



TC/38/8

ORIGINAL: English

DATE: February 8, 2002

**INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS**  
GENEVA

**TECHNICAL COMMITTEE**

**Thirty-Eighth Session**  
**Geneva, April 15 to 17, 2002**

DEVELOPMENT OF DOCUMENT TGP/7  
“DEVELOPMENT OF TEST GUIDELINES”

*Document prepared by the Office of the Union*

1. Document TGP/7 “Development of Test Guidelines” has been structured into four sections (see document TC/38/7, Annex I):

Ref.	Drafting by:	Title
TGP/7		<b>DEVELOPMENT OF TEST GUIDELINES</b> <i>(Coordinator: Mrs. Buitendag (ZA))</i>
Section 1	Office	<u>Guidance for Drafters of Test Guidelines</u>
Section 2	Office	<u>TG Template</u>
Section 3	Office	<u>Standardized UPOV Terms and Explanations</u>  Part 1: Types of Expression (Qualitative, Quantitative and Pseudo-Qualitative) of Characteristics  Part 2: Harmonized States of Expression and Notes of Characteristics
Section 4	Office	<u>Procedure for the Introduction and Revision of Test Guidelines</u>

2. During the course of 2001, the Technical Working Parties (hereinafter referred to as “the TWPs”) reviewed document TC/37/10, which contained a first draft of Section 1, “Guidance for Drafters of Test Guidelines,” and Section 2, “TG Template” of document TGP/7. In the time available, the TWPs were unable to complete discussion of the entire document TC/37/10. However, they were able to discuss, in full, the proposed TG Template being developed for Section 2. This section will contain the standard layout and minimum standard text to appear in *all* Test Guidelines (TG). On the basis of these discussions, the Office of the Union (hereinafter referred to as “the Office”), with the advice of the Enlarged Editorial Committee (hereinafter referred to as “the EEC”), has produced a revised draft TG Template (Annex I) for consideration by the Technical Committee (hereinafter referred to as “the Committee”). Background notes have also been provided to explain the basis for certain elements of the proposed template.

3. It is intended that the layout and text agreed by the Committee will be developed into an electronic version of the TG Template to be used as the starting point for all drafters of Test Guidelines. It is planned that a demonstration of such an electronic template, using PowerPoint, will be provided at the thirty-eighth session of the Committee.

4. As explained above, due to the lack of time in the TWPs, it was not possible to consider, in detail, the draft for Section 1 of document TGP/7, “Guidance for Drafters of Test Guidelines.” This section will provide guidance to drafters on how to develop individual Test Guidelines, starting from the template. It will provide guidance on matters such as how to decide on the appropriate number of plants to be examined, number of growing cycles, uniformity requirements, selection of grouping characteristics, etc. and, where possible, will provide some standard options. However, although it was not possible to consider the draft of this section in detail, the discussions in the TWPs have identified some important issues which should be considered by the Committee in April 2002, in order that an improved draft can be presented to the TWPs in 2002. These issues are presented in Annex II. The revised draft will incorporate the views of the Committee on these issues and other points raised by the TWPs in 2001.

5. The Office has not yet prepared a draft of Section 4, “Procedure for the Introduction and Revision of Test Guidelines;” however, discussions in the TWPs have raised some issues to be considered in its drafting. These are presented in Annex III. The Office will prepare a draft for Section 4, “Procedure for the Introduction and Revision of Test Guidelines,” for consideration by the TWPs in 2002 and presentation to the Committee in April 2003, taking into account the comments from the Committee on Annex III.

6. The Office will prepare a draft for Section 3, “Standardized UPOV Terms and Explanations,” for consideration by the TWPs in 2002 and presentation to the Committee in April 2003.

7. *The Committee is invited to:*

*(a) review the draft TG Template, presented in Annex I, and provide any necessary amendments for the establishment of an agreed “TG Template” (Section 2 of document TGP/7) to be used as the basis for all future Test Guidelines;*

*(b) make recommendations on the issues raised by the TWPs with regard to the development of “Guidance for Drafters of Test Guidelines” (Section 1 of document TGP/7), as explained in Annex II;*

*(c) make recommendations on the issues raised in Annex III with regard to the development of “Procedure for the Introduction and Revision of Test Guidelines” (Section 4 of document TGP/7); and*

*(d) note the planned schedule for the development of “Standardized UPOV Terms and Explanations” (Section 3 of document TGP/7).*

[Annex I follows]



TG/{...}<sup>a</sup>  
**ORIGINAL:**  
**DATE:**

**INTERNATIONAL UNION  
 FOR THE PROTECTION  
 OF NEW VARIETIES OF  
 PLANTS**

**UNION INTERNATIONALE  
 POUR LA PROTECTION  
 DES OBTENTIONS  
 VÉGÉTALES**

**INTERNATIONALER  
 VERBAND ZUM SCHUTZ  
 VON PFLANZEN-  
 ZÜCHTUNGEN**

**UNIÓN INTERNACIONAL  
 PARA LA PROTECCIÓN  
 DE LAS OBTENCIONES  
 VEGETALES**

<p>Main Common Name<sup>1</sup>          (E, F, G &amp; S)</p> <p>[types of ] <i>Latin name</i><sup>1</sup></p> <p>[UPOV Code]<sup>b</sup></p>
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## GUIDELINES

### FOR THE CONDUCT OF TESTS

### FOR DISTINCTNESS, UNIFORMITY AND STABILITY

*Alternative Latin Name(s)*<sup>1</sup>:  
 (if appropriate)

*Alternative Common Name(s)*<sup>1</sup>:  
 (if appropriate)

English	French	German	Spanish

## ASSOCIATED DOCUMENTS

These guidelines should be read in conjunction with 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” and its associated “TGP” documents.

