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|  |  | ETWC/31/3**ORIGINAL:**  EnglishDATE:  May 10, 2013 |
| INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS  |
| Geneva |

Technical working party on automation and computer programs

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tgp documents

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 The purpose of this document is to provide an overview of developments concerning TGP documents.

 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

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# I. BACKGROUND

 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.

 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 Convention[[1]](#footnote-2) 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.

 The situation with regard to the development of TGP documents can be summarized as follows:

| **Document reference** | **Issue** | **Title** | **Issue date** |
| --- | --- | --- | --- |
| TGP/0 | /5 | List of TGP Documents and Latest Issue Dates | November 1, 2012 |
| 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]](#footnote-3)*  |
| 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 |
| Section 6 | /2 | UPOV Report on Technical Examination and UPOV Variety Description | October 30, 2008 |
| Section 7 | /2 | 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 | /2 | Guidance on Certain Physiological Characteristics | November 1, 2012 |
| 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 |  | Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS) | not yet issued |

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. TGP DOCUMENTS FOR ADOPTION IN 2013

## (a) New TGP document

### (i) TGP/15: Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)

* see document TGP/15/1 Draft 4 : “Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)”

 The TC, at its forty-ninth session held in Geneva from March 18 to 20, 2013, considered document TGP/15/1 Draft 4. The TC agreed, subject to agreement by the CAJ at its sixty-seventh session, to be held in Geneva on March 21, 2013, to submit document TGP/15/1 Draft 5 “Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)” as the basis for adoption of TGP/15 by the Council, at its forty-seventh session, to be held on October 24, 2013. The TC noted that the editing of the original English text and the French, German and Spanish translations would be checked by the relevant members of the Editorial Committee (TC-EDC) prior to submission of the draft of document TGP/15/1 to the Council (see document TC/49/41 “Report on the Conclusions”, paragraphs 26 and 27).

 The TC noted that document TGP/15/1 could be revised in the future, for instance to incorporate additional examples for the models (see document TC/49/41 “Report on the Conclusions”, paragraph 28).

 In agreement with the conclusions of the TC at its forty-ninth session (see the Annex to document CAJ/67/13, paragraphs 1 to 3), the CAJ approved document TGP/15/1 Draft 4 as the basis for the adoption of document TGP/15/1 by the Council at its forty-seventh ordinary session to be held in Geneva on October 24, 2013 (see document CAJ/67/14 “Report on the Conclusions”, paragraph 30).

 The CAJ noted that the French, German and Spanish translations of the original English text would be checked by the relevant members of the Editorial Committee prior to submission of the draft of document TGP/15/1 to the Council (see document CAJ/67/14 “Report on the Conclusions”, paragraph 31).

 The CAJ noted that document TGP/15/1 could be revised in the future, for instance to incorporate additional examples for the models (see document CAJ/67/14 “Report on the Conclusions”, paragraph 32).

## (b) Revision of TGP Documents

### (i) TGP/14: Glossary of Terms Used in UPOV Documents

 The TC, at its forty-ninth session held in Geneva from March 18 to 20, 2013, considered documents TC/49/35 “Revision of existing sections of document TGP/14: Section 2: Botanical Terms, Subsection 2: Shapes and Structures” and TC/49/36 “Revision of document TGP/14: Section 2: Botanical Terms, Subsection 3: Color”. The TC agreed, subject to agreement by the CAJ at its sixty-seventh session, to be held in Geneva on March 21, 2013, to invite the Council to adopt document TGP/14/2 “Glossary of Terms Used in UPOV Documents”, at its forty-seventh session, to be held on October 24, 2013, on the basis of documents TC/49/35 and TC/49/36, subject to the following amendments (see document TC/49/41 “Report on the Conclusions”, paragraphs 29 and 30):

|  |  |
| --- | --- |
| document TC/49/35, Annex I, Section 1.5 | to amend “narrow” and “broad” to “long” and “short”  |
| document TC/49/36, Part IV, 4.1 “Schematic overview” and 4.2.1.2  | to amend “sharply” to “sharp”  |

 The TC noted that the updating of definitions of terms and indices, and the checking of the French, German and Spanish translations of the original English text by the relevant members of the TC-EDC, would be done prior to submission of the draft of document TGP/14/2 to the Council (see document TC/49/41 “Report on the Conclusions”, paragraph 31).

 The CAJ, at its sixty-seventh session, held in Geneva, on March 21, 2013, considered documents CAJ/67/11 “Revisions of existing sections of document TGP/14: Section 2: Botanical Terms, Subsection 2: Shapes and Structures” and CAJ/67/12 “Revision of document TGP/14: Section 2: Botanical Terms, Subsection 3: Color”, in conjunction with the conclusions of the TC at its forty-ninth session, as set out in paragraphs 4 to 6 of the Annex to document CAJ/67/13 (see document CAJ/67/14 “Report on the Conclusions”, paragraph 33).

