



TWA/44/3

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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS**Forty-Fourth Session
Obihiro, Japan, July 6 to 10, 2015**

TGP DOCUMENTS

*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 and to present proposals concerning revisions of TGP documents
2. The TWA is invited to note:
 - (a) the revisions to documents TGP/0, TGP/5, TGP/9 and TGP/14 to be put forward for adoption by the Council at its forty-ninth ordinary session, as set out in paragraphs 6 to 18;
 - (b) that the proposals for future revisions of TGP documents to be discussed by the TWPs at their sessions in 2015 will be dealt with under separate documents;
 - (c) that the TC, at its fifty-first session, held in Geneva from March 23 to 25, 2015, agreed:
 - (i) that it would not be necessary to develop further guidance to address issues relating to plant material submitted for examination beyond that already provided in documents TG/1/3, TGP/7 and TGP/9;
 - (ii) that authorities should provide guidance on the requirements of material submitted for DUS examination to the avoid possible effect of the method of propagation (e.g. micropropagation) in the expression of DUS characteristics;
 - (iii) to add new standard wording in the TG template, Chapter 4.2 "Uniformity", and amend ASW 8 (c) to provide guidance for Test Guidelines that are developed on the basis of varieties with one type of propagation when varieties may be developed in the future with other types of propagation, for future revision of document TGP/7, as set out in paragraph 24 of this document;
 - (iv) that the existing guidance in documents TGP/8: Part I: "DUS trial design and data analysis" and TGP/9 "Examining distinctness" was sufficient to address guidance for blind randomized trials; and
 - (v) to include guidance on "Examining characteristics using image analysis", for future revision of document TGP/8, as presented in paragraphs 26 and 27 of this document.
 - (d) the program for the development of TGP documents, as set out in the Annex to this document.

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4. The following abbreviations are used in this document:

CAJ:	Administrative and Legal Committee
TC:	Technical Committee
TC-EDC:	Enlarged Editorial Committee
TWA:	Technical Working Party for Agricultural Crops
TWC:	Technical Working Party on Automation and Computer Programs
TWF:	Technical Working Party for Fruit Crops
TWO:	Technical Working Party for Ornamental Plants and Forest Trees
TWV:	Technical Working Party for Vegetables
TWPs:	Technical Working Parties

I. BACKGROUND

5. The approved TGP documents are published on the UPOV website at http://www.upov.int/upov_collection/en/

II. MATTERS FOR ADOPTION BY THE COUNCIL IN 2015

6. The TC at its fifty-first session held in Geneva, on March 23 to 25, 2015, agreed to invite the Council to adopt the following revisions of TGP documents at its forty-ninth ordinary session, to be held on October 29, 2015, as follows:

TGP/0: List of TGP Documents and Latest Issue Dates

7. The Council will be invited to adopt document TGP/0/8, in order to reflect the revisions of TGP documents (see document TC/51/39 "Report", paragraph 113).

TGP/5: Experience and Cooperation in DUS Testing

- (i) *Revision of document TGP/5: Section 3: Technical Questionnaire to be Completed in Connection with an Application for Plant Breeders' Rights*

8. The TC agreed that following the launching of the redesigned UPOV website on November 1, 2011, the web link provided in document TGP/5: Section 3 should read as follows (see document TC/51/39 "Report", paragraphs 163 to 165):

"A model Technical Questionnaire is provided in document TGP/7 "Development of Test Guidelines": Annex 1: TG Template: Chapter 10. The UPOV Test Guidelines (http://www.upov.int/edocs/tgpdocs/en/tgp_7.pdf) contain, in Chapter 10, a specific Technical Questionnaire for varieties covered by those Test Guidelines."

- (ii) *Revision of document TGP/5: Section 8: Cooperation in Examination*

9. The TC agreed that following the launching of the redesigned UPOV website on November 1, 2011, the web link provided in document TGP/5: Section 8 should read as follows:

"A synopsis of cooperation in examination between authorities is provided in the form of a Council document:

"C/[session]/5 (e.g. C/49/5), (http://www.upov.int/meetings/en/topic.jsp?group_id=251)."

- (iii) *Revision of document TGP/5: Section 9: List of Species in Which Practical Knowledge has Been Acquired or for Which National Test Guidelines Have Been Established*

10. The TC agreed that following the launching of the redesigned UPOV website on November 1, 2011, the web link provided in document TGP/5: Section 9 should read as follows:

"A list of genera and species in which practical knowledge has been acquired or for which national test guidelines have been established is provided in the Technical Committee document:

"TC/[session]/4 (e.g. TC/51/4), (http://www.upov.int/meetings/en/topic.jsp?group_id=254).

