

These Test Guidelines have been superseded by a later version. The latest adopted version of Test Guidelines can be found at http://www.upov.int/test_guidelines/en/list.jsp

Ces principes directeurs d'examen ont été remplacés par une version ultérieure. La version adoptée la plus récente des principes directeurs d'examen figure à l'adresse suivante : http://www.upov.int/test_guidelines/fr/list.jsp

Diese Prüfungsrichtlinien wurden durch eine neuere Fassung ersetzt. Die neueste angenommene Fassung von Prüfungsrichtlinien ist unter http://www.upov.int/test_guidelines/de/list.jsp zu finden.

Las presentes directrices de examen han sido reemplazadas por una versión posterior. La versión de las directrices de examen de más reciente aprobación está disponible en http://www.upov.int/test_guidelines/es/list.jsp.



TG/84/4 Corr. 2

ORIGINAL: English

DATE: 2011-10-20 + 2013-01-25

+ 2017-04-05

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

JAPANESE PLUM

UPOV Code: PRNUU_SAL

Prunus salicina Lindl.

*

GUIDELINES**FOR THE CONDUCT OF TESTS****FOR DISTINCTNESS, UNIFORMITY AND STABILITY**Alternative Names:^{*}

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Prunus salicina</i> Lindl.	Japanese plum	Prunier Japonais	Ostasiatische Pflaume	Ciruelo Japonés

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.]

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
1. SUBJECT OF THESE TEST GUIDELINES	3
2. MATERIAL REQUIRED	3
3. METHOD OF EXAMINATION.....	3
3.1 Number of Growing Cycles	3
3.2 Testing Place.....	3
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	4
4.1 Distinctness	4
4.2 Uniformity.....	5
4.3 Stability	6
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL	6
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS	6
6.1 Categories of Characteristics.....	6
6.2 States of Expression and Corresponding Notes.....	7
6.3 Types of Expression.....	7
6.4 Example Varieties	7
6.5 Legend.....	8
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTERES/MERKMALSTABELLE/TABLA DE CARACTERES.....	9
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS	25
8.1 Explanations covering several characteristics	25
8.2 Explanations for individual characteristics	25
9. LITERATURE	37
10. TECHNICAL QUESTIONNAIRE.....	38

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Prunus salicina* Lindl.. For the examination of hybrids involving *Prunus salicina* Lindl., 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 budsticks, dormant shoots or one-year-old trees grafted on a rootstock selected by the testing authority.

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

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

2.4 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease.

2.5 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

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

3.1.2 The growing cycle is considered to be the duration of a single growing season, beginning with bud burst (flowering and/or vegetative), flowering and fruit harvest and concluding when the following dormant period ends with the swelling of new 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. Trees should only be pruned in the year of planting to ensure good branch formation.

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 Additional Tests

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

4. Assessment of Distinctness, Uniformity and Stability

4.1 Distinctness

4.1.1 General Recommendations

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

4.1.2 Consistent Differences

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

4.1.3 Clear Differences

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

4.1.4 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 5 plants or parts taken from each of 5 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 2.

4.1.5 Method of Observation

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

MG: single measurement of a group of plants or parts of plants

MS: measurement of a number of individual plants or parts of plants

VG: visual assessment by a single observation of a group of plants or parts of plants

VS: visual assessment by observation of individual plants or parts of plants

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

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

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

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

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

4.2 Uniformity

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

4.2.2 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 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) Fruit: size (characteristic 29)
- (b) Fruit: ground color of skin (characteristic 40)
- (c) Fruit: over color of skin (characteristic 42)
- (d) Fruit: color of flesh (characteristic 46)
- (e) Time of beginning of flowering (characteristic 60)
- (f) Time of beginning of fruit ripening (characteristic 61)

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

6. Introduction to the Table of Characteristics

6.1 *Categories of Characteristics*

6.1.1 Standard Test Guidelines Characteristics

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

6.1.2 Asterisked Characteristics

Asterisked characteristics (denoted by *) are those included in the Test Guidelines which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all members of the

Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

6.2 States of Expression and Corresponding Notes

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

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

State	Note
small	3
medium	5
large	7

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

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

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

6.3 Types of Expression

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

6.4 Example Varieties

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

6.5 Legend

(*) Asterisked characteristic – see Chapter 6.1.2

QL Qualitative characteristic – see Chapter 6.3

QN Quantitative characteristic – see Chapter 6.3

PQ Pseudo-qualitative characteristic – see Chapter 6.3

MG, MS, VG, VS – see Chapter 4.1.5

(a)-(c) 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 caracteresticas

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplos	Note/ Nota
1.	VG	Tree: type of bearing	Arbre : type de fructification	Baum: Fruchtansatz	Árbol: tipo de fructificación		
PQ		on spurs only	sur spurs seulement	nur an Kurztrieben	únicamente en espolones	Gaviota	1
		on spurs and long shoots	sur spurs et rameaux longs	an Kurztrieben und Langtrieben	en espolones y tallos largos	Angeleno, Shiro	2
		on long shoots only	sur rameaux longs seulement	nur an Langtrieben	únicamente en tallos largos		3
2.	VG	Tree: vigor	Arbre : vigueur	Baum: Wuchsstärke	Árbol: vigor		
(+)							
QN		weak	faible	gering	débil	Black Gold, Satsuma	3
		medium	moyenne	mittel	medio	Autumn Giant, Suplumeleven	5
		strong	forte	stark	fuerte	Robusto, Royal Diamond, Taiyou	7
3.	VG	Tree: habit	Arbre : port	Baum: Wuchsform	Árbol: porte		
(*)							
PQ		upright	dressé	aufrecht	erecto	Formosa, Freedom, Taiyou	1
		semi-upright	demi-dressé	halbaufrecht	semierecto	Laroda	2
		spreading	étalé	breitwüchsig	extendido	Ozark Premier, Shiro	3
		drooping	retombant	überhängend	colgante	Weeping Santa Rosa	4
4.	VG	One-year-old shoot: color	Rameau d'un an : couleur	Einjähriger Trieb: Farbe	Rama de un año: color		
(+)							
PQ		greyish brown	brun grisâtre	graubraun	marrón grisáceo	Taiyou	1
		yellow brown	marron jaune	gelbgrün	marrón amarillento	Sordum	2
		brown	brun	braun	marrón	Methley	3
		reddish brown	brun rougeâtre	rötlichbraun	marrón rojizo	Combination	4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejempl	Note/ Nota
5.	VG	Spur: length	Spur : longueur	Kurztrieb: Länge	Espolón: longitud		
QN		short	courte	kurz	corto	Laroda, Sordum	3
		medium	moyenne	mittel	medio	Frontier	5
		long	longue	lang	largo	October Purple	7
6.	VG	Vegetative bud: size	Bourgeon : taille	Vegetative Knospe: Größe	Yema de madera: tamaño		
(+)							
QN	(a)	small	petit	klein	pequeña	Harry Pickstone	1
		medium	moyen	mittel	medianas	Black Gold, Great Yellow	2
		large	grand	groß	grande		3
7.	VG	Vegetative bud: shape of apex	Bourgeon : forme du sommet	Vegetative Knospe: Form der Spitze	Yema de madera: forma del ápice		
(+)							
PQ	(a)	acute	aigue	spitz	agudo	Eldorado	1
		obtuse	obtuse	stumpf	obtuso	Songold	2
		rounded	arrondie	abgerundet	redondeado	Satsuma	3
8.	VG	One-year-old shoot: position of vegetative bud in relation to shoot	Rameau d'un an : position du bourgeon par rapport au rameau	Einjähriger Trieb: Stellung der vegetativen Knospe im Vergleich zum Trieb	Rama de un año: posición de la yema de madera en relación con la rama		
(+)							
QN	(a)	adpressed	appliquée	anliegend	alineada	Queen Ann	1
		slightly held out	légèrement divergente	leicht absthend	ligeramente divergente	Satsuma	2
		markedly held out	fortement divergente	deutlich absthend	fuertemente divergente	Songold	3
9.	MS/ VG	Leaf blade: length	Limbe : longueur	Blattspreite: Länge	Limbo: longitud		
(*)							
QN	(a)	short	courte	kurz	corto	Honey Rosa	3
		medium	moyen	mittel	medio	Taiyou	5
		long	longue	lang	largo	Ozark Premier, Sordum	7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejempl	Note/ Nota
10. (*)	MS/ VG	Leaf blade: width	Limbe : largeur	Blattspreite: Breite	Limbo: anchura		
QN	(a)	narrow	étroite	schmal	estrecho	Beauty	3
		medium	moyenne	mittel	mediano	Sordum, Suplumeleven	5
		broad	large	breit	ancho	Combination	7
11. (*)	MS/ VG	Leaf blade: length/width ratio	Limbe : rapport longueur/largeur	Blattspreite: Verhältnis Länge/Breite	Limbo: relación entre la longitud y la anchura		
QN	(a)	slightly elongated	légèrement allongé	leicht langgezogen	ligeramente alargada	Casselman	1
		moderately elongated	modérément allongé	mäßig langgezogen	moderadamente alargada	Pioneer	2
		very elongated	très allongé	stark langgezogen	muy alargada	Eclipse	3
12. (*) (+)	VG	Leaf blade: shape	Limbe : forme	Blattspreite: Form	Limbo: forma		
QN	(a)	ovate	ovale	eiförmig	oval		1
		elliptic	elliptique	elliptisch	elíptico	Black Gold, October Purple, Syokou, Taiyou	2
		obovate	obovale	verkehrt eiförmig	ovoidal	Kanro, Kelsey	3
13. (*)	VG	Leaf blade: color of upper side	Limbe : couleur de la face supérieure	Blattspreite: Farbe der Oberseite	Limbo: color del haz		
PQ	(a)	light green	vert clair	hellgrün	verde claro	Flaming Delicious, Taiyou	1
		medium green	vert moyen	mittelgrün	verde medio	Abundance, Laroda	2
		dark green	vert foncé	dunkelgrün	verde oscuro	Gaviota, Shiro	3
		Reddish purple	pourpre rougeâtre	rötlichpurpurn	púrpura rojizo	Hollywood	4