{Other associated documents}<sup>c</sup>

<sup>1</sup> These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website ([www.upov.int](http://www.upov.int)), for the latest information.]

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## 1. SUBJECT OF THESE GUIDELINES

1.1 These Test Guidelines apply to all varieties of {...}.

## 2. MATERIAL REQUIRED

2.1 The competent authorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.

2.2 The material is to be supplied in the form of {...}.

2.3 The minimum quantity of plant material, to be supplied by the applicant, should be:

{...}

2.4 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease.

2.5 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment.<sup>d</sup> If it has been treated, full details of the treatment must be given.

## 3. METHOD OF EXAMINATION<sup>e</sup>

### 3.1 Duration of Tests

The minimum duration of tests should normally be {...}.

### 3.2 Testing Place

The tests should normally be conducted at one place. If any characteristics of the variety, which are [appropriate] / [relevant] for the examination of DUS<sup>f</sup>, cannot be seen at that place, the variety may be tested at an additional place.

### 3.3 Conditions for Conducting the Examination

The tests should be carried out under conditions ensuring satisfactory growth for the expression of the [relevant] characteristics of the variety and for the conduct of the examination.<sup>g</sup>

### 3.4 Test Design

3.4.1 The design of the tests should be such that plants or parts of plants may be removed for measurement or counting without prejudice to the observations which must be made up to the end of the growing cycle.

3.4.2 Each test should be designed to result in a total of, at least, {...} plants (which should be divided between {...} replicates – *if appropriate*).

### 3.5 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, all observations determined by measuring or counting<sup>h</sup> should be made on {...} plants or {...} parts taken from each of {...} plants.

### 3.6 Additional Tests

Additional tests, for examining relevant characteristics, may be established.

### ~~3.7 Unrelated and Very Atypical Plants~~<sup>i</sup>

## 4. **ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY**<sup>j</sup>

### 4.1 Distinctness

#### 4.1.1 General Recommendations

It is of particular importance for users of these Test Guidelines to consult the General Introduction and document TGP/9, “Examining Distinctness,” prior to making decisions regarding distinctness. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

#### 4.1.2 Consistent Differences

The minimum duration of tests recommended in section 3.1 reflects, in general, the need to ensure that any differences in a characteristic are [sufficiently]<sup>k</sup> consistent.

#### 4.1.3 Clear Differences

Determining whether a difference between two varieties is clear depends on many factors, and should consider, in particular, the type of expression of the characteristic being examined, i.e. whether it is expressed in a qualitative, quantitative, or pseudo-qualitative manner (*quote from document TG/1/3: currently document TC/38/5, Annex I, Chapter 5, section 5.3.3.2*)<sup>k</sup>. Therefore, it is important that users of these Test Guidelines are familiar with the recommendations contained in the General Introduction and document TGP/9, “Examining Distinctness,” prior to making decisions regarding distinctness.

### 4.2 Uniformity

It is of particular importance for users of these Test Guidelines to consult the General Introduction and document TGP/10, “Examining Uniformity,” prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

*{ recommended uniformity standards to be inserted }*

### 4.3 Stability

4.3.1 In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated

that, in general, when a variety has been shown to be uniform, it can also be considered to be stable. (*Quote from document TG/1/3: currently document TC/38/5, Annex I, Chapter 7, section 7.3.1.1*)<sup>k</sup>

4.3.2 In cases of doubt, stability may be tested, either by growing a further generation, or by testing a new seed or plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied. (*Quote from document TG/1/3: currently document TC/38/5, Annex I, Chapter 7, section 7.3.1.2*)<sup>k</sup>

## **5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL<sup>1</sup>**

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness is aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together. (*Quote from document TG/1/3: currently document TC/38/5, Annex I, Chapter 4, section 4.8*)<sup>k</sup>

5.3 The following have been agreed as useful grouping characteristics:

*{list grouping characteristics}*

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided in document TGP/9, "Examining Distinctness."<sup>m</sup>

## **6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS**

### **6.1 Categories of Characteristics**

#### **6.1.1 [Standard]<sup>k</sup> Test Guidelines Characteristics**

[Standard] Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which [Contracting Parties] [members of the Union] can select those suitable for their particular circumstances. (*Quote from document TG/1/3: currently document TC/38/5, Annex I, Chapter 4, section 4.8*)<sup>k</sup>

#### **6.1.2 Asterisked Characteristics**

Asterisked characteristics (denoted by \*) are those [included in the Test Guidelines] which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all [Contracting Parties] [members of the Union], except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate. (*Quote from document TG/1/3: currently document TC/38/5, Annex I, Chapter 4, section 4.8*)<sup>k</sup>



## 6.2 States of Expression and Corresponding Notes

States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording the description.

