



TG/70/5(proj.2)

ORIGINAL: English

DATE: 2018-10-05

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

APRICOT*

UPOV Code(s): PRUNU_ARM

Prunus armeniaca L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

*prepared by experts from South Africa
to be considered by the
Technical Working Party for Fruit Crops
at its forty-ninth session, to be held in Santiago de Chile, Chile,
from 2018-11-19 to 2018-11-23*

Disclaimer: this document does not represent UPOV policies or guidance

Alternative names:*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Prunus armeniaca</i> L., <i>Armeniaca vulgaris</i> Lam.	Apricot	Abricotier	Aprikose, Marille	Albaricoquero, Chabacano

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.....	3
2. MATERIAL REQUIRED.....	3
3. METHOD OF EXAMINATION.....	4
3.1 Number of Growing Cycles.....	4
3.2 Testing Place.....	4
3.3 Conditions for Conducting the Examination.....	4
3.4 Test Design.....	4
3.5 Additional Tests.....	4
4. ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY.....	5
4.1 Distinctness.....	5
4.2 Uniformity.....	6
4.3 Stability.....	6
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL.....	7
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS.....	8
6.1 Categories of Characteristics.....	8
6.2 States of Expression and Corresponding Notes.....	8
6.3 Types of Expression.....	8
6.4 Example Varieties.....	8
6.5 Legend.....	9
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES.....	10
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS.....	29
8.1 Explanations covering several characteristics.....	29
8.2 Explanations for individual characteristics.....	31
9. LITERATURE.....	54
10. TECHNICAL QUESTIONNAIRE.....	55

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Prunus armeniaca* L.

For the examination of hybrids involving *Prunus armeniaca* L. guidance is provided in document TGP/13 "Guidance for New Types and Species". .

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 one-year-old grafts, budsticks or dormant shoots for grafting.
- 2.3 The minimum quantity of plant material, to be supplied by the applicant, should be:
- (a) varieties resulting from crossings
3 trees (one-year-old grafts) or
5 budsticks or
 - (b) varieties resulting from mutations
10 trees (one-year-old grafts) or
10 budsticks

The rootstock to be used is specified by the competent 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.

3. Method of Examination

3.1 *Number of Growing Cycles*

- 3.1.1 The minimum duration of tests should normally be two independent growing cycles.
- 3.1.2 The two independent growing cycles may be observed from a single planting, examined in two separate growing cycles.
- 3.1.3 In particular, it is essential that the trees produce a satisfactory crop of fruit in each of the two growing cycles.
- 3.1.4 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 season 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.

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. The color chart and version used should be specified in the variety description.

3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 3 trees.

3.4.2 Varieties resulting from mutation: Each test should be designed to result in a total of at least 9 trees.

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 or Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 3 plants or parts of plants taken from each of 3 plants and any other observations made on all plants in the test, disregarding any off-type plants.

In the case of observations of parts taken from single plants, the number of parts to be taken from each of the plants should be 5.

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 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 These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation the recommendation in the General Introduction and document TGP/13 "Guidance for new types and species". Section 4.5 Testing Uniformity should be followed.

4.2.3 For the assessment of uniformity of vegetatively propagated varieties, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 3 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 further examined by testing a new plant 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) Tree: vigor (characteristic 1)
 - (b) Tree: habit (characteristic 2)
 - (c) Leaf blade: incisions of margin (characteristic 15)
 - (d) Fruit: size (characteristic 29)
 - (e) Fruit: shape in lateral view (characteristic 30)
 - (f) Fruit: ground color of skin (characteristic 46)
 - (g) Fruit: relative area of over color (characteristic 47)
 - (h) Fruit: color of flesh (characteristic 51)
 - (i) Time of beginning of flowering (characteristic 58)
 - (j) Time of beginning of fruit ripening (characteristic 59)
- 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

English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1	2	3	4	5	6	7
	Name of characteristics in English	Nom du caractère en français	Name des Merkmals auf Deutsch	Nombre del carácter en español		
	states of expression	types d'expression	Ausprägungsstufen	tipos de expresión		

- 1 Characteristic number
- 2 (*) Asterisked characteristic – see Chapter 6.1.2
- 3 Type of expression
 - QL Qualitative characteristic – see Chapter 6.3
 - QN Quantitative characteristic – see Chapter 6.3
 - PQ Pseudo-qualitative characteristic – see Chapter 6.3
- 4 Method of observation (and type of plot, if applicable)
 MG, MS, VG, VS – see Chapter 4.1.5
- 5 (+) See Explanations on the Table of Characteristics in Chapter 8.2
- 6 (a)-(d) See Explanations on the Table of Characteristics in Chapter 8.1
- 7 Growth stage key See Explanations on the Table of Characteristics in Chapter 8.3

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

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*)	QN	MG/VG	(+)	(a)				
	Tree: vigor							
	very weak						Sub-zero	1
	weak						Ninfa, Polonais, Rustic	3
	medium						Bergeron, Canino, Peeka, Rouge du Roussillon	5
	strong						Earle Orange, Magyar kajszi, Palsteyn, Pisana, Portici	7
	very strong						Monaco Bello, Moniqué, Solitaire, Viceroy	9
2. (*)	PQ	VG	(+)	(a)				
	Tree: habit							
	fastigate						Japan's Early	1
	upright						Harcot, Primando, Reale d'Imola	2
	upright to spreading						Ceglédi óriás, Paz, Proimo Tyrinthos, Veecot	3
	spreading						Blenheim, Canino, Grandir, Hargrand, Magyar kajszi	4
	drooping						Palsteyn, Pisana, Polonais, Vesna	5
3.	QN	VG	(+)	(a)				
	Tree: degree of branching							
	weak						Earle Orange, Roxana	3
	medium						Bergeron, Magyar kajszi, Roxanne, San Castrese	5
	strong						Harlayne, Prevete, Roxy, Veecot	7

