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APRICOT

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Prunus armeniaca L.

*

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by experts from Hungary

*to be considered by the Enlarged Editorial Committee at its meeting
to be held in Geneva, Switzerland, January 11, 2005*

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, Damasco

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 *Prunus armeniaca* 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 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:

5 trees (one-year-old grafts) or
3 budsticks or
5 dormant shoots for grafting, sufficient to produce 5 trees.

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*

The minimum duration of tests should normally be two independent growing cycles. The growing cycle is considered to be the duration of a single growing season, beginning with bud burst, 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*

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 trees 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 trees.

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 3. In particular, in the case of fruit and stone characteristics, observations should be made on 25 fruits, 5 taken from each of 5 trees.

3.6 *Additional Tests*

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

4. Assessment of Distinctness, Uniformity and Stability

4.1 *Distinctness*

4.1.1 General Recommendations

It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding distinctness. However, the following points are provided for elaboration or emphasis in these Test Guidelines.

4.1.2 Consistent Differences

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

4.1.3 Clear Differences

Determining whether a difference between two varieties is clear depends on many factors, and should consider, in particular, the type of expression of the characteristic being examined, i.e. whether it is expressed in a qualitative, quantitative, or pseudo-qualitative manner. Therefore, it is important that users of these Test Guidelines are familiar with the recommendations contained in the General Introduction prior to making decisions regarding distinctness.

4.2 *Uniformity*

4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

4.2.2 For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 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 plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

5. Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness are aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.

5.3 The following have been agreed as useful grouping characteristics:

- (a) Fruit: size (characteristic 28)
- (b) Fruit: ground color of skin (characteristic 44)
- (c) Fruit: amount of over color (characteristic 45)
- (d) Fruit: color of flesh (characteristic 49)
- (e) Time of beginning of flowering (characteristic 56)
- (f) Time of beginning of fruit ripening (characteristic 57).

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

6. Introduction to the Table of Characteristics

6.1 *Categories of Characteristics*

6.1.1 Standard Test Guidelines Characteristics

Standard Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which members of the Union can select those suitable for their particular circumstances.

6.1.2 Asterisked Characteristics

Asterisked characteristics (denoted by *) are those included in the Test Guidelines which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all members of the Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

6.2 *States of Expression and Corresponding Notes*

States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.

6.3 *Types of Expression*

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudo-qualitative) is provided in the General Introduction.

6.4 *Example Varieties*

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic.

6.5 *Legend*

(*) Asterisked characteristic – see Chapter 6.1.2

QL: Qualitative characteristic – see Chapter 6.3

QN: Quantitative characteristic – see Chapter 6.3

PQ: Pseudo-qualitative characteristic – see Chapter 6.3

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

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

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

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
1. (a) Tree: vigor		Arbre: vigueur	Baum: Wuchsstärke	Árbol: vigor		
(+)						
QN	very weak	très faible	sehr gering	muy débil	Sub-zero	1
	weak	faible	gering	débil	Ninfa, Polonais	3
	medium	moyenne	mittel	medio	Bergeron, Canino, Peeka, Rouge du Roussillon	5
	strong	forte	stark	fuerte	Earle Orange, Magyar kajszí, Palsteyn, Pisana, Portici	7
	very strong	très forte	sehr stark	muy fuerte	Ceglédi bíbor, Monaco Bello, Moniquí, Viceroy	9
2. (a) Tree: habit		Arbre: port	Baum: Wuchsform	Árbol: porte		
(+)						
PQ	fastigate	très dressé	sehr aufrecht	fastigiado	Japan's Early	1
	upright	dressé	aufrecht	erecto	Harcot, Reale d'Imola	2
	upright to spreading	dressé à étalé	aufrecht bis breitwüchsig	entre erecto y divergente	Cegléi óriás, Proimo Tyrinthos, Veecot	3
	spreading	étalé	breitwüchsig	divergente	Blenheim, Canino, Hargrand, Magyar kajszí	4
	drooping	retombant	überhängend	colgante	Palsteyn, Pisana, Polonais, Vesna	5
	weeping	pleureur	lang überhängend	llorón		6
3. (a) Tree: degree of branching		Arbre: degré de ramification	Baum: Grad der Verzweigung	Árbol: grado de ramificación		
(+)						
QN	weak	faible	gering	débil	Earle Orange, Roxana	3
	medium	moyen	mittel	medio	Bergeron, Magyar kajszí, San Castrese	5
	strong	fort	stark	fuerte	Harlayne, Prevete, Veecot	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
4. (*)	(a) Tree: distribution of flower buds	Arbre: répartition des boutons floraux	Baum: Verteilung der Blütenknospen	Árbol: distribución de las yemas florales		
PQ	predominantly on spurs	le plus souvent sur bouquets de mai	vorwiegend an Bukettrieben	predominantemente en los estalones	Earle Orange, Nugget, Sun Glo	1
	equally on spurs and on one-year-old shoots	autant sur bouquets de mai que sur rameaux d'un an	gleichmaßen an Bukettrieben und an einjährigen Trieben	tanto en los estalones como en los tallos de un año	Bergeron, Canino, San Castrese, Veecot	2
	predominantly on one-year-old shoots	essentiellement sur rameaux d'un an	vorwiegend an einjährigen Trieben	predominantemente en los tallos de un año	Amal, Ouardi, Roxana	3
5. (*)	Young shoot: anthocyanin coloration of apex (during rapid growth)	Jeune rameau: pigmentation anthocyanique de l'apex (pendant la croissance rapide)	Jungtrieb: Anthocyanfärbung der Spitze (während des raschen Wachstums)	Tallo joven: pigmentación antociánica del ápice (durante el crecimiento rápido)		
QN	weak	faible	gering	débil	Blenheim, Hargrand, Perla, Samarkandskij rannij	3
	medium	moyenne	mittel	media	Polonais, San Castrese, Sun Glo	5
	strong	forte	stark	fuerte	Ceglédi bíbor, Harcot, Ohaicos, Roxana	7
6. (+)	(a) One-year-old shoot: color on sunny side	Rameau d'un an: couleur de la face exposée au soleil	Einjähriger Trieb: Farbe an der Sonnenseite	Tallo de un año: color en la parte soleada		
PQ	yellow brown	brun-jaune	gelbbraun	marrón amarillento	Bebeco, Grandir	1
	red brown	brun-rouge	rotbraun	marrón rojizo	Palsteyn, Polonais, Veecot	2
	purple brown	brun-pourpre	purpurbraun	marrón violáceo	Blenheim, Harcot	3
7. (a)	One-year-old shoot: size of bud support	Rameau d'un an: taille du support de l'œil	Einjähriger Trieb: Größe des Knospenwulstes	Tallo de un año: tamaño del soporte de la yema		
QN	small	petit	klein	pequeño	Canino, Harcot, Vitillo	3
	medium	moyen	mittel	medio	Hargrand, Magyar kajszai, Palsteyn, Portici	5
	large	grand	groß	grande	Ceglédi arany, Hamidi, Roxana	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
8. (b) Leaf blade: length		Limbe: longueur	Blattspreite: Länge	Limbo: longitud		
QN	short	court	kurz	corta	Early Biady, Perla, Samarkandskij rannij	3
	medium	moyen	mittel	media	Canino, Portici, Rouge du Roussillon, Veecot	5
	long	long	lang	larga	A. Vecchioni, Ceglédi arany, Moniquí, Roxana	7
9. (b) Leaf blade: width		Limbe: largeur	Blattspreite: Breite	Limbo: anchura		
QN	narrow	étroit	schmal	estrecha	Ceglédi bíbor, Monaco Bello, Rouget de Sernhac, Veecot	3
	medium	moyen	mittel	media	Canino, Harcot, Veecot, Vitulo	5
	broad	large	breit	ancha	Ceglédi piroška, Moniquí, Pisana	7
10. (b) Leaf blade: ratio length/width		Limbe: rapport longueur/largeur	Blattspreite: Verhältnis Länge/Breite	Limbo: relación longitud/anchura		
QN	very small	très petit	sehr klein	muy pequeña	Canino, Portici	1
	small	petit	klein	pequeña	Cafona, Hargrand	3
	medium	moyen	mittel	media	Harcot, San Castrese	5
	large	grand	groß	grande	A. Vecchioni, Ceglédi bíbor, Rouget de Sernhac	7
	very large	très grand	sehr groß	muy grande	Colorado Temprano, Noemi	9
11. (b) Leaf blade: intensity of green color of upper side		Limbe: intensité de la couleur verte de la face supérieure	Blattspreite: Intensität der Grünfärbung der Oberseite	Limbo: intensidad del color verde en la parte superior		
QN	light	claire	hell	claro	San Castrese, Veecot, Velasquez	3
	medium	moyenne	mittel	medio	Canino, Ceglédi óriás, Flaming Gold, Harcot	5
	dark	foncée	dunkel	oscuro	A. Vecchioni, Earle Orange, Moniquí	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
12. (+)	(b) Leaf blade: shape of base	Limbe: forme de la base	Blattspreite: Form der Basis	Limbo: forma de la base		
PQ	acute	pointue	spitz	aguda	Ceglédi bíbor, Rouget de Sernhac, San Francesco	1
	obtuse	obtuse	stumpf	obtusa	Bhart, Magyar kajsz, Portici	2
	truncate	tronquée	gerade	truncada	Bergeron, Blenheim, Canino, Perla	3
	cordate	cordiforme	herzförmig	cordiforme	Moniquí	4
13. (+)	(b) Leaf blade: angle of apex (excluding tip)	Limbe: angle de l'apex (pointe exclue)	Blattspreite: Winkel der Spitze (ohne Ende)	Limbo: ángulo del ápice (excluido el extremo)		
PQ	acute	aigu	spitz	agudo	San Castrese	1
	right-angled	droit	rechtwinklig	en ángulo recto	Canino, Ceglédi óriás	2
	moderately obtuse	modérément obtus	mittel stumpf	moderadamente obtuso	Bergeron, Polonais, Portici	3
	strongly obtuse	fortement obtus	stark stumpf	fuertemente obtuso	Hargrand, Moniquí	4
14. (+)	(b) Leaf blade: length of tip	Limbe: longueur de la pointe	Blattspreite: Länge des Endes	Limbo: longitud del extremo		
QN	absent or very short	absente ou très courte	fehlend oder sehr kurz	ausente o muy corta	Alpha	1
	short	courte	kurz	corta	Bhart, Harmat, Moniquí	3
	medium	moyenne	mittel	media	Magyar kajsz	5
	long	longue	lang	larga	Ivonne Liverani, Roxana	7
15. (+)	(b) Leaf blade: incisions of margin	Limbe: incisions du bord	Blattspreite: Randeinschnitte	Limbo: incisiones del borde		
PQ	crenate	crénelées	gekerbt	crenadas	Canino, San Castrese, Verdun	1
	bicrenate	bicrénelées	doppelt gekerbt	bicrenadas	Bhart, Ninfa	2
	serrate	dentelées	gesägt	serradas	Vitillo	3
	biserrate	bidentelées	doppelt gesägt	biserradas	Hamidi, Rakovszky, Roxana, San Francesco	4

