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UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

ALMOND *

UPOV Code: PRUNU_DUL

*Prunus amygdalus (*L) Focke.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from South Africa

to be considered by the Technical Working Party for Fruit Crops
at its fortieth session, to be held in Angers, France, from September 21 to 25, 2009

Alternative Names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Prunus amygdalus (L), *Prunus dulcis*	Almond			

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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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of vegetatively propagated fruit varieties of *Prunus amygdalus* (L.) and *Prunus dulcis.*

1. 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 budsticks.

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

- 5 budsticks with sufficient buds to propagate 5 trees (to be sent at budding time) or
- 5 dormant shoots for grafting, sufficient to propagate 5 trees (to be sent at grafting time); or
- 5 virus–tested one-year-old trees grafted on a rootstock selected by the testing authority.

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.

2. Method of Examination

3.1 Number of Growing Cycles

3.3.1 The minimum duration of tests should normally be two independent growing cycles.

3.3.2 The growing cycle is considered to be the duration of a single growing season, beginning with bud burst (flowering and/or vegetative), flowering and fruit harvest and concluding when the following dormant period ends with the swelling of new seasons buds.

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. In particular, it is essential that the plants produce a satisfactory crop of fruit in each of the two growing cycles.

3.4 Test Design

3.4.1 Each test should be designed to result in a total of at least 5 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 5 plants or parts taken from each of 5 plants. In the case of parts of plants, the number to be taken from each of the plants should be 2.

3.6 Additional Tests

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

3. 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 5 plants, no off-types are 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 seed or plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

4. 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:

To be decided on

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

5. 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

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

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

Do we want MG, MS, VG, VS in this guideline ?

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

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1.	**Tree: vigor**					
QN	weak				Marcona.Tuono	3
	medium				Nonpareil	5
	strong				Flour en bas,Barte	7
2.	**Tree: habit**	ZA proposes	I think your proposal is good!			
PQ	~~upright~~	upright			Fournat de Brezenaud	1
	~~slightly open~~	semi-upright			Ferragnes	2
	~~open~~	spreading			Ne Plus Ultra	3
	~~spreading~~	drooping			Primorskii	4
	~~drooping~~				Desmayo Largueta	5
3.	**Plant: aspect of bark**	This is not QN but QL, because of two status. How about considering to add new status „medium“ and to keep QN?				
QN	smooth				Barte	1
	cracked				Ferragnes	2
4.	**One-year-old shoot: thickness**					
QN	thin				Ai	3
	medium				Nonpareil	5
	thick				Texas, Primorski	7
5.	**One-year-old shoot: anthocyanin coloration**	Za proposes				
QL	absent	Combine with 6?	JP considering this proposal may be good. Because sometimes anthocyanin coloration is not QL but QN(i.e if very very weekly present, these two status are continuous). If combine with 6, status 1 may be better if not „abesnt“ but „absent or very weak“			1
	present				Desmayo Largueta, Texas	9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
6.		**One-year-old shoot: intensity of anthocyanin coloration**					
QN	**(a)**	weak				Desmayo Largueta	3
		medium				Barte	5
		strong				Texas, Marcona	7
7.		**One-year-old shoot: feathering**	ZA proposes	Should be harmonize with char.20 “pubescence” Cf: apple TG char.8: One-year-old shoot: pubescence			
QN		~~absent or very slight~~	absent or very weak			Barte	1
		~~slight~~	weak			Texas	3
		~~medium~~	medium			Desmayo Larguerta	5
		~~much~~	strong			Marcona	7
		~~very much~~	very strong			Ai	9
8.		**Time of leaf bud burst in relation to beginning of flowering:**	ZA proposes	I think “simultaneous” may be better. Because “medium” does not exist between bud burst and beginning of flowering in this case. Or “almost stimulaneous”,“almost same” may be correct (?).			
PQ		earlier				Cavaliera	3
		~~simultaneous~~	medium			Ferragnes	5
		later				Texas	7
9.		**Foliage: density**					
QN		loose	“sparse” may be better.			Fournat de Brezenaud	3
		medium				Nonpareil	5
		dense					7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
10.		**Leaf blade: length**					
QN	**(a)**	short				Ai	3
		medium				Primorskii	5
		long				Barte	7
11.		~~**Leaf blade: breadth**~~		ZA proposes Leaf blade:width	Your proposal is good!		
QN	**(a)**	narrow				Ai	3
		medium				Ne Plus Ultra	5
		broad				Barte	7
12.		~~**Leaf blade:**~~ ~~**length/breath**~~ ~~**ratio**~~		ZA proposes Leaf: ratio lenght/width	Your proposal is good!		
QN	**(a)**	~~low~~		small		Desmayo Largueta	3
		~~medium~~		medium		Texas	5
		~~high~~		large		Cristomorto	7
13.		~~**Leaf blade: color**~~		ZA proposes Leaf blade: green color	„ intensity of green color“ may be better. QN may be better than PQ		
PQ	**(a)**	~~light green~~		light		Barte	3
		~~medium green~~		medium		Nonpareil	5
		~~dark green~~		dark		Texas	7
14.		**Leaf blade: incisions of margin**					
QN	**(a)**	serrate					1
		crenate				Texas	2

