

TC/48/5

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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

TECHNICAL COMMITTEE

Forty-Eighth Session Geneva, March 26 to 28, 2012

TGP DOCUMENTS

Document prepared by the Office of the Union

- 1. The purpose of this document is: to report on developments concerning TGP documents, to provide background information to assist the Technical Committee (TC) in its consideration of individual TGP documents, and to present a tentative program for the development of TGP documents.
- 2. 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

3. The structure of this document is as follows:

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ANNEX I Background information concerning document TGP/12/2 DRAFT 1 "Guidance on Certain Physiological Characteristics"

ANNEX II Program for TGP documents

I. BACKGROUND

4. The purpose of document TG/1/3 "General Introduction to the Examination of Distinctness, Uniformity and Stability and the Development of Harmonized Descriptions of New Varieties of Plants" (General Introduction), and the associated series of documents specifying Test Guidelines' Procedures (TGP documents), is to set out the principles which are used in the examination of DUS. The only binding obligations for members of the Union are those contained in the UPOV Convention itself. However, on the basis of practical experience, the General Introduction and the TGP documents seek to provide general

guidance for the examination of all species in accordance with the UPOV Convention. In addition, UPOV has developed "Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability" (Test Guidelines), for many individual species or other variety groupings. The purpose of those Test Guidelines is to elaborate certain of the principles contained in the General Introduction and the associated TGP documents, into detailed practical guidance for the harmonized examination of DUS and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

- 5. As noted by the Chair at the fifty-fourth session of the Administrative and Legal Committee (CAJ), held in Geneva on October 16 and 17, 2006, the development of TGP documents in relation to the DUS examination may be seen as another element in the preparation of information materials concerning the UPOV Convention¹ and, in addition to being published in their own right, the TGP documents can be used in support of various UPOV activities. In particular, the General Introduction and the TGP documents will form the basis of an advanced module on "Examination of Applications for Plant Breeders' Rights" for inclusion in the Distance Learning program, which the Consultative Committee has entrusted the Office of the Union to develop.
- 6. The situation with regard to the development of TGP documents can be summarized as follows:

Document reference	Issue	Title	Issue date
TGP/0	/4	List of TGP Documents and Latest Issue Dates	October 20, 2011
TGP/1		General Introduction With Explanations	not yet issued
TGP/2	/1	List of Test Guidelines Adopted by UPOV	April 6, 2005
TGP/3		Varieties of Common Knowledge	not yet issued ²
TGP/4	/1	Constitution and Maintenance of Variety Collections	April 11, 2008
TGP/5		Experience and Cooperation in DUS Testing	
Introduction		Introduction	October 30, 2008
Section 1	/2	Model Administrative Agreement for International Cooperation in the Testing of Varieties	October 30, 2008
Section 2	/3	UPOV Model Form for the Application for Plant Breeders' Rights	October 21, 2010
Section 3	/1	Technical Questionnaire to be Completed in Connection with an Application for Plant Breeders' Rights	April 6, 2005
Section 4	/2	UPOV Model Form for the Designation of the Sample of the Variety	October 30, 2008
Section 5	/2	UPOV Request for Examination Results and UPOV Answer to the Request for Examination Results	October 30, 2008

The CAJ, at its fifty-second session, held in Geneva on October 24, 2005, agreed an approach for the preparation of information materials concerning the UPOV Convention, as explained in paragraphs 8 to 10 of document CAJ/52/4. It also agreed the establishment of an advisory group to the CAJ ("CAJ-AG") to assist in the preparation of documents concerning such materials, as proposed in paragraphs 11 to 14 of document CAJ/52/4 (see paragraph 67 of document CAJ/52/5, Report).

At its fifty-fifth session, held in Geneva on March 29, 2007, "[t]he CAJ endorsed the conclusion of the CAJ-AG that the General Introduction already provided guidance with respect to the term 'common knowledge' and that it would not be appropriate, for the time being, to pursue the development of document TGP/3 'Varieties of Common Knowledge'" (see document CAJ/55/7, paragraph 46).

