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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

HEUCHERA
HEUCHERELLA

UPOV Code: HEUCH;
HEUCH_TIA

Heuchera L.
x*Heucherella* H. R. Wehrh.

[*]

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from the United Kingdom

to be considered by the
Technical Working Party for Ornamental Plants and Forest Trees
at its forty-first session, to be held in Wageningen, Netherlands, from June 9 to 13, 2008

Alternative Names:[*]

Botanical name	*English*	*French*	*German*	*Spanish*
Heuchera L. x*Heucherella* H. R. Wehrh.	Heuchera Heucherella	Heuchera	Purpurglöckchen	.....

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 Test Guidelines should be read in conjunction with 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), for the latest information.]

TABLE OF CONTENTS PAGE

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Heuchera* L. and x*Heucherella* H. R. Wehrh., of the family *Saxifragaceae.*

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 young plants of commercial standard.

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

10 young plants.

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 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 10 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

3.5.1 Unless otherwise indicated, all observations should be made on 10 plants or parts taken from each of 10 plants and any other observations made on all plants in the test.

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 10 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) Leaf: main or only color (characteristic 36), with the following groups:

Gr. 1: white
Gr. 2: light yellow
Gr. 3: yellow
Gr. 4: yellow green
Gr. 5: light green
Gr. 6: medium green
Gr. 7: dark green
Gr. 8: yellow brown
Gr. 9: red
Gr. 10: red brown
Gr. 11: brown
Gr. 12: purple
Gr. 13: grey purple
Gr. 14: grey green

Gr. 15: grey

(b) Leaf: second color (characteristic 37), with the following groups:

Gr. 1: white
Gr. 2: light yellow
Gr. 3: yellow
Gr. 4: yellow green
Gr. 5: light green
Gr. 6: medium green
Gr. 7: dark green
Gr. 8: yellow brown
Gr. 9: red
Gr. 10: red brown
Gr. 11: brown
Gr. 12: purple
Gr. 13: grey purple
Gr. 14: grey green
Gr. 15: grey

(c) Flower: color of outer surface (characteristic 59), with the following groups:

Gr. 1: greenish
Gr. 2: white
Gr. 3: cream
Gr. 4: light pink
Gr. 5: medium pink
Gr. 6: dark pink
Gr. 7: red

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

(*) Asterisked characteristic – see Chapter 6.1.2

QL: Qualitative characteristic – see Chapter 6.3
QN: Quantitative characteristic – see Chapter 6.3
PQ: Pseudo-qualitative characteristic – see Chapter 6.3

(a)-(d) See Explanations on the Table of Characteristics in Chapter 8.1
(+) See Explanations on the Table of Characteristics in Chapter 8.2

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

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1.		**Plant: growth habit**					
PQ	**(a)**	upright					1
		rounded					2
		spreading					3
2. **(*)**		**Plant: height**					
QN	**(a)**	short					3
		medium					5
		tall					7
3.		**Plant: width**					
QN	**(a)**	narrow					3
		medium					5
		broad					7
4.		**Plant: density**					
QN	**(a)**	sparse					3
		medium					5
		dense					7
5. **(*)**		**Petiole: length**					
QN	**(b)**	short					3
		medium					5
		long					7
6.		**Petiole: pubescence**					
QN	**(b)**	absent or very weak					1
		weak					3
		medium					5
		strong					7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
7. **(*)**		**Petiole: color**					
PQ	**(b)**	RHS Colour Chart (indicate reference number)					
8. **(*)**		**Leaf: length**					
QN	**(b)**	short					3
		medium					5
		long					7
9. **(*)**		**Leaf: width**					
QN	**(b)**	narrow					3
		medium					5
		broad					7
10. **(*)**		**Leaf: length/width ratio**					
QN	**(b)**	low					3
		medium					5
		high					7
11. **(*)**		**Leaf: rugosity**					
QL	**(b)**	absent					1
		present					9
12.		**Leaf: intensity of rugosity**					
QN	**(b)**	weak					3
		medium					5
		strong					7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
13. **(*)**		**Leaf: glossiness**					
QL	**(b)**	absent					1
		present					9
14.		**Leaf: intensity of glossiness**					
QN	**(b)**	weak					3
		medium					5
		strong					7
15. **(*)**		**Leaf: pubecence**					
QL	**(b)**	absent					1
		present					9
16.		**Leaf: density of pubescence**					
QN	**(b)**	weak					3
		medium					5
		strong					7
17. **(*)**		**Leaf: pubescence of the <u>lower</u> surface**					
QN	**(b)**	absent or very weak					1
		weak					3
		medium					5
		strong					7
18. **(*)**		**Leaf: lobing**					
QL	**(b)**	absent					1
		present					9