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
16. (b)	Leaf blade: undulation of margin	Limbe: ondulation du bord	Blattspreite: Randwellung	Limbo: ondulación del borde		
QN	weak	faible	gering	débil	Harcot, Palsteyn, Portici	3
	medium	moyenne	mittel	media	Blenheim, Nonno, Roxana	5
	strong	forte	stark	fuerte	Piet Cillié, Polonais, San Francesco	7
17. (b)	Leaf blade: profile in cross section	Limbe: profil en section transversale	Blattspreite: Profil im Querschnitt	Limbo: perfil en sección transversal		
(+)						
QN	straight or weakly concave	droit ou faiblement concave	gerade oder leicht konkav	recto o débilmente cóncavo	Earle Orange, Rouget de Sernhac, San Castrese	1
	moderately concave	modérément concave	mittel konkav	moderadamente cóncavo	Bergeron, Dulcinea, Moniquí	2
	strongly concave	fortement concave	stark konkav	fuertemente cóncavo	Polonais	3
18. (b)	Petiole: length	Pétiole: longueur	Blattstiel: Länge	Pecíolo: longitud		
(*)						
QN	short	courte	kurz	corta	Moniquí, Ninfa, Veecot	3
	medium	moyenne	mittel	media	Bergeron, Cafona, Canino, Hargrand	5
	long	longue	lang	larga	Reale d'Imola, Skopska Krupna	7
19. (b)	Leaf: ratio length of blade /length of petiole	Feuille: rapport longueur du limbe/longueur du pétiole	Blatt: Verhältnis Länge der Blattspreite/Länge des Blattstiels	Hoja: relación longitud del limbo/longitud del pecíolo		
QN	small	faible	klein	pequeña	Earle Orange, Harcot, Pisana, Rouget de Sernhac	3
	medium	moyen	mittel	media	Bergeron, Hâtif Colomer, Portici, Rouge du Roussillon	5
	large	élevé	groß	grande	Bebeco, Flaming Gold, Monaco Bello, Moniquí	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
20. (b) Petiole: thickness		Pétiole: épaisseur	Blattstiel: Dicke	Pecíolo: grosor		
QN	thin	mince	dünn	fino	Flaming Gold, San Castrese, Veecot	3
	medium	moyen	mittel	medio	Harcot, Portici	5
	thick	épais	dick	grueso	Ceglédi arany, Moniquí, Reale d'Imola	7
21. (b) Petiole: anthocyanin coloration of upper side		Pétiole: pigmentation anthocyanique de la face supérieure	Blattstiel: Anthocyanfärbung an der Oberseite	Pecíolo: pigmentación antociánica de la parte superior		
QN	weak	faible	gering	débil	Cibo del Paradiso	3
	medium	moyenne	mittel	media	Bebeco, Bhart, San Castrese	5
	strong	forte	stark	fuerte	Canino, Ceglédi bíbor, Early Biady, Harogem	7
22. (*) (b) Petiole: predominant number of nectaries		Pétiole: nombre le plus fréquent de nectaires	Blattstiel: Vorwiegende Anzahl Nektarien	Pecíolo: número predominante de nectarios		
PQ	none or one	aucun ou un	keine oder eine	ninguno o uno	Mandulakajszí, Rouget de Sernhac, Sant' Ambrogio	1
	two or three	deux ou trois	zwei oder drei	dos o tres	Cafona, Magyar kajszí, Veecot	2
	more than three	plus de trois	mehr als drei	más de tres	Canino, Moniquí, Pisana	3
23. (b) Petiole: size of nectaries		Pétiole: taille des nectaires	Blattstiel: Größe der Nektarien	Pecíolo: tamaño de los nectarios		
QN	small	petite	klein	pequeño	Alpha, San Francesco, Yerevani	3
	medium	moyenne	mittel	medio	Ceglédi óriás, San Castrese, Tilton	5
	large	grande	groß	grande	Canino, Early Biady, Harmat, Pisana	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
24. (*) (+)	(c) Flower: diameter	Fleur: diamètre	Blüte: Durchmesser	Flor: diámetro		
QN	small	petit	klein	pequeño	Borsi rózsá, Hâtif Colomer, Portici	3
	medium	moyen	mittel	medio	Magyar kajszí, Polonais, Reale d'Imola	5
	large	grand	groß	grande	Hargrand, Harmat, San Castrese	7
25.	(c) Flower: position of stigma relative to anthers	Fleur: position du stigmate par rapport aux anthères	Blüte: Sitz der Narbe im Vergleich zu den Antheren	Flor: posición del estigma en relación a las anteras		
QN	below	au-dessous	unten	por debajo	Canetta, Harmat	1
	same level	au même niveau	gleiche Höhe	al mismo nivel	Hargrand, Portici	2
	above	au-dessus	oben	por encima	Canino, Pisana, Polonais	3
26. (+)	(c) Petal: shape (excluding claw)	Pétale: forme (onglet exclu)	Blütenblatt: Form (ohne Nagel)	Pétalo: forma (excluyendo el mucrón)		
PQ	broad elliptic	elliptique large	breit elliptisch	elíptica ancha	Sant' Ambrogio	1
	circular	rond	rund	circular	Harcot, Luizet	2
	oblate	oblong	breitrund	achatada	Canino, Polonais, Vitillo	3
27. (+)	(c) Petal: color on lower side	Pétale: couleur de la face inférieure	Blütenblatt: Farbe an der Unterseite	Pétalo: color de la parte inferior		
PQ	white	blanc	weiß	blanco	Cafona, Polonais	1
	light pink	rose clair	hellrosa	rosa claro	Magyar kajszí, San Castrese	2
	dark pink	rose foncé	dunkelrosa	rosa oscuro	Harcot	3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
28. (d) Fruit: size (*)	Fruit: size	Fruit: taille	Frucht: Größe	Fruto: tamaño		
QN	very small	très petite	sehr klein	muy pequeño	Haggith, Menace, Zard	1
	small	petite	klein	pequeño	Borsi rózsa, Hâtif Colomer, Patriarca Temprano	3
	medium	moyenne	mittel	medio	Cafona, Canino, Harcot	5
	large	grande	groß	grande	Ceglédi bíbor, Moniquí, Portici	7
	very large	très grande	sehr groß	muy grande	Ceglédi óriás, Hargrand, Palsteyn, Pisana	9
29. (d) Fruit: shape in lateral view (+)	Fruit: shape in lateral view	Fruit: forme en vue latérale	Frucht: Form in der Seitenansicht	Fruto: forma en vista lateral		
PQ	oblong	oblongue	rechteckig	oblonga	Blenheim, Portici, Sundrop	1
	elliptic	elliptique	elliptisch	elíptica	Precoce d'Imola, Wenatchee, Yerevani	2
	circular	ronde	rund	circular	Earle Orange, Ninfa, Ouardi, Polonais	3
	oblate	aplatie	breitrund	achatada	Korai zamatos, Nugget, Patriarca Temprano	4
	triangular	triangulaire	dreieckig	triangular	Luizet	5
	ovate	ovale	eiförmig	oval	Bergeron, Pisana	6
	obovate	obovale	verkehrt eiförmig	oboval	Harcot, Harmat, Trevatt	7
	oblique rhombic	oblique losangique	schräg rautenförmig	oblicua rómbica	Canino, Vulcan	8