## 6.3 Types of Expression

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudo-qualitative) is provided in the General Introduction. (*Quote from document TG/1/3: currently document TC/38/5, Annex I, Chapter 4, section 4.8*)<sup>k</sup>

## 6.4 Example Varieties<sup>n</sup>

## 6.5 Legend:

(\*) Asterisked characteristic – see section 6.1.2

(QL) Qualitative characteristic – see section 6.3

(QN) Quantitative characteristic – see section 6.3

(PQ) Pseudo-Qualitative characteristic – see section 6.3

(+) See Explanations on the Table of Characteristics in Chapter 8.

(1) Where appropriate, the optimum stage of development for the assessment of the characteristic is indicated according to the scale described in Chapter 8.

(2) Where appropriate, the recommended method of observing the characteristic is indicated as follows:

MS: Measurement of a number of individual plants or parts of plants

MG: Measurement of a group of plants or parts of plants

VS: Visual assessment of a number of individual plants or parts of plants

VG: Visual assessment of a group of plants or parts of plants

## 7. TABLE OF CHARACTERISTICS

Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

Stage <sup>(1)</sup>	English	français	deutsch	español	Example Varieties	Note/
Stade <sup>(1)</sup>					Exemples	Nota
Stadium <sup>(1)</sup>					Beispielssorten	
Estadio <sup>(1)</sup>					Variedades ejemplo	
Observation <sup>(2)</sup>						
Erfassung <sup>(2)</sup>						
Observación <sup>(2)</sup>						

**8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS**

**9. LITERATURE**

## 10. TECHNICAL QUESTIONNAIRE

TECHNICAL QUESTIONNAIRE	Page {x} of {y} <sup>o</sup>	Reference Number:
		Application date: (not to be filled in by the applicant)
<b>TECHNICAL QUESTIONNAIRE</b> to be completed in connection with an application for plant breeders' rights		
<i>Applicants should note that the information provided in this Technical Questionnaire {...}</i> <sup>p</sup>		
1. Subject of the Technical Questionnaire <sup>q</sup>		
1.1 Latin Name	<input type="text"/>	
1.2 Common Name	<input type="text"/>	
2. Applicant <sup>r</sup>		
Name	<input type="text"/>	
Address	<input type="text"/>	
Telephone No.	<input type="text"/>	
Fax No.	<input type="text"/>	
E-mail address	<input type="text"/>	
Breeder (if different from applicant)	<input type="text"/>	
3. Proposed denomination and breeder's reference <sup>s</sup>		
Proposed denomination (if available)	<input type="text"/>	
Breeder's reference	<input type="text"/>	

**CONFIDENTIAL SECTION<sup>t</sup>**

4. Information on the origin and propagation of the variety<sup>u</sup>

4.1 Origin<sup>v</sup>

4.1.1 Variety resulting from:

- (a) controlled cross [ ]  
(please state parent varieties)
- (b) partially unknown cross [ ]  
(please state known parent variety(ies))
- (c) totally unknown cross [ ]

4.1.2 Mutation [ ]  
(please state parent variety)

4.1.3 Discovery [ ]  
(please state where, when and how developed)

4.1.4 Other [ ]  
(please provide details)

4.2 Method of Propagating the Variety<sup>w</sup>:

4.2.1 Seed propagated varieties

- (a) Self-pollinated [ ]
- (b) Cross-pollinated [ ]  
(i) population [ ]  
(ii) synthetic variety [ ]
- (c) Hybrid [ ]  
{...options...}
- (d) Other [ ]  
(please provide details)

4.2.2 Vegetatively propagated varieties<sup>x</sup>

{...options...} [... .. ...]

4.2.3 Other [ ]  
(please provide details)

TECHNICAL QUESTIONNAIRE	Page {x} of {y} <sup>o</sup>	Reference Number:
-------------------------	------------------------------	-------------------

5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note<sup>y</sup> which best corresponds).

Characteristics	Example Varieties	Note

6. Similar varieties and differences from these varieties<sup>z</sup>

Denomination(s) of similar variety(ies) to your variety	Characteristic(s) in which your variety differs from the similar variety(ies) <sup>o)</sup>	Describe the expression of the characteristic(s) for the <b>similar</b> variety(ies)	Describe the expression of the characteristic(s) for <b>your</b> variety
<i>(Example)</i>	<i>Plant: height</i>	<i>e.g. note 3</i>	<i>note 7</i>
		<i>e.g. short</i>	<i>tall</i>
		<i>e.g. 90 cm</i>	<i>130 cm</i>

<sup>o)</sup> ~~In the case of identical states of expressions of both varieties, please indicate the basis for considering that the varieties can be clearly distinguished.~~<sup>aa</sup>

TECHNICAL QUESTIONNAIRE	Page {x} of {y} <sup>o</sup>	Reference Number:
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7. Additional information which may help in the examination of the variety<sup>bb</sup>

7.1 In addition to the information provided in sections 5 and 6<sup>cc</sup>, are there any additional characteristics which may help to distinguish the variety?