					Example Varieties		
		English	français	deutsch	español	Exemples Beispielssorten Variedades ejempl	Note/ Nota
14.	VG	Leaf blade: angle of apex (excluding tip)	Limbe : angle de l'apex (pointe exclue)	Blattspreite: Winkel des Scheitels (ohne Spitze)	Limbo: ángulo del ápice (sin punta)		
QN	(a)	acute	aigu	spitz	agudo	Ozark Premier, Taiyou	1
		right angled	droit	rechtwinklig	en ángulo recto	Satsuma	2
		obtuse	obtus	stumpf	obtuso	Methley	3
15.	VG	Leaf: glossiness of upper side	Feuille : brillance sur la face supérieure	Blatt: Glanz der Oberseite	Hoja: brillo del haz		
QN	(a)	weak	faible	gering	débil	Ozark Premier, Taiyou	1
		medium	moyenne	mittel	medio	Frontier, Shiro	2
		strong	forte	stark	fuerte	Nubiana	3
16.	VG	Leaf blade: density of pubescence of lower side	Limbe : densité de la pilosité sur la face inférieure	Blattspreite: Dichte der Behaarung der Unterseite	Limbo: pubescencia del envés		
QN	(a)	sparse	sparse	locker	laxa	Angeleno, Redheart, Taiyou	1
		medium	moyenne	mittel	media	Queen Ann, Shiro	2
		dense	dense	dicht	densa	Obilnaja	3
17.	VG	Leaf blade: incisions of margin	Limbe : découpures du bord	Blattspreite: Randeinschnitte	Limbo: incisiones del borde		
PQ	(a)	crenate	crénelées	gekerbt	crenadas	Gaviota, Harry Pickstone	1
		bi-crenate	bicrénelées	doppelt gekebert	bicrenadas	Golden Kiss, Pioneer	2
		serrate	en scie	gesägt	serradas	Dapple Dandy	3
		bi-serrate	en scie double	doppelt gesägt	biserradas		4
18.	MS/ VG	Petiole: length	Pétiole : longueur	Blattstiell: Länge	Pecíolo: longitud		
QN	(a)	short	courte	kurz	corto	Kelsey	3
		medium	moyenne	mittel	mediano	Frontier	5
		long	longue	lang	largo	Combination	7

		English	français	deutsch	español	Example Varieties	
						Exemples	Note/ Nota
						Beispielssorten	
19.	VG	Leaf: position of nectaries	Feuille : position des nectaires	Blatt: Stellung der Nektarien	Hoja: posición de nectarios		
QN	(a)	predominantly on base of leaf blade	essentiellement à la base du limbe	vorwiegend an der Basis der Blattspreite	principalmente en la base del limbo	Methley	1
		equally on base of leaf blade and on petiole	autant à la base du limbe que sur le pétiole	gleichermaßen an der Basis der Blattspreite und am Blattstiel	tanto en la base del limbo como en el pecíolo	Nubiana	2
		predominantly on petiole	essentiellement sur le pétiole	vorwiegend am Blattstiel	principalmente en el pecíolo	Queen Ann	3
20.	MS/ (*) VG (+)	Pedicel: length	Pédoncule : longueur	Blütenstiel: Länge	Pedicelo: longitud		
QN	(b)	short	courte	kurz	corto	Methley	3
		medium	moyenne	mittel	medio	Queen Ann, Shiro	5
		long	longue	lang	largo	Red Ace, Taiyou	7
21.	MS/ VG	Flower: diameter	Fleur : diamètre	Blüte: Durchmesser	Flor: diámetro		
QN	(b)	small	petit	klein	pequeño	Black Gold, Nubiana	3
		medium	moyen	mittel	medio	October Purple, Shiro, Taiyou	5
		large	grand	groß	grande	Kiyou, Methley, Ozark Premier	7
22.	VG (+)	Flower: arrangement of petals	Fleur : disposition des pétales	Blüte: Anordnung der Blütenblätter	Flor: disposición de los pétalos		
QN	(b)	free	disjointes	freistehend	libres	Laroda	1
		touching	tangentes	sich berührend	en contacto	Harry Pickstone, Shiro	2
		overlapping	chevauchantes	überlappend	solapados	Beauty	3

					Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
	English	français	deutsch	español		
23. (*) (+)	VG Sepal: shape	Sépale : forme	Kelchblatt: Form	Sépalo: forma		
PQ	(b)	triangular	triangulaire	dreieckig	triangular	Mariposa
		medium ovate	ovale moyenne	mittel eiförmig	oval medio	Harry Pickstone
		broad ovate	ovale large	breit eiförmig	oval ancho	George Wilson
		narrow elliptic	elliptique étroite	schmal elliptisch	elíptico estrecho	Laroda
		medium elliptic	elliptique moyenne	mittel elliptisch	elíptico medio	Nubiana
24. (*)	MS/ VG Petal: length	Pétale : longueur	Blütenblatt: Länge	Pétalo: longitud		
QN	(b)	short	courte	kurz	corto	Laroda, Shigyoku
		medium	moyenne	mittel	medio	Santa Rosa
		long	longue	lang	largo	Burbank
25. (*) (+)	VG Petal: shape	Pétale : forme	Blütenblatt: Form	Pétalo: forma		
PQ	(b)	elliptic	elliptique	elliptisch	elíptico	Red Ace, Taiyou
		circular	circulaire	kreisförmig	circular	Shiro, Wickson
		oblanceolate	oblongue	breitrund	achatado	Wright's Early
		obovate	obovale	verkehrt eiförmig	ovoidal	Mammoth Cardinal
26.	VG Petal: undulation of margin	Pétale : ondulation du bord	Blütenblatt: Randwellung	Pétalo: ondulación del margen		
QN	(b)	weak	faible	gering	débil	Redheart, Shiro, Taiyou
		medium	moyenne	mittel	media	Queen Ann
		strong	forte	stark	fuerte	Lady Red, Morettini 355, Showtime

