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| International Union for the Protection of New Varieties of Plants |  |

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| Technical Committee  Fifty-Eighth Session Geneva, October 24 and 25, 2022 | TC/58/17 Add.  Original: English  Date: October 20, 2022 |

Addendum to  
Progress reports on the work of the Technical Working Parties

Document prepared by the Office of the Union

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The purpose of this addendum is to present the report from the chairperson of the Technical Working Party on Testing Methods and Techniques (TWM), at its session in 2022.

The structure of this document is as follows:

Annex Technical Working Party on Testing Methods and Techniques (TWM)

[Annex follows]

# FIRST session of the Technical Working Party on Testing Methods and Techniques (TWM)

*Report by Ms. Beate Rücker (Germany), Chairperson of the TWM*

The TWM held its first session, organized by electronic means, from September 19 to 23, 2022, chaired by Ms. Beate Rücker (Germany).  The report of the session is provided in document TWM/1/26 “Report”.

The session was attended by 116 participants from 28 members of the Union, 2 observer States and 8 observer organizations.

The TWM considered document TWM/1/8 on “Developments on the improved COYU method (splines)” and received a presentation from Mr. Adrian Roberts and Ms. Haidee Philpott (United Kingdom). The TWM noted that a report of the results of the test campaign of the software for COYU Splines would be presented for consideration by the TC, at its fifty-eighth session in conjunction with the revision of document TGP/8.

The TWM noted that a new version of DUSTNT incorporating COYU with splines (DUST9NT) would be launched by September 2023, once the improvements identified from the testing campaign had been incorporated, including extrapolation. The expert noted that further revisions to document TGP/8 would be required to incorporate guidance on extrapolation and minimum data requirements.

The TWM considered document TWM/1/7 on “Combined-over-year uniformity (COYU) criterion: Extrapolation” and received a presentation from Mr. Adrian Roberts (United Kingdom). The TWM noted the recommendation that there should be particular consideration of uniformity by the crop experts when extrapolation occurred. The TWM agreed that further discussion would be required on approaches when extrapolation was indicated and agreed to invite the United Kingdom and other members to report at the second session of the TWM.

The TWM considered document TWP/6/5. The TWM noted that information from China, the Czech Republic, France, Poland and Uzbekistan had been received to update document UPOV/INF/16. The TWM agreed that clarification would be required on the software proposed by Uzbekistan, including its availability for exchange.

The TWM received a presentation from Mr. Kun Yang (China) on “Development of Statistical Analysis Software: DUSCEL and DUSBIGDATA” (document TWM/1/10). The TWM noted the extensive work and expansion of the software to include additional functionalities. The TWM agreed to invite China to report developments at the second session of the TWM.

The TWM received a presentation from Mr. Thibaud Quémar (France) on “PATHOSTAT application” (document TWM/1/11). The TWM noted that PATHOSTAT was a web-based application made available for use by members of Union. The TWM noted the condition for supply of PATHOSTAT made available as a web service and not as a software for download. The TWM recommended the TC, at its fifty-eighth session, to propose to include the PATHOSTAT application in document UPOV/INF/16.

The TWM received presentations on phenotyping and image analysis from experts from the Republic of Korea, China, United Kingdom and Maynooth University, Ireland. The TWM agreed to invite further developments on the assessment of color through phenotyping and image analysis to be presented at its second session.

The TWM received presentations from Ms. Ana Laura Vicario (International Seed Testing Association (ISTA)) on “ISTA report on the use of molecular techniques” (document TWM/1/23) and from Mr. Christophe Rouillard (Organisation for Economic Co-operation and Development (OECD)) on “Latest developments in the application of BMT under the OECD Seed Schemes” (document TWM/1/24). The TWM noted that OECD had formed the Advisory Group on BMT to deal with all BMT issues under the Seed Schemes, including matters relating to cooperation with other international organizations.