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
30. (d) Fruit: shape in ventral view (+)		Fruit: forme en vue ventrale	Frucht: Form in der Bauchansicht	Fruto: forma en vista ventral		
PQ	oblong	oblongue	rechteckig	oblonga	Baracca, Hargrand, Hâtif Colomer, Veecot	1
	elliptic	elliptique	elliptisch	elíptica	Bella d'Imola, Flaming Gold, Sant' Ambrogio, Yerevani	2
	circular	ronde	rund	circular	Rouge du Roussillon, Polonais, San Castrese, Viceroy	3
	oblate	aplatie	breitrund	achatada	Nugget	4
	triangular	triangulaire	dreieckig	triangular	Luizet, Mandulakajsi, Reale d'Imola	5
	ovate	ovale	eiförmig	oval	Bergeron, Canino, Fracasso	6
	obovate	obovale	verkehrt eiförmig	oboval	Portici, Harcot, Harmat	7
31. (d) Fruit: height (+)		Fruit: hauteur	Frucht: Höhe	Fruto: altura		
QN	short	petit	niedrig	baja	Patriarca Temprano, Samarkandskij rannij, Sayeb	3
	medium	moyen	mittel	media	Bebeco, Bergeron, Canino, Polonais	5
	tall	grand	hoch	alta	Goldrich, Mandulakajsi, Vivillo	7
32. (d) Fruit: lateral width (+)		Fruit: largeur latérale	Frucht: seitliche Breite	Fruto: anchura lateral		
QN	narrow	étroit	schmal	estrecha	Cerasiello, Harmat, Samarkandskij rannij	3
	medium	moyen	mittel	media	Bergeron, Bhart, Cafona	5
	broad	large	breit	ancha	Hargrand, Moniquí, Vivillo	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
33. (d)	Fruit: ventral width	Fruit: largeur ventrale	Frucht: ventrale Breite	Fruto: anchura ventral		
(+)						
QN	narrow	étroit	schmal	estrecha	Cerasiello, Harlayne, Hâtif Colomer	3
	medium	moyen	mittel	media	Bebeco, Bhart, Palummella	5
	broad	large	breit	ancha	Ceglédi arany, Goldrich, Moniquí	7
34. (d)	Fruit: ratio height/ventral width	Fruit: rapport hauteur/largeur ventrale	Frucht: Verhältnis Höhe/ventrale Breite	Fruto: relación altura/anchura ventral		
(+)						
QN	small	faible	klein	pequeña	Korai zamatos, Monaco Bello, Patriarca Temprano	3
	medium	moyen	mittel	media	Cafona, Canino, Magyar kajsi, Rouge du Roussillon	5
	large	élevé	groß	grande	Bergeron, Hâtif Colomer, Vitillo	7
35. (d)	Fruit: ratio lateral width/ventral width	Fruit: rapport largeur latérale/largeur ventrale	Frucht: Verhältnis seitliche Breite/ventrale Breite	Fruto: relación anchura lateral/ventral		
(+)						
QN	small	faible	klein	pequeña	Mandorlon, Maria Ferez, Vesna	3
	medium	moyen	mittel	media	Bergeron, Luizet, Pisana, Rouge du Roussillon	5
	large	élevé	groß	grande	Henderson, Borsi rózsa	7
36. (d)	Fruit: symmetry in ventral view	Fruit: symétrie en vue ventrale	Frucht: Symmetrie in der Bauchansicht	Fruto: simetría en vista ventral		
PQ	symmetric	symétrique	symmetrisch	simétrica	Canino, Hâtif Colomer, Magyar kajsi, Polonais, Portici	1
	slightly asymmetric	légèrement dissymétrique	leicht asymmetrisch	ligeramente asimétrica	Boccuccia, Ceglédi óriás, Royal	2
	clearly asymmetric	nettement dissymétrique	deutlich asymmetrisch	claramente asimétrica	Borsi rózsa, Reale d'Imola	3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
37. (d) Fruit: suture (*)		Fruit: suture	Frucht: Naht	Fruto: sutura		
PQ	raised	en relief	vorgewölbt	protuberante	Priboto	1
	slightly sunken	légèrement en creux	leicht eingesunken	ligeramente hundida	Magyar kajszzi, Ninfa, Rouge du Roussillon	2
	moderately sunken	modérément en creux	mittel eingesunken	moderadamente hundida	Bergeron, Monaco Bello, Pineapple	3
	deeply sunken	profondément en creux	tief eingesunken	profundamente hundida	Dima, Henderson, Kech-pshar, Portici	4
38. (d) Fruit: depth of stalk cavity		Fruit: profondeur de la dépression pédonculaire	Frucht: Tiefe der Stielhöhle	Fruto: profundidad de la cavidad peduncular		
QN	shallow	peu profonde	flach	poco profunda	Harlayne, Rouge du Roussillon, San Castrese	3
	medium	moyenne	mittel	mediana	Blenheim, Magyar kajszzi, Vitillo	5
	deep	profonde	tief	profunda	Canino, Ceglédi óriás, Hâtif Colomer, Palsteyn	7
39. (d) Fruit: shape of apex (*) (+)		Fruit: forme de l'apex	Frucht: Form der Spitze	Fruto: forma del ápice		
PQ	acute	pointu	spitz	aguda	Mandulakajszzi, Reale d'Imola	1
	rounded	rond	abgerundet	redondeada	Bergeron, Goldrich, Luizet, Portici	2
	truncate	tronqué	abgestumpft	truncada	Bella d'Immola, Hargrand, Hâtif Colomer	3
	retuse	échancré	eingedrückt	retusa	Early Ril, Perfection, San Castrese	4
40. (d) Fruit: presence of mucro (+)		Fruit: présence de mucron	Frucht: Vorhandensein der aufgesetzten Spitze	Fruto: presencia de mucrón		
QL	absent	absent	fehlend	ausente	Blenheim, Canino, San Castrese	1
	present	présent	vorhanden	presente	Bhart, Pisana	9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
41. (d) Fruit: surface		Fruit: surface	Frucht: Oberfläche	Fruto: superficie		
QL	smooth	lisse	glatt	lisa	Bergeron, Palsteyn, Portici, Rouge du Roussillon	1
	bumpy	bosselée	höckerig	protuberante	Canino, Ceglédi óriás, Nonno	2
42. (d) Fruit: skin pubescence		Fruit: pilosité de la peau	Frucht: Hautbehaarung	Fruto: pubescencia de la piel		
QL	absent	absente	fehlend	ausente	Glattschalige Frühmarille	1
	present	présente	vorhanden	presente	Bergeron, Canino, Magyar kajszi	9
43. (d) <u>Only varieties with pubescence absent:</u> Fruit: glossiness of skin		<u>Seulement les variétés sans pilosité:</u> Fruit: brillance de la peau	<u>Nur Sorten ohne Behaarung:</u> Frucht: Glanz der Haut	<u>Sólo variedades con pubescencia ausente:</u> Fruto: brillo de la piel		
QN	absent or weak	nulle ou faible	fehlend oder gering	ausente o débil	Moorpark	1
	medium	moyenne	mittel	medio	Harcot	2
	strong	forte	stark	fuerte	Cluthagold, Sun Glo	3
44. (d) (*) Fruit: ground color of skin		Fruit: couleur de fond de la peau	Frucht: Grundfarbe der Haut	Fruto: color de fondo de la piel		
PQ	white	blanc	weiß	blanco	San Nicola, Shirazskij belyj	1
	yellowish	jaunâtre	gelblich	amarillento	Moniquí, Piet Cillié, Vitillo, Yerevani	2
	yellow green	vert-jaune	gelbgrün	verde amarillento	Grüne Spätmarille, Kaisi Ashtarak, Sateni Karmir	3
	light orange	orange clair	hellorange	naranja claro	Canino Hargrand, Goldcot, Portici, Rouge du Roussillon	4
	medium orange	orange moyen	mittelorange	naranja medio	Hâtif Colomer, Luizet, Pisana, Veecot	5
	dark orange	orange foncé	dunkelorange	naranja oscuro	Bhart, Harcot, Harogem	6