					Example Varieties	
					Exemples	Note/ Nota
					Beispielssorten	
	English	français	deutsch	español	Variedades ejempl	
27.	VG (*)	Stigma: position in relation to anthers	Stigmate : position par rapport aux anthères	Narbe: Stellung im Vergleich zu den Antheren	Estigma: posición en relación con las anteras	
QN	(b)	below	au-dessous	unterhalb	por debajo	Mariposa
		same level	au même niveau	auf gleicher Höhe	al mismo nivel	Methley
		above	au-dessus	oberhalb	por encima	Mammoth Cardinal
28.	MS	Fruit: length of stalk	Fruit : longueur du pédoncule	Frucht: Länge des Stiels	Fruto: longitud del pedúnculo	
QN		short	courte	kurz	corto	Yonemomo
		medium	moyenne	mittel	medio	Sordum
		long	longue	lang	largo	Hollywood
29.	VG (*) (+)	Fruit: size	Fruit : taille	Frucht: Größe	Fruto: tamaño	
QN	(c)	very small	très petite	sehr klein	muy pequeño	Methley
		small	petite	klein	pequeño	Allo, Eldorado
		medium	moyenne	mittel	medio	Shiro
		large	grosse	groß	grande	Angeleno, Taiyou
		very large	très grosse	sehr groß	muy grande	Songold
30.	MS (*) (+)	Fruit: height	Fruit : hauteur	Frucht: Höhe	Fruto: altura	
QN	(c)	short	courte	kurz	corto	Eclipse
		medium	moyenne	mittel	mediano	Harry Pickstone
		tall	haute	hoch	alto	Valentine
31.	MS (*) (+)	Fruit: width	Fruit : largeur	Frucht: Breite	Fruto: anchura	
QN	(c)	narrow	étroite	schmal	estrecho	Amber Jewel
		medium	moyenne	mittel	medio	Casselman
		broad	large	breit	ancho	Simka

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejempl	Note/ Nota
32.	VG (*) (+)	Fruit: shape in lateral view	Fruit : forme en vue latérale	Frucht: Form in Seitenansicht	Fruto: forma en vista lateral		
PQ	(c)	oblong	oblongue	rechteckig	oblongo	Reubennel	1
		elliptic	elliptique	elliptisch	elíptico	Ozark Premier, Taiyou	2
		circular	circulaire	kreisförmig	circular	Red Beauty, Shiro	3
		oblanceolate	aplatie	breitrund	achatado	Friar	4
		cordate	cordiforme	herzförmig	cordiforme	Morettini 355	5
		ovovate	obovale	verkehrt eiförmig	ovoidal		6
		obcordate	obcordiforme	verkehrt herzförmig	obcordiforme	Santa Rosa	7
33.	VG (+)	Fruit: symmetry	Fruit : symétrie	Frucht: Symmetrie	Fruto: simetría		
QN	(c)	symmetric or slightly asymmetric	symétrique ou légèrement dissymétrique	symmetrisch oder leicht asymmetrisch	simétrico o ligeramente asimétrico	Laroda, Shiro	1
		moderately asymmetric	modérément dissymétrique	mäßig asymmetrisch	moderadamente asimétrico	Friar, Harry Pickstone	2
		strongly asymmetric	fortement dissymétrique	stark asymmetrisch	muy asimétrico	Ozark Premier	3
34.	VG (*) (+)	Fruit: shape of base	Fruit : forme de la base	Frucht: Form der Basis	Fruto: forma de la base		
PQ	(c)	pointed	pointue	spitz	puntiaguda	Morettini 355, Taiyou	1
		truncate	tronquée	gerade	truncada	Black Gold, Green Sun	2
		depressed	déprimée	eingesenkt	hendida	Calita, Durado, Gabora	3

					Example Varieties	
		English	français	deutsch	español	Note/ Nota
35.	VG (+)	Fruit: shape of apex	Fruit : forme de l'apex	Frucht: Form der Spitze	Fruto: forma del ápice	
PQ	(c)	pointed	pointue	spitz	puntiaguda	Golden Plumza 1
		rounded	arrondie	abgerundet	redondeada	Shiro 2
		truncate	tronquée	gerade	truncada	Angeleno 3
		depressed	déprimée	eingesenkt	hendida	Friar, Tereda 4
36.	MS/ VG (*)	Fruit: depth of stalk cavity	Fruit : profondeur de la cavité du pédoncule	Frucht: Tiefe der Stielhöhle	Fruto: profundidad de la cavidad peduncular	
QN	(c)	shallow	peu profonde	flach	poco profunda	Taiyou 1
		medium	moyenne	mittel	media	Angeleno, Nubiana 2
		deep	profonde	tief	profunda	Black Gold, Laroda 3
37.	VG/ MS (+)	Fruit: width of stalk cavity	Fruit : largeur de la cavité du pédoncule	Frucht: Breite der Stielhöhle	Fruto: anchura de la cavidad peduncular	
QN	(c)	narrow	étroite	schmal	estrecha	Koike Sumomo 1
		medium	moyenne	mittel	media	Beni Ryozhen 2
		broad	large	breit	ancha	Finroza 3
38.	VG (*) (+)	Fruit: depth of suture	Fruit : profondeur de la suture	Frucht: Tiefe der Naht	Fruto: profundidad de la sutura	
QN	(c)	absent or very shallow	absente ou très peu profonde	fehlend oder sehr flach	ausente o muy poco profunda	Sunrise 1
		shallow	peu profonde	flach	poco profunda	Taiyou 2
		medium	moyenne	mittel	media	Sordum 3
		deep	profonde	tief	profunda	Akihime 4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
39. (*) (+)	VG	Fruit: bloom of skin	Fruit : pruine de l'épiderme	Frucht: Bereifung der Schale	Fruto: pruina de la epidermis		
QN	(c)	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil		1
		weak	faible	gering	débil	Red June	3
		medium	moyenne	mittel	media	Ooishi Nakate	5
		strong	forte	stark	fuerte	Sordum	7
		very strong	très forte	sehr stark	muy fuerte		9
40. (*) (+)	VG	Fruit: ground color of skin	Fruit : couleur de fond de l'épiderme	Frucht: Grundfarbe der Schale	Fruto: color de fondo de la epidermis		
PQ	(c)	not visible	non visible	nicht sichtbar	no visible	Angeleno	1
		green	vert	grün	verde	Gaviota, Santa Rosa	2
		yellowish green	vert jaunâtre	gelblichgrün	verde amarillento	Songold, Taiyou	3
		yellow	jaune	gelb	amarillo	Shiro	4
41. (*) (+)	VG	Fruit: relative area of over color	Fruit : proportion de lavis	Frucht: relative Fläche der Deckfarbe	Fruto: proporción del color superficial de la epidermis		
QN	(c)	absent or very small	absente ou très petite	fehlend oder sehr klein	ausente o muy pequeña	Green Sun, Shiro	1
		small	petite	klein	pequeña	Bragialla	3
		medium	moyenne	mittel	mediana	Fortune	5
		large	large	groß	grande	Taiyou	7
		very large or whole surface	très large ou sur toute la surface	sehr groß oder ganzflächig	muy grande o totalidad de la superficie	Friar, Suplumeleven	9

