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**INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS**

GENEVA

**DRAFT**

**CHERIMOYA**

*(Annona cherimola Mill.)*

**GUIDELINES**

**FOR THE CONDUCT OF TESTS**

**FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

Alternative Names:\*

<i>Latin</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Annona cherimola</i> Mill.	Cherimoya	Chérimolier	Cherimoya	Cherimoya, Chirimoyo

**ASSOCIATED DOCUMENTS**

These guidelines should be read in conjunction with document TG/1/3, “General Introduction to the Examination of Distinctness, Uniformity and Stability and the Development of Harmonized Descriptions of New Varieties of Plants” (hereinafter referred to as 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](http://www.upov.int)), for the latest information.]

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## 1. Subject of these Guidelines

These Test Guidelines apply to all varieties of *Annona cherimola* Mill. and their hybrids.

## 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 on rootstocks of *Annona cherimola* Mill.

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

eight plants (one-year old grafts) on rootstocks of *Annona cherimola* Mill.

2.4 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease. It should preferably not be obtained from *in vitro* propagation. If it has been produced by *in vitro* propagation this fact has to be stated by the applicant.

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 *Duration of Tests*

The minimum duration of tests should normally be two independent growing cycles. For the purposes of these Test Guidelines, a growing cycle refers to the fruiting cycle.

### 3.2 *Testing Place*

The tests should normally be conducted at one place. If any characteristics of the variety, which are relevant for the examination of DUS, cannot be seen at that place, the variety may be tested at an additional place.

### 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 plants.

3.4.2 The design of the tests should be such that plants or parts of plants may be removed for measurement or counting without prejudice to the observations which must be made up to the end of the growing cycle.

### 3.5 *Number of Plants / Parts of Plants to be Examined*

Unless otherwise indicated, all observations determined by measuring or counting should be made on 5 plants or parts taken from each of 5 plants. In the case of plant parts, the number to be taken from each of the plants should be 2.

### 3.6 *Additional Tests*

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

## 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 minimum duration of tests recommended in section 3.1 reflects, in general, the need to ensure that any differences in a characteristic are sufficiently consistent.

#### 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 is 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: shape in lateral view (characteristic 29);
- (b) Fruit: segmentation of surface (characteristic 33);
- (c) Fruit: protuberance on surface (characteristic 34).

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 Section 6.1.2

QL Qualitative characteristic – see Section 6.3

QN Quantitative characteristic – see Section 6.3

PQ Pseudo-Qualitative characteristic – see Section 6.3

(a)-(d) See Explanations on the Table of Characteristics in Chapter 8, Section 8.1

