significant progress could be made and all Lead Experts were encouraged to hold meetings of this type.
7. The TWO agreed to discuss the draft Test Guidelines for Ginkgo, Helleborus, Lotus, Magnolia, Pot Azalea and Rhododendron (revision to combine TGs), Ornamental Apple (revision), Zantedeschia and Aloe (partial revision) at its fifty-eighth session.
8. The TWO agreed that its fifty-eighth session should be held via electronic means, from July 6 to 9, 2026.
9. The TWO agreed that documents for its fifty-eighth session should be submitted to the Office of the Union by May 29, 2026. The TWO noted that items would be deleted from the agenda if the planned documents have not reached the Office of the Union by the agreed deadline.
10. The TWO agreed to discuss the following items at its next session:

1. Opening of the session
2. Adoption of the agenda

Matters for discussion

3. Procedures for DUS examination (presentations invited)
4. Report on court cases dealing with technical matters (presentations invited)
5. Molecular techniques in DUS examination (presentations invited)
6. Information databases (presentations invited)
7. Experiences with new types and species (oral reports invited)
8. Discussion on draft Test Guidelines (Subgroups)
9. Recommendations on draft Test Guidelines

10. Date and place of the next session
11. Future program
12. Adoption of the report of the session (if time permits)

Matters for information

13. Reports from members and observers (written reports to be prepared by members and observers)
14. Report on developments within UPOV (general developments, including variety denominations, information databases, exchange and use of software and equipment)
15. Closing of the session

[Annex V follows]

FIFTY-NINTH SESSION OF THE TECHNICAL WORKING PARTY FOR VEGETABLES (TWV)

Report by Mr. Yoshiyuki Ohno (Japan), Chair of the TWV

1. The TWV held its fifty-ninth session via electronic means, from May 5 to 8, 2025, and was chaired by Mr. Yoshiyuki Ohno (Japan). The report of the session is provided in document TWV/59/19 "Report".
2. The session was attended by 84 participants from 27 members of the Union, 1 observer State and 3 observer organizations.
3. The chair noted the following main topics advanced at the TWV:

Disease resistance characteristics in UPOV Test Guidelines

4. Discussions on disease resistance characteristic in Test Guidelines could be grouped in two main aspects:
5. Procedure for the addition of disease resistance characteristics in UPOV Test Guidelines:
 - There was agreement on the importance of developing new varieties with various types of resistances or tolerances in response to recent climate change at global level. Discussions considered the extent up to which the frequency of revision of Test Guidelines should be increased to incorporate further disease resistance characteristics.
 - The addition of new disease resistance characteristics to the UPOV Test Guidelines exposes differences in the level of expertise and testing capacity among UPOV members, often restricted to some countries and regions.
 - For this reason, the addition of new disease resistance characteristics to UPOV Test Guidelines will be discussed in additional intersessional meetings to facilitate consensus in advance of the subgroup meeting.
6. Interpretation of disease resistance characteristics for assessment:
 - Although many disease resistances are expressed in a continuous range of variation, the TWV did not identify gaps or challenges interpreting such diseases as QL characteristics.
 - The TC-EDC considered that such characteristics should be indicated as QN (1-3). On the other hand, there is no robust threshold variety to establish a second the cut-off point for a third state of expression.
 - UPOV guidance requires at least two example varieties for QN characteristics with (1-3) scale.
 - The threshold example variety is continuously moving their expression whether it would be QL (1/9) or QN (1/2, 2/3).
 - Under these circumstances, the TWV will consider the difference required to demonstrate a clear difference between two varieties close to the border of adjacent states of expression to establish distinctness based on a one note difference; then consider revising UPOV guidance to adapt to this situation.
 - It was also noted that such QL or QN interpretations and implementation would benefit from the participation of legal experts, such as the CAJ.

Interpretation of guidance on minimum duration of tests of two growing cycles

7. Some UPOV Test Guidelines state that "The minimum duration of tests should normally be two independent growing cycles." The TWV noted that there were different interpretations of this recommendation among UPOV members, where final DUS results could be generated after one growing cycle. The chair noted that some UPOV members had this flexibility by law, which prevailed over the guidance.

Experience with a new type of crop

8. The TWV noted the experience of DUS examination of Oil Pumpkin of experts from Austria. The TWV received an invitation from Austria to collaborate in the revision of the UPOV Test Guidelines, while noting that Austria could report the use of additional characteristics and states of expression using the template provided in document TGP/5, Section 10. The proposal from Austria received very positive response from a group of interested experts.

9. The TWV discussed 15 draft Test Guidelines and agreed that the draft Test Guidelines for Eggplant (revision), Broccoli (partial revision), Brussels Sprouts (partial revision), Cabbage (partial revision), Cauliflower (partial revision), Kohlrabi (partial revision), Lettuce (partial revision), Maize (partial revision), Shiitake (partial revision) and Tomato (partial revision) should be submitted to the TC for adoption.

10. The TWV agreed to discuss at its sixtieth session the draft Test Guidelines for Asparagus, Garlic (revision), Ginger (revision), Vegetable Marrow/Squash (revision), Parsley, Cucumber/Gherkin (partial revision) and Tomato Rootstocks (partial revision).

11. At the invitation of the United States of America, the TWV agreed to hold its sixtieth session in Pacific Grove, California, United States of America, from May 18 to 21, 2026.

12. The TWV agreed that in order to allow sufficient time in advance of the meeting to post the documents and provide comments, all documents and presentations invited or to be prepared should be sent to the Office of the Union by April 4, 2026.

13. The TWV proposed to discuss the following items at its next session:

1. Opening of the session
2. Adoption of the agenda

Matters for discussion

3. Procedures for DUS examination (presentations invited)
4. Proposals for ring-tests (presentations invited)
5. Assessing distinctness in disease resistance characteristics (document to be prepared by the Netherlands (Kingdom of) and presentations invited)
6. Image analysis of vegetable crops (presentations invited)
7. Molecular techniques in variety examination (presentations invited)
8. Experiences with new types and species (oral reports invited)
9. Discussions on draft Test Guidelines (Subgroups)
10. Recommendations on draft Test Guidelines
11. Date and place of the next session
12. Future program
13. Adoption of the report of the session (if time permits)

Matters for information

14. Reports on developments in plant variety protection from members and observers (reports invited)
15. Reports on developments in UPOV (general developments, including variety denominations, information databases, exchange and use of software and equipment)
16. Closing of the session

[End of Annex V and of document]