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
15.		**Petiole: length**					
QN	**(a)**	short				Ferragnes	3
		medium				Primorskii	5
		long				Peerless	7
16.		**Flower bud: distribution**	ZA proposes:				
PQ	**(a)**	~~Rarely on spurs(10%)~~	predominantly on spurs			Nonpareil	1
		~~intermediate~~	equally on spurs and on one-year-old shoots			Ferragnes	2
		~~Almost always on spurs~~	predominantly on one-year-old shoots			Cristomorto	3
17.		**Flower bud: shape**					
PQ	**(a)**	conical				Ai	3
		ovoid				Desmayo Largueta	5
		circular				Cristomorto	7
18.		**Flower bud: color of tip of petals**		ZA proposes:			
PQ	**(a)**	~~white~~		white		Ardechoise	1
		~~pink white~~		pink		Barte	2
		~~pale pink~~		carmine		Ai	3
		~~pink~~				Marcona	4
		~~carmine~~				Trell	5
		~~white with carmine tip~~				Fournat de Brezenaud,	6

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
19.		**Flower bud: color of sepals**		ZA proposes:	"Main color" may be better, if more than one color exist.		
PQ	**(a)**	~~green~~		green		Cristomorto	1
		~~brown green~~		brown		Tuono	2
		~~red brown~~		red		Desmayo Largueta	3
		~~dark red~~				Ne Plus Ultra	4
20		~~**Flower bud: hairiness of sepals**~~		ZA proposes: Flower bud: pubescence of sepals			
QN		~~absent or very weak~~		absent or very weak		Marcona	1
		~~weak~~		weak		Ardechoise	3
		~~medium~~		medium		Barte	5
		~~strong~~		strong			7
		~~very strong~~					9
21.		**Time of beginning of flowering**		ZA proposes:	To move after char. 50 may be better		
QN		~~very early~~		very early		Cavaliera	1
		~~very early to early~~		early		Desmayo Largueta	2
		~~early~~		medium		Ne Plus Ultra	3
		~~early to medium~~		late		Nonpareil	4
		~~medium~~		very late		Fournat de Brezenaud	5
		~~medium to late~~				Drake	6
		~~late~~				Texas	7
		~~late to very late~~				Ferragnes, Ai	8
		~~very late~~				Tardy Nonpareil	9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
22.		**Flower: size**		ZA proposes			
QN	**(b)**	~~very small~~		small			1
		~~small~~		medium		Ardechoise	3
		~~medium~~		large		Primorskii	5
		~~large~~				Ai	7
		~~very large~~				Barte	9
23.		~~**Flower: shape of petals**~~		ZA proposes			
(+)				Petal:shape			
PQ	**(b)**	narrow elliptic		narrow elliptic	Volcani 5	Marcona	1
		elliptic		elliptic	Butte	Ardechoise	2
		~~broad elliptic~~		circular	Texas Mission	Texas	3
				rhombic	Volcani 59/4	Volcani 59/4	4
24. **(*)**		~~**Flower: color of petals**~~		ZA proposes			
				Petal:color			
PQ	**(b)**	~~white~~		white		Barte	1
		~~pink white~~		light pink		Ai	2
		~~pink~~		medium pink		Marcona	3
		~~dark pink~~		dark pink		Trell	4
25.		**Petal: undulation of margin**		ZA proposes new characteristic	Your proposal is good! Please check provided photographs, because I don't find difference between 1 and 3, 5 and 7.		
(+)							
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
26. **(old 25).**		**Flower: number of stamens**		"Stamen : number " (?)			
QN	**(b)**	few				Cristomorto	3
		medium				Ai	5
		many				Barte	7
27. **(old 26).**		**Flower: number of pistils**		ZA Proposes to delete			
		always one				Nonpareil	1
		sometimes two				Desmayo Largueta	2
		frequently two					3
28. **(old 27)**		**Flower: position of stigma compare with anthers**		ZAproposes Stigma: position in relation to anthers			
PQ	**(b)**	below				Drake	1
		same level				Ne Plus Ultra	2
		above				Desmayo Largueta	3
29. **(old 28)**		**Stamen: anthocyanin coloration of filament**					
QL	**(b)**	absent				Desmayo Largueta	1
		present				Tokyo	9
30. **(old 29)**		**Stigma: size**					
QN	**(b)**	small				Desmayo Largueta	3
		medium					5
		large				Ai	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
31. (old 30)		**Green fruit: size**					
QN	**(c)**	very small					1
		small				Texas	3
		medium				Nonpareil	5
		large				Ardechoise	7