(+) See Explanations on the Table of Characteristics in Chapter 8, Section 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
<b>1. (a) Shoot: length of internode</b>	<b>Rameau: longueur de l'entre-nœud</b>	<b>Trieb: Länge des Internodiums</b>	<b>Rama: longitud del entrenudo</b>			
<b>QN</b>	short	court	kurz	corto	Big Sister, Villapark	3
	medium	moyen	mittel	medio	Bay Ott, Honey Hart	5
	long	long	lang	largo	Mariella, Pierce, White	7
<b>2. (a) Shoot: color</b>	<b>Rameau: couleur</b>	<b>Trieb: Farbe</b>	<b>Rama: color</b>			
<b>PQ</b>	greyish green	vert grisâtre	gräulichgrün	verde grisáceo	Big Sister, Chaffey	1
	grey	gris	grau	gris	Bay Ott, Honey Hart	2
	brown	brun	braun	marrón	African Pride, Fino de Jete	3
<b>3. (a) Shoot: pubescence</b>	<b>Rameau: pubescence</b>	<b>Trieb: Behaarung</b>	<b>Rama: pubescencia</b>			
<b>QL</b>	absent	absente	fehlend	ausente	African Pride, Gefner	1
	present	présente	vorhanden	presente	Bay Ott, Big Sister	9
<b>4. (b) Leaf blade: length</b>	<b>Limbe: longueur</b>	<b>Blattspreite: Länge</b>	<b>Limbo: longitud</b>			
<b>QN</b>	short	court	kurz	corto	African Pride, Gefner	3
	medium	moyen	mittel	medio	El Bumpo, Villapark	5
	long	long	lang	largo	Booth, Mariella	7
<b>5. (b) Leaf blade: width</b>	<b>Limbe: largeur</b>	<b>Blattspreite: Breite</b>	<b>Limbo: anchura</b>			
<b>QN</b>	narrow	étroit	schmal	estrecho	African Pride, Gefner	3
	medium	moyen	mittel	medio	El Bumpo, Villapark	5
	broad	large	breit	ancho	Booth, Mariella	7
<b>6. (b) Leaf blade: ratio length/width</b>	<b>Limbe: rapport longueur/largeur</b>	<b>Blattspreite: Verhältnis Länge/Breite</b>	<b>Limbo: relación entre la longitud y la anchura</b>			
<b>QN</b>	small	petit	klein	pequeña	African Pride, Gefner	3
	medium	moyen	mittel	media	El Bumpo, Villapark	5
	large	grand	groß	grande	Booth, Mariella	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>7. (b) Leaf blade: shape</b> (*) (+)	<b>Limbe: forme</b>	<b>Blattspreite: Form</b>	<b>Limbo: forma</b>		
<b>PQ</b> circular	circulaire	rund	circular	Booth, Oakwood	1
oblate	aplati	breitrund	achatada	Miguel, Ott, Pierce	2
broad lanceolate	lancéolé large	breit lanzettlich	lanceolada ancha	Big Sister, El Bumpo, Villapark	3
narrow lanceolate	lancéolé étroit	schmal lanzettlich	lanceolada estrecha	African Pride	4
<b>8. (b) Leaf blade: green color (upper side)</b>	<b>Limbe: couleur verte (face supérieure)</b>	<b>Blattspreite: Grünfärbung (Oberseite)</b>	<b>Limbo: color verde (haz)</b>		
<b>QN</b> light	claire	hell	claro	Mariella, Oakwood	3
medium	moyenne	mittel	medio	Bay Ott, Booth	5
dark	foncée	dunkel	oscuro	Big Sister	7
<b>9. (b) Leaf blade: green color (lower side)</b>	<b>Limbe: couleur verte (face inférieure)</b>	<b>Blattspreite: Grünfärbung (Unterseite)</b>	<b>Limbo: color verde (envés)</b>		
<b>PQ</b> green	vert	grün	verde	Bay Ott, Big Sister	1
dark green	vert foncé	dunkelgrün	verde oscuro	African Pride, Gefner	2
<b>10. (b) Leaf blade: pubescence (upper side)</b>	<b>Limbe: pubescence (face supérieure)</b>	<b>Blattspreite: Behaarung (Oberseite)</b>	<b>Limbo: pubescencia (haz)</b>		
<b>QL</b> absent	absente	fehlend	ausente	African Pride, Gefner	1
present	présente	vorhanden	presente	Bay Ott, Big Sister	9
<b>11. (b) Leaf blade: pubescence (lower side)</b>	<b>Limbe: pubescence (face inférieure)</b>	<b>Blattspreite: Behaarung (Unterseite)</b>	<b>Limbo: pubescencia (envés)</b>		
<b>QL</b> absent	absente	fehlend	ausente	African Pride, Gefner	1
present	présente	vorhanden	presente	Bay Ott, Big sister	9
<b>12. (b) Petiole: length</b>	<b>Pétiole: longueur</b>	<b>Blattstiel: Länge</b>	<b>Pecíolo: longitud</b>		
<b>QN</b> short	court	kurz	corto	Honey Hart	3
medium	moyen	mittel	medio	Fino de Jete	5
long	long	lang	largo	Big Sister	7