Document reference	Issue	Title	Issue date
Section 6	/2	UPOV Report on Technical Examination and UPOV Variety Description	October 30, 2008
Section 7	/3	UPOV Interim Report on Technical Examination	October 30, 2008
Section 8	/1	Cooperation in Examination	April 6, 2005
Section 9	/1	List of Species in Which Practical Knowledge has Been Acquired or for Which National Test Guidelines Have Been Established	April 6, 2005
Section 10	/2	Notification of Additional Characteristics	October 20, 2011
Section 11	/1	Examples of Policies and Contracts for Material Submitted by the Breeder	October 30, 2008
TGP/6	/1	Arrangements for DUS Testing	
Section 1	/1	Introduction	April 6, 2005
Section 2	/1	Examples of Arrangements for DUS Testing	April 6, 2005
Section 3	/1	Declaration on the Conditions for the Examination of a Variety Based on Trials Carried Out by or on behalf of the Breeder	April 6, 2005
TGP/7	/3	Development of Test Guidelines	October 20, 2011
TGP/8	/1	Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability	October 21, 2010
TGP/9	/1	Examining Distinctness	April 11, 2008
TGP/10	/1	Examining Uniformity	October 30, 2008
TGP/11	/1	Examining Stability	October 20, 2011
TGP/12	/1	Guidance on Certain Physiological Characteristics	October 22, 2009
TGP/13	/1	Guidance for New Types and Species	October 22, 2009
TGP/14	/1	Glossary of Terms Used in UPOV Documents	October 21, 2010
TGP/15		[New Types of Characteristics] [Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)]	under development

The General Introduction, approved TGP documents and adopted Test Guidelines are published on the UPOV website at http://www.upov.int/upov_collection/en/.

II. DEVELOPMENT OF TGP DOCUMENTS

New TGP Document

TGP/15: [New Types of Characteristics] [Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)]

- see document TGP/15/1 Draft 2
- 7. The TC at its forty-seventh session held in Geneva from April 4 to 6, 2011, and the CAJ, at its sixty-third session held in Geneva on April 7, 2011, agreed that document TGP/15 should be developed separately, but in parallel, to document BMT/DUS on the basis that document BMT/DUS would provide a report on the development and consideration of all models within UPOV and that document TGP/15 would provide guidance for the use of those models that had received a positive assessment and for which accepted examples could be provided, i.e. Models "Characteristic-specific molecular markers" and "Combining phenotypic [characteristics] and molecular distances in the management of variety collections" for the time being. The TC and the CAJ agreed that the purpose of both documents should be clarified within the documents and noted that both documents would need to be adopted by the Council. The TC and CAJ also agreed that consideration should be given to how to maintain both documents in an efficient way (see document TC/47/26 "Report on the Conclusions", paragraph 16). At its forty-fifth ordinary session, held in Geneva on October 20, 2011, the Council adopted document BMT/DUS/1 "Possible use of Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)" on the basis of document BMT/DUS/1 Draft 6 (see document C/45/17 "Report on the Decisions", paragraph 21).
- 8. At its sixty-fourth session held in Geneva on October 17, 2011, the CAJ noted that the CAJ would be invited to consider document TGP/15/1 Draft 2 at its sixty-fifth session, in March 2012, and that the title of document TGP/15, currently "New Types of Characteristics", would need to be amended (see document CAJ/64/11 "Report on the Conclusions", paragraph 17).
- 9. The TC-EDC, at its session held in Geneva, on January 11 and 12, 2012, considered documents TC-EDC/Jan12/2 "TGP Documents" and TGP/15/1 Draft 1 and recommended that document TGP/15/1 Draft 1 should be redrafted (restructured) to provide the following:
 - firstly, to present the principles, including the assumptions which provided the basis for the positive assessment of the examples in the approved models; and
 - secondly, to provide practical experience in the form of examples in the implementation of the principles.

10. The TC is invited to consider document TGP/15/1 Draft 2 and the recommendation of the TC-EDC, as set out in paragraphs 7 to 9 above.

In accordance with the sequential numbering of information materials, the reference for document "Possible use of Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)" has been changed from "BMT/DUS/1" to "UPOV/INF/18/1".

Revision of TGP Documents

TGP/7: "Development of Test Guidelines"

• see document TC/48/18 "TGP/7: Development of Test Guidelines"

11. The TC is invited to consider the revision of document TGP/7 "Development of Test Guidelines" on the basis of document TC/48/18.

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

- see document TC/48/19 "TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability"
 - 12. The TC is invited to consider the revision of document TGP/8 "Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability" on the basis of document TC/48/19.

