

TGP/7.2 Draft 1 ORIGINAL: English DATE: July 29, 2002

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

# Associated Document

<u>General Introduction to the Examination</u>
<u>of Distinctness, Uniformity and Stability and the</u>

Development of Harmonized Descriptions of New Varieties of Plants (document TG/1/3)

#### **DOCUMENT TGP/7**

#### "DEVELOPMENT OF TEST GUIDELINES"

**Section TGP/7.2: TG Template** 

Document prepared by the Office of the Union

to be considered by the

Technical Working Party for Vegetables (TWV), at its thirty-sixth session to be held in Tsukuba, Japan, from September 9 to 13, 2002

Technical Working Party for Agricultural Crops (TWA), at its thirty-first session to be held in Rio de Janeiro, Brazil, from September 23 to 27, 2002

Technical Working Party for Ornamental Plants and Forest Trees (TWO), at its thirty-fifth session to be held in Quito, from November 18 to 22, 2002

Technical Working Party for Fruit Crops (TWF), at its thirty-third session to be held in San Carlos de Bariloche, Argentina, from November 25 to 29, 2002

- 1. This document provides a template containing the universal standard wording which is appropriate for all UPOV Test Guidelines ("Test Guidelines"). The text presented here is, with the exception of Section 11 "Annex to the Technical Questionnaire" (Information on Material to be Examined), the text agreed by the Technical Committee at its thirty-eighth session, held in Geneva from April 15 to 17, 2002.
- 2. This document is also the basis for TGP/7.1 "Guidance Notes for Drafters of Test Guidelines" and references to the guidance provided in that document are made within the text. The guidance in document TGP/7.1 is provided in two ways:
  - (a) Firstly, TGP/7.1 provides additional, standard wording which is relevant for some, but not all, Test Guidelines. Where TGP/7.1 contains such additional standard wording, an insert is highlighted in the text of this document (TGP/7.2) at the appropriate location, e.g.

# {ASW 1 (TGP/7.2: Section 2.3) – seed quality requirements}

(b) Secondly, TGP/7.1 provides general guidance for drafters of Test Guidelines on how to develop the various aspects of the document. Where TGP/7.1 contains such guidance for drafters, an insert is highlighted in the text of this document (TGP/7.2) at the appropriate location, e.g.

{GN 2 (TGP/7.2: Section 1.1) – Subject of the Test Guidelines: More than one species}

3. The draft of Section 11 "Annex to the Technical Questionnaire" (Information on Material to be Examined) is presented here for comment by the members of the Technical Working Parties.



TG/{xx}
ORIGINAL: { xx}
DATE: {xx}

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

{Common Name(s)}

{Types of} {Latin name(s)}

#### **GUIDELINES**

### FOR THE CONDUCT OF TESTS

## FOR DISTINCTNESS, UNIFORMITY AND STABILITY

#### Alternative Names:\*

Latin	English	French	German	Spanish
$\{Latin\_name(s)\}$	{Common Name(s)}	{Common Name(s)}	{Common Name(s)}	{Common Name(s)}
${Alt\_Latin\_Name(s)}$	{Alt. Common Name(s)}	{Alt. Common Name(s)}	{Alt. Common Name(s)}	{Alt. Common Name(s)}

## 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" (hereinafter referred to as the "General Introduction") and its associated "TGP" documents.

OTHER ASSOCIATED UPOV DOCUMENTS: { GN 1 (COVER PAGE) – ASSOCIATED DOCUMENTS }

<sup>\*</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), for the latest information.]

# TABLE OF CONTENTS **PAGE** SUBJECT OF THESE GUIDELINES ......5 1. 2. MATERIAL REQUIRED ......5 METHOD OF EXAMINATION......5 Test Design \_\_\_\_\_\_6 ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY.......6 4.1 Distinctness 6 GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL ......7 INTRODUCTION TO THE TABLE OF CHARACTERISTICS ......8 6.1.2 Asterisked Characteristics 8 TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES......9 EXPLANATIONS ON THE TABLE OF CHARACTERISTICS ......10 8.