	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>13. (b) Petiole: thickness</b>		<b>Pétiole: épaisseur</b>	<b>Blattstiel: Dicke</b>	<b>Pecíolo: grosor</b>		
<b>QN</b>	thin	fin	dünn	delgado	Libby, Villapark	3
	medium	moyen	mittel	medio	Big Sister	5
	thick	épais	dick	grueso	Bays, Salmon	7
<b>14. (b) Leaf blade: undulation of margin</b>		<b>Limbe: ondulation du bord</b>	<b>Blattspreite: Randwellung</b>	<b>Limbo: ondulación del borde</b>		
<b>QN</b>	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil	African Pride	1
	weak	faible	gering	débil	Pierce	3
	medium	moyenne	mittel	media	White	5
	strong	forte	stark	fuerte	Big Sister	7
<b>15. (c) Shoot: density of flowers</b>		<b>Rameau: densité des fleurs</b>	<b>Trieb: Dichte der Blüten</b>	<b>Rama: densidad de las flores</b>		
<b>QN</b>	sparse	lâche	locker	laxa	Ott	3
	medium	moyenne	mittel	media	White	5
	dense	dense	dicht	densa	Big Sister	7
<b>16. (c) Petal: length</b>		<b>Pétale: longueur</b>	<b>Blütenblatt: Länge</b>	<b>Pétalo: longitud</b>		
<b>QN</b>	short	court	kurz	corto	Bays, Pink's Mommoth, White	3
	medium	moyen	mittel	medio	Big Sister, El Bumpo, Sabor	5
	long	long	lang	largo	Libby, Villapark	7
<b>17. (c) Petal: width</b>		<b>Pétale: largeur</b>	<b>Blütenblatt: Breite</b>	<b>Pétalo: anchura</b>		
<b>QN</b>	narrow	étroit	schmal	estrecho	Honey Hart, White	3
	medium	moyen	mittel	medio	Campus, Mariella, Miguel, Pink's Mommoth	5
	broad	large	breit	ancho	Libby, Villapark	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>18. (c)</b>	<b>Petal: ratio length/width</b>	<b>Pétale: rapport longueur/largeur</b>	<b>Blütenblatt: Verhältnis Länge/Breite</b>	<b>Pétalo: relación entre la longitud y la anchura</b>		
<b>QN</b>	small	petit	klein	pequeña	Honey Hart, White	3
	medium	moyen	mittel	media	Campus, Miguel	5
	large	grand	groß	grande	Libby, Villapark	7
<b>19. (c)</b>	<b>Petal: thickness</b>	<b>Pétale: épaisseur</b>	<b>Blütenblatt: Dicke</b>	<b>Pétalo: grosor</b>		
<b>QN</b>	thin	fin	dünn	delgado	Bays, Campas, Fino de Jete	3
	medium	moyen	mittel	medio	Big Sister, Honey Hart	5
	thick	épais	dick	grueso	Libby, Sabor	7
<b>20. (c)</b>	<b>Petal: color</b>	<b>Pétale: couleur</b>	<b>Blütenblatt: Farbe</b>	<b>Pétalo: color</b>		
<b>PQ</b>	green	vert	grün	verde	African Pride, Gefner	1
	yellow	jaune	gelb	amarillo	Bay Ott, Big Sister	2
	light brown	brun clair	hellbraun	marrón claro	El Bumpo, Pierce	3
<b>21. (c)</b>	<b>Peduncle: length</b>	<b>Pédoncule: longueur</b>	<b>Blütenstiel: Länge</b>	<b>Pedúnculo: longitud</b>		
<b>QN</b>	short	court	kurz	corto	Campas, Chaffey	3
	medium	moyen	mittel	medio	African Pride, Pink's Mommoth	5
	long	long	lang	largo	Booth, El Bumpo	7
<b>22. (c)</b>	<b>Petal: twisting just before anthesis</b>	<b>Pétale: torsion juste avant l'anthèse</b>	<b>Blütenblatt: Drehung kurz vor dem Blühstadium</b>	<b>Pétalo: torsión inmediately antes de la antesis</b>		
<b>QN</b>	small	petite	gering	pequeña	White	3
	medium	moyenne	mittel	media	Big Sister	5
	large	grande	stark	grande	Villapark	7
<b>23. (c)</b>	<b>Petal: curving</b>	<b>Pétale: courbure</b>	<b>Blütenblatt: Biegung</b>	<b>Pétalo: curvatura</b>		
<b>QN</b>	small	petite	gering	pequeña	Booth, Pierce	3
	medium	moyenne	mittel	media	White	5
	large	grande	groß	grande	Chaffey	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>24. (c) Ovary: shape</b>	<b>Ovaire: forme</b>	<b>Fruchtknoten: Form</b>	<b>Ovario: forma</b>		
<b>PQ</b> broad cordate	cordée large	breit herzförmig	cordiforme ancho	Chaffey	1
cordate	cordée	herzförmig	cordiforme	Bays, Campas, Spain	2
narrow cordate	cordée étroite	schmal herzförmig	cordiforme estrecho	Booth, Pierce, VillaPark	3
<b>25. (c) Ovary: length</b>	<b>Ovaire: longueur</b>	<b>Fruchtknoten: Länge</b>	<b>Ovario: longitud</b>		
<b>QN</b> short	courte	kurz	corto	African Pride, Gefner	3
medium	moyenne	mittel	medio	Chaffey	5
long	longue	lang	largo	Big Sister	7
<b>26. (c) Ovary: width</b>	<b>Ovaire: largeur</b>	<b>Fruchtknoten: Breite</b>	<b>Ovario: anchura</b>		
<b>QN</b> narrow	étroite	schmal	estrecho	African Pride, Gefner	3
medium	moyenne	mittel	medio	Chaffey	5
broad	large	breit	ancho	Booth	7
<b>27. (d) Fruit: length</b>	<b>Fruit: longueur</b>	<b>Frucht: Länge</b>	<b>Fruto: longitud</b>		
<b>QN</b> short	court	kurz	corto	Chafey	3
medium	moyen	mittel	medio	Bay Ott	5
long	long	lang	largo	Big Sister	7
<b>28. (d) Fruit: diameter in cross section</b>	<b>Fruit: diamètre en section transversale</b>	<b>Frucht: Durchmesser im Querschnitt</b>	<b>Fruto: diámetro en sección transversal</b>		
<b>QN</b> small	petit	klein	pequeño	Bay Ott, Bays	3
medium	moyen	mittel	medio	Mariella, Pierce	5
large	grand	groß	grande	Big Sister, Salmon	7