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
4.	(*)	QN	VG	(a)			
		Tree: distribution of flower buds					
		predominantly on spurs				Earle Orange, Nugget, Roxy, Royal Roussillon, Sun Glo	1
		equally on spurs and on one-year-old shoots				Bergeron, Bulida, Canino, San Castrese, Veecot	2
		predominantly on one-year-old shoots				Amal, Ouardi, Rosa, Roxana	3
5.	(*)	QN	VG	(+)			
		Young shoot: intensity of anthocyanin coloration of apex					
		absent or very weak					1
		weak				Blenheim, Hargrand, Paz, Perla, Samarkandskij rannij	3
		medium				Cape Bebeco, Polonais, San Castrese, Sun Glo	5
		strong				Ceglédi bíbor, Harcot, Ladisun, Ohaicos, Ravival, Roxana	7
6.		PQ	VG	(+)	(a)		
		One-year-old shoot: color on sunny side					
		yellow brown				Cape Bebeco, Grandir	1
		red brown				Palsteyn, Polonais, Royal, Veecot	2
		purple brown				Blenheim, Harcot	3
7.		QN	VG	(a)			
		One-year-old shoot: size of bud support					
		small				Canino, Cape Bebeco, Harcot, Vitillo	1
		medium				Hargrand, Magyar kajszi, Palsteyn, Portici, Tri Gems	2
		large				4546, Ceglédi arany, Himidi, Roxana	3

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
8.	QN	MS/VG	(b)				
	Leaf blade: length						
	short					Bulida, Early Biady, Perla, Samarkandskij rannij	3
	medium					Canino, Portici, Rouge du Roussillon, Veecot	5
	long					A. Vecchioni, Calirose, Ceglédi arany, Moniquí, Roxana	7
9.	QN	MS/VG	(b)				
	Leaf blade: width						
	narrow					Ceglédi bíbor, Monaco Bello, Rouget de Sernhac, Veecot	3
	medium					Canino, Cape Bebeco, Harcot, Vitillo	5
	broad					Ceglédi piroška, Moniquí, Pisana	7
10. (*)	QN	MG/VG	(b)				
	Leaf blade: ratio length/width						
	very low					Canino, Portici	1
	low					Cafona, Hargrand, Supergold	3
	medium					Harcot, Rouget de Sernhac, Rustic, San Castrese	5
	high					A. Vecchioni, Big Cot, Ceglédi bíbor	7
	very high					Calirose, Colorado, Noemi, Super Seven	9

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
11.	QN	VG	(b)				
	Leaf blade: intensity of green color of upper side						
		light				Roxy, San Castrese, Veecot, Velasquez	3
		medium				Canino, Ceglédi óriás, Flaming Gold, Grandir, Harcot	5
		dark				A. Vecchioni, Stark Early Orange	7
		very dark				Ninja	9
12.	PQ	VG	(+)	(b)			
	Leaf blade: shape of base						
		acute				Ceglédi bíbor, Rouget de Sernhac, San Francesco	1
		obtuse				Bhart, Calirose, Magyar kajsz, Portici	2
		truncate				Bergeron, Blenheim, Canino, Perla	3
		cordate				Bulida, Monabri, Moniquí	4
13.	PQ	VG	(+)	(b)			
	Leaf blade: angle of apex						
		acute				San Castrese	1
		right-angled				Bulida, Canino, Ceglédi óriás	2
		moderately obtuse				Bergeron, Farclo, Polonais, Portici	3
		strongly obtuse				Hargrand, Moniquí	4
14.	QN	VG	(b)				
	Leaf blade: length of tip						
		absent or very short				Alpha	1
		short				Amber Gold, Bhart, Harmat, Moniquí	3
		medium				Magyar kajsz, Roxy	5
		long				Calirose, Fina, Ivonne Liverani, Roxana	7

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
15.	(*)	PQ	VG	(+)	(b)			
		Leaf blade: incisions of margin						
		crenate					Canino, Royal Roussillon, San Castrese, Verdun	1
		bicrenate					Bhart, Ninfa	2
		bidentate					Calicot	3
		serrate					Calirose, Vitillo	4
		biserrate					Farius, Himidi, Rakovszky, Roxana, San Francesco, Suapriseven	5
16.		QN	VG		(b)			
		Leaf blade: undulation of margin						
		weak					Harcot, Palsteyn, Portici	3
		medium					Blenheim, Cape Bebeco, Nonno, Roxana	5
		strong					Piet Cillié, Polonais, San Francesco	7
17.		QN	VG	(+)	(b)			
		Leaf blade: profile in cross section						
		slightly convex					Megatea	1
		straight or weakly concave					Earle Orange, Rouget de Sernhac, San Castrese	2
		moderately concave					Bergeron, Dulcinea, Moniquí, Rustic	3
		strongly concave					Polonais	4
18.	(*)	QN	MS/VG		(b)			
		Petiole: length						
		short					Cape Bebeco, Madison, Moniquí, Ninfa, Veecot	3
		medium					Bergeron, Bulida, Cafona, Canino, Hargrand	5
		long					HG nº1, Ladisun, Reale d'Imola, Skopska Krupna	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
19. (*)	QN	MG/VG	(b)			
	Leaf: ratio length of blade /length of petiole					
	low				Earle Orange, Harcot, Pisana, Rouget de Semhac	3
	medium				Bergeron, Calirose, Hâtif Colomer, Portici, Rouge du Roussillon	5
	high					7
20.	QN	VG	(b)			
	Petiole: thickness					
	thin				Flaming Gold, San Castrese, Veecot	1
	medium				Bulida, Harcot, Portici	2
	thick				Ceglédi arany, Moniquí, Reale d'Imola	3
21.	QN	VG	(b)			
	Petiole: intensity of anthocyanin coloration of upper side					
	weak				Cibo del Paradiso, Tri Gems	3
	medium				Bhart, Canino, Cape Bebeco, San Castrese	5
	strong				Ceglédi bíbor, Early Biady, Grandir, Harogem	7
22. (*)	QN	MG	(+)	(b)		
	Petiole: number of nectaries					
	none or one				Mandulakajszí, Rouget de Semhac	1
	two or three				Cafona, Magyar kajszí, Primarina, Veecot	2
	more than three				Bulida, Canino, Moniquí, Pisana	3

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
23.	QN	VG	(b)				
	Petiole: size of nectaries						
	small					Alpha, Calirose, Madison, San Francesco, Yerevani	3
	medium					Bulida, Ceglédi óriás, San Castrese, Tilton	5
	large					Canino, Early Biady, Harmat, Pisana, Red Blush	7
24. (*)	QN	MS/VG	(+)	(c)			
	Flower: diameter						
	small					Borsi rózsza, Hâtif Colomer, Supergold	3
	medium					Calirose, Magyar kajszí, Polonais, Portici, Reale d'Imola	5
	large					Hargrand, Harmat, San Castrese	7
25.	QN	VG	(+)	(c)			
	Flower: position of stigma relative to anthers						
	below					Canetta, Harmat, Rouge du Roussillon	1
	same level					Hargrand, Palsteyn, Portici	2
	above					Canino, Grandir, Pisana, Polonais	3
26.	PQ	VG	(+)	(c)			
	Petal: shape						
	elliptic						1
	circular					Faralia, Harcot, Luizet	2
	oblate					Canino, Polonais, Rustic, Vitillo	3
27.	PQ	VG	(+)	(c)			
	Petal: color on lower side						
	white					Bulida, Cafona, Polonais	1
	light pink					Harcot, Magyar kajszí, San Castrese	2
	dark pink						3