TGP/9: Examining Distinctness

Revisions previously agreed by the TC

11. The TC noted the new section on "Guidance on number of plants to be examined (for Distinctness)" already agreed by the TC for document TGP/9, as set out in Annex I to document TC/51/5 (see document TC/51/39 "Report", paragraph 114).

Revisions agreed by the TC at its fifty-first session

12. The TC agreed that the following revisions to document TGP/9 should be put forward for adoption by the Council, at its forty-ninth ordinary session (see document TC/51/39 "Report", paragraphs 116 to 121):

- (i) *Revision of document TGP/9: Section 1.6: Schematic Overview of TGP Documents Concerning Distinctness*

13. The TC agreed that the flow diagram in TGP/9, Section 1.6 "Schematic overview of TGP documents concerning distinctness", should be revised as set out in Annexes I and II to document TC/51/23.

- (ii) *Revision of document TGP/9: Section 2.5: Photographs*

14. The TC agreed that the guidance on photographs for inclusion in document TGP/9, Section 2.5 "Photographs", should read as follows:

“2.5.3 The suitability of photographs for the identification of similar varieties is strongly influenced by the quality of the photographs taken by the authority for the varieties in the reference collection and the photograph of the candidate variety provided by the applicant with the Technical Questionnaire. Comprehensive guidance for taking suitable photographs is provided in document TGP/7, GN 35. The guidance was developed in particular for the applicants to provide suitable photographs of the candidate variety. The same instructions are important and useful for the authorities to take photographs of the varieties in the variety collection under standardized conditions.”

(iii) *Revision of document TGP/9: Sections 4.3.2 “Single record for a group of plants or parts of plants (G)” and 4.3.4 “Schematic summary”*

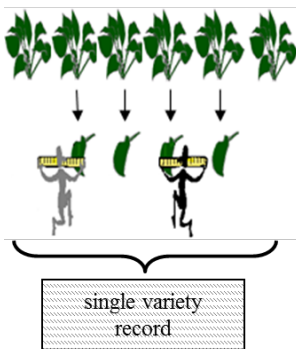
15. The TC agreed that the example of a single record for a group of plants (MG) taken on plant parts for inclusion in document TGP/9, Section 4.3.2 “Single record for a group of plants or parts of plants (G)” and Section 4.3.4 “Schematic Summary”, should read as follows:

“Example (MG)

“Measurement (MG): ‘Leaf blade: width’ in Hosta (vegetatively propagated): a representative measurement in the plot.”

16. The TC agreed that the illustration for inclusion in Subsection 4.3.4, should be amended to appear as follows:

Section 4.3.2.3
Example (MG): Leaf blade:
width
(hosta: vegetatively
propagated)



TGP/14: Glossary of Terms Used in UPOV Documents:

(i) *Section 2.4: “Apex/tip shape characteristics”*

17. The TC agreed that document TGP/14 Section 2.4 should read as follows:

“2.4 Apex/Tip Shape Characteristics

“2.4.1 The APEX (apical or distal part) of an organ or plant part is the end furthest from the point of attachment. In some cases, the distal extremity of the apex may be differentiated into a ‘TIP’.

“2.4.2 In considering the approach to describe the apex, the size of the organ and the number of apex shapes should be taken into account. Apex characteristics can be described in simple terms and if a differentiated tip is present it could be further described as a separate characteristic. Generally, it is not necessary to separate the apex shape characteristic into differentiated tip and apex characteristics.

“2.4.3 In cases where it is appropriate to separate into differentiated tip and apex characteristics, the shape of the apex is taken as the general shape, excluding any differentiated tip (if present) and the separation of tip and apex should be indicated in the explanation of the characteristic. For example:

[...]”

(ii) Subsection 3: "Color"

18. The TC noted the correction to the French translation of the color group "dark purple red" to read "*rouge pourpre foncé*" in document TGP/14 Subsection 3: "Color".

19. The TWA is invited to note the revisions to documents TGP/0, TGP/5, TGP/9 and TGP/14 to be put forward for adoption by the Council at its forty-ninth ordinary session, as set out in paragraphs 6 to 18.