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
45. (d) Fruit: amount of over color (*)	Fruit: amount of over color	Fruit: quantité du lavis	Frucht: Anteil der Deckfarbe	Fruto: cantidad de color superior		
QN	absent or very low	absente ou très petite	fehlend oder sehr gering	ausente o muy baja	Maria Matilde, Moniquí, Yerevani	1
	low	petite	niedrig	baja	Cafona, Canino, Goldrich	3
	medium	moyenne	mittel	media	Hâtif Colomer, Magyar kajsi, Palsteyn, Portici	5
	high	forte	hoch	alta	Bergeron, Bhart, Pisana	7
46. (d) Fruit: hue of over color	Fruit: hue of over color	Fruit: teinte du lavis	Frucht: Ton der Deckfarbe	Fruto: tono del color superior		
PQ	orange red	rouge orangé	orangerot	rojo anaranjado		1
	red	rouge	rot	rojo		2
	pink	rose	rosa	rosa		3
	purple	violet	purpurn	violeta		4
47. (d) Fruit: intensity of over color	Fruit: intensity of over color	Fruit: intensité de la couleur du lavis	Frucht: Intensität der Deckfarbe	Fruto: intensidad del color superior		
QN	light	claire	hell	clara		3
	medium	moyenne	mittel	media		5
	dark	foncée	dunkel	oscura		7
48. (d) Fruit: distribution of coloration	Fruit: distribution of coloration	Fruit: répartition de la pigmentation	Frucht: Verteilung der Färbung	Fruto: distribución de la pigmentación		
PQ	isolated flecks (spots)	panachure isolée (tâches)	isolierte Panaschierung (Flecken)	manchas aisladas (lunares)	Rouge du Roussillon	1
	solid flush	en plages continues	geflammt	tono uniforme	Bergeron	2
	covered all over with very small dots	totalment recouvert avec de très petits points	überall sehr fein gepunktet	cubierto con puntos muy pequeños	Moniquí	3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
49. (d) Fruit: color of flesh (*)		Fruit: couleur de la chair	Frucht: Farbe des Fleisches	Fruto: color de la carne		
PQ	whitish green	vert blanchâtre	weißlichgrün	verde blanquecino	Amban	1
	white	blanc	weiß	blanco	Cibo del Paradiso, Mouchbah Mourry, Spitak	2
	cream	crème	cremefarben	crema	Barese, Malatya, Moniquí, Patriarca Temprano	3
	light orange	orange clair	hellorange	naranja claro	Canino, Harmat, San Castrese, Yerevani	4
	medium orange	orange moyen	mittelorange	naranja medio	Harglow, Pisana, Rouge du Roussillon, Screara	5
	dark orange	orange foncé	dunkelorange	naranja oscuro	Francese, Harcot, Hâtif Colomer, Palsteyn	6
50. (d) Fruit: texture of flesh		Fruit: texture de la chair	Frucht: Textur des Fleisches	Fruto: textura de la carne		
QN	fine	fine	fein	fina	Fracasso, Harlayne, Peeka	1
	medium	moyenne	mittel	mediana	Canino, Magyar kajszi, Piet Cillié	2
	coarse	grossière	grob	grosera	Bergeron, Precoce d'Imola	3
51. (d) Fruit: firmness of flesh		Fruit: fermeté de la chair	Frucht: Festigkeit des Fleisches	Fruto: firmeza de la carne		
QN	very soft	très molle	sehr weich	muy blanda	Sant' Ambrogio, Viceroy	1
	soft	molle	weich	blanda	Alessandrino, Goldcot	3
	medium	moyenne	mittel	mediana	Magyar kajszi, Piet Cillié, Rouge du Roussillon, San Castrese	5
	firm	ferme	fest	firme	Bella d'Imola, Bergeron, Palsteyn	7
	very firm	très ferme	sehr fest	muy firme	Boccuccia Lisçia, Borsi rózsza, Čačansko zlato, Harogem	9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
52.	(d) Fruit: ratio weight of fruit/weight of stone	Fruit: rapport poids du fruit/poids du noyau	Frucht: Verhältnis Gewicht der Frucht/Gewicht des Steins	Fruto: relación entre el peso del fruto/peso del hueso		
QN	small	faible	klein	pequeña	Borsi rózsza, Reale d'Imola	3
	medium	moyen	mittel	media	Blenheim, Hâtif Colomer, Portici	5
	large	élevé	groß	grande	Badami, Bergeron, San Castrese	7
53.	(d) Fruit: adherence of stone to flesh	Fruit: adhérence du noyau à la chair	Frucht: Anhaften des Steins am Fleisch	Fruto: adherencia del hueso a la carne		
QN	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil	Bergeron, Hargrand, Ninfa, Peeka	1
	weak	faible	gering	débil	Canino, Nonno, Rouge du Roussillon, Sirena	3
	medium	moyenne	mittel	media	Cafona, Tardif de Bordaneil	5
	strong	forte	stark	fuerte	Comandor, Precoce di Toscana	7
54.	(d) Stone: shape in lateral view	Noyau: forme en vue latérale	Stein: Form in der Seitenansicht	Hueso: forma en vista lateral		
PQ	oblong	oblong	rechteckig	oblonga	Bella d'Imola, Palsteyn, Rouge du Roussillon	1
	elliptic	elliptique	elliptisch	elíptica	Bergeron, Vitillo	2
	circular	rond	rund	circular	Canino, Eten Bey, Hargrand, Monaco Bello	3
	ovate	oval	eiförmig	oval	Goldcot, Magyar kajszi, Portici	4
	obovate	oboval	verkehrt eiförmig	oboval	Harcot, Harmat	5