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
19. **(*)**		**Leaf: depth of main lobes**					
QN	**(b)**	shallow					3
		medium					5
		deep					7
20.		**Leaf: apex**					
PQ	**(b)**	acute					1
		obtuse					2
		rounded					3
21. **(*)**		**<u>x Heucherella only</u>:** **Leaf: length of terminal lobe**					
QN	**(b)**	short					3
		medium					5
		long					7
22. **(*)**		**<u>x Heucherella only</u>:** **Leaf: width of terminal lobe at base**					
QN	**(b)**	narrow					3
		medium					5
		broad					7
23.		**<u>x Heucherella only</u>:** **Leaf: terminal lobe: ratio length/width at base**					
QN	**(b)**	low					3
		medium					5
		high					7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
24. **(*)**		**<u>x Heucherella only</u>:** **Leaf: width of terminal lobe at widest point**					
QN	**(b)**	narrow					3
		medium					5
		broad					7
25.		**<u>x Heucherella only</u>:** **Leaf: terminal lobe: ratio length/width at widest point**					
QN	**(b)**	low					3
		medium					5
		high					7
26. **(*)**		**Leaf: toothing of margin**					
QN	**(b)**	absent or very weak					1
		weak					3
		medium					5
		strong					7
27. **(*)**		**Leaf: undulation of margin**					
QN	**(b)**	absent or very weak					1
		weak					3
		medium					5
		strong					7
28. **(*)**		**Leaf: depth of undulation of margin**					
QN	**(b)**	shallow					3
		medium					5
		deep					7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
29. **(*)**		**<u>Young just expanded leaf</u>: main or only color**					
PQ	**(b)** **(c)**	RHS Colour Chart (indicate reference number)					
30. **(*)**		**<u>Young just expanded leaf</u>: second color**					
PQ	**(b)** **(c)**	RHS Colour Chart (indicate reference number)					
31. **(*)**		**<u>Young just expanded leaf</u>: second color: distribution**					
PQ	**(b)**	on the veins					1
	(c)	along the veins					2
		on and along the veins					3
		between the veins					4
		at the base					5
		basal zone					6
		on the margin					7
		marginal zone					8
		central zone					9
		central zone and along the veins					10
		intermediate zone					11
		random					12

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
32. **(*)**		**<u>Young just expanded leaf</u>: second color: total area**					
QN	**(b)**	small					3
	(c)	medium					5
		large					7
33.		**<u>Young just expanded leaf</u>: third color**					
PQ	**(b)**	RHS Colour Chart (indicate reference number)					
	(c)						
34.		**<u>Young just expanded leaf</u>: third color: distribution**					
PQ	**(b)**	on the veins					1
	(c)	along the veins					2
		on and along the veins					3
		between the veins					4
		at the base					5
		basal zone					6
		on the margin					7
		marginal zone					8
		central zone					9
		central zone and along the veins					10
		intermediate zone					11
		random					12