Yes [ ] No [ ]

(If yes, please provide details)

[7.1.1 Resistance to pests and diseases]

[7.1.2 Other]

7.2 Special conditions for the examination of the variety

7.2.1 Are there any special conditions for growing the variety or conducting the examination?

Yes [ ] No [ ]

7.2.2 If yes, please give details:

7.3 Other information

8. Authorization for release

(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

If the answer to (b) is yes, please attach a copy of the authorization.

9. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:<sup>dd</sup>

Name

Signature

Date

**11. ANNEX TO THE TECHNICAL QUESTIONNAIRE<sup>ee</sup>**

		Reference Number:
<b>TECHNICAL QUESTIONNAIRE (ANNEX)</b> Information on Material to be Examined		
A1	Health status of material to be examined	
	Has the material to be examined been tested for the presence of virus disease?	
	Yes	<input type="checkbox"/> (please provide details)
	No	<input type="checkbox"/>
A2	Vegetatively propagated varieties only	
	Has the material to be examined been produced using “in vitro” propagation?	
	Yes	<input type="checkbox"/> (please provide details)
	No	<input type="checkbox"/>
<p>I hereby declare that, to the best of my knowledge, the information provided in this form is correct and that the material to be examined is free from any factors which may affect the expression of the characteristics of the variety.</p>		
Name	<input type="text"/>	
Signature	<input type="text"/>	Date <input type="text"/>

Notes



Example of current Test Guidelines' front page

TITRE ORIGINAL: English	
DATE: 2004.04.01	
TABLE OF CONTENTS	PAGE
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Example of current Test Guidelines' table of contents

- <sup>a</sup> Text presented as {...} indicates there will be a blank for completion in individual Test Guidelines.
- <sup>b</sup> The UPOV code should be included in the title box as soon as it is introduced.
- <sup>c</sup> This section would contain a reference to all relevant UPOV documents. This would include the General Introduction and its Associated “TGP” documents and any other documents of relevance, e.g. other Test Guidelines covering the same species.
- <sup>d</sup> The current standard text has been qualified to refer to any treatment “which would affect the expression of the characteristics of the variety.” This is to clarify that routine husbandry practice, e.g. pest and disease control treatments, do not need to be declared unless they would affect the expression of the characteristics of the variety.
- <sup>e</sup> The Technical Working Party for Fruit Crops (TWF) highlighted the difficulty in distinguishing between the previous chapters “Conduct of Tests” and “Methods and Observations.” This new chapter would combine these two old chapters and create clear sections. It has been suggested that the timing of examination of groups of characteristics and notes on the observation of color, currently included in “Methods and Observations,” should be moved to the chapter “Explanations on the Table of Characteristics.”
- <sup>f</sup> The wording used in previous Test Guidelines has been: “If any important characteristics of the variety cannot be seen at that place. ...” The word “important” reflected the use of the word in Article 6 of the 1978 Act of the Convention, which required that a variety must be clearly distinguishable by one or more important characteristics. However, the 1991 Act of the Convention does not use the word “important.” The new wording is proposed to provide consistency with all Acts of the Convention.
- <sup>g</sup> The wording used in previous Test Guidelines has been: “The tests should be carried out under conditions ensuring normal growth.” The proposed new wording reflects the fact that the conditions in the DUS test do not always result in normal growth. For example, the plant population is often much lower than appropriate for normal growth, to allow a thorough examination of individual plants. In other cases, abnormal conditions (e.g. growing out of season) may be necessary to explore certain relevant characteristics.



*Notes (continued)*

<sup>h</sup> Reference to weighing has been removed from the previous standard phrase "... all observations determined by measuring, weighing or counting. ...". It was noted that weighing is a form of measuring.

<sup>i</sup> There were some discussions on whether the Test Guidelines should include the extract from the General Introduction regarding "unrelated and very atypical plants:"

"6.5 Unrelated and Very Atypical Plants

"The test material may contain plants that are very atypical or unrelated to those of the variety. These are not necessarily treated as off-types, or part of the variety, and may be disregarded, and the test may be continued, as long as the removal of these very atypical or unrelated plants does not result in an insufficient number of suitable plants for the examination, or make the examination impractical. In choosing the term "may be disregarded," UPOV makes it clear that it will depend on the judgment of the crop expert. In practice, in tests conducted with a small number of plants, just one single plant could interfere with the test, and therefore should not be disregarded."

However, it is proposed that this would not be included.

<sup>j</sup> This is a new chapter which would explain how to approach the assessment of DUS beyond the Test Guidelines.

<sup>k</sup> The text will be modified to reflect the final wording in the General Introduction.

<sup>l</sup> The change of title from "Grouping of Varieties in the Growing Trial" is intended to reflect the fact that grouping characteristics can be used to decide which varieties of common knowledge can be excluded from the growing trial, in addition to deciding how best to arrange the varieties which need to be grown.

<sup>m</sup> Within the TWP's, there were many discussions on the purpose of grouping characteristics and the way in which they should be selected. It is proposed that this would be explored within document TGP/9 and incorporated in Section 1 of document TGP/7, "Guidance for Drafters of Test Guidelines."

<sup>n</sup> There have been extensive discussions within the TWP's regarding the role of example varieties. Further discussion of the issue, by the TC, is required before a standard text can be developed (see document TC/38/8).