					Example Varieties		
		English	français	deutsch	español	Exemples Beispielssorten Variedades ejempl	Note/ Nota
42. (*) (+)	VG	Fruit: over color of skin	Fruit : lavis	Frucht: Deckfarbe der Schale	Fruto: color superficial de la epidermis		
PQ	(c)	yellow	jaune	gelb	amarillo	Golden Japan	1
		orange yellow	jaune orangé	orangegeißel	amarillo anaranjado	Formosa	2
		medium red	rouge moyen	mittelrot	rojo medio	Red Beauty	3
		dark red	rouge foncé	dunkelrot	rojo oscuro	Starking Delicious, Taiyou	4
		purple	pourpre	purpurn	púrpura	Karari, Morettini 355	5
		dark blue	bleu foncé	dunkelblau	azul oscuro	Black Amber	6
		black	noir	schwarz	negro	Angeleno	7
43. (*) (+)	VG	Fruit: pattern of over color	Fruit : distribution du lavis	Frucht: Verteilung der Deckfarbe	Fruto: distribución del color superficial		
PQ	(c)	flecks only	tâches seulement	nur Flecken	sólo manchas	Tiger	1
		mottled	marbrée	gepunktet	jaspeado	Omega	2
		solid flush only	en plages continues seulement	nur ganzflächig	de manera puramente uniforme	Friar, Taiyou	3
44. (*)	VG	Fruit: number of lenticels	Fruit : nombre de lenticelle	Frucht: Anzahl der Lentizellen	Fruto: número de lenticelas		
QN	(c)	few	petit	gering	bajo	ARC PR 3	3
		medium	moyen	mittel	medio	Sunrise	5
		many	grand	groß	alto	Polar Eclipse	7
45. (*)	VG	Fruit: size of lenticels	Fruit : taille des lenticelles	Frucht: Größe der Lentizellen	Fruto: tamaño de las lenticelas		
QN	(c)	small	petites	klein	pequeñas	Sunset	1
		medium	moyennes	mittel	medianas	Extreme	2
		large	grandes	groß	grandes	Southern Belle	3

					Example Varieties	
	English	français	deutsch	español	Exemples	Note/ Nota
					Beispielssorten	
46.	VG	Fruit: color of flesh	Fruit : couleur de la chair	Frucht: Farbe des Fleisches	Fruto: color de la pulpa	
(*)						
PQ	(c)	whitish	blanchâtre	weißlich	blanquecino	Taiyou
		green	verte	grün	verde	Reina Claudia
		yellowish green	vert jaunâtre	gelblichgrün	verde amarillento	Shiro
		yellow	jaune	gelb	amarillo	Angeleno, Golden Japan, Reubennel
		orange	orange	orange	naranja	Black Amber, Sun Gold
		medium red	rouge moyen	mittelrot	rojo medio	Satsuma, Sordum
		dark red	rouge foncé	dunkelrot	rojo oscuro	Beauty, Hawera, Karari, Stark Delicious
		purplish	pourpre	purpurn	purpúreo	Sangue di Drago
47.	MS	Fruit: firmness	Fruit : fermeté	Frucht: Festigkeit	Fruto: firmeza	
(+)						
QN	(c)	soft	molle	weich	blando	Shiro
		medium	moyenne	mittel	medio	Frontier
		firm	ferme	fest	firme	Laroda, Taiyou
48.	MG	Fruit: juiciness	Fruit : jutosité	Frucht: Saftigkeit	Fruto: jugosidad	
(+)						
QN	(c)	low	faible	gering	baja	Autumn Giant, Laroda
		medium	moyenne	mittel	media	Gaviota, Ozark Premier
		high	forte	hoch	alta	Reubennel, Shiro, Santa Rosa

					Example Varieties	
	English	français	deutsch	español	Exemples	Note/ Nota
					Beispielssorten	
49.	MG	Fruit: acidity	Fruit : acidité	Frucht: Säure	Fruto: acidez	
(+)						
QN	(c)	low	faible	gering	baja	Angeleno, Durado
		medium	moyenne	mittel	media	Green Sun, Shiro, Taiyou
		high	élevée	hoch	alta	Carmen, Obilnaja
50.	MG	Fruit: sweetness	Fruit : goût sucré	Frucht: Süße	Fruto: dulzura	
(+)						
QN	(c)	low	faible	gering	baja	Durado, Obilnaja, Shiro
		medium	moyen	mittel	media	Angeleno
		high	élevé	hoch	alta	Black Gold, Laroda, Taiyou
51.	VG	Fruit: adherence of stone to flesh	Fruit : adhérence du noyau à la chair	Frucht: Anhaftung des Steins am Fleisch	Fruto: adhesión del hueso a la pulpa	
(*)						
QN	(c)	non-adherent	non-adhérent	nicht anhaftend	no adherente	Fortune
		semi-adherent	semi-adhérent	zum Teil anhaftend	semiadherente	Nubiana, Taiyou
		adherent	adhérent	völlig anhaftend	adherente	Shiro, Sungold
52.	VG	Fruit: amount of fiber	Fruit : quantité de fibres	Frucht: Menge der Fasern	Fruto: cantidad de fibra	
(+)						
QN		low	faible	gering	poca	1
		medium	moyenne	mittel	media	2
		high	grande	hoch	muchas	3
53.	VG	Stone: size	Noyau : taille	Stein: Größe	Hueso: tamaño	
(*)						
QN	(c)	small	petite	klein	pequeño	Angeleno, Eldorado
		medium	moyenne	mittel	mediano	Taiyou, Wickson
		large	grande	groß	grande	Freedom
						7

		English	français	deutsch	español	Example Varieties	
						Exemples	Note/ Nota
						Beispielssorten	
54.	VG	Stone: shape in lateral view	Noyau : forme en vue latérale	Stein: Form in Seitenansicht	Hueso: forma en vista lateral		
(*)							
(+)							
PQ	(c)	narrow elliptic	elliptique étroite	schmal elliptisch	elíptico estrecho	Eldorado	1
		medium elliptic	elliptique moyenne	mittel elliptisch	elíptico medio	Santa Rosa, Taiyou	2
		circular	circulaire	kreisförmig	circular	Angeleno, Kelsey	3
		broad ovate	ovale large	breit eiförmig	oval ancho		4
55.	VG	Stone: shape in ventral view	Noyau : forme en vue ventrale	Stein: Form in Bauchansicht	Hueso: forma en vista ventral		
(*)							
(+)							
PQ	(c)	narrow elliptic	elliptique étroite	schmal elliptisch	elíptico estrecho	Kelsey	1
		medium elliptic	elliptique moyenne	mittel elliptisch	elíptico medio	Santa Rosa, Taiyou	2
		broad elliptic	elliptique large	breit elliptisch	elíptico ancho	Eldorado	3
56.	VG	Stone: shape in basal view	Noyau : forme en vue basale	Stein: Form in Basisansicht	Hueso: forma desde la base		
(*)							
PQ	(c)	narrow elliptic	elliptique étroite	schmal elliptisch	elíptico estrecho	Shiro, Songold	1
		medium elliptic	elliptique moyenne	mittel elliptisch	elíptico medio	Bragialla	2
		broad elliptic	elliptique large	breit elliptisch	elíptico ancho	Black Gold, Frontier	3
57.	VG	Stone: symmetry in lateral view	Noyau : symétrie en vue latérale	Stein: Symmetrie in Seitenansicht	Hueso: simetría en vista lateral		
QN	(c)	symmetric or slightly asymmetric	symétrique ou légèrement dissymétrique	symmetrisch oder leicht asymmetrisch	simétrico o ligeramente asimétrico	Angeleno, Frontier	1
		moderately asymmetric	modérément dissymétrique	mäßig asymmetrisch	moderadamente asimétrico	Shiro	2
		strongly asymmetric	fortement dissymétrique	stark asymmetrisch	muy asimétrico		3

		English	français	deutsch	español	Example Varieties	
						Exemples	Note/ Nota
						Beispielssorten	
58.	VG	Stone: texture of lateral surfaces	Noyau : texture des surfaces latérales	Stein: Struktur der seitlichen Oberflächen	Hueso: textura de las superficies laterales		
PQ	(c)	fine grained	à grains fins	feinkörnig	de grano fino	Eldorado	1
		granular	granulaire	körnig	granular	Nubiana	2
		rough	rugueuse	rauh	rugosa	Laroda, Songold	3
		hammered	martelée	gehämmert	martillada	Harry Pickstone	4
59.	VG	Stone: width of stalk-end	Noyau : largeur de l'attache pédonculaire	Stein: Breite des Stielansatzes	Hueso: anchura de la punta del pedúnculo		
(+)	(c)	narrow	étroit	schmal	estrecha	Frontier	1
QN	(c)	medium	moyen	mittel	media	Harry Pickstone	2
		broad	large	breit	ancha	Angeleno, Lady Red	3
60.	MG	Time of beginning of flowering	Époque de début de floraison	Zeitpunkt des Blühbeginns	Época del comienzo de la floración		
(*)							
(+)							
QN		very early	très précoce	sehr früh	muy temprana	Durado, Karari, Red Beauty	1
		early	précoce	früh	temprana	Fortune, Mariposa, Taiyou	3
		medium	moyenne	mittel	media	Green Sun, Nubiana	5
		late	tardive	spät	tardía	Gaviota, Shiro	7
		very late	très tardive	sehr spät	muy tardía	Angeleno, Simka	9