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
35.		**Young just expanded leaf: third color: total area**					
QN	**(b)**	small					3
	(c)	medium					5
		large					7
36. **(*)**		**Leaf: main or only color**					
PQ	**(b)** **(c)**	RHS Colour Chart (indicate reference number)					
37. **(*)**		**Leaf: second color**					
PQ	**(b)** **(c)**	RHS Colour Chart (indicate reference number)					
38. **(*)**		**Leaf: second color: distribution**					
PQ	**(b)**	on the veins					1
	(c)	along the veins					2
		on and along the veins					3
		between the veins					4
		at the base					5
		basal zone					6
		on the margin					7
		marginal zone					8
		central zone					9
		central zone and along the veins					10
		intermediate zone					11
		random					12

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
39. **(*)**		**Leaf: second color: total area**					
QN	**(b)**	small					3
	(c)	medium					5
		large					7
40.		**Leaf: third color**					
PQ	**(b)**	RHS Colour Chart (indicate reference number)					
	(c)						
41.		**Leaf: third color: distribution**					
PQ	**(b)**	on the veins					1
	(c)	along the veins					2
		on and along the veins					3
		between the veins					4
		at the base					5
		basal zone					6
		on the margin					7
		marginal zone					8
		central zone					9
		central zone and along the veins					10
		intermediate zone					11
		random					12
42.		**Leaf: third color: total area**					
QN	**(b)**	small					3
	(c)	medium					5
		large					7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
43.		**Leaf: fourth color**					
PQ	**(b)**	RHS Colour Chart (indicate reference number)					
	(c)						
44.		**Leaf: fourth color: distribution**					
PQ	**(b)**	on the veins					1
	(c)	along the veins					2
		on and along the veins					3
		between the veins					4
		at the base					5
		basal zone					6
		on the margin					7
		marginal zone					8
		central zone					9
		central zone and along the veins					10
		intermediate zone					11
		random					12
45.		**Leaf: fourth color: total area**					
QN	**(b)**	small					3
	(c)	medium					5
		large					7
46. **(*)**		**Leaf: color of <u>underside</u>**					
PQ	**(b)**	RHS Colour Chart (indicate reference number)					
	(c)						

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
47. **(*)**	**Inflorescence: form**					
PQ	spike					1
	simple raceme					2
	branched raceme					3
48. **(*)**	**Inflorescence: length including scape**					
QN	short					3
	medium					5
	long					7
49. **(*)**	**Infloresence: color of scape**					
PQ	RHS Colour Chart (indicate reference number)					
50. **(*)**	**Inflorescence: length of flowering part**					
QN	short					3
	medium					5
	long					7
51. **(*)**	**Inflorescence: width**					
QN	narrow					3
	medium					5
	broad					7
52. **(*)**	**Inflorescence: ratio length of flowering part/width**					
QN	low					3
	medium					5
	high					7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
53.		**Inflorescence: density of flowers**					
QN		sparse					3
		medium					5
		dense					7
54.		**Flower: attitude**					
QN	**(d)**	moderately upwards					3
		outwards					5
		moderately downwards					7
55. **(*)**		**Flower: length**					
QN	**(d)**	short					3
		medium					5
		long					7
56. **(*)**		**Flower: width**					
QN	**(d)**	narrow					3
		medium					5
		broad					7
57.		**Flower: shape**					
PQ	**(d)**	cylindrical					1
		campanulate					2
		urceolate					3
58.		**Petal: shape**					
PQ	**(d)**	filiform					1
		lanceolate					2
		elliptic					3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
59. **(*)**		**Flower: color of <u>outer</u> surface**					
PQ	**(d)**	RHS Colour Chart (indicate reference number)					
60.		**Flower: color of <u>inner</u> surface**					
PQ	**(d)**	RHS Colour Chart (indicate reference number)					
61. **(*)**		**<u>x Heucherella only</u>: Petal: color of <u>outer</u> surface**					
PQ	**(d)**	RHS Colour Chart (indicate reference number)					
62.		**<u>x Heucherella only</u>: Petal: color of <u>inner</u> surface**					
PQ	**(d)**	RHS Colour Chart (indicate reference number)					

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

Unless otherwise indicated, all characteristics should be observed at the time of full flowering.