The image shows a technical questionnaire form. At the top, it is titled "TECHNICAL QUESTIONNAIRE" with a reference number "Osteospermum\_2004/0445" and "DC". Below the title is a section labeled "X. Technical Questionnaire". The form is divided into several sections. The first section is a box for "Reference Number (one to be filled in by the applicant)". Below this is the title "TECHNICAL QUESTIONNAIRE" and a note "to be completed in connection with an application for plant breeder's rights". The form then has three numbered sections: 1. "Species (Osteospermum or Matis (DC) No.)" with "OSTEOSPERMUM" written below it; 2. "Applicant (Name and address)"; and 3. "Proposed denomination or breeder's reference".

*Example of current Test Guidelines' Technical Questionnaire*

*Notes (continued)*

<sup>o</sup> This header line has been inserted and will appear on each page of the Technical Questionnaire (TQ). It contains the reference number of the application and the page number, to ensure that recipients will know if any pages are missing.

<sup>p</sup> It is intended that this part of the Technical Questionnaire will be used for each authority to clarify for applicants the way in which the information they provide will be treated and, for example, what would happen if the information provided proved to be incorrect.

<sup>q</sup> Previous title was “Species.”

<sup>r</sup> The size of the box provided for details of the applicant has been increased and boxes provided for the detailed information.

<sup>s</sup> This section now prompts for both a proposed denomination and breeder’s reference.

<sup>t</sup> The Technical Working Party for Vegetables (TWV) proposed that Section 4 should be identified as a confidential section within the Technical Questionnaire. However, it was noted in some other TWPs that the confidentiality of this information, or not, would be a matter for each member of the Union to decide. Therefore, it would be inappropriate to specify this as confidential in the UPOV Technical Questionnaire.

<sup>u</sup> The wording used in previous Test Guidelines has been: “Information on origin, maintenance and reproduction of the variety.” The proposed new title reflects the fact that the 1991 Act of the Convention makes no reference to reproduction and refers to the features of propagation for consideration of uniformity and stability.

<sup>v</sup> Standard text has been proposed on the basis of discussions in the TWPs. It has been suggested that the introduction of specified types of origin, set out in paragraphs 4.1.1 to 4.1.4, would clarify the information required from breeders.

<sup>w</sup> The title is intended to clarify that it is the method of propagating the variety and not the natural system of reproduction for the species. The methods of propagation specified in subparagraphs (a) to (c) are those recognized in the General Introduction.

<sup>x</sup> Different options will need to be developed, in individual Test Guidelines, to reflect the use of systems, such as cuttings, tubers, in vitro methods, etc.

<sup>y</sup> “State of expression” has been replaced by “note” for consistency with the table which follows and because this corresponds to the heading in the Table of Characteristics.

<sup>z</sup> Previous title: “Similar varieties and differences between these varieties.” There is a general consensus in all TWPs that the current version is confusing for users. The Technical Working Party for Ornamental Plants and Forest Trees (TWO) considers the wording of its proposal would be more easily understood as, apart from the experts involved in the drafting and familiar with the UPOV terminology, few would understand the term “state of expression.”

6. Similar varieties and differences from these varieties			
Denomination of similar variety	Characteristic in which the similar variety is different <sup>oo</sup>	State of expression of similar variety	State of expression of candidate variety

<sup>oo</sup> In the case of identical states of expressions of both varieties, please indicate the size of the difference.

<sup>aa</sup> The TWO proposed to delete the footnote as it would not be understood by the applicant and would apply only in very rare cases. Even in those cases, the applicant would not know the exact states of expression of the Test Guidelines as he would not always have a copy of those Test Guidelines at hand and he would not really give the same expression in both columns.

*Notes (continued)*

<sup>bb</sup> Previous title was “Additional information which may help to distinguish the variety.” The additional information is sought to help in the examination and can go beyond assisting only the examination of distinctness.

<sup>cc</sup> This clarifies that there is only a need to provide information which has not already been provided in other sections of the Technical Questionnaire.

<sup>dd</sup> New section.

<sup>ee</sup> In general, it was agreed that information on the general status of the material to be examined was important and that the Technical Questionnaire should have a section for such information. In the past, this information has, in general, been included in Section 4 of the Technical Questionnaire. However, the TWF noted that this information related to the MATERIAL to be examined and not the VARIETY. It noted that the Technical Questionnaire is completed at the time of application and, at this time, the exact sample of material to be examined, and its health status, may not be known. Therefore, it proposed that a separate form should be created, which could be submitted with the Technical Questionnaire, or at a later time when the material to be examined had been decided.

[Annex II follows]

ANNEX II

ISSUES TO BE CONSIDERED BY THE TECHNICAL COMMITTEE  
REGARDING FURTHER DEVELOPMENT OF  
SECTION 1, "GUIDANCE FOR DRAFTERS OF TEST GUIDELINES"  
OF DOCUMENT TGP/7, "DEVELOPMENT OF TEST GUIDELINES"

I. Example Varieties

*Selection of Example Varieties*

1. At present, the proposed list of example varieties to be included in Test Guidelines is developed by the leading expert who is preparing the document. Where the Test Guidelines are drafted by two or more leading experts, this first proposal is agreed between them. The first proposed list reflects the situation in the country(ies) in which the leading expert(s) is (are) located. The appropriate TWP then discusses the proposals. The proposed list is not necessarily intended to be suitable on a worldwide basis; however, the proposed example varieties are removed if requested by the other experts in the TWP. In addition, during discussions in the TWP, an exchange of data and checking of the proposed list is undertaken (usually from one year to the next) to achieve general agreement on the set of example varieties and ensure they are representative.