		very large				Barte	9
32.		~~**Green fruit: shape**~~		ZA proposes			
(old 31)				Green fruit : general shape (in lateral view)			
(+)							
PQ	**(c)**	~~rounded~~		ovate		Marcona	1
		~~ovate~~		elliptic		Ai	2
		~~elliptic~~		circular		Ne Plus Ultra	3
		~~pointed~~		obovate		Ardechoise	5
33.		**Green fruit: shape of apex**		ZA propses new characteristic			
PQ	**(c)**	acute				Carmel	1
		obtuse				Price	2
		rounded				Texas Mission	3
34.		**Green fruit: pubescence**		ZA proposes:			
(old 32)							
QN	**(c)**	~~slight~~		weak		Khouki	3
		~~medium~~		medium		Desmayo Largueta	5
		~~much~~		strong		Ferraduel	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
35.		**Time of maturity**			To move after char. 50 may be better.		
(old 33)					Definition of this characteristic may be necessary.		
(*)							
QN		very early				Cavaliera	1
		early				Nonpareil	3
		medium				Ferragnes	5
		late				Marcona	7
		very late				Texas	9
36.		**Dry fruit: length**		ZA proposes			
QN	**(d)**	short					3
		medium					5
		long					7
37.		**Dry fruit: width in lateral view**		ZA proposes			
QN	**(d)**	narrow					3
		medium					5
		broad					7
38.		**Dry fruit: length/width in lateral view ratio**		ZA proposes	How about to read “ratio length/width in lateral view”		
QN	**(d)**	small					3
		medium					5
		large					7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
39.		~~**Dry fruit: shape**~~		ZA proposes			
(old 34)				Dry fruit: general shape (in lateral view)			
(+)							
PQ	**(d)**	~~Type 1~~		ovate		Montrone,Marcona	1
		~~Type 2~~		elliptic		Catuccia	2
		~~Type 3~~		circular		Nonpareil	3
		~~Type 4~~		obovate		Ne Plus Ultra	4
40.		**Dry fruit: shape of apex**		ZA proposes			
(old 35.)							
(*)							
PQ	**(d)**	~~flat~~		acute		~~Marcona~~	1
		~~rounded~~		obtuse		~~Ai~~	2
		~~pointed~~		rounded		~~Cristomorto~~	3
41.		**Dry fruit: thickness of endocarp**					
(old 36)							
QN	**(d)**	thin				Nonpareil	3
		medium				Ferragnes	5
		thick				Barte	7
42.		**Dry fruit: resistance to cracking**	In the case of „resistance“, statuses are weak-strong may be better. If low-high, not resistance but frequency may be better. What do you think?				
(old 37).							
QN	**(d)**	very low				Nonpareil	1
		low				Princess	3
		medium				Texas	5
		high				Desmayo Largueta	7
		very high				Barte	9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
43.		**Dry fruit: keel development**			What is keel ?(sorry I have no knowledge)		
(old 38)							
QN	**(d)**	absent or very weak				Drake	1
		weak				Marcona	3
		medium					5
		strong				Ardechoise	7
		very strong					9
44.		**Dry fruit: percentage of double kernels**		ZA proposes			
(old 39)							
QN	**(d)**	~~nil or very low~~		absent or very low	Your proposal is good!	Marcona	1
		low		low		Nonpareil	3
		medium		medium			5
		high		high		Ne Plus Ultra	7
		very high		very high		Texas	9
45.		**Kernel: shape**		ZA propose to delete	Is it always just same with dry fruit?		
(old 40)					And I think shape of kernel itself may be important		
(+)PQ							
		narrow elliptic		(Same as dry fruit)		Jordanolo	3
		elliptic				Desmayo	5
		broad elliptic				Ai	7
		very broad elliptic				Marcona	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
46.	**Kernel: size**					
(old 41)						
QN	very small				Kapareil	1
	small				Texas	3
	medium				Nonpareil	5
	large				Ferragnes	7
	very large				Barte	9
47.	**Kernel: thickness**		ZA propose to delete			
(old 42)						
QN	very thin				A la Dame	1
	thin				Nonpareil	3
	medium				Ne Plus Ultra	5
	thick				Texas	7
	very thick					9
48.	**Kernel: main color**		ZA proposes	Do they really exist “yellow”, “red”?		
(old 43)						
PQ	~~yellow~~		yellow		Nonpareil	1
	~~yellow brown~~		brown			2
	~~light brown~~		red			3
	~~red brown~~				Texas	4
	~~dark chestnut brown~~				Marcona	5