III. FUTURE REVISION OF TGP DOCUMENTS

Future revisions under development

20. The TC, at its fifty-first session held in Geneva from March 23 to 25, 2015, agreed that the following matters for future revisions of TGP documents should be considered by the TWPs at their sessions in 2015 (see document TC/51/39 "Report", paragraphs 126 to 162 and 166 to 170):

TGP/7: Development of Test Guidelines

- (i) *Drafter's Kit for Test Guidelines*
See document TWV/49/12
- (ii) *Use of Proprietary Photographs and Illustrations in Test Guidelines*
See document TWV/49/13
- (iii) *Regional Sets of Example Varieties*
See document TWV/49/14

TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability

- (i) *Minimizing the Variation due to Different Observers of the same trial*
See document TWV/49/15
- (ii) *The Combined-Over-Years Uniformity Criterion (COYU)*
See document TWV/49/16
- (iii) *Examining DUS in Bulk Samples*
See document TWV/49/17
- (iv) *Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions*
See document TWV/49/18

TGP/10: Examining uniformity

- (i) *Revision of document TGP/10: New section: Assessing Uniformity by Off-Types on Basis of More than One Growing Cycle or on the Basis of Sub-Samples*
See document TWV/49/9

21. The TWA is invited to note that the proposals for future revisions of TGP documents to be discussed by the TWPs at their sessions in 2015 will be dealt with under separate documents.

Matters agreed by the TC concerning future revisions

TGP/7: Development of Test Guidelines

- (i) *Revision of document TGP/7: Plant Material Submitted for Examination*

22. The TC agreed that it would not be necessary to develop further guidance to address issues relating to plant material submitted for examination beyond that already provided in documents TG/1/3 "General Introduction to the Examination of Distinctness, Uniformity and Stability and the Development of Harmonized Descriptions of new Varieties of Plants", TGP/7 "Development of Test Guidelines" and TGP/9 "Examining Distinctness".

23. The TC agreed that authorities should provide guidance on the requirements of material submitted for DUS examination to the avoid possible effect of the method of propagation (e.g. micropropagation) in the expression of DUS characteristics (see document TC/51/39 "Report", paragraphs 127 to 129).

(ii) *Revision of document TGP/7: Coverage of the Test Guidelines*

24. The TC agreed to add new standard wording in the TG template, Chapter 4.2 "Uniformity", and amend ASW 8 (c) to provide guidance for Test Guidelines that are developed on the basis of varieties with one type of propagation when varieties may be developed in the future with other types of propagation in a future revision of document TGP/7, as follows:

"New standard wording: TG template, Chapter 4.2:

"These Test Guidelines have been developed for the examination of [*type or types of propagation*] varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 'Guidance for new types and species', Section 4.5: 'Testing Uniformity' should be followed."

"ASW 8 (c)

"(c) *Uniformity assessment by off-types (all characteristics observed on the same sample size)*

"For the assessment of uniformity of [self-pollinated] [vegetatively propagated] [seed-propagated] varieties, a population standard of { x } % and an acceptance probability of at least { y } % should be applied. In the case of a sample size of { a } plants, [{ b } off-types are] / [1 off-type is] allowed."

TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability

(i) *Revision of document TGP/8: Part II: Selected Techniques Used in DUS Examination, New Section: Guidance for Blind Randomized Trials*

25. The TC noted that blind randomized trials were not routinely used and agreed that the existing guidance in documents TGP/8: Part I: "DUS trial design and data analysis" and TGP/9 "Examining distinctness" was sufficient to address the matter.

(ii) *Revision of document TGP/8: Part II: Selected Techniques Used in DUS Examination, New Section: Examining Characteristics Using Image Analysis*

26. The TC considered document TC/51/21 and the proposed draft guideline on "Examining Characteristics Using Image Analysis", as presented in the Annex to document TC/51/21, in conjunction with the comments made by TC-EDC at its meeting in 2015, as set out in paragraph 16 of document TC/51/21.

27. The TC agreed with the proposed guidance on "Examining Characteristics Using Image Analysis" for inclusion in a future revision of document TGP/8, subject to the following amendments:

Annex, paragraph 5	to add "in cases where image analysis is automated" at the end of the first sentence
Annex, paragraph 14	to delete heading above paragraph
Annex, paragraph 18	to read "RHS <u>colour</u> chart"
Annex, paragraph 19	to be deleted
Annex, paragraph 20	to replace "home-made" by "in-house"
Annex, paragraph 22	to read "...possible to use it for a wider range of <u>standard UPOV</u> characteristics in future."