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
28.	QN	VG	(+)				
	Sepal: attitude						
	upwards					Bhart, Ladisun	1
	outwards					Calirose, Farbaly	2
	downwards					Cape Bebeco	3
29. (*)	QN	MS/VG	(d)				
	Fruit: size						
	very small					Hagghith, Menace, Supergold, Zard	1
	small					Borsi rózsza, Hâtif Colomer, Ladisun, Patriarca Temprano	3
	medium					Cafona, Canino, Harcot, Paz	5
	large					Ceglédi bíbor, Moniquí, Portici	7
	very large					Ceglédi óriás, Hargrand, Palsteyn, Pisana	9
30. (*)	PQ	VG D	(+)	(d)			
	Fruit: shape in lateral view						
	triangular					Luizet	1
	ovate					Bergeron, Calirose, Pisana	2
	oblate					Korai zamatos, Nugget, Patriarca Temprano	3
	circular					Earle Orange, Grandir, Ninfa, Ouardi, Polonais	4
	oblong					Blenheim, Portici, Sundrop	5
	elliptic					Précoce d'Imola, Wenatchee, Yerevani	6
	oblique rhombic					Banga, Bulida, Canino, Vulcan	7
	obovate					Harcot, Harmat, Trevatt	8

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
31.	(*)	PQ	VG	(+)	(d)			
		Fruit: shape in ventral view						
		triangular					Luizet, Mandulakajsi, Reale d'Imola	1
		ovate					Bergeron, Calirose, Canino, Fracasso	2
		oblate					Nugget	3
		circular					Polonais, Rouge du Roussillon, San Castrese, Supergold, Viceroy	4
		oblong					Baracca, Hargrand, Hâtif Colomer, Veecot	5
		elliptic					Bella d'Imola, Flaming Gold, Yerevani	6
		obovate					Harcot, Harmat, Ladisun, Portici	7
32.		QN	MS/VG		(d)			
		Fruit: height						
		short					Patriarca Temprano, Samarkandskij rannij, Sayeb, Supergold	3
		medium					Bergeron, Canino, Cape Bebeco, Polonais	5
		tall					Calirose, Goldrich, Mandulakajsi, Vitillo	7
33.		QN	MS/VG		(d)			
		Fruit: width in lateral view						
		narrow					Cerasiello, Harmat, Manicot, Samarkandskij rannij, Supergold	3
		medium					Bergeron, Bhart, Cafona, Paz	5
		broad					Hargrand, Moniquí, Roxanne, Vitillo	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34.	QN	MS/VG	(d)			
	Fruit: width in ventral view					
	narrow				Cerasiello, Harlayne, Hâtif Colomer, Tri Gems	3
	medium				Bhart, Cape Bebeco, Palummella	5
	broad				Ceglédi arany, Goldrich, Moniquí, Roxanne	7
35.	QN	MG/VG	(d)			
	Fruit: ratio height /ventral width					
	low				Korai zamatos, Monaco Bello, Patriarca Temprano, Peeka	3
	medium				Cafona, Canino, Magyar kajszi, Rouge du Roussillon, Solitaire	5
	high				Bergeron, Hâtif Colomer, Tri Gems, Vitillo	7
36. (*)	QN	MG/VG	(d)			
	Fruit: ratio lateral width/ventral width					
	very low				Monaco Bello	1
	low				Mandorlon, Maria Ferez, Rustic, Vesna	3
	medium				Bergeron, Luizet, Pisana, Rouge du Roussillon	5
	high				Borsi rózsa, Calicot, Henderson, IP 660	7
37. (*)	QN	VG	(+)	(d)		
	Fruit: symmetry in ventral view					
	symmetric				Canino, Hâtif Colomer, Magyar kajszi, Paz, Polonais, Portici	1
	slightly asymmetric				Boccuccia, Calirose, Ceglédi óriás, Royal	2
	clearly asymmetric				Borsi rózsa, Grandir, Reale d'Imola	3

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
38.	(*)	PQ	VG	(+)	(d)			
		Fruit: suture						
		raised					Priboto	1
		slightly sunken					Calirose, Magyar kajszí, Ninfa, Rouge du Roussillon	2
		moderately sunken					Bergeron, Ladisun, Monaco Bello, Pineapple	3
		deeply sunken					Cape Bebeco, Dima, Henderson, Kech-pshar, Portici	4
39.		QN	VG		(d)			
		Fruit: depth of stalk cavity						
		shallow					Harlayne, Peeká, Rouge du Roussillon, San Castrese	3
		medium					Blenheim, Grandir, Magyar kajszí, Vitillo	5
		deep					Canino, Ceglédi óriás, Hâtif Colomer, Kayzee, Palsteyn	7
40.	(*)	PQ	VG	(+)	(d)			
		Fruit: shape of apex						
		acute					Hula Blush, Mandulakajszí, Reale d'Imola	1
		rounded					Bergeron, Calirose, Goldrich, Luizet, Portici	2
		truncate					Bella d'Imola, Hargrand, Hâtif Colomer, Royal	3
41.		PQ	VG	(+)	(d)			
		Fruit: shape of tip						
		pointed					Mediabel	1
		flat					Farbaly	2
		weakly depressed					Suapriseven	3
		strongly depressed					Primaya	4

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
42. (*)	QL VG	(d)				
	Fruit: presence of mucron					
	absent				Blenheim, Bulida, Canino, San Castrese	1
	present				Bhart, Pisana	9
43.	QN VG	(d)				
	Fruit: surface					
	smooth				Bergeron, Palsteyn, Portici, Rouge du Roussillon	1
	slightly bumpy				Cape Bebeco, Supergold	2
	moderately bumpy				Canino, Ceglédi óriás, Faralia, Nonno	3
	very bumpy				Rosa	4
44. (*)	QL VG	(d)				
	Fruit: pubescence					
	absent				Badami, Glattschalige Frühmarille	1
	present				Bergeron, Bulida, Canino, Magyar kajsi	9
45.	QN VG	(d)				
	Only varieties with pubescence absent: Fruit: glossiness					
	absent or weak				Rouge du Roussillon	1
	medium				Harcot	2
	strong				Maravilla, Sun Glo	3