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>29. (d) (*) (+)</b>	<b>Fruit: shape in lateral view</b>	<b>Fruit: forme en vue latérale</b>	<b>Frucht: Form in der Seitenansicht</b>	<b>Fruto: forma en vista lateral</b>		
<b>PQ</b>	circular	circulaire	rund	circular	Bay Ott, Chaffey	1
	cordate	cordé	herzförmig	cordiforme	Bays, Honey Hart, Pierce, White	2
	conical	conique	kegelig	cónico	El Bumpo, Libby, Mariella, Villapark	3
	broad conical	conique large	breit kegelig	cónico ancho	Booth, Campas, Fino de Jete, Miguel, Ott	4
	trapezoidal	trapézoïdal	trapezförmig	trapezoidal	Big Sister	5
<b>30. (d) (*)</b>	<b>Fruit: glossiness of skin</b>	<b>Fruit: brillance de la peau</b>	<b>Frucht: Glanz der Schale</b>	<b>Fruto: brillo de la epidermis</b>		
<b>QL</b>	absent	absente	fehlend	ausente	Bays, Big Sister	1
	present	présente	vorhanden	presente	African Pride, Gefner	9
<b>31. (d) (*)</b>	<b>Fruit: color of skin</b>	<b>Fruit: couleur de la peau</b>	<b>Frucht: Farbe der Schale</b>	<b>Fruto: color de la epidermis</b>		
<b>PQ</b>	pale yellow green	vert-jaune pâle	blaß gelbgrün	verde amarillento pálido	Pierce	1
	pale green	vert pâle	blaßgrün	verde pálido	Bays, Big Sister, Libby	2
	greyish green	vert grisâtre	gräulichgrün	verde grisáceo	Sabor, Campas, Miguel	3
<b>32. (d) (*)</b>	<b>Fruit: thickness of rind</b>	<b>Fruit: épaisseur de l'écorce</b>	<b>Frucht: Dicke der Schale</b>	<b>Fruto: grosor de la corteza</b>		
<b>QN</b>	thin	fine	dünn	delgada	El Bumpo	3
	medium	moyenne	mittel	media	Big Sister	5
	thick	épaisse	dick	gruesa	Bay Ott	7
<b>33. (d) (*) (+)</b>	<b>Fruit: segmentation of surface</b>	<b>Fruit: segmentation de la surface</b>	<b>Frucht: Segmentierung der Oberfläche</b>	<b>Fruto: segmentación de la superficie</b>		
<b>QL</b>	reticulate	réticulée	netzartig	reticular	Booth, El Bumpo, Ott	1
	overlapping segments	segments chevauchants	überlappende Segmente	segmentos solapados	Bay Ott, Big Sister, Spain	2

