

UPOV

TG/115/4(proj.1)

ORIGINAL: English

DATE: June 24, 2004

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

GENEVA

DRAFT

TULIP

UPOV Code: TULIP\_

*Tulipa L.*

## GUIDELINES

## FOR THE CONDUCT OF TESTS

## FOR DISTINCTNESS, UNIFORMITY AND STABILITY

*prepared by an expert from the Netherlands*

*to be considered by the  
Technical Working Party for Ornamental Plants and Forest Trees at its  
thirty seventh session,  
to be held in Hanover, Germany from July 12 to 16, 2004*

Alternative Names: \*

<i>Latin</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Tulipa L.</i>	Tulip	Tulipe	Tulpe	Tulipán

The purpose of these guidelines (“Test Guidelines”) is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

## ASSOCIATED DOCUMENTS

These guidelines (“Test 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.

\* 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.]

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
1. SUBJECT OF THESE TEST GUIDELINES.....	3
2. MATERIAL REQUIRED .....	3
3. METHOD OF EXAMINATION.....	3
3.1 Number of Growing Cycles .....	3
3.2 Testing Place .....	3
3.3 Conditions for Conducting the Examination.....	3
3.4 Test Design .....	4
3.5 Number of Plants / Parts of Plants to be Examined.....	4
3.6 Additional Tests .....	4
4. ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY .....	4
4.1 Distinctness .....	4
4.2 Uniformity.....	5
4.3 Stability .....	5
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL .....	5
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS .....	6
6.1 Categories of Characteristics.....	6
6.2 States of Expression and Corresponding Notes.....	6
6.3 Types of Expression .....	6
6.4 Example Varieties .....	6
6.5 Legend.....	7
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES.....	8
8. EXPLANATIONS COVERING SEVERAL CHARACTERISTICS .....	16
8.1 Explanations covering several characteristics .....	16
8.2 Explanations for individual characteristics .....	16
9. LITERATURE .....	17
10. TECHNICAL QUESTIONNAIRE.....	18

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Tulipa L.*

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 flowerable bulbs of commercial size

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

30 bulbs

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 *Number of Growing Cycles*

The minimum duration of tests should normally be a single growing cycle

3.2 *Testing Place*

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 "Examining Distinctness".

3.3 *Conditions for Conducting the Examination*

3.3.1 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.

3.3.2 Type of observation – visual or measurement

The recommended method of observing the characteristic is indicated by the following key in the second column of the Table of Characteristics:

- MG: Single measurement of a group of plants or parts of plants  
MS: Measurement of a number of individual plants or parts of plants  
VG: Visual assessment by a single observation of a group of plants or parts of plants  
VS: Visual assessment by observation of individual plants or parts of plants

### 3.3.3 Observation of color by eye

Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within the tolerances set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background.]

## 3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 25 plants

3.4.2 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.

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

Unless otherwise indicated, all observations should be made on 10 plants or parts taken from each of 10 plants. In the case of parts of plants, the number to be taken from each of the plants should be one.

## 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 differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One means of ensuring that a difference in a characteristic, observed in a growing trial, is

sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

#### 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*

4.2.1 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:

4.2.2 For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95 % should be applied. In the case of a sample size of 30 plants, 1 off-type is allowed.

#### 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 plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

### 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 are 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:

- (a) Plant classification: groups (characteristic 1)
- (b) Flower: type (characteristic 11)
- (c) Flower: main color: RHS Colour Chart (characteristic 14)
- (d) Flower: main color Expression: according to the 50 groups mentioned in TGP/14.2.3 Draft 1 (characteristic 15)

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

## 6. Introduction to the Table of Characteristics

### 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.

6.5 *Legend*

(\*) Asterisk 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

(a) – (b) See Explanations on the Table of Characteristics in Chapter 8, Section 8.1