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
55. (d) Kernel: bitterness		Amande: amertume	Kern: Bitterkeit	Almendra: amargor		
QN	absent or weak	nulle ou faible	fehlend oder gering	ausente o débil	Bergeron, Harcot, Magyar kajszí, Moniquí, Reale d'Imola	1
	medium	moyenne	mittel	medio	Bella d'Imola, Harlayne, Palsteyn	2
	strong	forte	stark	muy amarga	Borsi rózsa, Canino, Prevete, Viceroy	3
56. (*) (+)	Time of beginning of flowering	Époque du début de la floraison	Zeitpunkt des Blühbeginns	Época de inicio de la floración		
QN	very early	très précoce	sehr früh	muy precoz	Bakour, Currots, Harmat, Ninfa	1
	early	précoce	früh	precoz	Canino, Harcot, Hâtif Colomer, San Castrese	3
	medium	moyenne	mittel	intermedia	Magyar kajszí, Moniquí, Portici, San Francesco	5
	late	tardive	spät	tardía	Bergeron, Boccuccia Liscia, Harlayne, Polonais	7
	very late	très tardive	sehr spät	muy tardía	Harglow, Skromnyj, Zard	9
57. (*) (+)	Time of beginning of fruit ripening	Époque du début de la maturation des fruits	Zeitpunkt des Fruchtreifebeginns	Época de inicio de maduración del fruto		
QN	very early	très précoce	sehr früh	muy precoz	Ninfa, Patriarca Temprano, Rutbhart, Samarkandskij rannij	1
	early	précoce	früh	precoz	Bhart, Hâtif Colomer, Monaco Bello, Rouget de Sernhac	3
	medium	moyenne	mittel	intermedia	Moniquí, San Castrese,	5
	late	tardive	spät	tardía	Bergeron, Harlayne, Pisana, Polonais	7
	very late	très tardive	sehr spät	muy tardía	Borsi rózsa, Larqueen, Tardif de Bordaneil type 2	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) Tree/One-year-old shoot: Unless otherwise stated, all observations on the tree and on the one-year-old shoot should be made during winter, on trees that have fruited at least once.
- (b) Leaf: Unless otherwise stated, all observations on the leaf should be made in summer on fully developed leaves from the middle third of a well developed current season's shoot.
- (c) Flower: Unless otherwise stated, all observations on the flower should be made on fully developed flowers at the beginning of anther dehiscence.
- (d) Fruit/Stone: All observations on the fruit and stone should be made on 25 fruits, five from each of five trees.