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

(a) To be observed on the leaf rosette, excluding the flowering stems.
(b) Unless otherwise indicated, to be observed in mid summer on fully expanded leaves of the current season, on the upper surface of the blade.
(c) The main color is that with the largest surface area, the second is that with the second largest surface area, and so on.
(d) To be observed on fully open flowers from the middle third of the flowering part of the inflorescence.

8.2 Explanations for individual characteristics

9. Literature

Heims, D and Ware, G., 2005: Heucheras and Heucherellas, Coral Bells and Foamy Bells. Timber Press, Inc., Oregon.

Oliver, C. and M., 2006: Heuchera, Tiarella and Heucherella, A Gardener's Guide. B. T. Batsford Ltd., London.

10. Technical Questionnaire

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

	Application date: (not to be filled in by the applicant)

TECHNICAL QUESTIONNAIRE
to be completed in connection with an application for plant breeders' rights

1. Subject of the Technical Questionnaire (please indicate the relevant genus:)

1.1 Botanical name	*Heuchera* L. **[ ]**
1.2 Common name	Heuchera
1.1 Botanical name	x*Heucherella* H. R. Wehrh. **[ ]**
1.2 Common name	Heucherella

2. Applicant

Name	
Address	
Telephone No.	
Fax No.	
E-mail address	
Breeder (if different from applicant)	

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	
Breeder's reference	

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)

[#] 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:

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) cuttings [ ]
(b) *in vitro* propagation [ ]
(c) other (state method) [ ]

4.2.2 Seed [ ]

(a) Self-pollination [ ]

(b) Cross-pollination
(i) population [ ]
(ii) synthetic variety [ ]

(c) Hybrid [ ]
(please provide details)

(d) Other [ ]
(please provide details)

4.2.3 Other [ ]
(please provide details)

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
5.1 (2)	**Plant: height [excluding flowering stems]**		
	short		3
	medium		5
	tall		7
5.2 (19)	**Leaf: depth of main lobes**		
	shallow		3
	medium		5
	deep		7
5.3 (28)	**Leaf: depth of undulation of margin**		
	shallow		3
	medium		5
	deep		7

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

	Characteristics	Example Varieties	Note
5.4 (29)	**Young just expanded leaf: main or only color**		
	white		
	light yellow		
	yellow		
	yellow green		
	light green		
	medium green		
	dark green		
	yellow brown		
	red		
	red brown		
	brown		
	purple		
	grey purple		
	grey green		
	grey		

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

	Characteristics	Example Varieties	Note
5.4 (36)	**Leaf : main or only color**		
	white		
	light yellow		
	yellow		
	yellow green		
	light green		
	medium green		
	dark green		
	yellow brown		
	red		
	red brown		
	brown		
	purple		
	grey purple		
	grey green		
	grey		

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

	Characteristics	Example Varieties	Note
5.4 (37)	**Leaf: second color**		
	white		
	light yellow		
	yellow		
	yellow green		
	light green		
	medium green		
	dark green		
	yellow brown		
	red		
	red brown		
	brown		
	purple		
	grey purple		
	grey green		
	grey		

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

	Characteristics	Example Varieties	Note
5.4 (38)	**Leaf: second color: distribution**		
	on the veins		
	along the veins		
	on and along the veins		
	between the veins		
	at the base		
	basal zone		
	on the margin		
	marginal zone		
	central zone		
	central zone and along the veins		
	intermediate zone		
	random		
5.5 (59)	**Flower: color of <u>outer</u> surface**		
	greenish		1
	white		2
	cream		3
	light pink		4
	medium pink		5
	dark pink		6
	red		7

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 **similar** variety(ies)	Describe the expression of the characteristic(s) for **your** candidate variety
Example	*Leaf: color of upper surface*	*yellow brown*	*light green*

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

Yes [ ] No [ ]

(If yes, please provide 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 or submitted for examination.

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, pesticide) Yes [ ] No [ ]

(c) Tissue culture Yes [ ] No [ ]

(d) Other factors Yes [ ] No [ ]

Please provide details for 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]