(+) See Explanations on the Table of Characteristics in Chapter 8, Section 8.2

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

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielsorten/ Variedades ejemplo	Note/ Nota
<b>1. (a) Plant: classification: groups</b>						
(*)						
(+)						
<b>QL</b>	single-flowered					1
	double-flowered					2
	lily-flowered					3
	fringed					4
	viridiflora					5
	parrot					6
	kaufmanniana					7
	fosteriana					8
	greigii					9
	miscellaneous					10
<b>2. (a) Plant: height</b>						
(*)						
<b>QN</b>	very short					1
	short					3
	medium					5
	tall					7
	very tall					9
<b>3. (a) Stem: anthocyanin coloration</b>						
(*)						
<b>QN</b>	absent					1
	present					9



	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>4. (*) (a)</b>	<b>Stem: position of anthocyanin coloration</b>					
<b>QN</b>	distal part only					1
	whole stem					2
<b>5. (*) (a)</b>	<b>Leaf: shape</b>					
<b>PQ</b>	linear					1
	narrow elliptic					2
	medium elliptic					3
	broad elliptic					4
	narrow ovate					5
	medium ovate					6
	broad ovate					7
	narrow obovate					8
	medium obovate					9
	broad obovate					10
<b>6. (*) (a)</b>	<b>Leaf: variegation</b>					
<b>QN</b>	absent					1
	present					9
<b>7. (*) (a)</b>	<b>Leaf: position of variegation:</b>					
<b>QL</b>	picotee					1
	margin					2
	pattern of dots					3
	pattern of stripes					4
	pattern of stripes and dots					5

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>8. (*) (a)</b>	<b>Leaf: color of variegation:</b>					
<b>PQ</b>	white					1
	yellow green					2
	yellow					3
	pink					4
	red					5
	purple					5
<b>9. (*) (a)</b>	<b>Leaf: undulation of margin</b>					
<b>QN</b>	absent					1
	present					9
<b>10. (*) (a)</b>	<b>Flower: number per stem</b>					
<b>QN</b>	one or two					1
	more than two					2
<b>11. (*) (a)</b>	<b>Flower: type</b>					
(+)	single					1
<b>QN</b>	double					2
<b>12. (*) (+)</b>	<b>Flower: length</b>					
<b>QN</b>	very short					1
	short					3
	medium					5
	long					7
	very long					9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>13.</b>	<b>(a) <u>Only single flower type varieties:</u></b>					
(*)	<b>Flower: shape</b>					
<b>PQ</b>	ellipsoid					1
	globose					2
	ovoid					3
	pear shaped					4
<b>14.</b>	<b>(b) Flower: main color</b>					
(*)						
(+)						
<b>PQ</b>	RHS Colour Chart					
	(Indicate reference number)					
<b>15.</b>	<b>(b) Flower: main color</b>					
(*)						
(+)						
<b>PQ</b>	Expression:according to the 50 groups mentioned in TGP/14.2.3 Draft 1					
<b>16.</b>	<b>(a) Flower: number of colors on outer side</b>					
(*)						
<b>QN</b>	one					1
	two					2
	three or more					3
<b>17.</b>	<b>(a) Flower: secondary color</b>					
(*)						
<b>QN</b>	absent					1
	present					9
<b>18.</b>	<b>(a) Flower: distribution of secondary color on outer side:</b>					
(*)						
<b>QL</b>	picotee					1
	marginied					2