		English	français	deutsch	español	Example Varieties	Note/ Nota
61.	MG	Time of beginning of fruit ripening	Époque du début de la maturité des fruits	Zeitpunkt des Beginns der Fruchtreife	Época de inicio de la madurez del fruto	Exemples Beispielssorten Variedades ejempl	
QN		very early	très précoce	sehr früh	muy temprana	Beauty, Durado, Red Noble	1
		early	précoce	früh	temprana	Mariposa, Shiro	3
		medium	moyenne	mittel	media	Black Gold, Gaviota	5
		late	tardive	spät	tardía	Angeleno, Nubiana, Taiyou	7
		very late	très tardive	sehr spät	muy tardía	Akihime, Autumn Giant, Golden King,	9

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

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

- (a) All observations on the bud, the leaf and the shoot should be made at the central third of the shoot. The observations on the leaf should be made on mature leaves from current season's shoots.
- (b) All observations on the flower should be made at the time of full flowering.
- (c) All observations on the fruit should be made at full maturity for consumption.

8.2 Explanations for individual characteristics

Ad. 2: Tree: vigor

The vigor of the tree is observed as the overall abundance of vegetative growth.

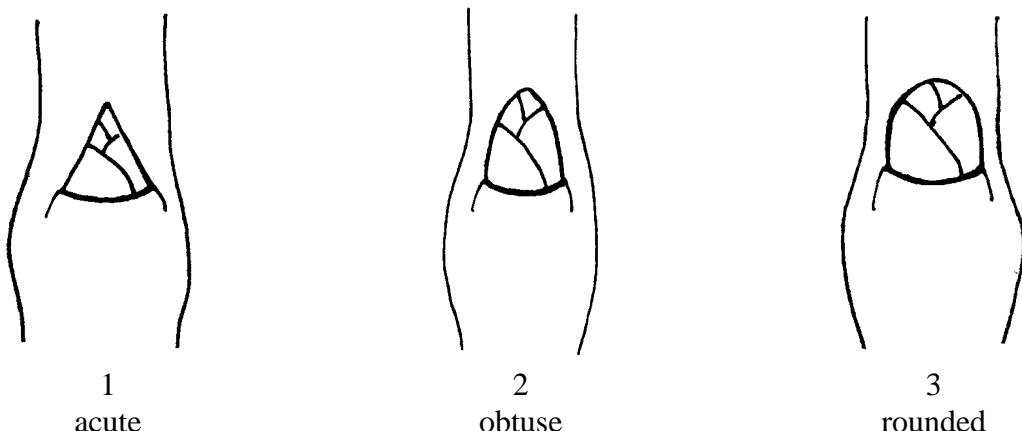
Ad. 4: One-year-old shoot: color

To be observed on the sunny side after removal of cuticle

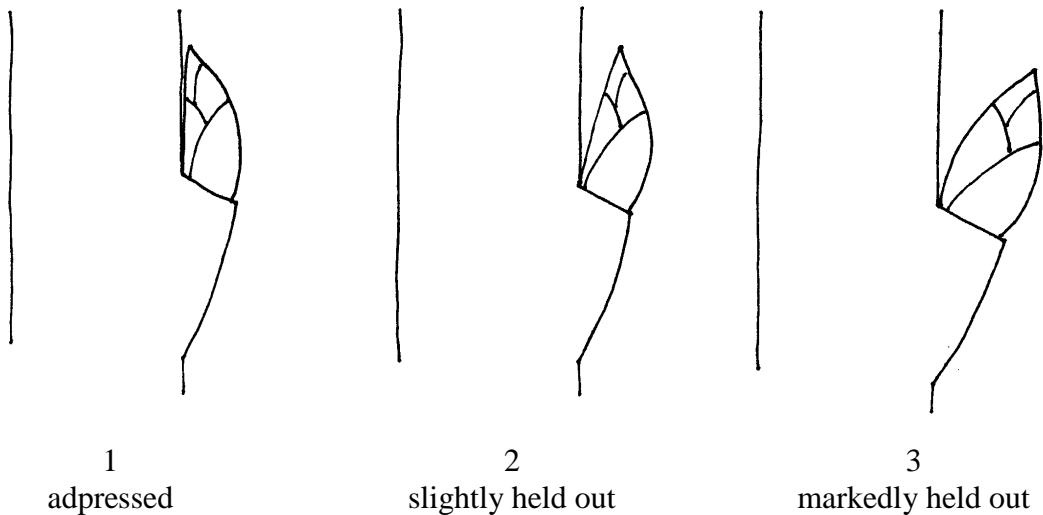
Ad. 6: Vegetative bud: size

To be observed on one-year-old shoots before the opening up of the bud.

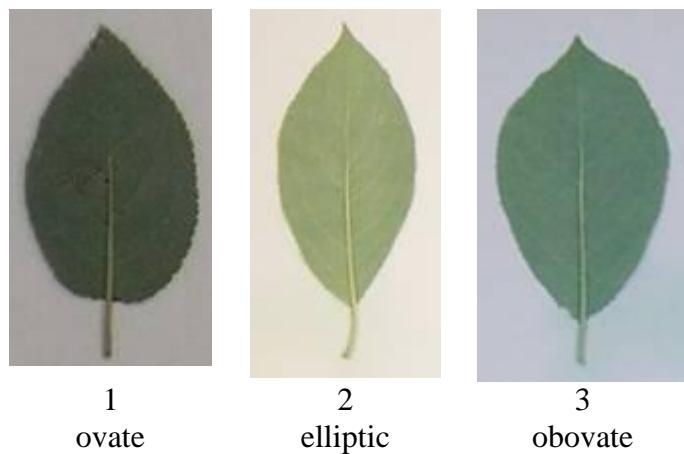
Ad. 7: Vegetative bud: shape of apex



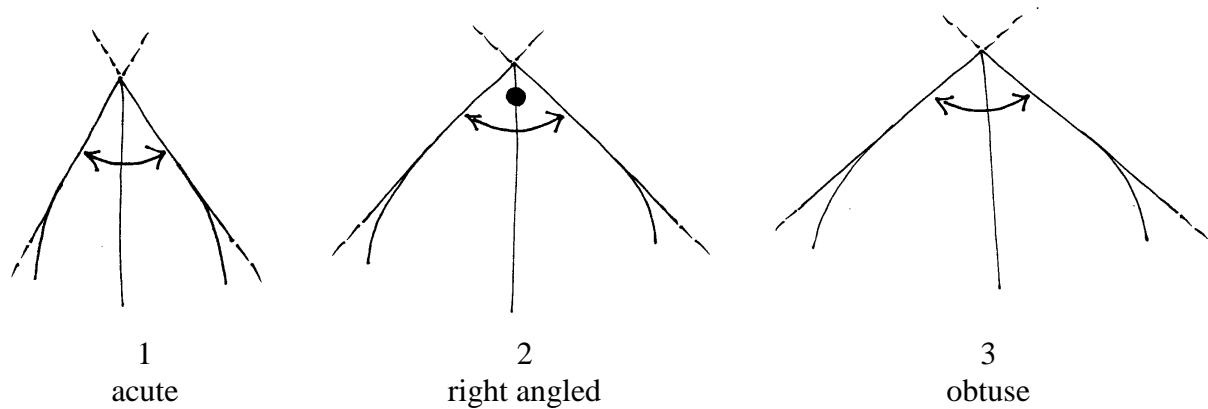
Ad. 8: One-year-old shoot: position of vegetative bud in relation to shoot