8.2 *Explanations for Individual Characteristics*

Ad. 1: Tree: vigor

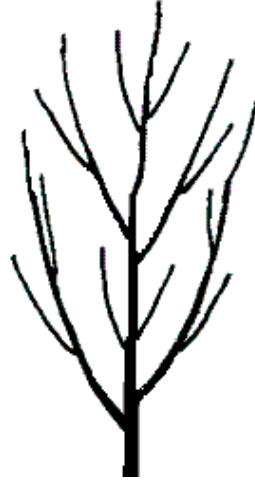
The tree vigor should be considered as the overall abundance of vegetative growth.

Ad. 2: Tree: habit



1

fastigate



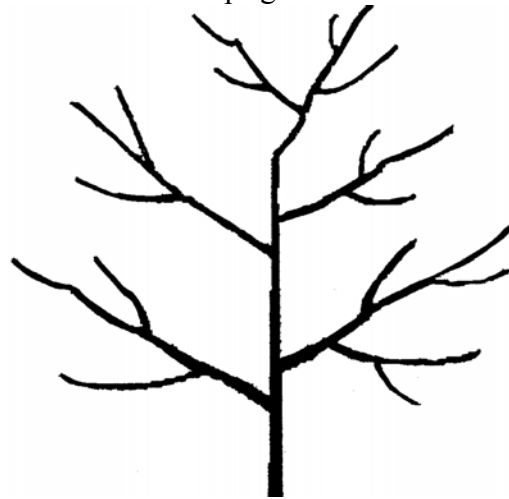
2

upright



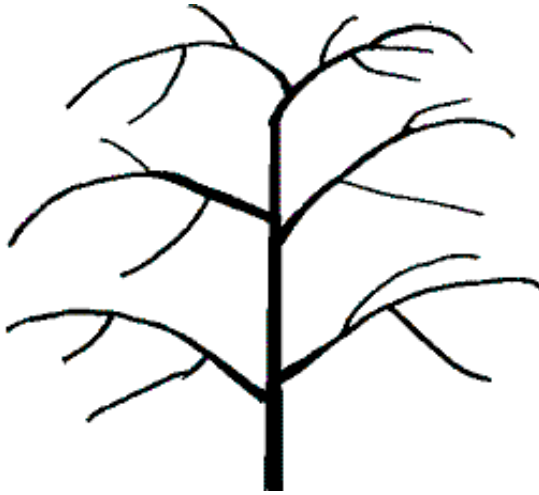
3

upright to spreading



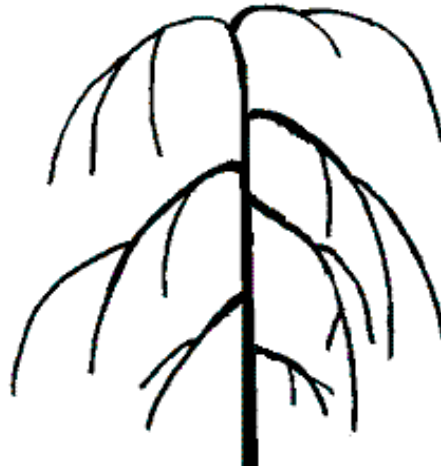
4

spreading



5

drooping



6

weeping

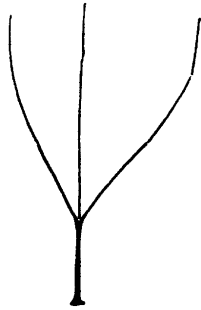
Ad. 3: Tree: degree of branching

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.

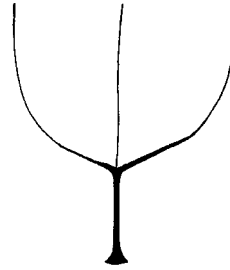
Ad. 6: One-year-old shoot: color on sunny side