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
	flamed					3
	flushed					4
	other					5
<b>19.</b>	<b>(a) Flower: fringe</b>					
<b>(*)</b>						
<b>QN</b>	absent					1
	present					9
<b>20.</b>	<b>(a) Flower: conspicuousness of fringe</b>					
<b>(*)</b>						
<b>QN</b>	weak					1
	medium					2
	strong					3
<b>21.</b>	<b>(a) Flower: position of fringe on tepals</b>					
<b>(*)</b>						
<b>QL</b>	top only					1
	all over the margin					2
	irregular					3
<b>22.</b>	<b>(a) Flower: shape of tip of outer tepal:</b>					
<b>(*)</b>						
<b>PQ</b>	acuminate					1
	acute					2
	rounded					3
	emarginate					4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>23.</b> (*)	<b>(a) Flower: color of middle third of <u>outer side of inner tepals</u></b>					
<b>PQ</b>	RHS Colour Chart  (indicate reference number)					
<b>24.</b> (*)	<b>Flower: color of middle third of <u>inner side of inner tepals</u></b>					
<b>PQ</b>	RHS Colour Chart  (indicate reference number)					
<b>25.</b> (*)	<b>(a) Flower: main color of macule on inner side of inner tepals</b>					
<b>PQ</b>	white					1
	yellow					2
	blue					3
	black					4
	brown					5
	green					
<b>26.</b> (*) (+)	<b>(a) Flower: different color of border of macule</b>					
<b>QN</b>	absent					1
	present					9
<b>27.</b> (*)	<b>(a) Stamen: number of colors of filament</b>					
<b>QN</b>	one					1
	two					2

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>28. (*)</b>	<b>(a) Stamen: color of basal half of filament</b>					
<b>PQ</b>	white					1
	light yellow					2
	medium yellow					3
	dark yellow					4
	purple					5
	blue					6
	black					7
<b>29. (*)</b>	<b>(a) Stamen: color of distal half of filament</b>					
<b>PQ</b>	white					1
	light yellow					2
	medium yellow					3
	dark yellow					4
	purple					5
	blue					6
	black					7
<b>30. (*)</b>	<b>(a) Stamen: color of pollen</b>					
<b>PQ</b>	yellow					1
	purple or black					2
	yellow and purple or black					3

---

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielsorten/ Variedades ejemplo	Note/ Nota
<b>31. (*)</b>	<b>(a) Plant: start of flowering</b>					
	early					1
	medium					2
	late					3

---

8. Explanations covering several characteristics

8.1 *Explanations covering several characteristics*

Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

- (a) characteristics which should be observed at the start of full flowering
- (b) characteristics which should be observed shortly before the flower opens for the first time

8.2 *Explanations for individual characteristics*

Ad 1. Plant: classification: groups

(derived from Classified List and International Register of Tulip names (see 9)).

1. Single-flowered group: single flowered but excluding group 3-10.
2. Double-flowered: double flowered but excluding group 3-10.
3. Lily-flowered group: Single flowered, mid season or late flowering, flowers with pointed reflexed tepals. Stem of variable length.
4. Fringed group: Single or double flowered tepals are edged with crystal shaped fringes, mid season or late flowering. Stem of variable length.
5. Viridiflora group: single flowered with partly greenish tepals. Late flowering. Stem of variable length.
6. Parrot group: single flowered with laciniate, curled and twisted tepals. Mainly late flowering. Stem of variable length.
7. Kaufmanniana group : *Tulipa kaufmanniana* with her cultivars, subspecies, varieties and hybrids, which resemble *T.kaufmanniana*. very earle flowering, sometimes with mottled foliage. Flower with multicolored base opens fully. Exterior normally with a clear carmine blush. Heigth up to 20 cm.
8. Fosteriana group:  
*Tulipa fosteriana* with her cultivars, subspecies, varieties, and hybrids which resemble *T.fosteriana*. Early flowering, leaves very broad, green or grey green, sometimes mottled or striped. Stem medium to long . Large long flower, base variable.
9. Greigii group:  
*Tulipa greigii* with her cultivars, subspecies, varieties, and hybrids which resemble *T.greigii*. Mostly with striped or mottled foliage, flowering later than *kaumanniana*. Leaves spreading normally on the ground, mostly strongly undulated. Flower shape variable or striped. Stem medium to long . Large long flower, base variable.
10. In fact not a cultivar group, but the collection of all species, varieties and their cultivars in which the wild species is evident, not belonging to any of the above mentioned cultivar groups.