The TWM received presentations on

- Reports of work on molecular techniques in relation to DUS examination

- Methods for analysis of molecular data, management of databases and exchange of data and material

- Confidentiality, ownership and access to molecular data, including model agreement template

- The use of molecular techniques in variety identification

- The use of molecular techniques for enforcement

The TWM received a presentation from Mr. Marcel Bruins (CropLife International) on “Confidentiality and ownership of molecular information” (document TWM/1/22). The TWM noted the concern expressed by breeders’ organizations that molecular information provided for the examination of a variety should not be provided to others outside the authority that received the application without the permission of the breeder. The TWM further noted the concern that breeders were lacking clarity and information about how molecular information was being used, and especially shared.

The TWM agreed that further clarification was required on the type of information and purpose of use of data to be shared (e.g. molecular distances between varieties, genotype sequences) that would require permission before being shared by PVP offices with other PVP offices. The TWM agreed to invite members and observers to report existing policies on confidentiality of molecular information at the second session of the TWM.

The TWM considered document TWP/6/7. The TWM held a discussion session to allow participants to exchange information on their work on biochemical and molecular techniques and explore possible areas for cooperation. The TWM agreed that sufficient time should be allocated for discussing the agenda items in the future work plan for the meeting and agreed that it would not be necessary to have an open discussion session.

The TWM agreed to hold its second session, from April 8 to 12, 2024.

The TWM agreed that virtual meetings were useful to enhance participation of experts and agreed that face-to-face meetings are important for cooperation. The TWM agreed to propose holding a future meeting in hybrid format.

The TWM noted the expression of interest of the Seed Association of the Americas (SAA) to support the organization of a future in-person meeting of the TWM at a UPOV member.

The TWM agreed that documents for its second session should be submitted to the Office of the Union by February 23, 2024. 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.

The TWM proposed to discuss the following items at the second session:

1. Opening of the Session

2. Adoption of the agenda

3. Developments in plant variety protection:

(a) Reports from members and observers (written reports to be prepared by members and observers)

(b) Report on developments within UPOV (report by the Office of the Union)

4. Guidance and cooperation

(a) Development of guidance and information materials (document to be prepared by the Office of the Union)

(b) Increasing participation in the work of the TC and the TWPs (document to be prepared by the Office of the Union)

(c) Cooperation in examination (document to be prepared by the Office of the Union)

(d) Information and databases

- UPOV PRISMA (document to be prepared by the Office of the Union)

- UPOV information databases (document to be prepared by the Office of the Union)

- Variety description databases including databases containing molecular data (document to be prepared by the Office of the Union and papers invited)

- Variety denominations (document to be prepared by the Office of the Union)

5. Software and statistical analysis methods for DUS examination

(a) Statistical tools and methods for DUS examination (papers invited)

- The Combined-Over-Years Uniformity Criterion (COYU) (document to be prepared by the Office of the Union)

- Development of software for the improved COYU method (splines) (document to be prepared by the United Kingdom)

- Extrapolation in relation to COYU (document to be prepared by the United Kingdom and papers invited)

- Comparison of results obtained for COYD and COYU procedures using different software (document to be prepared by France)

- Development of Big Data platform for DUS examination (document to be prepared by China)

(b) Exchange and use of software and equipment (document to be prepared by the Office of the Union and papers invited)

- Development of Statistical Analysis Software: DUSCEL (document to be prepared by China)

6. Phenotyping and image analysis (papers invited)

- Assessment of color characteristics using image analysis (papers invited)

7. Developments in molecular techniques and bioinformatics

(a) Latest developments in molecular techniques and bioinformatics (papers invited)

(b) Cooperation between international organizations (document to be prepared by the Office of the Union and papers invited)

(c) Report of work on molecular techniques in relation to DUS examination (papers invited)

(d) Methods for analysis of molecular data, management of databases and exchange of data and material (papers invited)

(e) Confidentiality, ownership and access to molecular data, including model agreement template1 (papers invited)

- Examples of policies on confidentiality and access to molecular information data (papers invited)

(f) The use of molecular techniques in examining essential derivation[[1]](#footnote-2) (papers invited)

(g) The use of molecular techniques in variety identification1 (papers invited)

(h) The use of molecular techniques for enforcement1 (papers invited)

8. Date and place of the next session

9. Future program

10. Adoption of the Report on the session (if time permits)

11. Closing of the session

[End of Annex and of document]

1. “Breeders day” April 11, 2024 [↑](#footnote-ref-2)