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
46.	(*)	PQ	VG	(+)	(d)			
		Fruit: ground color of skin						
		not visible					A3759, A3844	1
		white					San Nicola, Shirazskij belyj	2
		yellowish					Piet Cillié, Soldonné, Vitillo, Yerevani	3
		yellow green					Grüne Spätmarille, Kaisi Ashtarak, Roxy, Sateni Karmir	4
		light orange					Canino, Goldcot, Hargrand, Portici, Rouge du Roussillon, Roxanne	5
		medium orange					Calirose, Hâtif Colomer, Luizet, Pisana, Veecot	6
		dark orange					Bhart, Harcot, Harogem	7
47.	(*)	QN	VG	(+)	(d)			
		Fruit: relative area of over color						
		absent or very small					Charisma, Maria Matilde, Moniquí, Yerevani	1
		small					Cafona, Canino, Cape Bebeco, Goldrich	3
		medium					Hâtif Colomer, Magyar kajszi, Palsteyn, Portici, Roxy	5
		large					Bergeron, Bhart, Golden Blush, Pisana	7
		very large					A3759, A3844	9
48.	(*)	PQ	VG		(d)			
		Fruit: hue of over color						
		orange red					Cape Bebeco, Kayzee	1
		red					Bhart, Faralia	2
		pink					Colorado, Palsteyn, Rustic	3
		purple						4

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
49.	QN	VG	(d)				
	Fruit: intensity of over color						
	light					Big Cot	3
	medium					Calirose	5
	dark					Primarina	7
50. (*)	PQ	VG	(+)	(d)			
	Fruit: pattern of over color						
	isolated spots					Big Cot, Rouge du Roussillon	1
	solid flush					Bergeron, Cape Bebeco	2
	covered all over with very small spots					Grandir, Moniquí	3
51. (*)	PQ	VG	(+)	(d)			
	Fruit: color of flesh						
	white					Cibo del Paradiso, Mouchbah Mourry, Spitak	1
	whitish green					Amban	2
	yellowish white					Barese, Malatya, Moniquí, Patriarca Temprano	3
	light orange					Canino, Cape Bebeco, Harmat, San Castrese, Yerevani	4
	medium orange					Grandir, Harglow, Pisana, Rouge du Roussillon, Screara	5
	dark orange					Bhart, Francese, Harcot, Hâtif Colomer, Palsteyn	6
	red						7
52.	QN	VG	(d)				
	Fruit: texture of flesh						
	fine					Fracasso, Harlayne, Peeká	1
	medium					Canino, Cape Bebeco, Magyar kajszí, Piet Cillié	2
	coarse					Bergeron, Précoce d'Imola	3

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
53.	QN	VG	(+)	(d)				
	Fruit: firmness of flesh							
	very soft						Viceroy	1
	soft						Alessandrino, Goldcot, Grandir	3
	medium						Cape Bebeco, Magyar kajszai, Piet Cillié, Rouge du Roussillon, San Castrese	5
	firm						Bella d'Imola, Bergeron, Palsteyn, Suapriseven	7
	very firm						Boccuccia Liscia, Borsi rózsa, Cacansko zlato, Harogem	9
54.	QN	MG		(d)				
	Fruit: ratio weight of fruit/weight of stone							
	low						Borsi rózsa, Reale d'Imola	3
	medium						Blenheim, Hâtif Colomer, Portici, Primaya	5
	high						Badami, Bergeron, Hula Blush, San Castrese	7
55. (*)	QN	VG		(d)				
	Fruit: adherence of stone to flesh							
	absent or very weak						Bergeron, Hargrand, Ninfa, Peeka	1
	weak						Canino, Nonno, Paz, Rouge du Roussillon, Sirena	3
	medium						Tardif de Bordaneil	5
	strong						Comandor, Precoce di Toscana	7

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
56.	(*)	PQ	VG	(+)	(d)			
		Stone: shape in lateral view						
		ovate					Goldcot, Grandir, Magyar kajsi, Portici	1
		circular					Canino, Eten Bey, Hargrand, Monaco Bello, Suaprieight	2
		elliptic					Bergeron, Roxanne, Vitillo	3
		oblong					Bella d'Imola, Calirose, Palsteyn, Rouge du Roussillon	4
		obovate					Harcot, Harmat	5
57.		QN	VG	(+)	(d)			
		Kernel: bitterness						
		absent or weak					Bergeron, Harcot, Magyar kajsi, Moniquí, Reale d'Imola	1
		medium					Bella d'Imola, Harlayne, Palsteyn, Suaprieight	2
		strong					Borsi rózsa, Canino, Manicot, Prevete, Supergold	3
58.	(*)	QN	MG/VG	(+)				
		Time of beginning of flowering						
		very early					Bakour, Currots, Harmat, Ninfa, Solitaire	1
		early					Canino, Harcot, Hâtif Colomer, Roxanne, San Castrese	3
		medium					Bhart, Magyar kajsi, Moniquí, Portici, San Francesco, Supergold	5
		late					Bergeron, Boccuccia Liscia, Farius, Harlayne, Ladisun, Polonais	7
		very late					Badami, Harglow, Skromnyj, Stella, Zard	9

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
59	(*)	QN	MG/VG	(+)			
	Time of beginning of fruit ripening						
	very early					Bakour, Ninfa, Patriarca Temprano, Rutbhart, Samarkandskij rannij	1
	very early to early					Monabri, Tsunami	2
	early					Bhart, Hâtif Colomer, Ladisun, Monaco Bello, Rouget de Sernhac, Tomcot	3
	early to medium					Goldrich, Hargrand, Magyar kajsi	4
	medium					Amber Gold, Bergeron, Harlayne, Pisana, Polonais	5
	medium to late					Anegat	6
	late					Faralia, Larquen	7
	late to very late					Fartoli	8
	very late					Farclo, Lartago	9