2. During 2001, the TWPs and the Committee noted that, as UPOV expands, the agreement on the list of example varieties will become more difficult and each country may increasingly select its own set of example varieties. The following proposals have been made in response:

- (a) to provide more than one list of example varieties;
- (b) to provide further and more up-to-date information on the UPOV Web site;
- (c) to identify the location/region where a given set of example varieties had been tested;
- (d) define criteria for the selection of example varieties.

3. With the aim of highlighting the main concerns that UPOV is facing when selecting example varieties during the preparation of Test Guidelines, the expert of France prepared a text, which is contained in document TWA/29/20<sup>1</sup>. This paper and discussions in the TWPs have raised the following issues:

*Function of Example Varieties*

4. The latest draft of the General Introduction (see document TC/38/5, Annex I, Chapter 4, section 4.3, "States of Expression of Characteristics") states that:

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<sup>1</sup> See also documents TC/36/3, paragraphs 46 to 48; TC/36/11, paragraphs 76 to 83; TWA/29/20; TC/37/3, paragraphs 53 to 60, and TC/37/8, paragraph 62.

“Where appropriate (see document TGP/07, ‘Development of Test Guidelines’), example varieties are provided in the Test Guidelines to clarify the states of expression of a characteristic.”

This clarifies that at least one of the functions of example varieties is to clarify the states of expression of a characteristic. However, there have been some suggestions that this function might be better fulfilled by use of illustrations or photographs (see below “Use of Illustrations and Photographs”).

5. Discussions in the TWPs have also highlighted a view that another important function of example varieties might be to achieve international harmonization of variety descriptions. The latest draft of the General Introduction (see document TC/38/5, Annex I, Chapter 1, “Introduction”) makes reference to the importance of harmonized, internationally recognized descriptions of protected varieties in helping to provide effective protection. This has been further reinforced by the development of a project on the publication of variety descriptions (see document TC/38/10, “Publication of Variety Descriptions”). In most characteristics, with the exception of some qualitative characteristics, the influence of the environment means that there may be a need for example varieties to serve as a reference point for comparison of variety descriptions.

6. In developing Section 1 of document TGP/7, “Guidance for Drafters of Test Guidelines,” it will be necessary to clarify the function of example varieties within the Test Guidelines and whether they have an important role in the international harmonization of variety descriptions. If this is considered to be the case, it may be appropriate to provide particular guidance for example varieties of asterisked characteristics, since their particular function is the harmonization of variety descriptions (see document TC/38/5, Annex I, Chapter 4, section 4.8, “Functional Categorization of Characteristics”).

7. The Technical Working Party for Agricultural Crops (hereinafter referred to as “the TWA”) considered that the study on barley (document TWA/30/16), in particular, demonstrated the need to re-examine the procedure for selecting asterisked characteristics to achieve useful harmonized descriptions. It also raised the need to consider a wider range of example varieties and the need for more regular updating of example varieties. A presentation on wheat suggested that the selection of grouping characteristics needed further consideration since many appeared to have variable states of expression for the same variety.

8. The delegate of Denmark advised that he will be investigating whether it is possible to develop a statistical procedure to eliminate the variation in descriptions due to “country effects.” It was noted that one country effect is likely to be due to variation in recording the characteristics, and there was recognition of the need to improve the illustration of characteristics in the Test Guidelines to minimize this. In particular, it was suggested that photographs or diagrams should be used to illustrate characteristics, rather than reliance on example varieties for this purpose. However, it was noted that the example varieties were important for standardization of descriptions.

9. It was proposed that further studies should be undertaken on other crops and that, furthermore, a recommendation should be made to the Committee that such a study should always be undertaken as a part of the process of revising Test Guidelines. It was agreed that the Office, in consultation with the delegate of Denmark, should draft a model questionnaire for use in any further studies.

10. Germany agreed to undertake a study on winter oilseed rape (building on a related study presented in document TWA/30/12), Australia agreed to do the same for spring wheat and the United Kingdom will further develop its study on winter wheat. Reports will be presented at the TWA in 2002.

11. The TWA decided to set up a project for exchanging seed of selected varieties between interested countries, with descriptions to be produced by each or most participants in their countries. These descriptions would then be sent to a coordinator for a report to be produced. Projects were proposed for spring oats (coordinator: Sweden), lupins (coordinator: South Africa) and white clover (coordinator: New Zealand). A project for rice may be established if a coordinator can be identified. The Office will prepare a circular to identify all possible participants for these crops and then prepare a protocol in conjunction with the coordinators.