TGP/12: "Guidance on Certain Physiological Characteristics"

- see document TGP/12/2 Draft 2 "Guidance on Certain Physiological Characteristics" and Annex I to this document "Background Information Concerning Document TGP/12/2 Draft 2 'Guidance on Certain Physiological Characteristics".
- 13. The program for the development of TGP documents anticipates the adoption of the revision of document TGP/12/2 by the Council at its forty-sixth ordinary session to be held in Geneva on November 1, 2012. The French, German and Spanish translations of the original English text will be checked by the relevant members of the Editorial Committee prior to submission of the draft of document TGP/12/2 to the Council.
 - 14. The TC is invited to consider document TGP/12/2 Draft 2 and Annex I to this document as the basis for the adoption of document TGP/12/2 by the Council.

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

Revision of existing sections of document TGP/14

 see document TC/48/21 "Revision of Document TGP/14: Revision of existing Sections"

New Section for Color Characteristics

- see document TC/48/20 "Revision of Document TGP/14: New Section for Color Characteristics"
 - 15. The TC is invited to consider the revision of document TGP/14 "Glossary of Terms Used in UPOV Documents" on the basis of documents TC/48/21 and TC/48/20.

PROGRAM FOR THE DEVELOPMENT OF TGP DOCUMENTS

- 16. Annex II to this document proposes a program for the development of TGP documents on the basis of the program agreed by the TC at its forty-seventh session and the CAJ, at its sixty-fourth session (see documents TC/47/26 "Report on the Conclusions", paragraph 86, and document CAJ/64/11 "Report on the Conclusions", paragraph 14, respectively), and the discussions at the TWP sessions in 2011 and the recommendations of the TC-EDC at its meeting on January 11 and 12, 2012.
 - 17. The TC is invited to consider the program for the development of TGP documents, as set out in Annex II to this document.

[Annexes follow]

TC/48/5 ANNEX I

BACKGROUND INFORMATION CONCERNING DOCUMENT TGP/12/2 DRAFT 2

"GUIDANCE ON CERTAIN PHYSIOLOGICAL CHARACTERISTICS"

Introduction

- 1. At its forty-fifth session, held in Geneva from March 30 to April 1, 2009, the Technical Committee (TC) considered a proposal made by Mr. Kees van Ettekoven (Netherlands) at the forty-second session of the Technical Working Party for Vegetables (TWV), held in Cracow, Poland, from June 23 to 27, 2008, concerning the nomenclature of disease resistance. The TC agreed to invite the TWV to propose whether to include a section on the nomenclature of disease resistance in document TGP/14 "Glossary of Terms Used in UPOV Documents" or in a future revision of document TGP/12 "Guidance on Certain Physiological Characteristics".
- 2. At its forty-third session, held in Beijing, China, from April 20 to 24, 2009, the TWV considered documents TWV/43/13 "Nomenclature of Pathogens" and TWV/43/16 "Principles on the Use of Disease Resistance Characteristics in UPOV Test Guidelines" and concluded that the proposal should be presented to the TC and other Technical Working Parties (TWPs) for consideration for a possible future revision of document TGP/12/1 (document TGP/12/2). It also agreed that the states of expression for quantitative characteristics with three notes might be reviewed, if appropriate.
- 3. At its forty-sixth session, held in Geneva from March 22 to 24, 2010, the TC agreed that the TWV should develop a proposal for a revision of document TGP/12/1 in order to provide guidance on the nomenclature and use of disease resistance characteristics, as set out in paragraphs 1 and 2 above.

Comments of the Enlarged Editorial Committee (TC-EDC) in 2011

4. At its meeting on January 6, 2011, the TC-EDC proposed that the explanations for disease resistance characteristics in the Test Guidelines should refer to published methods rather than reproducing the methods in the Test Guidelines.

Comments of the Technical Committee in 2011

- 5. The Technical Committee, at its forty-seventh session, held in Geneva from April 4 to 6, 2011, considered document TC/47/23 "Revision of document TGP/12: Disease Nomenclature and Disease Resistance Characteristics".
- 6. The TC agreed that document TC/47/23, Annex I "Explanations for Disease Resistance Characteristics in the Test Guidelines" should be developed further with regard to states of expression for quantitative disease resistance characteristics.
- 7. With regard to the proposed standard disease resistance protocols in Section 2.4 of Annex I "Explanations for Disease Resistance Characteristics in the Test Guidelines" to document TC/47/23, the TC agreed that:
 - the information items that were not asterisked in the protocol should not be elaborated in detail in the Test Guidelines and should be replaced by a reference to the contact details for UPOV members that would be able to provide such information on request. The TC agreed that the asterisk symbol should be replaced in order to avoid confusion;
 - the explanations for disease resistance characteristics in the Test Guidelines should refer to published methods rather than reproducing the methods in the Test Guidelines;
 - it was important to recall that authorities could arrange for tests to be conducted by specialized laboratories and could also use cooperation with other UPOV members in order to address situations where the DUS testing center did not have suitable facilities for conducting the test, or was prevented from conducting such tests because of phytosanitary restrictions. It agreed that it would be useful for document TGP/12 to address such issues and agreed that Mr. Sergio Semon (European Union) should coordinate with Mr. Kees van Ettekoven (Netherlands) the preparation of document TGP/12 for the TWP sessions in 2011.