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

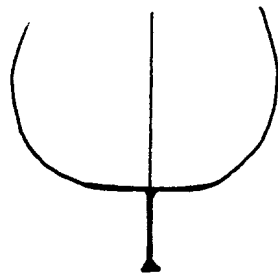
Ad. 12: Leaf blade: shape of base



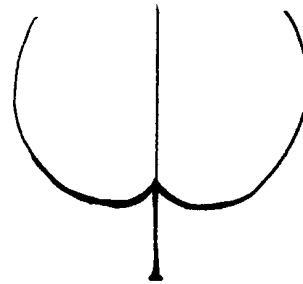
1
acute



2
obtuse

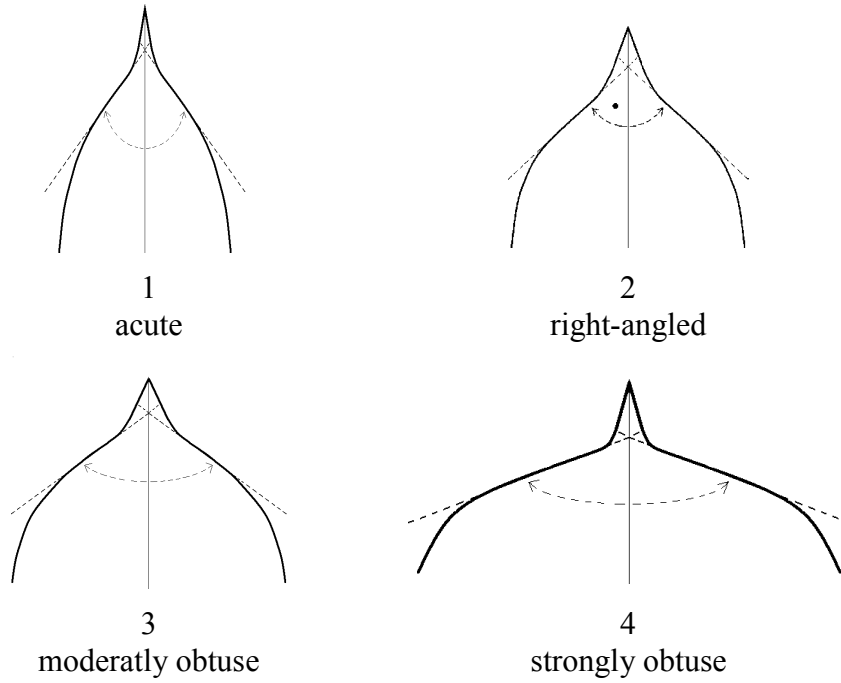


3
truncate

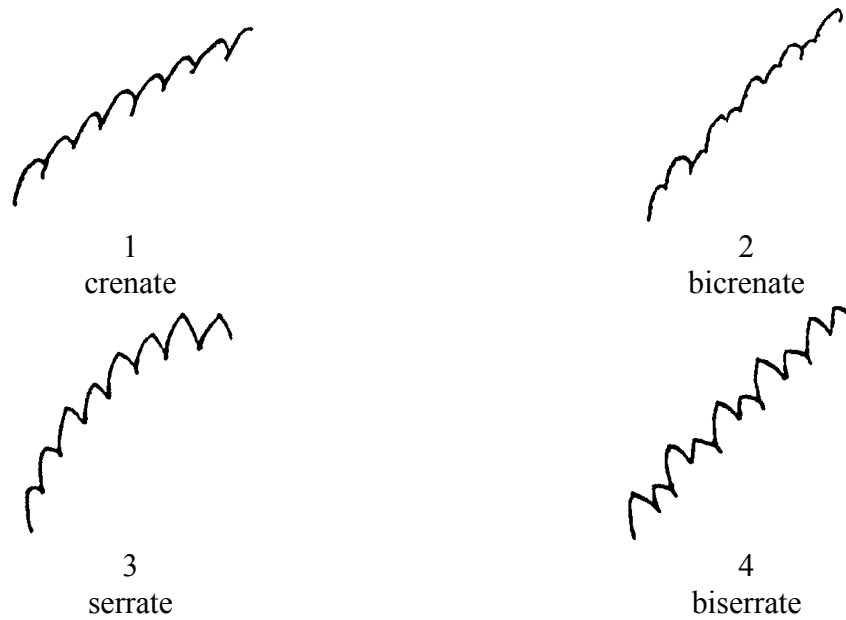


4
cordate

Ad. 13: Leaf blade: angle of apex (excluding tip)



Ad. 15: Leaf blade: incisions of margin



Ad. 17: Leaf blade: profile in cross section

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

Ad. 24. Flower: diameter

Observations or measurements should be carried out on flowers with petals pressed into horizontal position.

Ad. 26: Petal: shape (excluding claw)



1
broad elliptic



2
circular



3
oblate

Ad. 27: Petal: color on lower side

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

Ad. 29: Fruit: shape in lateral view

Ad. 30: Fruit: shape in ventral view

Ad. 31: Fruit: height

Ad. 32: Fruit: lateral width

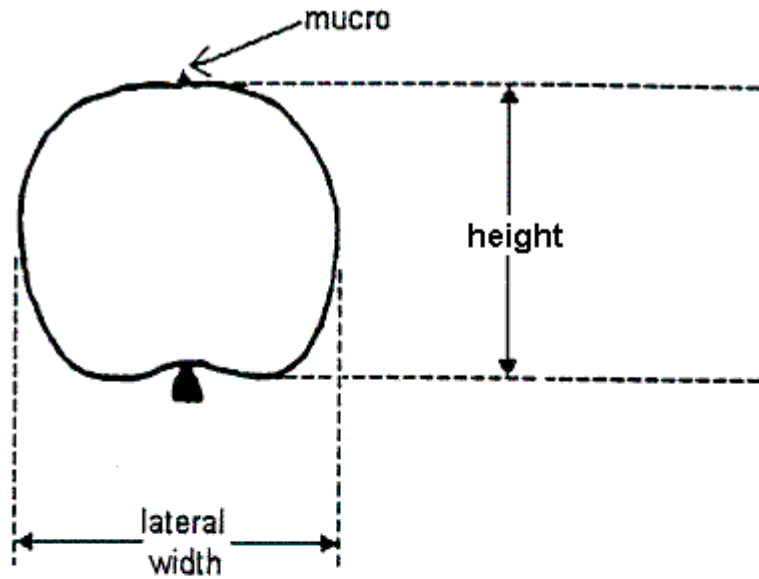
Ad. 33: Fruit: ventral width

Ad. 34: Fruit: ratio height/ventral width

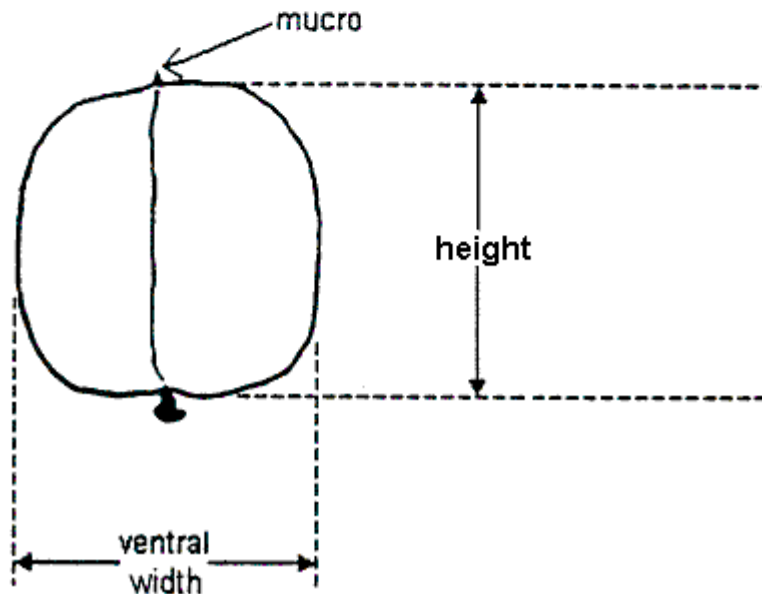
Ad. 35: Fruit: ratio lateral width/ventral width

Ad. 40: Fruit: presence of mucro

Lateral view

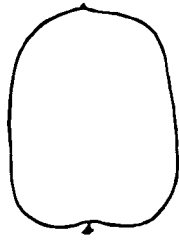


Ventral view



Ad. 29: Fruit: shape in lateral view

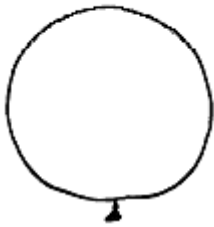
Ad. 30: Fruit: shape in ventral view



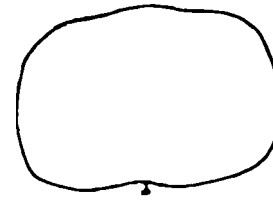
1
oblong



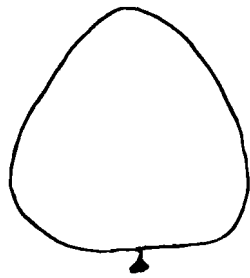
2
elliptic



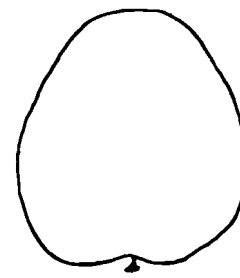
3
circular



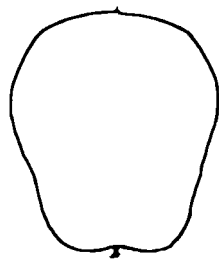
4
oblate



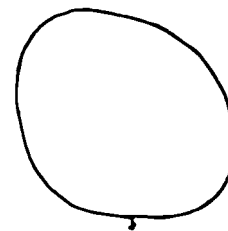
5
triangular



6
ovate



7
obovate



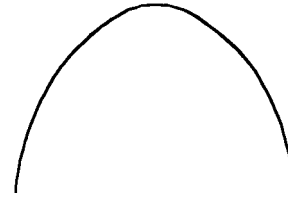
8
oblique rhombic

Ad. 39: Fruit: shape of apex

Observations should be carried out on fruits in lateral cross-section.