- 1. Subject of these Guidelines
- 1.1 These Test Guidelines apply to all varieties of

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{GN 2 (Section 1.1) - Subject of the Test Guidelines: More than one species }
{GN 3 (Section 1.1) - Subject of the Test Guidelines: Different types or groups within a species}
{GN 4 (Section 1.1) - Subject of the Test Guidelines: Family name }
{GN 5 (Section 1.1) - Guidance for New Types and Species }
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# 2. <u>Material Required</u>

- 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  $\{xx\}$ .
- 2.3 The minimum quantity of plant material, to be supplied by the applicant, should be:

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{ GN 6 (Section 2.3) –Quantity of plant material required }
{ ASW 1 (Section 2.3) – seed quality requirements }
```

- 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. If it has been treated, full details of the treatment must be given.
- 3. Method of Examination
- 3.1 Duration of Tests

The minimum duration of tests should normally be

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{ ASW 2 (Section 3.1) – number of growing cycles }
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3.2 Testing Place

The tests should normally be conducted at one place. If any characteristics of the variety, which are relevant for the examination of DUS, 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.

{ ASW 3 (Section 3.3) – information for conducting the examination of particular characteristics }

### 3.4 Test Design

## { GN 7 (Section 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 { ASW 4 (Section 3.4.2) plot design }
- 3.5 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, all observations determined by measuring or counting should be made on  $\{xx\}$  plants or  $\{xx\}$  parts taken from each of  $\{xx\}$  plants.

#### 3.6 Additional Tests

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

- 4. Assessment of Distinctness, Uniformity and Stability
- 4.1 Distinctness

#### 4.1.1 General Recommendations

It is of particular importance for users of these Test Guidelines to consult the General Introduction 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 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. Therefore, it is important that users of these Test Guidelines are familiar with the

recommendations contained in the General Introduction 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 prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

```
{ GN 8 (Section 4.2) – uniformity assessment } { ASW 5 (Section 4.2) – uniformity assessment }
```

- 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, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.
- 4.3.2 Where appropriate, or 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.

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{ ASW 6 (Section 4.3.3) – stability assessment of hybrid varieties }
```

- 5. Grouping of Varieties and Organization of the Growing Trial
- 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.
- 5.3 The following have been agreed as useful grouping characteristics:

```
{ GN 9 (Section 5.3) – Grouping characteristics }
```

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction.

## 6. <u>Introduction to the Table of Characteristics</u>

## 6.1 Categories of Characteristics

#### 6.1.1 Standard Test Guidelines Characteristics

Standard Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which members of the Union can select those suitable for their particular circumstances.

#### 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 members of the Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

## 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 of data and for the production and exchange of 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.

### 6.4 Example Varieties

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic.

# { GN 10 (Section 6.4) – Example varieties }

- 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.

 $\{xx\}$ 

# 7. <u>Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres</u>

```
{ GN 11 (Section 7) – Selecting a characteristic for inclusion in the Table of Characteristics } { GN 12 (Section 7) – Special characteristics } { GN 13 (Section 7) – New types of characteristics } { GN 14 (Section 7) – Table of Characteristics: Handling a long list of characteristics }
```

Char. No. (*) (+) (QL/QN/PQ)	Method of Examination	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
{ GN 15 Order of characteristics in the Table of Characteristics }		Heading of a		{ GN 21 Heading of a characteristic }	{ GN 21 Heading of a characteristic }		
{ GN 16 Asterisked characteristics }		expression of a	{ GN 22 States of expression of a characteristic }	{ GN 22 States of expression of a characteristic }	{ GN 22 States of expression of a characteristic }	{GN 10 Example varieties }	{ GN 23 Notes }
{ GN 17 Explanation of the characteristic }	{ GN 20 Growth stage }	expression of a	{ GN 22 States of expression of a characteristic }	{ GN 22 States of expression of a characteristic }	{ GN 22 States of expression of a characteristic }	{GN 10 Example varieties }	{ GN 23 Notes }
{ GN 18 Type of expression of the characteristic }	{Other}	expression of a	{ GN 22 States of expression of a characteristic }	{ GN 22 States of expression of a characteristic }	{ GN 22 States of expression of a characteristic }	{GN 10 Example varieties }	{ GN 23 Notes }