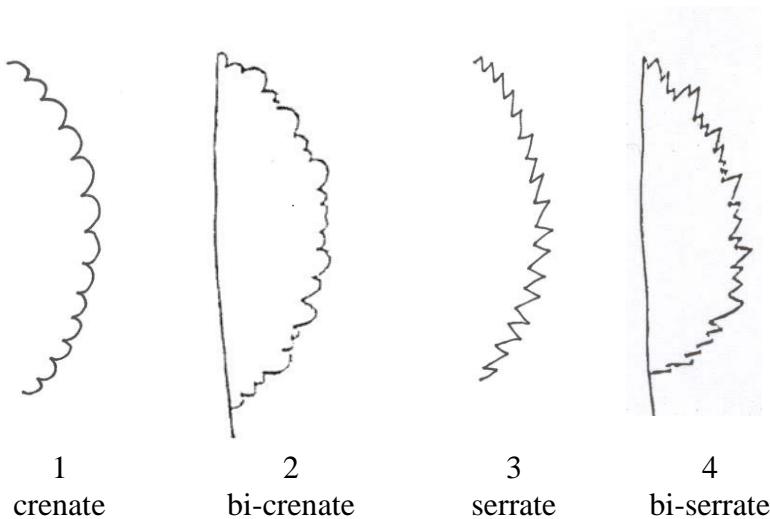
Ad. 12: Leaf blade: shape



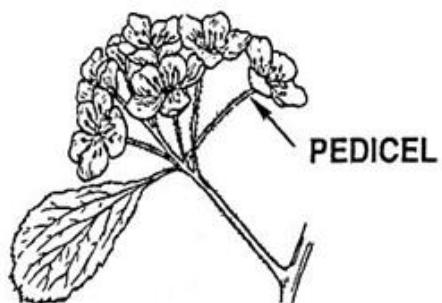
Ad. 14: Leaf blade: angle of apex (excluding tip)



Ad. 17: Leaf blade: incisions of margin

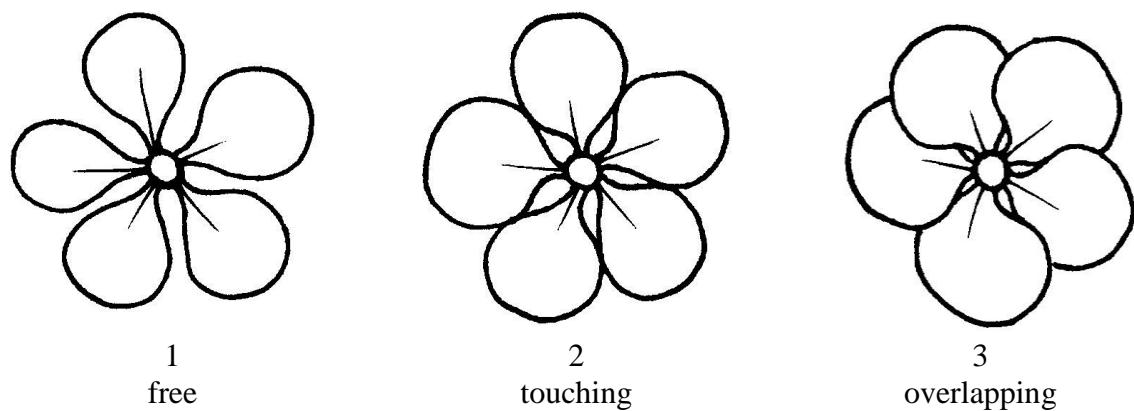


Ad. 20: Pedicel: length

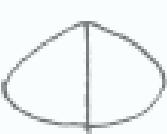


Ad. 22: Flower: arrangement of petals

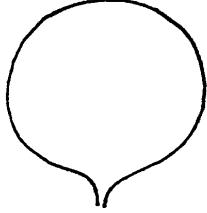
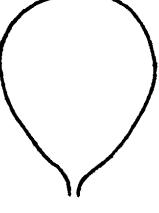
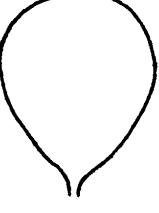
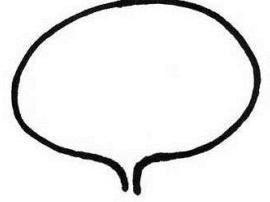
To be observed solely on flowers which have five petals.



Ad. 23: Sepal: shape

← broadest part →		
(below middle)	at middle	(above middle)
		 4 narrow elliptic
 (angular) 1 triangular	 (rounded) 2 medium ovate	 5 medium elliptic
	 3 broad ovate	

Ad. 25: Petal: shape

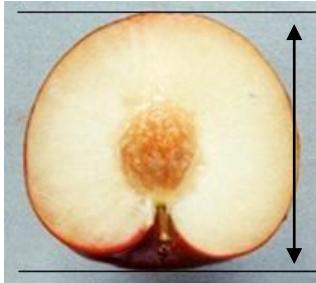
		← broadest part →	
		at middle	(above middle)
broad (compressed) ← width (ratio length/width) → narrow (elongated)			
	1 elliptic		
	2 circular		4 obovate
	3 oblanceolate		

Ad. 29: Fruit: size

To be observed on the area of the lateral section of the fruit.

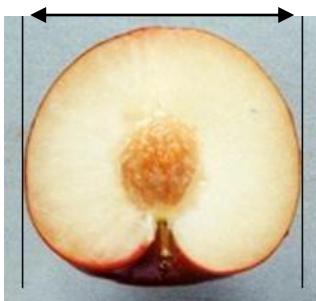
Ad. 30: Fruit: height

Height to be observed from ventral view.

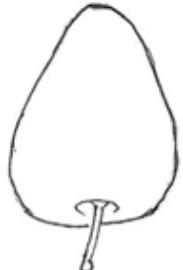
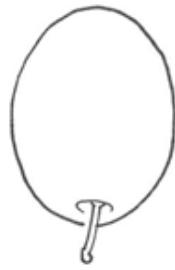
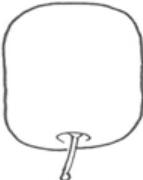


Ad. 31: Fruit: width

Width to be observed from ventral view.

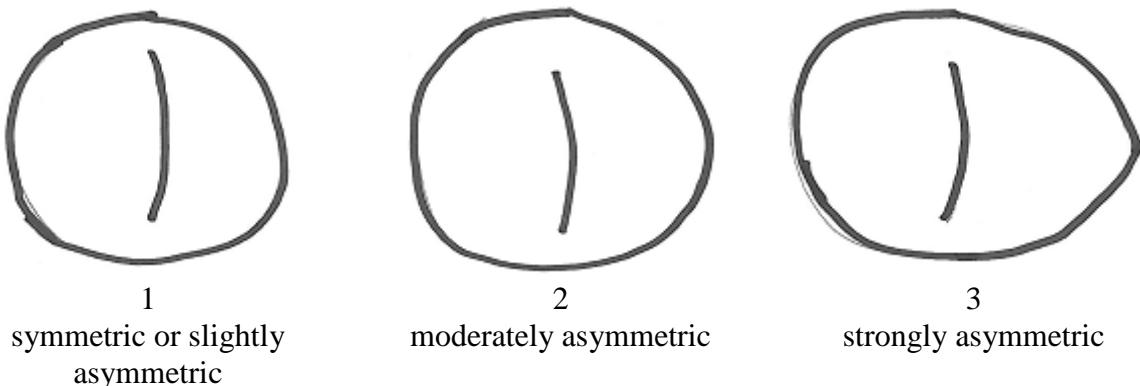


Ad. 32: Fruit: shape in lateral view

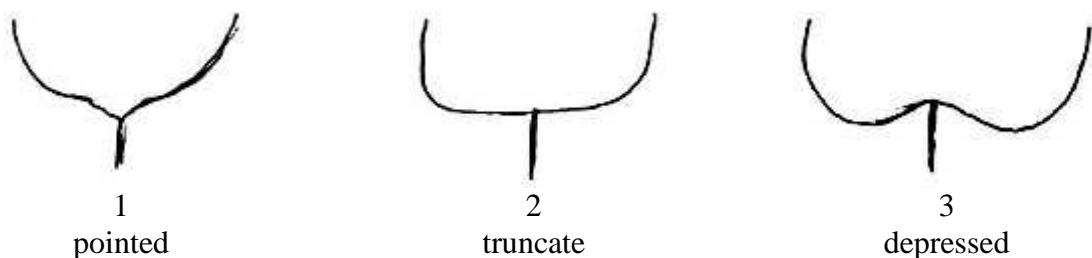
← broadest part →				
(below middle)	at middle	(above middle)		
 5 cordate	 2 elliptic			
← width (ratio length/width) →	 1 oblong	 3 circular	 7 obcordate	 6 obovate
broad (compressed)	 4 oblade			