8. Explanations on the Table of Characteristics

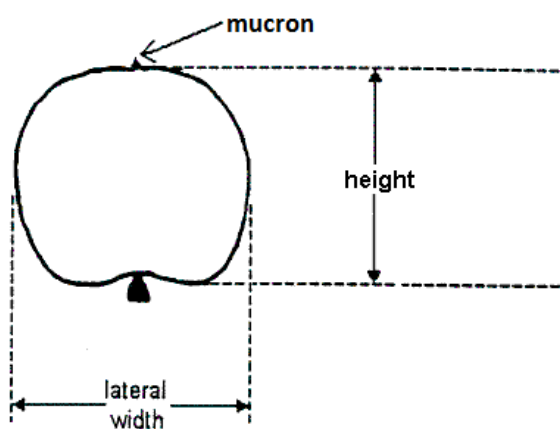
8.1 *Explanations covering several characteristics*

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

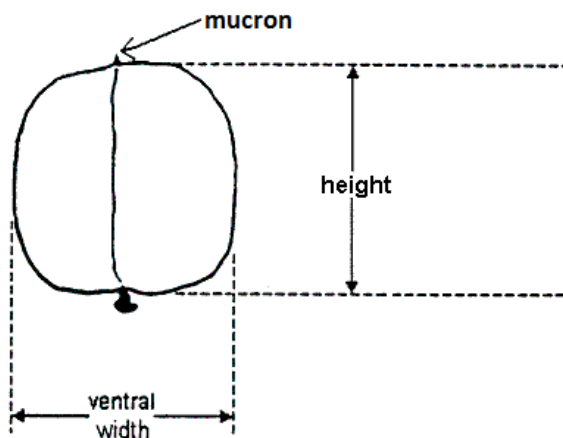
- (a) Tree/One-year-old shoot: All observations on the tree and on the one-year-old shoot should be made during the dormant period, on trees that have fruited at least once.
- (b) Leaf: All observations on the leaf should be made on fully developed leaves from the middle third of a well developed current season's shoot.
- (c) Flower: All observations on the flower should be made on fully developed flowers at the beginning of dehiscence.
- (d) Fruit/Stone: All observations on the fruit and stone should be made on 15 fruits, five from each of three trees. In the case of ten trees, 20 fruits should be observed, two from each tree.

Fruit: All observations on the fruit height, lateral and ventral width the ratio of the fruit as well as the mucron should be done according to the illustrations.

Lateral view



Ventral view

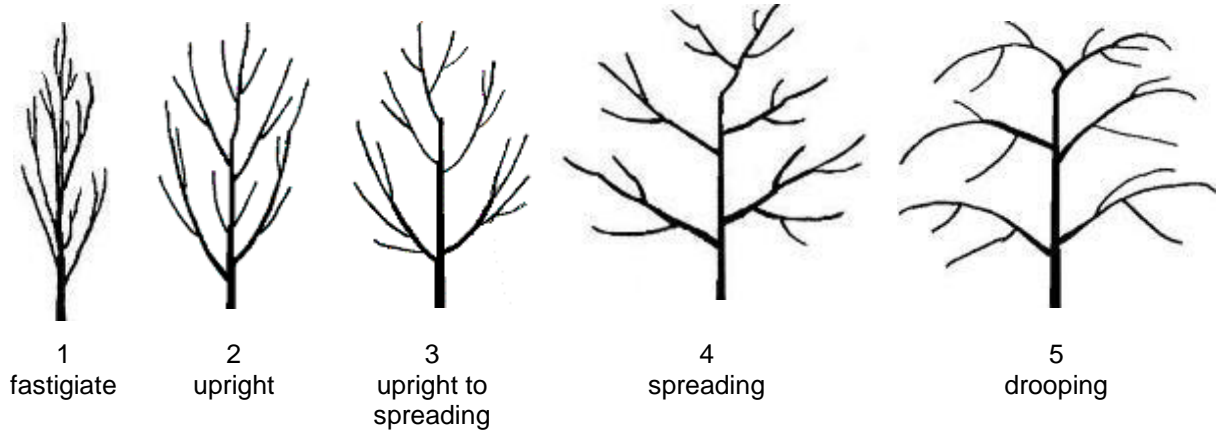


8.2 Explanations for individual characteristics

Ad. 1: Tree: vigor

The tree vigor should be considered as the overall abundance of vegetative growth.

Ad. 2: Tree: habit



Ad. 3: Tree: degree of branching

Observations should relate to the number of branches with the degree of branching being indicated by the density of lateral branches and shoots, excluding fruiting shoots.

Ad. 5: Young shoot: intensity of anthocyanin coloration of apex

Observation should be made during rapid growth.



Ad. 6: One-year-old shoot: color on sunny side

Observations should be made in the middle of one-year-old primary shoots.



1
yellow brown

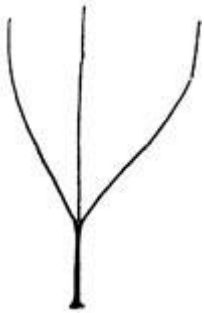


2
red brown



3
purple brown

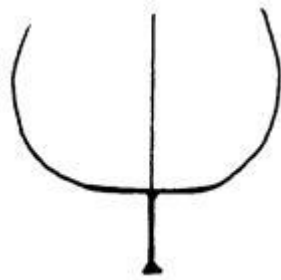
Ad. 12: Leaf blade: shape of base



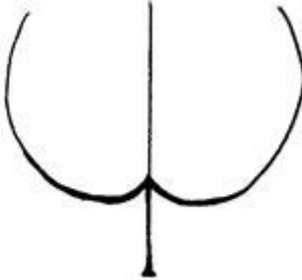
1
acute



2
obtuse



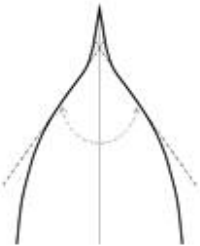
3
truncate



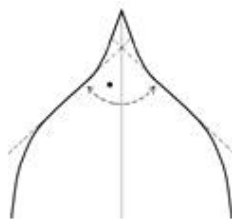
4
cordate

Ad. 13: Leaf blade: angle of apex

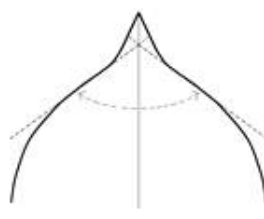
Observation should exclude the tip.