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>34. (d) Fruit: protuberance on surface</b> <b>(*)</b> <b>(+)</b>		<b>Fruit: protubérance sur la surface</b>	<b>Frucht: Höcker an der Oberfläche</b>	<b>Fruto: protuberancias en la superficie</b>		
<b>QN</b>	absent or very small	nulle ou très petite	fehlend oder sehr klein	ausentes o muy pequeñas	Honey Hart, White	1
	small	petite	klein	pequeñas	Big Sister, Libby, Mariella, Villapark	3
	medium	moyenne	mittel	medias	El Bumpo, Oakwood	5
	large	grande	groß	grandes	Miguel, Sabor	7
<b>35. (d) Fruit: color of flesh</b>		<b>Fruit: couleur de la chair</b>	<b>Frucht: Farbe des Fleisches</b>	<b>Fruto: color de la pulpa</b>		
<b>PQ</b>	white	blanche	weiß	blanco	Pierce	1
	cream	crème	cremefarben	crema	Villapark	2
<b>36. (d) Fruit: texture of flesh</b>		<b>Fruit: texture de la chair</b>	<b>Frucht: Textur des Fleisches</b>	<b>Fruto: textura de la pulpa</b>		
<b>QN</b>	soft	tendre	weich	blanda	El Bumpo, Miguel	3
	medium	moyenne	mittel	media	White	5
	firm	ferme	fest	firme	African Pride, Pink's Mommoth	7
<b>37. (d) Fruit: amount of fiber</b>		<b>Fruit: quantité de fibres</b>	<b>Frucht: Menge der Fasern</b>	<b>Fruto: cantidad de fibra</b>		
<b>QN</b>	few	peu	gering	poca	African Pride, El Bumpo	3
	medium	assez nombreuses	mittel	media	Big Sister, Chaffey, Libby, Miguel	5
	many	nombreuses	groß	mucha	Bay Ott, Honey Hart, Mariella, White	7
<b>38. (d) Fruit: amount of stone cell</b>		<b>Fruit: quantité de sclérites</b>	<b>Frucht: Menge der Steinzellen</b>	<b>Fruto: cantidad de lóculo óseo</b>		
<b>QN</b>	few	peu	gering	pequeña	Bay Ott, Honey Hart, Miguel, White	3
	medium	assez nombreuses	mittel	media	Big Sister, Chaffey, Libby	5
	many	nombreuses	groß	alta	Booth, Campas, Ott, Sabor	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>39. (d)</b>	<b>Fruit: juiciness of flesh</b>	<b>Fruit: succulence de la chair</b>	<b>Frucht: Saftigkeit des Fleisches</b>	<b>Fruto: succulencia de la pulpa</b>		
<b>QN</b>	low	faible	gering	baja	Chaffey, Pierce	3
	medium	moyenne	mittel	media	Bay Ott, Big Sister, Honey Hart	5
	high	forte	stark	alta	Booth, El Bumpo, Mariella, Oakwood	7
<b>40. (d)</b>	<b>Fruit: total soluble solids</b>	<b>Fruit: quantité de matières solubles</b>	<b>Frucht: Gesamtgehalt der gelösten Stoffe</b>	<b>Fruto: contenido de sólidos solubles</b>		
<b>QN</b>	low	faible	gering	bajo	Pierce, Salmon	3
	medium	moyenne	mittel	medio	Big Sister, Libby, Mariella, Pink's mommoth, Ott	5
	high	élevée	hoch	alto	Cumpas, Miguel, Sabor, White	7
<b>41. (d)</b>	<b>Fruit: acidity</b>	<b>Fruit: acidité</b>	<b>Frucht: Säure</b>	<b>Fruto: acidez</b>		
<b>QN</b>	low	faible	gering	baja	Big Sister, Campas, Fino de Jete	3
	medium	moyenne	mittel	media	Booth, Miguel	5
	high	élevée	hoch	alta	Bays, El Bumpo	7
<b>42. (d)</b>	<b>Fruit: aroma</b>	<b>Fruit: arôme</b>	<b>Frucht: Aroma</b>	<b>Fruto: aroma</b>		
<b>QN</b>	weak	faible	schwach	débil	Big Sister, Pierce	3
	medium	moyen	mittel	medio	Bay Ott, Bays, El Bumpo	5
	strong	fort	stark	fuerte	Booth, Honey Hart, Sabor, White	7
<b>43. (d)</b>	<b>Fruit: number of seeds</b>	<b>Fruit: nombre de pépins</b>	<b>Frucht: Anzahl Samen</b>	<b>Fruto: número de semillas</b>		
<b>QN</b>	few	petit	gering	bajo	Salmon	3
	medium	moyen	mittel	medio	Fino de Jete	5
	many	grand	groß	alto	Big Sister	7