Ad. 33: Fruit: symmetry

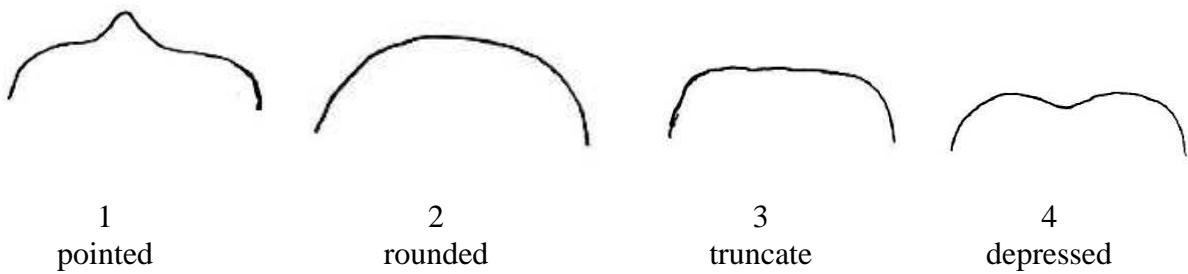
Symmetry to be observed from ventral view, along suture.



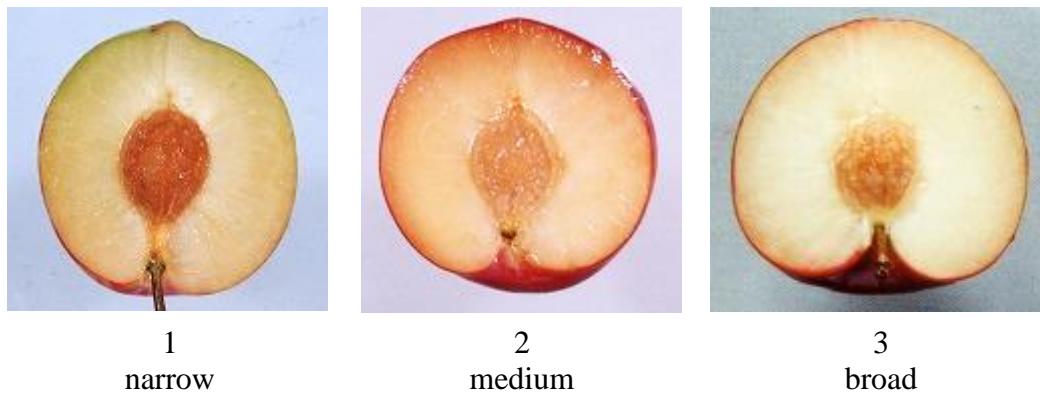
Ad. 34: Fruit: shape of base



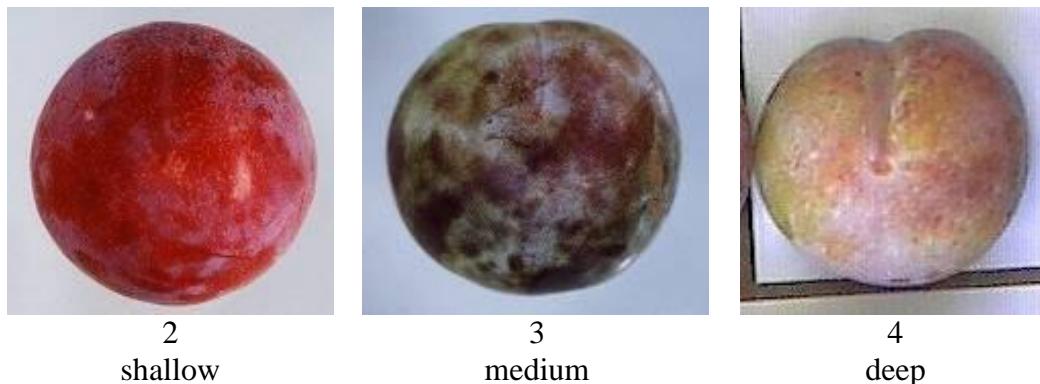
Ad. 35: Fruit: shape of apex



Ad. 37: Fruit: width of stalk cavity

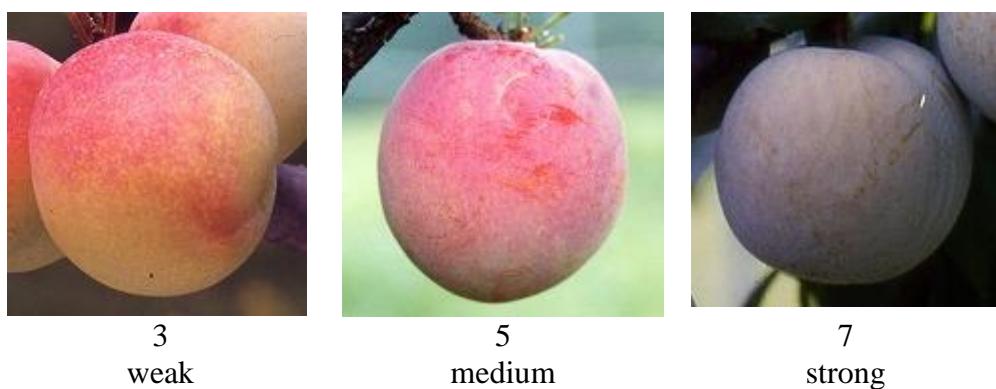


Ad. 38: Fruit: depth of suture



Ad. 39: Fruit: bloom of skin

The bloom is the waxy layer that can be removed by rubbing



Ad. 40: Fruit: ground color of skin

Ad. 41: Fruit: relative area of over color

To be observed without the bloom. The ground color is the first color to appear chronologically during the development of the skin and upon which other colors will develop in time in the form of spots, a macule, or a color flush or blush. It is not always necessarily the largest area of the fruit. The over color is the second color developing over time over the ground color. The coloration does not necessarily cover the smallest area of the fruit and consists of a pattern such as a flush or flecking.

Ad. 43: Fruit: pattern of over color

The over color is the second color developing over time over the ground color. The coloration does not necessarily cover the smallest area of the fruit and consists of a pattern such as a flush or flecking.

Ad. 47: Fruit: firmness

To be observed at eating ripeness with a penetrometer (see Ad. 61)

Ad. 48: Fruit: juiciness

The characteristic is observed as the juice content expressed as the percentage of total fruit weight obtained by pressing fruit.

Ad. 49: Fruit: acidity

Calculation of total titratable acidity of a juice sample. The equation is the following:

$$Ac \text{ (g/l)} = (V_1 * N * me) / V$$

V = sample volume in ml

V₁ = NaOH volume in ml

N = normality of NaOH

me = equivalent weight of malic acid (67)

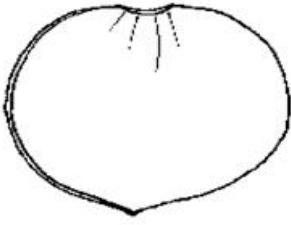
Ad. 50: Fruit: sweetness

Calculation of total soluble solids measured using a refractometer. The measured unit is the degree Brix (° Brix). One degree Brix corresponds to 1 gram of sucrose in 100 grams of solution.