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- 8. The TC noted the proposals concerning the nomenclature of pathogens, as set out in Section 2.5 of Annex II "Explanations for Nomenclature of Pathogens in Test Guidelines" to document TC/47/23.
- 9. The TC agreed with the proposal concerning explanations for disease resistance characteristics in Test Guidelines, as set out in Annex I to document TC/47/23.

Comments of the Technical Working Parties at their sessions in 2011

- 10. At its fortieth session, held in Brasilia, Brazil, from May 16 to 20, 2011, the TWA considered document TWA/40/15 and noted the modifications made in the document prepared by the Netherlands contained in the Annex to that document. The TWA recommended that a section providing guidance on how to apply the Standard Resistance Protocol should be developed. The TWA proposed that the contents of subsection 2.3.2.1 in document TGP/12 in respect of quantitative characteristics should be replaced by a reference to the relevant section in document TGP/7 (see document TWA/40/23 "Report", paragraph 37).
- 11. At its twenty-ninth session, held in Geneva, Switzerland, from June 7 to 10, 2011, the TWC noted the information provided in document TWC/29/15 (see document TWC/29/31 "Report", paragraph 39).
- 12. At its forty-fifth session, held in Monterey, United States of America, from July 25 to 29, 2011, the TWV agreed with the proposal for explanations for disease resistance characteristics in Test Guidelines and nomenclature of pathogens, as presented in the Annex to document TWV/45/15, subject to the following:

2.4	to explain that the elements in bold font should not be presented in bold font in
	the Test Guidelines

(see document TWV/45/26 "Report", paragraph 41).

- 13. At its forty-fourth session, held in Fukuyama City, Hiroshima Prefecture, Japan, from November 7 to 11, 2011, the TWO noted the proposal for explanations for disease resistance characteristics in Test Guidelines and nomenclature of pathogens, as presented in the Annex to document TWO/44/15 (see document TWO/44/25 "Report", paragraph 37)
- 14. At its forty-second session, held in Hiroshima, Japan, from November 14 to 18, 2011, the TWF agreed with the proposal for explanations for disease resistance characteristics in Test Guidelines and nomenclature of pathogens, as presented in the Annex to document TWF/42/15.
- 15. The TWF considered document TWF/42/21 "Disease Resistance Characteristics in Test Guidelines for Fruit Crops" and agreed that, at the moment there is no pressing need to adopt further disease resistance testing within the fruit Test Guidelines, although their possible use could be limited to exceptional situations where the applicant declares that this would be the only distinguishing characteristic from an existing variety of common knowledge; thus the claimed disease resistance could be used as an additional characteristic on a case-by-case basis, once a recognized test methodology has been described, and with any extra costs linked to test being borne by the applicant. Notwithstanding, examiners and authorities should be attentive to the market and breeding effort being made in that direction in order that disease resistance test methods can be developed in good time if there is a sudden influx of fruit varieties being applied mostly for those distinguishing characteristics (see document TWF/42/26 Rev. "Revised Report", paragraphs 44 and 45).

Comments of the Enlarged Editorial Committee (TC-EDC) in 2012

- 16. The TC-EDC considered document TGP/12/2 Draft 1 and Annex I of document TC-EDC/Jan12/2 "TGP Documents". In relation to document TGP/12/2 Draft 1, the TC-EDC:
 - endorsed the proposal of the TWA to replace the content of subsection 2.3.2.1 with respect to
 quantitative characteristics by a reference to the relevant section in document TGP/7 (see document
 TWA/40/23 "Report", paragraph 37) and, as a consequence, further suggested to replace the content
 of subsection 2.3.2.2 by a reference to the relevant sections in documents TGP/7 and TGP/9;
 - endorsed the proposal of the TWV to explain in section 2.4 that "the elements in bold font should not be presented in bold in the Test Guidelines"-(see document TWV/45/26 "Report", paragraph 41) and the TC-EDC suggested to add that explanation at the end of subsection 2.4.1;

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- proposed to replace "End of test" in point 10.7 of the "Standard Resistant Protocol" by "Final observations"; and
- proposed to delete subsection 2.4.3 and the word "Introduction" in 2.5.1.
- 17. The comments of the Technical Working Parties at their sessions in 2011, as set out in paragraphs 10 to 16 of Annex I to this document and the proposals of the Enlarged Editorial Committee in 2012 have been incorporated in document TGP/12/2 Draft 2.