 The CAJ agreed with the proposal of the TC to amend document CAJ/67/11, to read as follows:

|  |  |
| --- | --- |
| Annex I, Section 1.5 | to amend “narrow” and “broad” to “long” and “short”  |

(see the Annex to document CAJ/67/13, paragraph 5)

 The CAJ agreed with the proposal of the TC to amend document CAJ/67/12, to read as follows:

|  |  |
| --- | --- |
| Part IV, 4.1 “Schematic overview” and 4.2.1.2  | to amend “sharply” to “sharp”  |

(see the Annex to document CAJ/67/13, paragraph 5)

 Subject to the above changes, the CAJ approved documents CAJ/67/11 and  CAJ/67/12 as the basis for the adoption of document TGP/14/2 by the Council at its forty‑seventh ordinary session to be held in Geneva on October 24, 2013 (see document CAJ/67/14 “Report on the Conclusions”, paragraph 36).

 The CAJ noted that the updating of definitions of terms and indices, and the checking of the French, German and Spanish translations of the original English text by the relevant members of the Editorial Committee, would be done prior to submission of the draft of document TGP/14/2 to the Council (see document CAJ/67/14 “Report on the Conclusions”, paragraph 37).

### (ii) TGP/0: List of TGP documents and latest issue dates

 The TC, at its forty-ninth session held in Geneva from March 18 to 20, 2013, noted that the Council would be invited to adopt document TGP/0/6, in order to reflect the adoption of documents TGP/15/1 and TGP/14/2 (see document TC/49/41 “Report on the Conclusions”, paragraph 32).

 The CAJ, at its sixty-seventh session, held in Geneva, on March 21, 2013, noted that the Council would be invited to adopt document TGP/0/6, in order to reflect the adoption of documents TGP/15/1 and TGP/14/2 (see document CAJ/67/14 “Report on the Conclusions”, paragraph 38).

 *The TWC is invited to:*

 *(a) note the agreement of the TC and the CAJ to submit document TGP/15/1  “Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)” for adoption by the Council, at its forty-seventh session, to be held on October 24, 2013;*

 *(b) note the agreement of the TC and the CAJ to invite the Council to adopt document TGP/14/2 “Glossary of Terms Used in UPOV Documents” at its forty-seventh session, to be held on October 24, 2013; and*

 *(c) note that the Council will be invited to adopt document TGP/0/6, in order to reflect the adoption of documents TGP/15/1 and TGP/14/2.*

# III. MATTERS APPROVED BY THE TC FOR FUTURE REVISION OF TGP documents

 The TC has agreed that the following matters should be included in a future revision of the indicated TGP documents on the basis of the text approved by the TC, as follows:

## (a) TGP/7: Development of Test Guidelines

1. Coverage of Types of Varieties in Test Guidelines

(see document TC/47/26 “Report on the Conclusions”, paragraph 54)

1. Selection of Asterisked Characteristics

(see document TC/47/26 “Report on the Conclusions”, paragraph 59)

1. Standard References in the Technical Questionnaire

(see document TC/47/26 “Report on the Conclusions”, paragraph 68)

1. Applications for Varieties with Low Germination

(see documents TC/47/26 “Report on the Conclusions”, paragraph 60 and TC/48/22 “Report on the Conclusions”, paragraphs 38 and 39)

1. Procedure for the Development of Test Guidelines

(see document TC/48/22 “Report on the Conclusions”, paragraph 48)

1. Quantity of Plant Material Required

(see document TC/49/41 “Report on the Conclusions”, paragraph 35)

1. Minimum Quantity of Plant Material

(see document TC/49/41 “Report on the Conclusions”, paragraph 36)

1. Guidance on Number of Plants to be Examined (for Distinctness)

(see document TC/49/41 “Report on the Conclusions”, paragraph 40)

1. Guidance for Method of Observation

(see document TC/49/41 “Report on the Conclusions”, paragraph 42)

1. Example Varieties

(see document TC/49/41 “Report on the Conclusions”, paragraph 44)

1. Providing Photographs with the Technical Questionnaire

(see document TC/49/41 “Report on the Conclusions”, paragraph 46)

1. Duration of Test

(see document TC/49/41 “Report on the Conclusions”, paragraphs 78 and 79)

1. Number of Plants Required for Description

(see document TC/49/41 “Report on the Conclusions”, paragraph 82)

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

### Part I: DUS Trial Design and Data Analysis

1. New Section 2: “Data to be recorded”

(see document TC/49/41 “Report on the Conclusions”, paragraph 49)

1. New Section: “Reduction of Size of Trials”

(see document TC/49/41 “Report on the Conclusions”, paragraph 53)