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>44.</b>	<b>Seed: length</b>	<b>Pépin: longueur</b>	<b>Samen: Länge</b>	<b>Semilla: longitud</b>		
<b>QN</b>	short	court	kurz	corta	Oakwood, Pierce	3
	medium	moyen	mittel	media	Mariella	5
	long	long	lang	larga	Big Sister	7
<b>45.</b>	<b>Seed: width</b>	<b>Pépin: largeur</b>	<b>Samen: Breite</b>	<b>Semilla: anchura</b>		
<b>QN</b>	narrow	étroit	schmal	estrecha	African Pride, Gefner	3
	medium	moyen	mittel	media	Bay Ott, Honey Hart	5
	broad	large	breit	ancha	Chaffey, Mariella	7
<b>46.</b>	<b>Seed: ratio length/width</b>	<b>Pépin: rapport longueur/largeur</b>	<b>Samen: Verhältnis Länge/Breite</b>	<b>Semilla: relación entre la longitud y la anchura</b>		
<b>QN</b>	small	petit	klein	pequeña	Oakwood	3
	medium	moyen	mittel	media	El Bumpo	5
	large	grand	groß	grande	Bay Off	7
<b>47.</b>	<b>Seed: shape</b>	<b>Pépin: forme</b>	<b>Samen: Form</b>	<b>Semilla: forma</b>		
<b>QN</b>	narrow	étroit	schmal	estrecha	Bays, Sabor	3
	medium	moyen	mittel	media	Libby, Salmon, White	5
	broad	large	breit	ancha	Booth, Mariella	7
<b>48.</b>	<b>Seed: glossiness</b>	<b>Pépin: brillance</b>	<b>Samen: Glanz</b>	<b>Semilla: brillo</b>		
<b>QL</b>	absent	absente	fehlend	ausente	Big Sister, White	1
	present	présente	vorhanden	presente	African Pride, Pink's Mommoth, Spain	9
<b>49.</b>	<b>Seed: adherence to flesh</b>	<b>Pépin: adhérence à la chair</b>	<b>Samen: Anhaften am Fleisch</b>	<b>Semilla: adherencia a la pulpa</b>		
<b>QN</b>	weak	faible	gering	débil	Booth, Campus	3
	medium	moyenne	mittel	media	Big Sister, Chaffey	5
	strong	forte	stark	fuerte	Bay Ott, Bays	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>50.</b>	<b>Time of harvest maturity</b>	<b>Époque de maturité de récolte</b>	<b>Zeitpunkt der Erntereife</b>	<b>Época de madurez para la cosecha</b>		
<b>QN</b>	early	précoce	früh	temprana	El Bumpo, White	3
	medium	moyenne	mittel	media	Pierce, Chaffey, Mariella	5
	late	tardive	spät	tardía	African Pride, Big Sister	7



8. Explanations on the Table of Characteristics

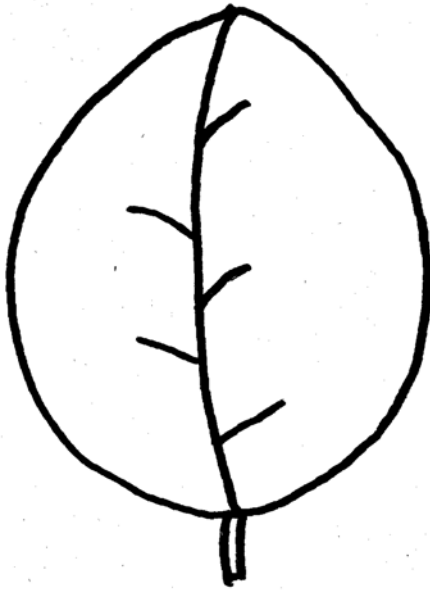
8.1 *Explanations covering several characteristics*