[Annex II follows]

Discription Colored						2011						2012						2013			
Figure F	Title of document		Current approved* documents	TC- EDC	TC/47	CAJ/63	TWPs	CAJ/64	C/45	TC. EDC	TC/48	CAJ/65	TWPs	CAJ/66	C/46	TC. EDC	TC/48	CAJ/65	TWPs	CAJ/66	C/46
Column C	List of TGP Documents and Latest Issue Dates		TGP/0/4 ADOPTED					1	TGP/0/4)raft 1 Adopt												
	General Introduction with Explanations			1	1	:	1	:	1		-	-	-		:		:			:	:
Chieffy Chie	List of Test Guidelines Adopted by UPOV		TGP/2/1 ADOPTED																		
Control Cont	Varieties of Common Knowledge		C(Extr.)/19/2 Rev.	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Notice and Strain B5 Section B2 Sectio	Constitution and Maintenance of Variety Collections	Collections	TGP/4/1 ADOPTED																		
Section 101 Section 102	Experience and Cooperation in DUS Testing	ing	ADOPTED																		
Column C	Section 10: Notification of Additional Characteristics	acteristics		Section 10/2 ; Draft 1	Section 10/2 Draft 2	Section 10/2 Draft 2		I	Section 10/2)raft 3 Adopt												
Control Cont	Arrangements for DUS Testing		TGP/6/1 ADOPTED																		
Column T.C.	Development of Test Guidelines		TGP/1/3 ADOPTED		IC/47/16-19		(revisions)	(revision)	TGP7/3 Adopt	(revision)	(revision)	(revision)	(revision)	!		(revision)	(revision)	(revision)	!		.GP/7/4 Adopt
Color Colo	Trial Design and Techniques Used in the Examination of Distinctness, Unformity and Stability			TC- EDC/Jan11/8			new sections & revisions)					i	(new sections & revisions)	!					(new sections & revisions)		GP/8/2 Adopt new section 2)
TGP121 TGP11A TGP1A	Examining Distinctness		TGP/9/1 ADOPTED																		
TGP111 TGP111 TGP111 TGP111 TGP111 TGP111 TGP111 TGP121 TGP122 TGP121 T	Examining Uniformity		TGP/10/1 ADOPTED																		
TCP/121 TC/4721 TC/4	Examining Stability		TGP/11/1 ADOPTED			TGP/11 /1 Draft 10		:	TGP/11/1 Draff 11 Adopt												
TGP/13/1	Guidance on Certain Physiological Characteristics			TC- EDC/Janl I/1	TC/47/23		new sections & revisions)			TGP/12/2 Draft 1	TGP/12/2 Draft 2	TGP/12/2 Draft 2			TGP/12/2)raft 3 / Adopt						
TCP14J1 TC Color revisions) Color revisions) Color revisions) Color revisions) Color revisions) Color revisions) TCP15J1 TCP15J1 <th< td=""><td>Guidance for New Types and Species</td><td></td><td>TGP/13/1 ADOPTED</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Guidance for New Types and Species		TGP/13/1 ADOPTED																		
TGP/15/1 TGP	Glossary of Terms Used in UPOV Documents		TGP/14/1 ADOPTED	TC- EDC/Jan11/1 5	FC/47/21, 22		(Color Subsection & revisions)	!		(Color Subsection & revisions)	(Color Subsection & revisions)	i	(Color Subsection & revisions)	!	!	(Color Subsection & revisions)	(Color Subsection & revisions)		(Color Subsection & revisions)	i	TGP/14/2 Adopt
	[New Types of Characterisies] [Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)]	ce on the Use of the Examination (DUS)]		X	X				X	TGP/15/1 Draft 1	TGP/15/1 Draft 2	TGP/15/1 Draft 2	TGP/15/1 Draft 3	:		TGP/15/1 Draft 4	TGP/15/1 Draft 5	TGP/15/1 Draft 5	:	i	TGP/15/1 Adopt

[End of Annex II and of document]