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UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

CORIANDER

UPOV Code: **CORIAN_SAT**

Coriandrum sativum L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by the experts from Brazil

to be considered by the

Technical Working Party for Vegetables
at its forty fifth session, to be held in Monterey, California, United States of America,
from July 25 to 29, 2011

Alternative Names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Coriandrum sativum L.	Coriander, Cilantro, Collender, Chinese parsley	Coriander, Persil arabe	Koriander	Coriandro, Cilantro, Cilandrio, Culantro

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.]

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Blue and underlined: changes proposed in TVW/41 (project 1) and according revision of TPG/7

Blue and highlighted: changes proposed by interested experts

Italic and highlighted: comments made by interested experts

Bold and highlighted: comments made by Leading Expert on the comments made by interested experts

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Coriandrum sativum* 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 seeds.

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

100 g or 10,000 seeds;

The seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority. In cases where the seed is to be stored, the germination capacity should be as high as possible and should be stated by the applicant.

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 two independent growing cycles.

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 The optimum stage of development for the assessment of each characteristic is indicated by a number in the second column of the Table of Characteristics. The stages of development denoted by each number are described in Chapter 8.

3.4 Test Design

3.4.1 Each test should be designed to result in a total of at least 60 plants, which should be divided between two or more replicates.

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 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.

4.1.4 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 40 plants or parts taken from each of 40 plants and any other observations made on all plants in the test, disregarding any off-type plants.

4.1.5 Method of Observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the second column of the Table of Characteristics (see document TGP/9 "Examining Distinctness", Section 4, "Observation 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

Type of observation: visual (V) or measurement (M)

"Visual" observation (V) is an observation made on the basis of the expert's judgment. For the purposes of this document, "visual" observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, "G" provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness."

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

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 The assessment of uniformity for cross-pollinated varieties should be according to the recommendations for cross-pollinated varieties in the General Introduction.

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 further examined by testing a new seed stock to ensure that it exhibits the same characteristics as those shown by the initial 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) Flower: anthocyanin coloration (characteristic 12)

DE: Even though Char. 13 is given as QL in this draft, we are not sure whether Anthocyanin coloration is a suitable characteristic in Coriander.

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction and document TGP/9 “Examining Distinctness”.

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

6.2.1 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.

6.2.2 In the case of qualitative and pseudo-qualitative characteristics (see Chapter 6.3), all relevant states of expression are presented in the characteristic. However, in the case of quantitative characteristics with 5 or more states, an abbreviated scale may be used to minimize the size of the Table of Characteristics. For example, in the case of a quantitative characteristic with 9 states, the presentation of states of expression in the Test Guidelines may be abbreviated as follows:

State	Note
small	3
medium	5
large	7

However, it should be noted that all of the following 9 states of expression exist to describe varieties and should be used as appropriate:

State	Note
very small	1
very small to small	2
small	3
small to medium	4
medium	5
medium to large	6
large	7
large to very large	8
very large	9

6.2.3 Further explanation of the presentation of states of expression and notes is provided in document TGP/7 “Development of Test Guidelines”.

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

MG, MS, VG, VS - see Chapter 4.1.5

(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.	**VG**	**Seedling: anthocyanin coloration of hypocotyl**					
QN	**(a)**	absent or very weak				Santo	1
		weak				Americano, Asteca	3
		medium				Palmeira	5
		strong				HTV-9299, Tabocas	7
		very strong					9
		HU: Absent and present would be enough. Is it really so good visible characteristic that we can observe the intensity?					
2.	**VG**	**Cotyledon: shape**					
(+)							
PQ	**(a)**	narrow elliptic				Asteca, Santo	1
		medium elliptic				Palmeira, Tapacurá	2
		broad elliptic				Verdão	3
3.	**MS**	**Plant: height**					
(+)							
QN	**(b)**	short				Americano	3
		medium				Português, Tapacurá, Thüringer	5
		tall				Asteca	7
		HU: The height of Santo was 72-80 cm in our trial but it is example variety for short (3). I propose also the variety Thüringer (65-67 cm) as example for medium (5).					
		BR: Delete Santo and add Thüringer					

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
4. (*)	**VS**	**Plant: number of basal leaves**					
QN	**(b)**	few				to be provided other example variety	3
		medium				Santo, Supéria, Verdão	5
		many				Tapacurá	7

DE: A drawing would be fine, because Coriander has two types of leaves. Foliage leaves at the basal part and pinnate leaves at the upper part of the plant. For comparison see http://pharm1.pharmazie.uni-greifswald.de/allgemei/koehler/koeh-193.jpg *(I just found it in the internet and don't know if we could use it reagarding copy rights) Even on your picture for char. 3, you see both types of leaves.*

HU: There are already basal and stem leaf at the beginning of flowering (8.1.b). It is very important to observe the basal leaf not the stem leaf. We propose to keep the basal leaf expression or change the „at the beginning of flowering" (8.1.b) for „before the appearance of flower stem".