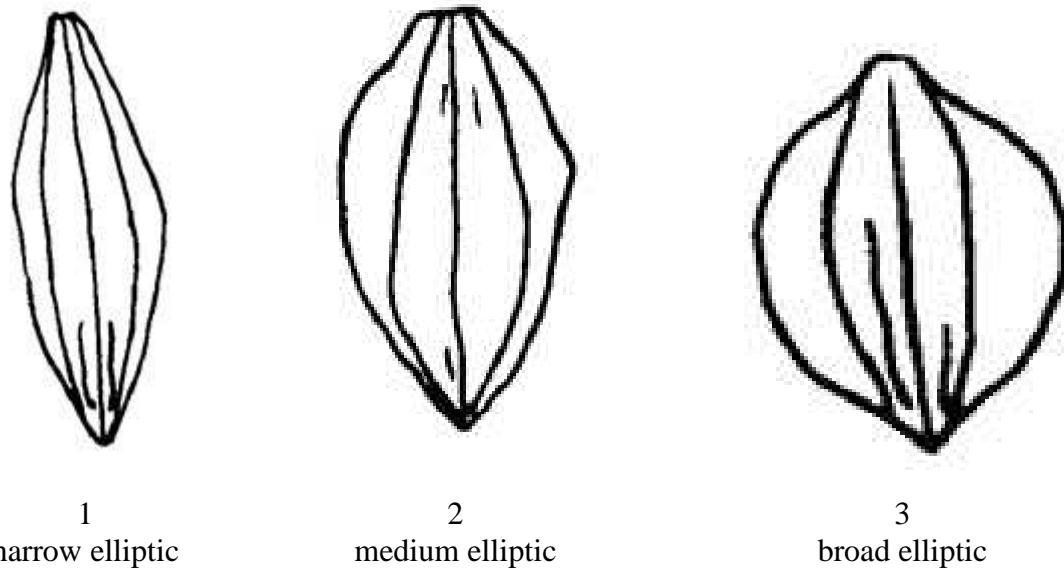
Ad. 52: Fruit: amount of fiber

To be observed at eating ripeness. The fruit should be cut in half longitudinally and a visual observation made to see if there are visible fibers in the flesh. The sliced fruit should then be eaten to assess further the amount of fiber.

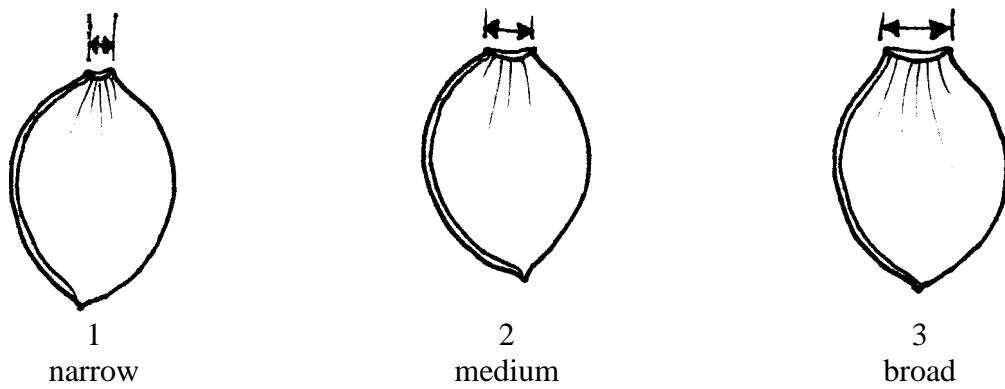
Ad. 54: Stone: shape in lateral view

Broad compressed) width (ratio length/width) narrow (elongated)	← broadest part →		
	(below middle)	at middle	(above middle)
			
		1 narrow elliptic	
			
	2 medium elliptic	3 circular	
			
		4 broad ovate	

Ad. 55: Stone: shape in ventral view



Ad. 59: Stone: width of stalk-end



Ad. 60: Time of beginning of flowering

The time of beginning of flowering is when all trees have 10% open flowers.

Ad. 61: Time of beginning of fruit ripening

The time of fruit ripening should be considered as the time of eating ripeness, when the fruit is most easily removed from the tree.

9. Literature

No specific literature.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
<p style="text-align: center;">TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights</p>		
1. Subject of the Technical Questionnaire		
1.1 Botanical name	<i>Prunus salicina</i> Lindl.	
1.2 Common name	Japanese plum	
2. Applicant		
Name		
Address		
Telephone No.		
Fax No.		
E-mail address		
Breeder (if different from applicant)		
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)		
Breeder's reference		

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

#4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

- (a) controlled cross []
(please state parent varieties)

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

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

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

- (c) unknown cross []

4.1.2 Mutation []
(please state parent variety)

[REDACTED]

4.1.3 Discovery and development []
(please state where and when discovered and how developed)

[REDACTED]

4.1.4 Other []
(please provide details)

[REDACTED]

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

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

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

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

4.2.2 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 Fruit: size (29)		
very small	Methley	1[]
very small to small		2[]
small	Allo, Eldorado	3[]
small to medium		4[]
medium	Shiro	5[]
medium to large		6[]
large	Angeleno, Taiyou	7[]
large to very large		8[]
very large	Songold	9[]
5.2 Fruit: ground color of skin (40)		
not visible	Angeleno	1[]
green	Gaviota, Santa Rosa	2[]
yellowish-green	Songold, Taiyou	3[]
yellow	Shiro	4[]
5.3 Fruit: over color of skin (42)		
yellow	Golden Japan	1[]
orange yellow	Formosa	2[]
red	Red Beauty	3[]
purple	Starking Delicious, Taiyou	4[]
violet blue	Karari, Morettini 355	5[]
dark blue	Black Amber	6[]
black	Angeleno	7[]

Characteristics	Example Varieties	Note
5.4 Fruit: color of flesh (46)		
whitish	Taiyou	1[]
green	Reina Claudia	2[]
yellowish green	Shiro	3[]
yellow	Angeleno, Golden Japan, Reubennel	4[]
orange	Black Amber, Sun Gold	5[]
medium red	Satsuma, Sordum	6[]
dark red	Beauty, Hawera, Karari, Stark Delicious	7[]
purplish	Sangue di Drago	8[]
5.5 Time of beginning of flowering (60)		
very early	Durado, Karari, Red Beauty	1[]
very early to early		2[]
early	Fortune, Mariposa, Taiyou	3[]
early to medium		4[]
medium	Green Sun, Nubiana	5[]
medium to late		6[]
late	Gaviota, Shiro	7[]
late to very late		8[]
very late	Angeleno, Simka	9[]

Characteristics	Example Varieties	Note
5.6 Time of beginning of fruit ripening (61)		
very early	Beauty, Durado, Red Noble	1[]
very early to early		2[]
early	Mariposa, Shiro	3[]
early to medium		4[]
medium	Black Gold, Gaviota	5[]
medium to late		6[]
late	Angeleno, Nubiana, Taiyou	7[]
late to very late		8[]
very late	Akihime, Autumn Giant, Golden King	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>Angeleno</i>	<i>Fruit: ground color of skin</i>	<i>Not visible</i>	<i>Green</i>
Comments:			

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
<p>#7. Additional information which may help in the examination of the variety</p> <p>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?</p> <p>Yes [] No []</p> <p>(If yes, please provide details)</p> <p>7.2 Are there any special conditions for growing the variety or conducting the examination?</p> <p>Yes [] No []</p> <p>(If yes, please provide details)</p> <p>7.3 Other information</p> <p>A representative color image of the variety should accompany the Technical Questionnaire.</p> <p>8. Authorization for release</p> <p>(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?</p> <p>Yes [] No []</p> <p>(b) Has such authorization been obtained?</p> <p>Yes [] No []</p> <p>If the answer to (b) is yes, please attach a copy of the authorization.</p>		

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

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

9. Information on plant material to be examined or submitted for examination.

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

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

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

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

.....

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