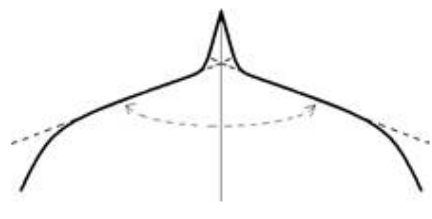
1
acute



2
right-angled



3
moderately obtuse



4
strongly obtuse

Ad. 15: Leaf blade: incisions of margin

Observations should be done on the upper half of the leaf.



1
crenate



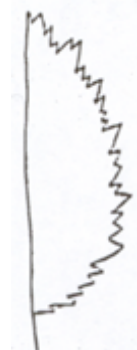
2
bicrenate



3
bidentate



4
serrate



5
biserrate

Ad. 17: Leaf blade: profile in cross section

Leaves observed should be on spurs or at base of flowering shoots.

Ad. 22: Petiole: number of nectaries



1
none or one



2
two or three

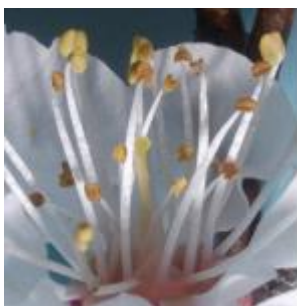


3
more than three

Ad. 24: Flower: diameter

Observations and measurements should be made on fully opened flowers.

Ad. 25: Flower: position of stigma relative to anthers



1
below



2
same level



3
above

Ad. 26: Petal: shape

Observations should exclude the claw.



1
elliptic



2
circular



3
oblate

Ad. 27: Petal: color on lower side

Observations should be made just after opening of sepals on the lower side.



1
white



2
light pink



3
dark pink

Ad. 28: Sepal: attitude

Observations should be made on fully opened flowers.



1
upwards


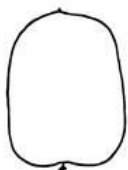

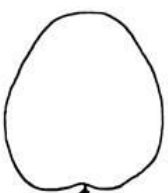
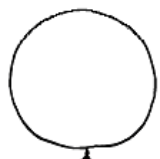

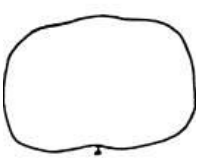
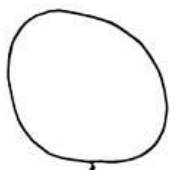


2
outwards


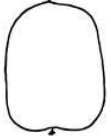
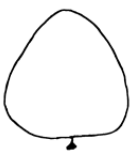
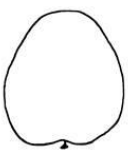
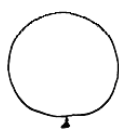

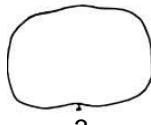


3
downwards

Ad. 30: Fruit: shape in lateral view

		←broadest part →			
		below middle	at middle	above middle	
width (ratio length/width)					
narrow (high)			 6 elliptic		
medium (medium)			 5 oblong		
		 1 triangular	 2 ovate	 4 circular	 8 obovate
broad (low)			 3 oblate	 7 oblique rhombic	

Ad. 31: Fruit: shape in ventral view

		← broadest part →			
		below middle	at middle	above middle	
width (ratio length/width)					
narrow (high)			 6 elliptic		
medium (medium)			 5 oblong		
		 1 triangular	 2 ovate	 4 circular	 7 obovate
broad (low)			 3 oblate		

Ad. 37: Fruit: symmetry in ventral view



1
symmetric



2
slightly asymmetric



3
clearly asymmetric

Ad. 38: Fruit: suture



1
raised



2
slightly sunken



3
moderately sunken



4
deeply sunken

Ad. 40: Fruit: shape of apex

Observations should be made on fruits in lateral view.



1
acute



2
rounded

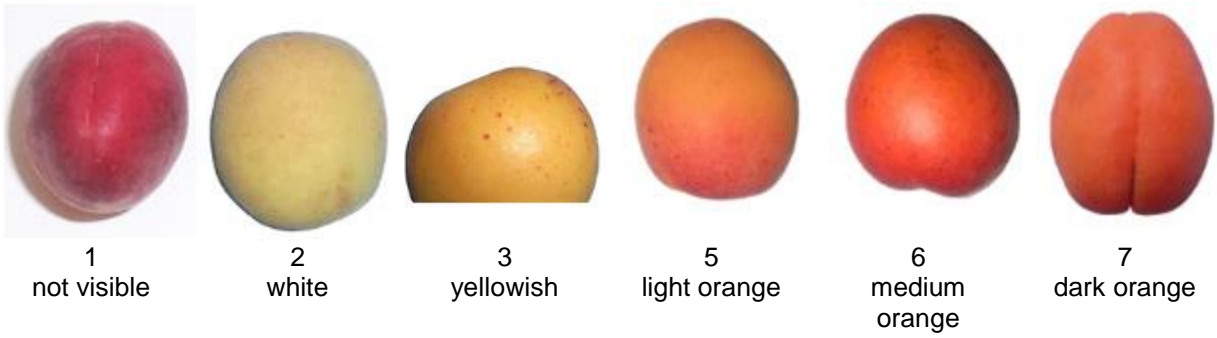


3
truncate

Ad. 41: Fruit: shape of tip

Observations should exclude the mucron tip.

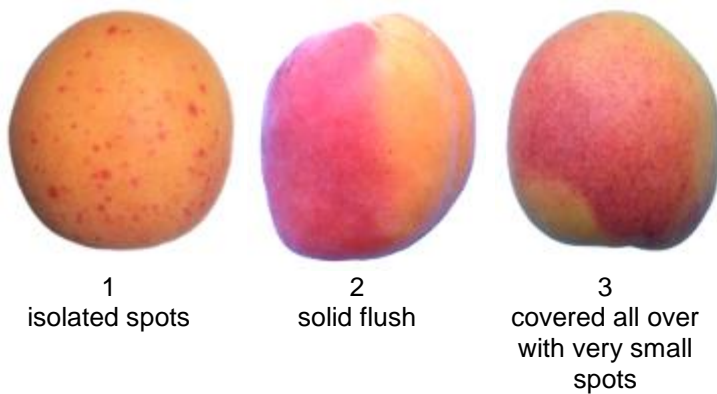
Ad. 46: Fruit: ground color of skin



Ad. 47: Fruit: relative area of over color



Ad. 50: Fruit: pattern of over color



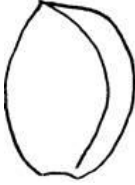
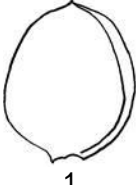

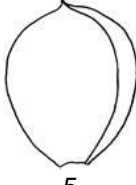

Ad. 51: Fruit: color of flesh



Ad. 53: Fruit: firmness of flesh

Observation is made by squeezing the fruit.