Ad 11. Flower: Type Double varieties: varieties with 12 or more tepals

Ad 14. Flower: main color To be observed on the outer side of the flower, color groups derived from TGP/14.2.3



9. Literature

- Baker, Chr., Lemmers W. and E.Sweeney , 1999: 'A Photographer's Botanical', Artisan, New York, USA  
ISBN 1-57965-122-4
- Dobs, L, Perry, C. and C. Breed , 2002 : 'Tulipa', Quadrille Publishing Ltd. London, UK  
ISBN 1-903845-49-1
- Frank, R., 1986: 'Zwiebel und Knollengewächse' Eugen Ulmer Verlag, Stuttgart, DE  
ISBN 3-8001-6159-1
- Grunert,Chr., 1990:'Das grosse Blumenzwiebelbuch', Deutscher Landwirtschafts-  
verlag,Berlin, DE  
ISBN 3-331-00193-7
- Heath, Brent and Becky, 2001: 'Tulips for North American Gardens', Bright sky press,  
Albany, New York, USA  
ISBN 0-9704729-6-X
- Kreuzer, Joh., 1999: 'Kreuzers Gartenpflanzen-Lexicon', Band 4, Thalacker Medien,  
Thalacker Verlag, Braunsweig, DE  
ISBN 3-87815-140-3
- Le Nard, M. and A.A. de Hertogh,: 'Tulipa' in: 'The Physiology of flower bulbs', 1993,  
Chapter 35, p. 616-682.
- Scheepen, J.van, 1995: Cultivar groups in the genus *Tulipa L. (Liliaceae)*, Acta Hort.  
413, p. 137-143
- Scheepen, J.van, 1996 (comp.): Classified List and International Register of Tulip  
Names, KAVB, Hillegom, NL.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	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		
1. Subject of the Technical Questionnaire		
1.1 Botanical name	<input type="text" value="Tulipa L."/>	
1.2 Common name	<input type="text" value="Tulip"/>	
2. Applicant		
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		
Proposed denomination (if available)	<input type="text"/>	
Breeder's reference	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
-------------------------	-----------------	-------------------

#4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

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

4.1.2 Mutation  [ ]  
(please state parent variety)

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

4.1.4 Other  [ ]  
(please provide details)

4.2 Method of propagating the variety

---

# Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	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 which best corresponds).

Characteristics	Example Varieties	Note
<b>5.1 Plant: classification: groups</b> <b>(1)</b>		
single-flowered		1
double-flowered		2
lily-flowered		3
fringed		4
viridiflora		5
parrot		6
kaufmanniana		7
fosteriana		8
greigii		9
miscellaneous		10
<b>5.2 Flower: type</b> <b>(11)</b>		
single		1
double		2
<b>5.3 Flower: main color</b> <b>(14)</b>		
RHS Colour Chart		20
(Indicate reference number		
<b>5.4 Flower: main color</b> <b>(15)</b>		
Expression:accordingly to the 50 groups mentioned in TGP/14.2.3 Draft 1		
<b>5.5 Plant: start of flowering</b> <b>(31)</b>		
early		1
medium		2
late		3

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
-------------------------	-----------------	-------------------

6. Similar varieties and differences from these varieties

*Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knowledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.*

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	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> candidate variety
<i>Example</i>		<i>(example to be inserted) (example to be inserted)</i>	

Comments:

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, 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 information

A representative color photograph of the variety should accompany the Technical Questionnaire.

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.

# Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
-------------------------	-----------------	-------------------

9. Information on plant material to be examined.

9.1 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.

9.2 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 the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

- |   |         |        |
|---|---------|--------|
| (a) Microorganisms (e.g. virus, bacteria, phytoplasma)      | Yes [ ] | No [ ] |
| (b) Chemical treatment (e.g. growth retardant or pesticide) | Yes [ ] | No [ ] |
| (c) Tissue culture  | Yes [ ] | No [ ] |
| (d) Other factors   | Yes [ ] | No [ ] |

Please provide details of where you have indicated "yes".

.....

10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Applicant's name

Signature

Date

[End of document]