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
49. **(old 44)**	**Kernel: intensity of color**		Do two dimensional matorix (char. 48 and 49) clearly stand?			
QN	light				Nonpareil	
	medium				Texas	
	dark				Marcona	
50. **(old 45)**	**Kernel: rugosity**		ZA proposes	Your proposal is good!		
QN	~~Very weak~~		weak			1
	~~Weak~~		medium		Nonpareil	3
	~~Medium~~		strong		Texas	5
	~~Strong~~				Ardechoise	7
	~~Very strong~~					9

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 bud, the leaf and the shoot should be made at the central third of the shoot. The observations on the leaves should be made on mature leaves from current season's shoots.

(b) All observations on the flower should be made at the time of full flowering.

(c) All observations on the green fruit should be done 80 days after full flowering.

(d) All observations on the dry fruit should be done after splitting or cracking of the flesh of the green fruit.

8.2 Explanations for individual characteristics

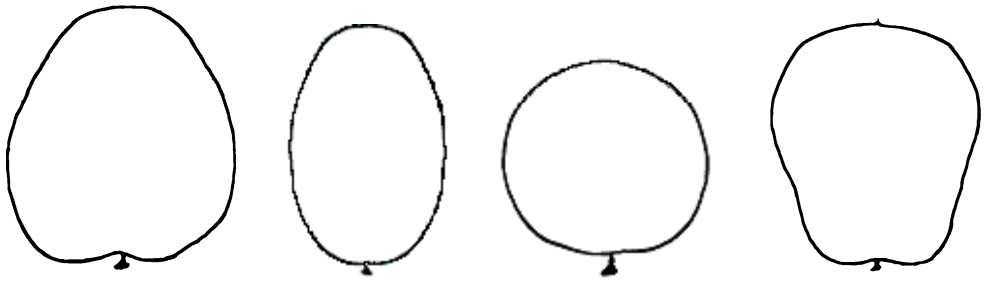
Ad. 23: Petal: shape

1	2	3	4
narrow elliptic	elliptic	circular	rhombic

Ad. 25: Petal: undulation of margin

1	3	5	7
absent or very weak	weak	medium	strong

Ad. 32: Green fruit: general shape in lateral view
Ad. 39: Dry fruit: general shape in lateral view



1	2	3	4
ovate	elliptic	circular	obovate

Ad. 40: Dry fruit: shape of apex

1	2	3
acute	obtuse	rounded

9. Literature

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	*Prunus amygdalus (*L)
1.2 Common name	ALMOND

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)

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 [ ]

4.2.3 Other [ ]
(please provide details)

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

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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 (21)	**Time of beginning of flowering**		
	very early	Cavaliera	1[ ]
	very early to early	Desmayo Largueta	2[ ]
	early	Ne Plus Ultra	3[ ]
	early to medium	Nonpareil	4[ ]
	medium	Fournat de Brezenaud	5[ ]
	late	Drake	6[ ]
	medium to late	Texas	7[ ]
	late to very late	Ferragnes,Ai	8[ ]
	very late	Tardy Nonpareil	9[ ]
5.2 (24)	**Flower: color of petals**		
	white	Barte	1[ ]
	pink white	Ai	2[ ]
	pink	Marcona	3[ ]
	dark pink	Trell	4[ ]
5.3 (35)	**Time of maturity**		
	very early	Cavaliera	1[ ]
	early	Nonpareil	3[ ]
	medium	Ferragnes	5[ ]
	late	Marcona	7[ ]
	very late	Texas	9[ ]

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	Characteristics	Example Varieties	Note
5.4 (40)	**Dry fruit: shape of apex**		
	flat	Marcona	1[ ]
	rounded	Ai	2[ ]
	pointed	Cristomorto	3[ ]
5.5 (45)	**Kernel: shape**		
	narrow elliptic	Jordanolo	3[ ]
	elliptic	Desmayo	5[ ]
	broad elliptic	Ai	7[ ]
	very broad elliptic	Marcona	9[ ]

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	*Fruit color*	*orange red*	*orange*

Comments:

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[#]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 What is this variety used for?

Fruit [ ] Ornamental [ ]

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

Yes [ ] No [ ]

(If yes, please provide details)

7.4 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.

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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”.

……

9.3 Has the plant material to be examined been tested for the presence of virus or other pathogens?

Yes [ ]

(please provide details as specified by the Authority)

No [ ]

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]