28. *The TWA is invited to note that the TC agreed:*

(a) *that it would not be necessary to develop further guidance to address issues relating to plant material submitted for examination beyond that already provided in documents TG/1/3, TGP/7 and TGP/9;*

(b) *that authorities should provide guidance on the requirements of material submitted for DUS examination to the avoid possible effect of the method*

of propagation (e.g. micropropagation) in the expression of DUS characteristics;

(c) to add new standard wording in the TG template, Chapter 4.2 "Uniformity", and amend ASW 8 (c) to provide guidance for Test Guidelines that are developed on the basis of varieties with one type of propagation when varieties may be developed in the future with other types of propagation, for future revision of document TGP/7, as set out in paragraph 24 of this document; and

(d) that the existing guidance in documents TGP/8: Part I: "DUS trial design and data analysis" and TGP/9 "Examining distinctness" was sufficient to address guidance for blind randomized trials;

(e) to include guidance on "Examining characteristics using image analysis", for future revision of document TGP/8, as presented in paragraphs 26 and 27 of this document.

V. PROGRAM FOR THE DEVELOPMENT OF TGP DOCUMENTS

29. The Annex to this document presents the program for the development of TGP documents as agreed by the TC, as its fifty-first session, and the CAJ, at its seventy-first session (see document TC/51/39 "Report", paragraph 171, and document CAJ/71/10 "Report on the Conclusions", paragraph 78, respectively).

30. The TWA is invited to note the program for the development of TGP documents, as set out in the Annex to this document.

[Annex follows]

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ANNEX

PROGRAM FOR TGP DOCUMENTS

Title of document	Current approved documents	2014							2015					2016						
		TC-EDC	TC/50	CAJ/69	TWPs	CAJ/70	C/48	TC-EDC	TC/51	CAJ/71	TWPs	CAJ/72	C/49	TC-EDC	TC/52	CAJ/73	TWPs	CAJ/74	C/50	
TGP/0	List of TGP Documents and Latest Issue Dates	TGP/0/7 ADOPTED						TGP/0/7 Adopt							TGP/0/8 Adopt					TGP/0/9 Adopt
TGP/1	General Introduction with Explanations	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TGP/2	List of Test Guidelines Adopted by UPOV	TGP/2/2 ADOPTED	TGP/2/2 Draft 1	TGP/2/2 Draft 2	TGP/2/2 Draft 3			TGP/2/2 Adopt												
TGP/3	Varieties of Common Knowledge	C(Extr.)/19/2 Rev.																		
TGP/4	Constitution and Maintenance of Variety Collections	TGP/4/1 ADOPTED																		
TGP/5	Experience and Cooperation in DUS Testing	ADOPTED																		
	Section 3: Technical Questionnaire to be Completed in Connection with an Application for Plant Breeders' Rights	Section 3/1 Adopted							TC-EDC/Jan15/2	TC/51/5	CAJ/71/7				Sec. 3/2 Adopt					
	Section 8: Cooperation in Examination	Section 8/1 Adopted							TC-EDC/Jan15/2	TC/51/5	CAJ/71/7				Sec. 8/2 Adopt					
	Section 9: List of Species in Which Practical Knowledge has Been Acquired or For Which National Test Guidelines Have Been Established	Section 9/1 Adopted							TC-EDC/Jan15/2	TC/51/5	CAJ/71/7				Sec. 9/2 Adopt					
	Section 10: Notification of Additional Characteristics	Section 10/3 Adopted	TC-EDC/Jan14/2	TC/50/5	CAJ/69/3			Sec. 10/3 Adopt												
TGP/6	Arrangements for DUS Testing	TGP/6/1 ADOPTED																		
TGP/7	Development of Test Guidelines	TGP/7/4 ADOPTED																		
	TC Approved Revisions (document TC/50/5 Annex I)		TC-EDC/Jan14/2	TC/50/5	CAJ/69/3			TGP/7/4 Adopt												
	Drafter's Kit for Test Guidelines (Drafter: Office of the Union)			TC/50/5		TWP/xx/14			TC-EDC/Jan15/2	TC/51/5		TWP/xx/12			x	x	x		TGP/7/5 Adopt	
	Plant Material Submitted for Examination (Drafter: Jens Wegner (European Union))		TC-EDC/Jan14/5	TC/50/17		TWP/xx/12			TC-EDC/Jan15/3	TC/51/14										
	Coverage of the Test Guidelines (Drafter: Office of the Union)			TC/50/5		TWP/xx/13			TC-EDC/Jan15/4	TC/51/15							x		TGP/7/5 Adopt	
	Use of Proprietary Photographs and Illustrations in Test Guidelines (Drafter: Office of the Union)											TWP/xx/13			x	x	x		TGP/7/5 Adopt	
	Regional Sets of Example Varieties (Drafter: Office of the Union)											TWP/xx/14			x	x	x		TGP/7/5 Adopt	
TGP/8	Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability	TGP/8/2 ADOPTED	see Appendix					TGP/8/2 Adopt	see Appendix					see Appendix					TGP/8/3 Adopt	
TGP/9	Examining Distinctness	TGP/9/1 ADOPTED																		
	TC Approved Revisions (document TC/50/5 Annex III)		TC-EDC/Jan14/2	TC/50/5	CAJ/69/3						CAJ/71/7								TGP/9/2 Adopt	
	Revision of Section 2.5: Photographs (Drafter: Beate Ruescher (Germany))					TWP/xx/22			TC-EDC/Jan15/13	TC/51/23	CAJ/71/7								TGP/9/2 Adopt	
	Method of Observation (single measurement - MG) Drafter (Office of the Union)					TWP/xx/22			TC-EDC/Jan15/13	TC/51/23	CAJ/71/7								TGP/9/2 Adopt	
	Schematic Overview of TGP Documents Concerning Distinctness Drafter (Office of the Union)					TWP/xx/22			TC-EDC/Jan15/13	TC/51/23	CAJ/71/7								TGP/9/2 Adopt	
TGP/10	Examining Uniformity	TGP/10/1 ADOPTED																		
	Assessing Uniformity by Off-Types on Basis of More than One Growing Cycle or on the Basis of Sub-Samples Drafter (Office of the Union)		TC-EDC/Jan14/23	TC/50/12		TWP/xx/9			TC-EDC/Jan15/6	TC/51/25		TWP/xx/9			x	x	x		TGP/10/2 Adopt	
TGP/11	Examining Stability	TGP/11/2 ADOPTED																		
TGP/12	Guidance on Certain Physiological Characteristics	TGP/12/2 ADOPTED																		
TGP/13	Guidance for New Types and Species	TGP/13/1 ADOPTED																		
TGP/14	Glossary of Terms Used in UPOV Documents	TGP/14/2 ADOPTED																		
	Section 2.4: Apex/Tip Characteristics Drafter (Office of the Union)					TWP/xx/23			TC-EDC/Jan15/24	TC/51/25	CAJ/71/7								TGP/14/3 Adopt	
TGP/15	Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)	TGP/15/1 ADOPTED																		