#### *Different Sets of Example Varieties*

12. Irrespective of any role in the harmonization of variety descriptions, there is sometimes a need to develop separate sets of example varieties within the same Test Guidelines. For example, there may be a need for separate sets of example varieties for different types of variety, e.g. winter and spring types, or regionally adapted types, covered by the same Test Guidelines.

13. In drafting document TGP/7, it will be necessary to consider how to present these different sets of example varieties. Two possible solutions have been mentioned. Firstly, it would be possible to change the layout of the Table of Characteristics from “portrait” style to “landscape” to create space for additional columns of example varieties. Secondly, the additional sets of example varieties might be presented as an annex to the Test Guidelines.

14. If the role of example varieties includes the harmonization of variety descriptions for the purpose of examining distinctness (e.g. in the management of variety [reference] collections), it will also be necessary to ensure that guidance on the introduction of separate sets of example varieties is provided in document TGP/7. This would be to ensure that careful consideration is given to the risk of descriptions of the same variety using the same Test Guidelines, but a different set of example varieties, inadvertently leading to wrong conclusions on distinctness.

#### *Use of Illustrations and Photographs*

15. As explained above, some experts believe that the role of clarifying the states of expression could be achieved more effectively with the use of illustrations and photographs, rather than by the use of example varieties. It may, therefore, be appropriate to omit the requirement for example varieties, where a suitable illustration or photograph is provided, in cases where the example varieties are not necessary for purposes of harmonization of variety descriptions. In particular, example varieties are not, in general, necessary for harmonization of descriptions of qualitative characteristics. Therefore, it has been suggested that they may not be the best method to clarify the states of expression for qualitative characteristics.

16. *The Committee is invited to consider:*

16.1. *Function of Example Varieties*

(a) *if the function of example varieties should include the aim of producing internationally harmonized variety descriptions, and if so:*

(b) *if document TGP/7 should contain particular guidance for selection of example varieties for asterisked characteristics; and*

(c) *if a study on the harmonization of variety descriptions, such as that conducted for barley, should be undertaken for asterisked characteristics as a part of the process of revising Test Guidelines.*

16.2. *Different Sets of Example Varieties*

(a) *if different sets of example varieties should be accepted within the Test Guidelines, and if so:*

(b) *if these should be presented within the main Table of Characteristics, or as an annex; and*

(c) *if document TGP/7 should contain guidance regarding the risks for possible wrong decisions on distinctness when based on variety descriptions developed using different sets of example varieties.*

16.3. *Use of Illustrations and Photographs*

*If it should be possible to omit the requirement for example varieties where a suitable illustration or photograph is provided and the example varieties are not necessary for the purposes of international harmonization of variety descriptions.*

## II. Handling a Long List of Characteristics

17. The latest draft of the General Introduction (see document TC/38/5, Annex I, Chapter 4, section 4.8, “Functional Categorization of Characteristics”) clarifies that the function of characteristics included in the Test Guidelines is to provide a list of UPOV accepted characteristics from which users can select those suitable for their particular circumstances. The criteria for inclusion in the Test Guidelines are that they must satisfy the basic requirements for a characteristic set out in the General Introduction (see document TC/38/5, Annex I, Chapter 4, section 4.2, “Selection of Characteristics”) and must have been used to develop a variety description by at least one member of the Union. Through the work of its TWPs, UPOV provides a system of “quality control” by ensuring that any characteristics included in the Test Guidelines meet these criteria.

18. The purpose and criteria set out above demonstrate the intention that the Test Guidelines should contain all characteristics which are suitable for examination of DUS and that there should be no restriction, on the inclusion of characteristics in Test Guidelines, on the basis of the degree of use. This intention is confirmed by recognition that, in the case of a long list of characteristics, an indication of the extent of use of each characteristic might be considered.

19. The TWA has suggested that the Committee should invite the TWPs to propose a scheme for handling Test Guidelines where there is a long list of characteristics. Proposals for indicating the extent of use of a characteristic and also for practical measures for structuring a large Table of Characteristics might be invited.

*20. The Committee is invited to request the TWPs to propose:*

*(a) practical measures for structuring a large Table of Characteristics;*

*(b) possible schemes for indicating the extent of use of a characteristic.*

## III. States of Expression for Quantitative Characteristics

21. For quantitative characteristics, the standard range for the states of expression is the full 1 to 9 scale, although this is sometimes presented in an incomplete way. The various versions are presented below:



Standard Range Version 1	Standard Range Version 2	Standard Range Version 3	Standard Range Version 4
1 (e.g. absent to very weak)	1 (e.g. absent to very weak)	-	-
3 (weak)	3 (weak)	3 (weak)	3 (weak)
5 (medium)	5 (medium)	5 (medium)	5 (medium)
7 (strong)	7 (strong)	7 (strong)	7 (strong)
9 (very strong)	-	9 (very strong)	-

(Where appropriate, the even states can also be presented)

22. In addition to this standard range, a “condensed” range, comprising notes 1 to 3, has also been accepted for quantitative characteristics (see document TC/26/4 Rev., Examples 24 to 32). This condensed range was introduced to address situations where the range has extreme states but, in practice, it is only possible to recognize a single intermediate state.