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

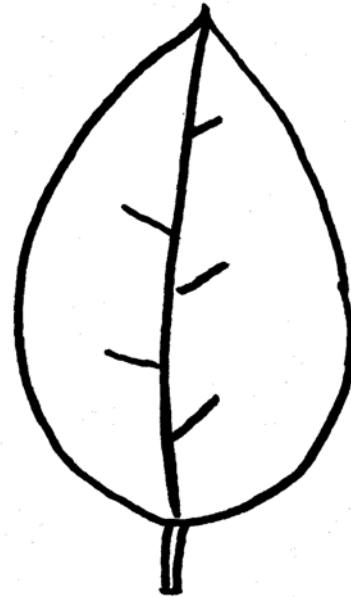
- (a) One-year-old shoot: Observations on the one-year-old shoot should be made on the middle third during the dormant season.
- (b) Leaf: Observations on the leaf should be made on fully developed leaves from the middle third of a current season's shoot.
- (c) Flower: Observations on the flower should be made at the time of flowering when the petals are starting to separate.
- (d) Fruit: Observations on the fruit should be made on fruits at the time of harvest maturity.

8.2 *Explanations for individual characteristics*

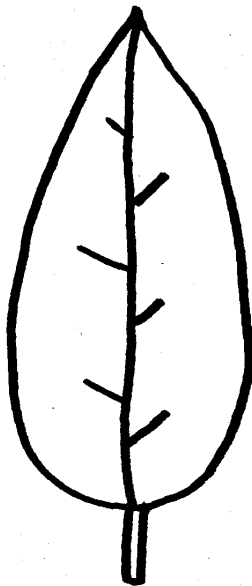
Ad. 7: Leaf blade: Shape



1  
circular



2  
oblate

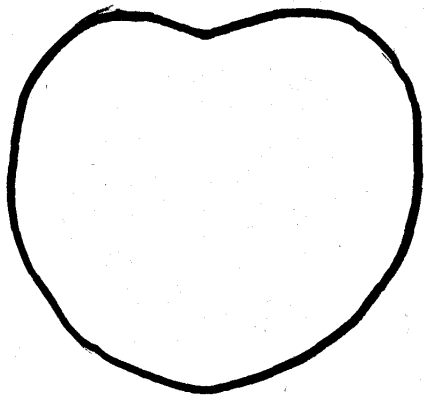


3  
broad lanceolate

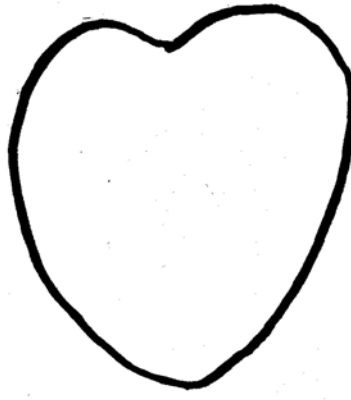


4  
narrow lanceolate

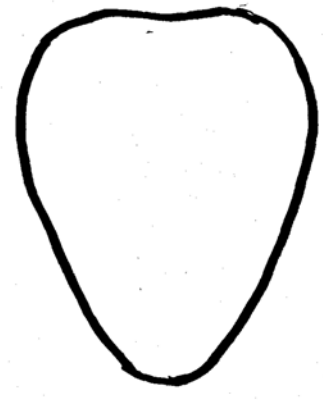
Ad. 29: Fruit: shape in lateral view



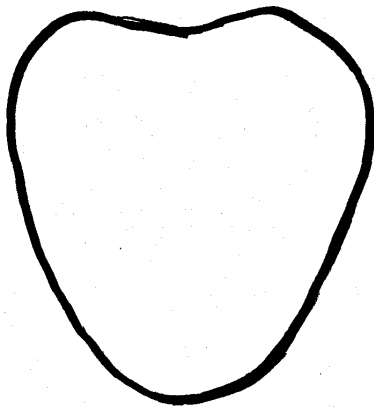
1  
circular



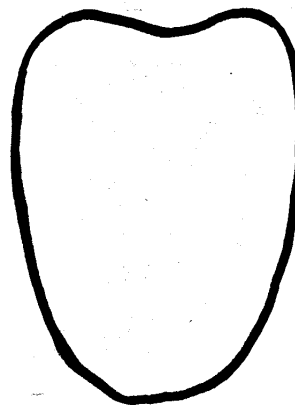
2  
cordate



3  
conical

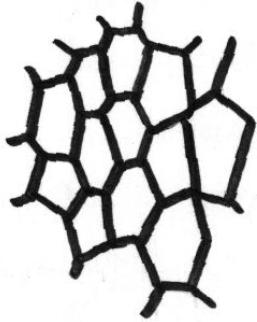


4  
broad conical

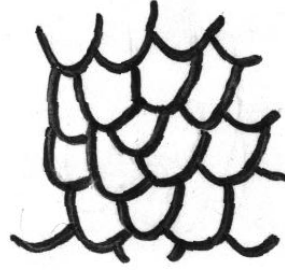


5  
trapezoidal

Ad. 33: Fruit: segmentation of surface

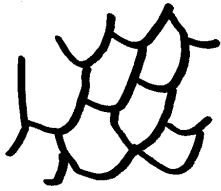


1  
reticulate



2  
overlapping segments

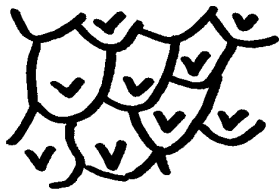
Ad. 34: Fruit: protuberance on surface



1  
absent or very small



2  
small



3  
medium



4  
large

9. Literature

Introductory fruit tree variety characteristic investigation enterprise report (1994), Japan Fruit Tree Seedling and Clonial Association.

Japanese National Test Guidelines for cherimoya (2000).

Yamashita, S., (1995) Fruit of fascination - Cherimoya, Agriculture & Horticulture, Vol.70, No. 11, p57-64.

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 Latin Name	<input type="text" value="Annona cherimola Mill."/>	
1.2 Common Name	<input type="text" value="Cherimoya"/>	
