

**Work plan for UPOV Technical Working Party on Testing Methods and Techniques (TWM), Fourth Session,
Cambridge, United Kingdom (TWM/4)**

(please note that the schedule is subject to change at any time) – Local time in United Kingdom (UTC+1)

(UTC+1)	Tuesday, June 2 Start 09.00	Wednesday, June 3 Start 9.00	Thursday, June 4 Start 9.00	Friday, June 5 Start 9.00
9.00 am	<p><u>1. Opening</u> (i) Opening remarks (ii) Overviews of UK's PVP system</p> <p><u>2. Adoption of agenda</u> (TWM/4/1 Rev.)</p> <p><u>5. Date and place of next session</u></p> <p><u>4. Matters for information</u> (a) Report on developments in UPOV (TWP/10/6) (b) Reports from members and observers (TWM/4/2) (c) Development of guidance and information materials (TWP/10/1) (d) Notification of additional characteristics and states of expression (TWP/10/2) (e) Measures to improve support provided for DUS examination (TWP/10/3) (f) Technical Questionnaire, section 4.2: "Method of propagating the variety" (TWP/10/5)</p>	<p>FIELD VISIT</p> <p>Departure from hotel: 08:45 Return to hotel: 16:30</p> <p>08:45: Meet in reception 09:00: Leave Jesus College by coach 09:30: Arrival at NIAB, Park Farm 09:45: Welcome and introduction 10:10: Field Plot tour (transfer via coach) 11:10: AI Workshop 12:15: Lunch 13:00: Tour of Niab facilities: • Gene transformation • Research projects and glasshouses • UAV work, imaging, data sciences • Pathology growth rooms • Facilities for DUS, seed certification and the OSTs 15:30: Posters and networking 16:30: Back for Jesus College</p>	<p><u>3.3 (a) Cooperation between international organizations</u> (i) OECD Seed Schemes recent developments in the application of biochemical and molecular techniques "Towards enhanced OECD / ISTA/ UPOV cooperation" (TWM/4/27)</p> <p>(ii) Activities of the ISTA Variety Committee (VARCOM) (TWM/4/23)</p> <p>(iii) Developments in molecular techniques at UPOV (TWP/10/4)</p> <p>(iv) The OIV key actions on grapevine genetic resources and the publication of the 3rd edition of the OIV ampelographic descriptors (TWM/4/20)</p>	<p><u>3.3 (b) Reports of work on molecular techniques in relation to DUS examination</u> (i) CPVO R&D activities (TWM/4/9)</p> <p>(ii) Exploring the potential use of UPOV model "Combining phenotypic and molecular distances in the management of variety collections" for bread wheat in France (TWM/4/24)</p> <p>(iii) Exploring the use of genomic prediction approaches for variety collection management in barley (TWM/4/17)</p> <p><u>3.3 (c) Management of databases and exchange of data and material</u> (i) Construction and application of molecular fingerprint databases for vegetable varieties (TWM/4/13)</p>
10.30	Coffee Break		Coffee Break	Coffee Break
11.00	<p><u>3.1 Software and statistical analysis methods for DUS examination</u> (i) United Kingdom software innovations: DUST and COYUs (TWM/4/11)</p> <p>(ii) Guidance on extrapolation when using Combined Over-Years Uniformity (COYU) (TWM/4/12)</p> <p>(iii) Comparison of COYU method: spline vs moving average (TWM/4/15)</p> <p>(iv) Comparison of software for COYD, U (TWM/4/28)</p> <p>(v) Minimum distance of varieties (TWM/4/3)</p>		<p><u>3.3 (a) Cooperation between international organizations (cont'd)</u> (v) Development of molecular marker panels for variety registration and trade control (TWM/4/21)</p> <p>(vi) Molecular markers: Public-private partnership, a Brazilian experience (TWM/4/10)</p> <p>(vii) Molecular markers for DUS test in Italy (TWM/4/30)</p> <p>(viii) CPVO co-funded project: International validation of a SNP marker set for tomato DUS testing (TWM/4/26)</p>	<p><u>3.3 (c) Management of databases and exchange of data and material (cont'd)</u> (ii) DUS Pheno/Geno database (TWM/4/16)</p> <p>(iii) Progress in the use of molecular markers to support tomato DUS testing at Naktuinbouw (TWP/60/7-TWM/4/6)</p> <p><u>3.3 (d) The use of molecular techniques in examining essential derivation</u> (i) A strategy to establish Genetic Similarity (GS) thresholds to support Essentially Derived Variety (EDV) evaluation: (TWM/4/25)</p>
12.30 pm	Lunch		Lunch	Lunch
14.00	<p><u>3.1 Software and statistical analysis methods for DUS examination (cont'd)</u> (vi) Kora: Digital management of variety collections (TWM/4/14)</p> <p>(vii) Work on molecular techniques in relation to DUS examination in Ukraine and short report of software and statistical analysis methods for DUS examination (TWM/4/5)</p> <p>(viii) Revision suggestions on document TGP/8 "Trial design and techniques used in the examination of Distinctness, Uniformity and Stability" (TWM/4/4)</p> <p><u>3.2 Phenotyping and image analysis</u> (i) Artemis - Digital solutions for climate-resilient agriculture (TWM/4/18)</p>		<p><u>3.3 (a) Cooperation between international organizations (cont'd)</u> (ix) Survey on the use of molecular marker techniques 2026 (TWP/10/4 Add.)</p> <p>Discussion Session on cooperation between international organizations</p>	<p><u>3.3 (e) The use of molecular techniques for enforcement</u> (i) New developments in the use of DNA techniques for PBR enforcement in Peru (TWM/4/7)</p> <p><u>6. Future program</u></p>
15.30	Coffee Break		Coffee Break	Coffee Break
16.00	<p><u>3.2 Phenotyping and image analysis (cont'd)</u> (ii) Development of an image-based test for soybean variety identification (TWM/4/22)</p> <p>(iii) Validation of an artificial intelligence-based method for varietal identification of wheat, barley and soybean seeds using optical markers (TWM/4/29)</p> <p>(vi) Phenotyping and image analysis at Naktuinbouw (TWM/4/8)</p> <p>(v) Image analysis in DUS testing (TWM/4/19)</p>		<p>Discussion Session on cooperation between international organizations (cont'd)</p>	<p><u>7. Adoption of the Report</u></p> <p><u>8. Closing of the session</u></p>
17.30	End		End	End
	19:00- Official Formal Dinner		19:30- Informal Buffet Dinner	