8. <u>Explanations on the Table of Characteristics</u>

 $\{xx\}$ 

9. <u>Literature</u>

 $\{xx\}$ 

# 10. <u>Technical Questionnaire</u>

TECHNICAL QUESTIONNAIRE		numbering to start with 1 Page {x} of {y}	Reference Number:
			Application date: (not to be filled in by the applicant)
		HNICAL QUESTIONN ction with an applicatio	NAIRE n for plant breeders' rights
1.	Subject of the Technical Ques	tionnaire	
	1.1 Latin Name {	Latin Name}	
	1.2 Common Name {	Common Name}	
2.	Applicant		
	Name		
	Address		
	Telephone No.		
	Fax No.		
	E-mail address		
	Breeder (if different from app	licant)	
3.	Proposed denomination and b	reeder's reference	
	Proposed denomination (if available)		
	Breeder's reference		

TECHNICAL QUESTIONNAIRE	numbering to start with I Page {x} of {y}	Reference Number:
TECHNICIE QUESTIONIME		Reference runnoer.

	Treatment (control training)				
4.	Information on the breeding scheme and propagation of the variety				
	4.1 Breeding Scheme				
	{ ASW 7 (Section TQ 4.1) – information on breeding scheme }				
	4.2 Method of Propagating the Variety				
	{ ASW 8 (Section TQ 4.2) – information on method of propagating the variety } { ASW 9 (Section TQ 4.2) – information on method of propagating hybrid varieties }				

TECHNICAL QUESTIONNAIRE	numbering to start with I Page {x} of {y}	Reference Number:
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5. Characteristics of corresponding character	f the variety to be inc ristic in Test Guidelines				
Characteristics			Example	e Varieties	Note
	n 10 - TQ: question 5) - election of TQ character				
6. Similar varieties a	and differences from the	se varieti	es		
Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	of the cl	the expression naracteristic(s) he <b>similar</b> riety(ies)	Describe the e of the charac for <b>your</b> ca variet	teristic(s) indidate
(Example)	Plant: height	e.g.	note 3	note 7	•
		e.g.	short	tall	
		e.g.	90 cm	130 cm	n

	numbering to start with 1	
TECHNICAL QUESTIONNAIRE	Page $\{x\}$ of $\{y\}$	Reference Number:

7.	Additional information which may help in the examination of the variety				
7.1	In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?				
	Yes	[ ] No [ ]			
	(If yes, p	please provide details)			
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 in	formation			
	{ ASV	7 10 (Section TQ 7.3) – where a photograph of the variety is to be provided }			
8.	Authori	zation for release			
8.	(a) D	zation for release  oes the variety require prior authorization for release under legislation concerning ection of the environment, human and animal health?			
8.	(a) D	oes the variety require prior authorization for release under legislation concerning ection of the environment, human and animal health?			
8.	(a) Do the prote	oes the variety require prior authorization for release under legislation concerning ection of the environment, human and animal health?			
8.	(a) Do the prote	oes the variety require prior authorization for release under legislation concerning ection of the environment, human and animal health?  es [ ] No [ ]  as such authorization been obtained?			
8.	(a) Do the protect Y (b) H	oes the variety require prior authorization for release under legislation concerning action of the environment, human and animal health?  es [ ] No [ ]  as such authorization been obtained?			
9. is con	(a) Do the protect You (b) How You If the are	oes the variety require prior authorization for release under legislation concerning ection of the environment, human and animal health?  es [ ] No [ ]  as such authorization been obtained?  es [ ] No [ ]			
9.	(a) Do the protection (b) How You If the arrow I hereby rect:	oes the variety require prior authorization for release under legislation concerning action of the environment, human and animal health?  es [ ] No [ ]  as such authorization been obtained?  es [ ] No [ ]  aswer to (b) is yes, please attach a copy of the authorization.			

# 11. <u>Annex to the Technical Questionnaire</u>

				Reference Number:		
	TECHNICAL QUESTIONNAIRE (ANNEX)					
	Information on Material to be Examined					
pestic	The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.					
1. factor	To the best of your kr	_		be examined free from any such cs of the variety?		
	Yes No	[ ]	(please provide detai	ls)		
2.	Has the material to be e	xamine	ed been tested for the p	resence of virus or other disease?		
	Yes No	[ ]	(please provide detail	ls)		
3.	Vegetatively propagate	d variet	ies only			
	Has the material to be e	xamine	ed been produced using	g "in vitro" propagation?		
	Yes No	[ ]	(please provide detail	ls)		
I hereby declare that, to the best of my knowledge, the information provided in this form is correct.						
	Name					
	Signature					