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:
-------------------------	-----------------	-------------------

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 unknown cross  [ ]  
(please state known parent variety(ies))
- (c) totally unknown cross  [ ]

4.1.2 Mutation  [ ]  
(please state parent variety)

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

4.1.4 Other  [ ]  
(please provide details)

4.2 Method of Propagating the Variety

4.2.1 Vegetative propagation

- (a) *in vitro* propagation  [ ]
- (b) other (e.g. leaf cutting, hardwood cutting, layer)  [ ]  
(state method)

4.2.2 Seed  [ ]

4.2.3 Other  [ ]  
(please provide details)

4.3 Virus status

4.3.1 The variety is free from all known viruses as follows:  [ ]  
(indicate from which viruses)

4.3.2 The plant material is virus tested:  [ ]  
(indicate against which viruses)

4.3.3 The virus status is unknown  [ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).

Characteristics	Example Varieties	Note
<b>5.1 Fruit: shape in lateral view (29)</b>		
circular	Bay Ott, Chaffey	1[ ]
cordate	Bays, Honey Hart, Pierce, White	2[ ]
conical	El Bumpo, Libby, Mariella, Villapark	3[ ]
broad conical	Booth, Campas, Fino de Jete, Miguel, Ott	4[ ]
trapezoidal	Big Sister	5[ ]
<b>5.2 Fruit: segmentation of surface (33)</b>		
reticulate	Booth, El Bumpo, Ott	1[ ]
overlapping segments	Bay Ott, Big Sister, Spain	2[ ]
<b>5.3 Fruit: protuberance on surface (34)</b>		
absent or very small	Honey Hart, White	1[ ]
small	Big Sister, Libby, Mariella, Villapark	3[ ]
medium	El Bumpo, Oakwood	5[ ]
large	Miguel, Sabor	7[ ]





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 Special conditions for the examination of the variety

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

Yes [ ] No [ ]

7.2.2 If yes, please give 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.

9. 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]