BR: Considering the DE and HU comments, I propose to return to the original characteristic"Plant: number of basal leaves". Regarding the period of evaluation I propose keep (b) because if we evaluate "before the appearance of flower stem" it´s more difficult to count only the basal leaves

5.	**VG**	**Plant: density of foliage**					
QN	**(b)**	sparse				Tapacurá	3
		medium				Americano, Asteca, Supéria, Verdão	5
		dense				HTV-9299, Santo	7

DE: "Density of leaves" might be a result of differences in "length of internodes", because a leave only grows at a node. Length of internodes would be easier to observe.

BR: Density of leaves result also of the number of basal leaves, length of leaves, size of leaf and leaflets… In addition, "Plant: density of foliage" is visually observed and length of internodes should be measured, what would make it harder to observe. Maybe would be better to observe before (b) stage. Maybe "before the appearance the flower stem"

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
6.	**VG**	**Foliage: coloration**					
QN	**(b)**	light green				to be provided an example variety	1
		green				Palmeira, Santo	3
		dark green				Tapacurá	5
7.	**VG**	**Basal leaf: structure of feathering**					
(+)							
PQ	**(b)**	fine				Delfino	1
		medium				HTV9299, Tabocas, Tapacurá, Verdão	2
		coarse				Santo, Supéria	3
		DE: Drawing would be fine. For comparison see Chamomille Guideline. Are pinnate leaves to be observed?					
		HU: Same as Ch.4. Delfino variety is example for fine (1). Don't you think that absent and present will be enough? Do you see really differences between medium and coarse?					
		BR: Considering the DE and HU comments, I suggest to return to the original characteristic "Basal Leaf: Structure of feathering". Insert Delfino as (1) and its picture in chapter 8-Ad.7 if HU agrees. Regarding the differences between medium and coarse we can analyze the pictures during the discussions and decide.					
8.	**VG/ MS**	**Leaf: size of terminal leaflet**					
(+)							
QN	**(b)**	small				Português	3
		medium				Asteca	5
		large				HTV-9299	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
9. **(+)**	**VG**	**Leaflet: density of incisions on margin**					
QN	**(b)**	sparse				Asteca, Santo	3
		medium				Americano, Tabocas, Tapacurá, Português, Supéria	5
		dense				HTV-9299, Palmeira, Verdão	7

DE: Drawing would be fine. For comparison see Chamomille Guideline. Are pinnate leaves to be observed?

BR: Insert pictures. Delfino would be sparse (1)?

10.	**VG**	**Leaflet: margin attitude**					
QN	**(b)**	downward				Asteca, HTV-9299, Português, Santo, Tabocas	1
		flat				Palmeira, Verdão	3
		upward				Supéria, Tapacurá	5
11. **(+)**	**MS**	**Petiole : length**					
QN	**(b)**	very short				UNAPAL Precoso	1
		short				Americano, Asteca	3
		medium				Português, Tapacurá	5
		long				Verdão	7
		very long				Tabocas	9

HU: I think the leaf length can be better than petiole (ch. 11.) because it is easier to observe ont he field. The observation has to be done on the developed basal leaf. (Leaf: length - short (3): Stimul (petiole:5-9cm; leaf: 10-17cm)/medium (5)/long (7): Delfino (petiole:8-11cm; leaf:13-29cm))

BR: To consider the change of characteristic

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
12. (*)	**VG**	**Flower: anthocyanin coloration**					
QL	**(c)**	absent				Santo, Tapacurá	1
		present					9
		DE: Should be discussed to deleted because the coloration is influenced by the age of the flower (from white to pink)					
		HU: Santo had anthocyanin color in our trial. Example for present (9): Caribe, Thüringer					
		BR: To consider the deletion of the charac.					
13.	**VG**	**Varieties with anthocyanin in the flowers only: intensity of anthocyanin coloration**					
QN	**(c)**	weak				Português, Superia	3
		medium				Verdão	5
		strong				Palmeira	7
		DE: Should be discussed to deleted because the coloration is influenced by the age of the flower (from white to pink)					
		HU: The intensity of flower is homogenous ? Some of our variety has a white petal if they are opened. The petal are pink in closed stage. I took this flowers as pink because it looks like pink in general but very light pink.					
		BR: To consider the deletion of the charac.					
14. (*)	**VG**	**Fruit: size**					
QN	**(d)**	small				Americano	3
		medium				HTV-9299, Tapacurá	5
		large				Palmeira, Verdão	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
15.	**VG**	**Fruit: intensity of brown color**					
QN	**(d)**	light				Asteca, Superia	3
		medium				Palmeira, Tabocas, Verdão	5
		dark				Português	7
16. (*) (+)	**VG**	**Fruit: shape**					
PQ	**(d)**	medium elliptic				Tabocas, Verdão	1
		broad elliptic				Americano, Asteca, HTV-9299, Palmeira, Santo, Superia, Tapacurá	2
		circular				Português	3
17.	**MG**	**Time of beginning of flowering (50% of plants with at least one flower)**					
QN		early					3
		medium				Tabocas, Tapacurá	5
		late				Americano, Santo, Supera	7

HU: Proposal for new characteristic:

Seed: weight of 1000 seeds (Delfino – small (3)/ Caribe, Hrubcicky – medium (5))

BR: Isn´t this characteristic too related to "17. Fruit: size"?