[Appendix follows]

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APPENDIX

PROGRAM FOR REVISION OF DOCUMENT TGP/8

Title of document	2014						2015						2016					
	TC-EDC	TC/50	CAJ/69	TWPs	CAJ/70	C/48	TC-EDC	TC/51	CAJ/71	TWPs	CAJ/72	C/49	TC-EDC	TC/52	CAJ/73	TWPs	CAJ/74	C/50
TGP/8 PART I: DUS TRIAL DESIGN AND DATA ANALYSIS																		
TC Approved Revisions (document TC/50/5 Annex II)		TC/50/5	CAJ/69/3			TGP/8/2 Adopt												
Minimizing variation due to different observers of the same trial (Drafter: Nik Hulse (Australia))	TC-EDC/Jan14/9	TC/50/21		TWP/xx/15			TC-EDC/Jan15/6	TC/51/16		TWP/xx/15			x	x	x			TGP/8/3 Adopt
TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION																		
TC Approved Revisions (document TC50/5 Annex II)		TC/50/5	CAJ/69/3			TGP/8/2 Adopt												
Method of Calculation of COYU (Drafter: Adrian Roberts (United Kingdom))	TC-EDC/Jan14/10	TC/50/22		TWP/xx/16			TC-EDC/Jan15/7	TC/51/17		TWP/xx/16			x	x	x			TGP/8/3 Adopt
Examining DUS in Bulk Samples (Drafter: Office of the Union)	TC-EDC/Jan14/12	TC/50/24		TWP/xx/17			TC-EDC/Jan15/8	TC/51/18		TWP/xx/17			x	x	x			TGP/8/3 Adopt
Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions (Drafter: Office of the Union)	TC-EDC/Jan14/13	TC/50/25		TWP/xx/18			TC-EDC/Jan15/9	TC/51/19		TWP/xx/18			x	x	x			TGP/8/3 Adopt
Guidance of Data Analysis for Blind Randomized Trials (Drafter: Richard Brand (France))	TC-EDC/Jan14/14	TC/50/26		TWP/xx/19			TC-EDC/Jan15/10	TC/51/20										
Examining Characteristics Using Image Analysis (Drafter: Jean Maisson (European Union))	TC-EDC/Jan14/15	TC/50/27		TWP/xx/20			TC-EDC/Jan15/11	TC/51/21							x			TGP/8/3 Adopt
Statistical Methods for Visually Observed Characteristics (Drafter: TWC to identify)	TC-EDC/Jan14/16	TC/50/28		TWP/xx/21			TC-EDC/Jan15/12	TC/51/22										

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