Ad. 56: Stone: shape in lateral view

		← broadest part →		
		below middle	at middle	above middle
width (ratio length/width)	narrow (high)		 4 oblong	
	medium (medium)	 1 ovate	 3 elliptic	 5 obovate
	broad (low)		 2 circular	

Ad. 57: Kernel: bitterness

Observation is made by tasting the kernel.

Ad. 58: Time of beginning of flowering

Observations or measurement should be made when 5-10% of the flowers are open.

Ad. 59: Time of beginning of fruit ripening

When 5-10% ripen fruits can be observed. Fruit ripening should be considered as the time of eating ripeness, when the fruit is most easily removed.

8.3 *Synonyms of example varieties*

Example Varieties	Synonym(s)
Sant' Ambrogio	Ambrosia, Saint Ambroise
Bhart	NJA 32
Borsi rózsa	Kecskemeter rose, Ružova neskora, Trandafirii tirzi
Čačacansko zlato	Čačak's Gold
Earle Orange	Erle Orange, Stark Earli Orange, Early Orange
Goldrich	Sungiant
Magyar kajszai	Cea mai bună de Ungaria, Hungarian Best, Klosterneuburger Aprikose, Krasnoshchokij, Mađarska najbolja, Meilleur d'Hongrie, Ungarische Beste,
Pineapple	Abricot d'Ananas, Ananas-Marille, Ananasnyj
Proimo Tyrinthos	Précoce de Tyrinthe
Sateni Karmir	Tabarza
Yerevani	Shalakh

9. Literature

- Anonymous, 1997: "The Brooks and Olmo register of new fruit and nut varieties". Third edition, ASHS Press, Alexandria, VA, US.
- Agulian, S. L., *et al.*, 1977: "Abrikosy Armenii" "Apricots of Armenia" (bilingual book). Izdatel'stvo Aiastan, Yerevan, AM.
- Boček, O., 1954: "Pomologie". Státní Zemědělské Nakladatelství, Praha, CZ.
- Beketovskaya, A. A., 1977: "Dima". Sadovodstvo No.7, p. 28, Moskva, RU.
- Bordeianu, T., *et al.*, 1963: "Pomologia Republicii Populare Romîne". Vol. 1-8, Editura Academiei Republicii Populare Romîne, Bucuresti, RO.
- Cifranič, P., *et al.*, 1978: "Pomologia". Priroda, Bratislava, SK.
- Couranjou, J., 1977: "Variétés d'abricotiers". INVUFLEC, Paris, FR.
- Della Strada, G., Pennone, F., Fideghelli, C., Monastra, F., Cobianchi, D., 1989: "Monografia di cultivar di albicocco". Istituto Sperimentale per la Frutticoltura, Roma, IT.
- Guerriero, R., 1982: "L'albicocco, (Apricot)" Cultivar. R.E.D.A., Roma, IT.
- Guerriero R., Monteleone P., 1992: "Distribuzione di alcuni caratteri tassonomici in una collezione di oltre 100 cultivar di albicocco". Atti del Congresso su "Germoplasma frutticolo. Salvaguardia e valorizzazione delle risorse genetiche" Alghero; p. 343-348, IT.
- Guerriero R., Monteleone P., 1992: "Principali caratteristiche tassonomiche e agronomiche di 28 cultivar di albicocco italiane in pericolo di estinzione". Atti del Congresso su "Germoplasma frutticolo. Salvaguardia e valorizzazione delle risorse genetiche" Alghero; 349-356, IT.
- G. Tóth M., 1997. "Gyümölcsészet (Pomology)" PRIMOM, Nyíregyháza, HU.
- Krümmel, H., Groh, W., Friedrich, G., 1964: "Deutsche Obstsorten". Bd. 1-3. Deutscher Landwirtschaftsverlag, Berlin, DE.
- Löschnig, J., Passecker, F., 1954: "Die Marille (Aprikose) und ihre Kultur". Österreichischer Agrarverlag, Wien, AT.
- Nagano-ken, 1980: "The report on the characterization and classification of apricot varieties", Nagano-ken Fruit Tree Experiment Station (by consignment of the MAFF), JP.
- Nyujtó, F., Surányi, D., 1981: "Kajsziabarack (Apricot)", Mezőgazdasági Kiadó, Budapest, HU.
- Nyujtó, F., Tomcsányi, P., 1959: "A kajsziabarack és termesztése (Apricot growing)", Mezőgazdasági Kiadó, Budapest, HU.
- Pochyba, D., *et al.*, 1964: "Pomologia", Slov. Vyd. Polnohosp. Lit., Bratislava, SK.
- Rayman, J., Tomcsányi, P., 1964: "Gyümölcsfajták zsebkönyve. Almagyümölcsűek és csonthéjasok (Pocket manual of fruit varieties 1.)". Mezőgazdasági Kiadó, Budapest, HU.
- Shepelskij, A. I., 1966: "Novye sorta plodovykh i yagodnykh kul'tur Ukrain (New fruit varieties of Ukraine)". Urozhai, Kiev, UA.
- Simirenko, L. P., 1963: "Pomologija". Vol. 1-3. Izd S/h. Lit. Ukr. SSR, Kiev, UA.
- Sinskaya, E. N., 1949: "Kulturnaya flora SSSR. XVIII. Plodovye kostochkovye" (Cultivated plants of USSR. Stone fruits)". OGIZ-Sel'khozgiz, Moskva-Leningrad, RU.
- Smirnov, V. F., 1972: "Novye sorta kostochkovykh kul'tur, vyvedennye v SSSR (New stone fruit varieties bred in USSR)". Izdatel'stvo Nauka, Moskva, RU.
- Smykov, V. K., *et al.*, 1974: "Kostochkovye kul'tury (Stone fruits)". Izdatel'stvo Kartya Moldovenyaske, Kishinev, MD.
- Smykov, V. K., *et al.*, 1974: "Kul'tura abrikosa v neoroshayemykh usloviyakh Moldavii (Apricot growing under non-irrigated conditions of Moldavia)". Izdatel'stvo Stiinca, Kishinev, MD.

Stoichkov, J., *et al.*, 1960: "B"lgarska pomologiya (Bulgarian Pomology)". Zemizdat, Sofia, BG.