8. Explanations on the table of 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) All observations on the seedling characteristics should be done in the plant with the three first definitive leaves.

(b) Unless otherwise indicated, all observations on the plant, stem, foliage, leaf and leaflet should be done at the beginning of flowering. The observation on leaves and leaflets should be done in the fifth definitive leave.

(c) All observations on flowers should be made when 50% of the plants are with at least one flower opened.

(d) All observations on fruits should be made in the stage of dried seeds, collected in the first and second order umbells.

8.2 Explanations for individual characteristics

Ad. 2: Cotyledon: shape

1
narrow elliptic

2
medium elliptic

3
broad elliptic

Ad. 3: Plant: height

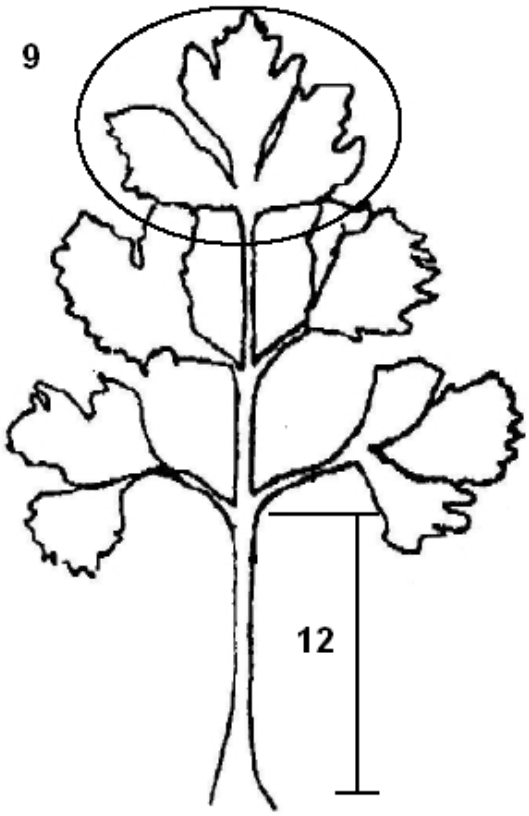
The assessment of the height of the plant should be made from the cotyledon node to the top of the highest leaf.

Plant: height

Ad. 7: Leaf: structure of feathering

PICTURE TO BE PROVIDED UNTIL TWV/45

Ad. 8: Leaf: size of terminal leaflet
Ad. 11: Petiole: length



Ad. 9: Leaflet: density of incisions on margin

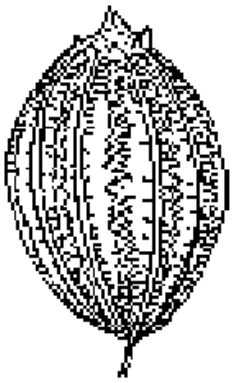
SUITABLE DRAWING TO BE PROVIDED UNTIL TWV/45

3	5	7
sparse	medium	dense

Ad. 10. Leaflet: margin attitude

PICTURE TO BE PROVIDED UNTIL TWV/45

Ad. 16: Fruit: shape

		
1 medium elliptic	2 broad elliptic	3 circular

9. Literature

DIEDERICHSEN, A. *Coriander (Coriandrum sativum* L.*). Promoting the conservation and use of underutilized and negleted crops*. 3. Rome: Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, 1996. 83 p.

Melo, P.C.T de ; Shirahige, F . H.; Negrini, A. C. A.; Wanderley Júnior, L. J. da G. Caracterização morfológica de estruturas vegetais de coentro *(Coriandrum sativum* L.*).*

Melo, P.C.T de ; Shirahige, F . H.; Negrini, A. C. A.; Wanderley Júnior, L. J. da G. Caracterização morfológica de estruturas reprodutivas e caracteres fenológicos de coentro *(Coriandrum sativum* L.*).*

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

1.1 Botanical name	*Coriandrum sativum* L.
1.2 Common Name	Coriander Cilantro Collender Chinese parsley

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)

(……..……..…)	x	(……..……..…)
female parent		male parent

(b) partially known cross [ ]
(please state known parent variety(ies))

(……..……..…)	x	(……..……..…)
female parent		male parent

(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 Seed-propagated varieties

(a) Self-pollination [ ]
(b) Cross-pollination
(i) population [ ]
(ii) synthetic variety [ ]
(c) Hybrid [ ]
(see below)
(d) Other [ ]

(please provide details)

4.2.2 Other [ ]
(please provide details)

In the case of hybrid varieties the production scheme for the hybrid should be provided on a separate sheet. This should provide details of all the parent lines required for propagating the hybrid e.g.

Single Hybrid

(……..……..)	x	(……..……..)
female parent		male parent

Three-Way Hybrid

(……..……..)	x	(……..……..)
female parent		male parent
(……..……..)	x	(……..……..)
single hybrid used as female parent		male parent

and should identify in particular:

(a) any male sterile lines

(b) maintenance system of male sterile lines.

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
5.2 (12)	**Flower: anthocyanin coloration**		
	absent	Santo, Tapacurá	1
	present		9

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			

Comments:

[#]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

[#] 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:

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. 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]