1
acute



2
rounded

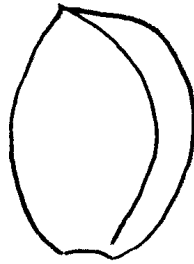


3
truncate

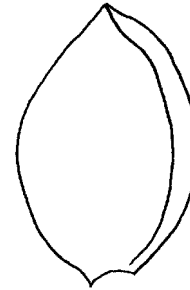


4
retuse

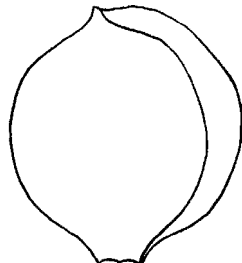
Ad. 54: Stone: shape in lateral view



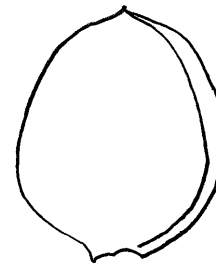
1
oblong



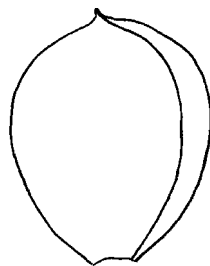
2
elliptic



3
circular



4
ovate



5
obovate

Ad. 56: Time of beginning of flowering

When 5-10% open flowers can be observed.

Ad. 57: 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.

Synonym(s) of Example Varieties

Example Varieties	Synonym(s)
Sant' Ambrogio	Ambrosia, Saint Ambroise
Bhart	NJA 32
Borsi rózsza	Kecskemeter rose, Ružova neskora, Trandafirii tirzi
Čačacansko zlato	Čačak's Gold
Earle Orange	Erle Orange, Stark Earli Orange
Goldrich	Sungiant
Magyar kajszai	Hungarian Best, Ungarische Beste, Meilleur d'Hongrie, Klosterneuburger Aprikose, Krasnoshchokij, Velkopavlovická, Mađarska najbolja, Cea mai bună de Ungaria
Pineapple	Ananas-Marille, Abricot d'Ananas, Ananasnyj
Proimo Tyrinthos	Précoce de Tyrinthe
Rutbhart	Early Blush
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: "Kajsziarack (Apricot)", Mezőgazdasági Kiadó, Budapest, HU.

Nyujtó, F., Tomcsányi, P., 1959: "A kajsziarack 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: "Pomologiya". 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 neoroshamykh 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"/>	

TECHNICAL QUESTIONNAIRE	Page (x) of {y}	Reference Number:
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#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) budding or grafting []
- (b) other (state method) []

4.2.2 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:	
<p>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).</p>			
Characteristics	Example Varieties	Note	
<p>5.1 Fruit: size (28)</p>			
<p>very small</p>	<p>Haggith, Menace, Zard</p>	<p>1[]</p>	
<p>small</p>	<p>Borsi rózsza, Hâtif Colomer, Patriarca Temprano</p>	<p>3[]</p>	
<p>medium</p>	<p>Cafona, Canino, Harcot</p>	<p>5[]</p>	
<p>large</p>	<p>Ceglédi bíbor, Moniquí, Portici</p>	<p>7[]</p>	
<p>very large</p>	<p>Ceglédi óriás, Hargrand, Palsteyn, Pisana</p>	<p>9[]</p>	
<p>5.2 Fruit: ground color of skin (44)</p>			
<p>white</p>	<p>San Nicola, Shirazskij belyj</p>	<p>1[]</p>	
<p>yellowish</p>	<p>Moniquí, Piet Cillié, Vitillo, Yerevani</p>	<p>2[]</p>	
<p>yellow green</p>	<p>Grüne Spätmarille, Kaisi Ashtarak, Sateni Karmir</p>	<p>3[]</p>	
<p>light orange</p>	<p>Canino Hargrand, Golcot, Portici, Rouge du Roussillon</p>	<p>4[]</p>	
<p>medium orange</p>	<p>Hâtif Colomer, Luizet, Pisana, Veecot</p>	<p>5[]</p>	
<p>dark orange</p>	<p>Bhart, Harcot, Harogem</p>	<p>6[]</p>	
<p>5.3 Fruit: amount of over color (45)</p>			
<p>absent or very low</p>	<p>Maria Matilde, Moniquí, Yerevani</p>	<p>1[]</p>	
<p>low</p>	<p>Cafona, Canino, Goldrich</p>	<p>3[]</p>	
<p>medium</p>	<p>Hâtif Colomer, Magyar kajcsi, Palsteyn, Portici</p>	<p>5[]</p>	
<p>high</p>	<p>Bergeron, Bhart, Pisana</p>	<p>7[]</p>	

TECHNICAL QUESTIONNAIRE	Page (x) of {y}	Reference Number:	
Characteristics	Example Varieties	Note	
5.4 Fruit: color of flesh (49)			
whitish green	Amban	1[]	
white	Cibo del Paradiso, Mouchbah Mourry, Spitak	2[]	
cream	Barese, Malatya, Moniquí, Patriarca Temprano	3[]	
light orange	Canino, Harmat, San Castrese, Yerevani	4[]	
medium orange	Harglow, Pisana, Rouge du Roussillon, Screara	5[]	
dark orange	Francese, Harcot, Hâtif Colomer, Palsteyn	6[]	
5.5 Time of beginning of flowering (56)			
very early	Bakour, Currots, Harmat, Ninfa	1[]	
early	Canino, Harcot, Hâtif Colomer, San Castrese	3[]	
medium	Magyar kajszi, Moniquí, Portici, San Francesco	5 []	
late	Bergeron, Boccuccia Liscia, Harlayne, Polonais	7 []	
very late	Harglow, Skromnyj, Zard	9[]	
5.6 Time of beginning of fruit ripening (57)			
very early	Ninfa, Patriarca Temprano, Rutbhart, Samarkandskij rannij	1[]	
early	Bhart, Hâtif Colomer, Monaco Bello, Rouget de Sernhac	3[]	
medium	Moniquí, San Castrese,	5[]	
late	Bergeron, Harlayne, Pisana, Polonais	7[]	
very late	Borsi rózsza, Larqueen, Tardif de Bordaneil type 2	9[]	

TECHNICAL QUESTIONNAIRE	Page (x) of {y}	Reference Number:
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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: size</i>	<i>small</i>	<i>medium</i>

Comments:

TECHNICAL QUESTIONNAIRE	Page (x) of {y}	Reference Number:
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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 Are there any special conditions for growing the variety or conducting the examination?

Yes [] No []

(If yes, please provide details)

7.3 Other information

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

8. Authorization for release

(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes [] No []

(b) Has such authorization been obtained?

Yes [] No []

If the answer to (b) is yes, please attach a copy of the authorization.

TECHNICAL QUESTIONNAIRE	Page (x) of {y}	Reference Number:
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9. Information on plant material to be examined.

9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.

9.2 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

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

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

.....

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

Applicant's name

Signature

Date

[End of document]