### Part II: Techniques Used in DUS Examination

1. Section 3: “The Combined-Over-Years Criteria for Distinctness (COYD)”

(see document TC/49/41 “Report on the Conclusions”, paragraph 55)

1. Section 3, Subsection 3.6: “Adapting COYD to special circumstances”

(see document TC/49/41 “Report on the Conclusions”, paragraph 57)

1. Section 4: “2x1% Method-Minimum Number of Degrees of Freedom for the 2x1% Method”

(see document TC/49/41 “Report on the Conclusions”, paragraph 59)

## (c) TGP/9: Examining Distinctness

1. Guidance on Number of Plants to be Examined (for Distinctness)

(see document TC/49/41 “Report on the Conclusions”, paragraph 84)

1. Providing Photographs with the Technical Questionnaire

(see document TC/49/41 “Report on the Conclusions”, paragraph 47)

 *The TWC is invited to note the matters approved by TC for future revision of documents TGP/7, TGP/8 and TGP/9, as set out in paragraph 22.*

# Iv. MATTERS FOR discussion on FUTURE REVISION OF TGP documents

## TGP/5: Experience and Cooperation in DUS Testing: Section 10: Notification of Additional Characteristics

 The TC, at its forty-ninth session held in Geneva from March 18 to 20, 2013, agreed that a draft revision of document TGP/5 Section 10 be presented for consideration by the TC at its fiftieth session, subject to the conclusion of discussions on disclaimers on UPOV documents in the Consultative Committee (see document TC/49/41 “Report on the Conclusions”, paragraph 150).

## TGP/7: Development of Test Guidelines

 The following matters will be discussed on the basis of the indicated documents:

### Revision of document TGP/7: Additional Standard Wording for Growing Cycle for Tropical Species;

Considered in document TWC/31/9.

### Revision of document TGP/7: Source of Propagating material;

Considered in document TWC/31/10.

### Revision of document TGP/7: Indication of Growth Stage in Test Guidelines;

Considered in document TWC/31/11.

### Revision of document TGP/7: Providing Illustrations of Color in Test Guidelines;

Considered in document TWC/31/12.

### Revision of document TGP/7: Presence of Leading Expert at Technical Working Party Sessions;

Considered in document TWC/31/13.

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

 The following matters will be discussed on the basis of the indicated documents:

### Revision of document TGP/8: Part I: New Section: Minimizing the Variation due to Different Observers;

Considered in document TWC/31/14.

### Revision of document TGP/8: Part II: Method of Calculation of COYU;

Considered in document TWC/31/15.

### Revision of document TGP/8: Part II: New Section 10: Minimum Number of Comparable Varieties for the Relative Variance Method;

Considered in document TWC/31/16.

### Revision of document TGP/8: Part II: New Section 11: Examining DUS in Bulk Samples;

Considered in document TWC/31/17.

### Revision of document TGP/8: Part II: New Section: Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions;

Considered in document TWC/31/18.

### Revision of document TGP/8: Part II: New Section: Guidance of Data Analysis for Blind Randomized Trials;

Considered in document TWC/31/19.

### Revision of document TGP/8: Part II: New Section: Examining Characteristics Using Image Analysis;

Considered in document TWC/31/20.

### Revision of document TGP/8: Part II: New Section: Statistical Methods for Visually Observed Characteristics;

Considered in document TWC/31/23.

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

 The following matter will be discussed on the basis of the indicated document:

### Revision of document TGP/14: Section 2: Botanical Terms, Subsection 3: Color: Definition for “Dot”.

Considered in document TWC/31/21.

 *The TWC is invited to:*

 *(a) note the agreement of the TC that a draft revision of document TGP/5 Section 10 be presented for consideration by the TC at its fiftieth session, subject to the conclusion of discussions on disclaimers on UPOV documents in the Consultative Committee; and*

 *(b) note the matters for discussion on future revision of documents TGP/7, TGP/8 and TGP/14 that will be dealt with under separate documents, as set out in paragraphs 25 to 27.*

# v. PROGRAM FOR THE DEVELOPMENT OF TGP DOCUMENTS

 The Annex to this document presents the program for the development of TGP documents on the basis of the conclusions by the TC, as its forty-ninth session, and the CAJ, at its sixty-seventh session (see document TC/49/41 “Report on the Conclusions”, paragraph 87, and document CAJ/67/14 “Report on the Conclusions”, paragraph 39, respectively).

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

[Annex follows]

See Excel spreadsheet.

[Appendices follow]

See Excel spreadsheet.

 [Appendix II follows]

See Excel spreadsheet.

[End of Appendix II and of document]

1. 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). [↑](#footnote-ref-2)
2. 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). [↑](#footnote-ref-3)