Tomcsányi, P., *et al.*, 1979: "Gyümölcsfajtáink, Gyakorlati pomológia (Practical Pomology)". Mezőgazdasági Kiadó, Budapest, HU.

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	<input type="text" value="Prunus armeniaca L."/>
1.2	Common name	<input type="text" value="Apricot"/>
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"/>

#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.

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 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 Tree: vigor (1)		
very weak	Sub-zero	1 []
weak	Ninfa, Polonais, Rustic	3 []
medium	Bergeron, Canino, Peeka, Rouge du Roussillon	5 []
strong	Earle Orange, Magyar kajszai, Palsteyn, Pisana, Portici	7 []
very strong	Monaco Bello, Moniquí, Solitaire, Viceroy	9 []
5.2 Tree: habit (2)		
fastigate	Japan's Early	1 []
upright	Harcot, Primando, Reale d'Imola	2 []
upright to spreading	Ceglédi óriás, Paz, Proimo Tyrinthos, Veecot	3 []
spreading	Blenheim, Canino, Grandir, Hargrand, Magyar kajszai	4 []
drooping	Palsteyn, Pisana, Polonais, Vesna	5 []
5.3 Leaf blade: incisions of margin (15)		
crenate	Canino, Royal Roussillon, San Castrese, Verdun	1 []
bicrenate	Bhart, Ninfa	2 []
bidentate	Calicot	3 []
serrate	Calirose, Vitillo	4 []
biserrate	Farius, Himidi, Rakovszky, Roxana, San Francesco, Suapriseven	5 []
5.4 Fruit: size (29)		
very small	Haggith, Menace, Supergold, Zard	1 []
small	Borsi rózsa, Hâtif Colomer, Ladisun, Patriarca Temprano	3 []
medium	Cafona, Canino, Harcot, Paz	5 []
large	Ceglédi bíbor, Moniquí, Portici	7 []
very large	Ceglédi óriás, Hargrand, Palsteyn, Pisana	9 []

Characteristics	Example Varieties	Note
5.5 Fruit: shape in lateral view (30)		
triangular	Luizet	1 []
ovate	Bergeron, Calirose, Pisana	2 []
oblate	Korai zamatos, Nugget, Patriarca Temprano	3 []
circular	Earle Orange, Grandir, Ninfa, Ouardi, Polonais	4 []
oblong	Blenheim, Portici, Sundrop	5 []
elliptic	Précoce d'Imola, Wenatchee, Yerevani	6 []
oblique rhombic	Banga, Bulida, Canino, Vulcan	7 []
obovate	Harcot, Harmat, Trevatt	8 []
5.6 Fruit: ground color of skin (46)		
not visible	A3759, A3844	1 []
white	San Nicola, Shirazskij belyj	2 []
yellowish	Piet Cillié, Soldonné, Vitillo, Yerevani	3 []
yellow green	Grüne Spätmarille, Kaisi Ashtarak, Roxy, Sateni Karmir	4 []
light orange	Canino, Goldcot, Hargrand, Portici, Rouge du Roussillon, Roxanne	5 []
medium orange	Calirose, Hâtif Colomer, Luizet, Pisana, Veecot	6 []
dark orange	Bhart, Harcot, Harogem	7 []
5.7 Fruit: relative area of over color (47)		
absent or very small	Charisma, Maria Matilde, Moniquí, Yerevani	1 []
small	Cafona, Canino, Cape Bebeco, Goldrich	3 []
medium	Hâtif Colomer, Magyar kajszi, Palsteyn, Portici, Roxy	5 []
large	Bergeron, Bhart, Golden Blush, Pisana	7 []
very large	A3759, A3844	9 []
5.8 Fruit: color of flesh (51)		
white	Cibo del Paradiso, Mouchbah Mourry, Spitak	1 []
whitish green	Amban	2 []
yellowish white	Barese, Malatya, Moniquí, Patriarca Temprano	3 []
light orange	Canino, Cape Bebeco, Harmat, San Castrese, Yerevani	4 []
medium orange	Grandir, Harglow, Pisana, Rouge du Roussillon, Screara	5 []
dark orange	Bhart, Francese, Harcot, Hâtif Colomer, Palsteyn	6 []
red		7 []

Characteristics	Example Varieties	Note
5.9 Time of beginning of flowering (58)		
very early	Bakour, Currots, Harmat, Ninfa, Solitaire	1 []
very early to early		2 []
early	Canino, Harcot, Hâtif Colomer, Roxanne, San Castrese	3 []
early to medium		4 []
medium	Bhart, Magyar kajszai, Moniquí, Portici, San Francesco, Supergold	5 []
medium to late		6 []
late	Bergeron, Boccuccia Liscia, Farius, Harlayne, Ladisun, Polonais	7 []
late to very late		8 []
very late	Badami, Harglow, Skromnyj, Stella, Zard	9 []
5.10 Time of beginning of fruit ripening (59)		
very early	Bakour, Ninfa, Patriarca Temprano, Rutbhart, Samarkandskij rannij	1 []
very early to early	Monabri, Tsunami	2 []
early	Bhart, Hâtif Colomer, Ladisun, Monaco Bello, Rouget de Sernhac, Tomcot	3 []
early to medium	Goldrich, Hargrand, Magyar kajszai	4 []
medium	Amber Gold, Bergeron, Harlayne, Pisana, Polonais	5 []
medium to late	Anegat	6 []
late	Faralia, Larquen	7 []
late to very late	Fartoli	8 []
very late	Farclo, Lartago	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
<i>Example</i>	<i>Fruit ground color of skin</i>	<i>light orange</i>	<i>dark orange</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 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 displaying its main distinguishing feature(s), should accompany the Technical Questionnaire. The photograph will provide a visual illustration of the candidate variety which supplements the information provided in the Technical Questionnaire.

The key points to consider when taking a photograph of the candidate variety are:

- Indication of the date and geographic location
- Correct labeling (breeder's reference)
- Good quality printed photograph (minimum 10 cm x 15 cm) and/or sufficient resolution electronic format version (minimum 960 x 1280 pixels)"

Further guidance on providing photographs with the Technical Questionnaire is available in document TGP/7 "Development of Test Guidelines", Guidance Note 35 (<http://www.upov.int/tgp/en/>).

[The link provided may be deleted by members of the Union when developing authorities' own test guidelines.]

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".

.....

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]