23. Thus, for example, the following range has been accepted in recent Test Guidelines:

<b>Condensed Range (current)</b>
1 (e.g. absent to very weakly expressed)
2 (weakly expressed)
3 (strongly expressed)

24. However, the Technical Working Party for Fruit Crops (TWF) considers that this presentation is rather asymmetrical since, in general, the difference between states 1 and 2 is rather small and the difference between states 2 and 3 rather large. It proposed that the currently accepted presentation should be replaced by the following:

<b>Condensed Range (new)</b>
1 (e.g. absent to weak)
2 (intermediate)
3 (strong)

25. It was noted that this presentation would be more compatible with the full 1 to 9 scale for quantitative characteristics, since it would be directly correlated as follows:

<u>Standard Range</u>	<u>Condensed Range (new)</u>
State 1 (absent to very weak)	} State 1 (absent to weak)
State 2	
State 3 (weak)	
State 4	} State 2 (intermediate)
State 5 (medium)	
State 6	
State 7 (strong)	} State 3 (strong)
State 8	
State 9 (very strong)	

26. It noted that the use of the term “intermediate” for state 2 would introduce some flexibility for cases where the state 2 would not lie at a mid-point between states 1 and 3, i.e. where the term “medium” might be inappropriate.

*27. The Committee is invited to consider if the new presentation of the condensed range for quantitative characteristics, proposed by the TWF, should replace the currently accepted presentation.*

[Annex III follows]

ANNEX III

ISSUES TO BE CONSIDERED BY THE TECHNICAL COMMITTEE  
REGARDING FURTHER DEVELOPMENT OF SECTION 4,  
“PROCEDURE FOR THE INTRODUCTION AND REVISION OF TEST GUIDELINES”  
OF DOCUMENT TGP/7, “DEVELOPMENT OF TEST GUIDELINES”

I. Parties Involved in the Drafting of Test Guidelines

1. The latest draft of the General Introduction (document TC/38/5, Annex I: Chapter 1, section 1.4) states that:

“The individual Test Guidelines are prepared by the appropriate Technical Working Party, which is composed of government-appointed experts from each member of the Union, with invited experts from other interested States and observer organizations. The main international non-governmental organizations in the field of plant breeding and the seed and plant industries are given the opportunity to comment on the drafts of Test Guidelines before their adoption, thus ensuring that the knowledge and experience of breeders and the seed and plant industries is taken into account. Once developed, the Test Guidelines are submitted for approval by the Technical Committee.”

This approach seeks to ensure that, as far as possible, the UPOV Test Guidelines are technically robust and the characteristics are harmonized with other interested States and organizations.

2. In addition to the consideration of Test Guidelines within the TWPs, there are circumstances where the development of Test Guidelines can benefit from consideration at other UPOV meetings. For example, the draft Test Guidelines for Rice and Chinese Cabbage have been discussed at the Regional Technical Meetings for Asian Plant Variety Protection Systems, most recently at the meeting held in Beijing from July 23 to 26, 2001. They will be discussed again at the Regional Technical Meeting in the Republic of Korea in 2002. In such circumstances, the comments from these meetings are reported to the relevant TWPs.

3. It should be emphasized that the participants at such regional technical meetings are also encouraged to participate at the relevant TWP meetings. However, it is recognized that, for practical and economic reasons, it is not always possible for experts to justify attendance at TWP meetings to discuss a particular crop. Regional meetings are an additional opportunity for experts, for a crop of particular regional importance, to meet and discuss the Test Guidelines. Together with the use of e-mail discussion groups, it offers UPOV the opportunity to improve the technical quality and harmonization of its Test Guidelines.

4. Discussions at the Regional Technical Meeting for Asian Plant Variety Protection Systems, held in Beijing from July 23 to 26, 2001, also highlighted the need for UPOV to clarify the opportunities for interested non-member States and observer organizations to initiate the process of introducing or revising Test Guidelines. Participants were informed that the process could be initiated, by such parties, through their attendance at the relevant TWP meeting but, where this was not possible, the process could be initiated by contacting an expert attending the relevant TWP meeting or by contacting the Office.

## II. Harmonization of Variety Descriptions

5. The Office informed the TWPs of the efforts it was making to find ways to harmonize variety descriptors with organizations, such as the International Plant Genetic Resources Institute (IPGRI). The Technical Working Party for Ornamental Plants and Forest Trees (TWO) advised that the Office should not restrict itself to just the Consultative Group on International Agricultural Research (CGIAR) institutes in its initiatives to improve the harmonization of variety descriptors.

6. The TWF reviewed the current situation regarding cooperation with the Tropical Fruit Network (TFNet). It was agreed that Japan would update the Office on their latest correspondence with TFNet. The Office, in conjunction with the TWF Chairman, would then consider how to take the matter forward. It would also advise TFNet that they were welcome to contact any UPOV member, or the Office, to arrange the drafting of Test Guidelines for crops of interest.

7. *The Committee is invited to:*

*(a) endorse the role of regional technical meetings in developing Test Guidelines of particular regional importance;*

*(b) endorse the possibilities for non-member States and observer organizations to initiate the process of introducing or revising Test Guidelines through experts attending the TWP meetings or the Office; and*

*(c) encourage, as far as possible, the involvement of interested organizations in the harmonization of variety descriptors.*

[End of Annex III and of document]