



TG/159/3

INTERNATIONAL UNION  
FOR THE PROTECTION  
OF NEW VARIETIES OF  
PLANTS

UNION INTERNATIONALE  
POUR LA PROTECTION  
DES OBTENTIONS  
VÉGÉTALES

INTERNATIONALER  
VERBAND ZUM SCHUTZ  
VON PFLANZEN-  
ZÜCHTUNGEN

UNIÓN INTERNACIONAL  
PARA LA PROTECCIÓN  
DE LAS OBTENCIONES  
VEGETALES

**GUIDELINES**  
**FOR THE CONDUCT OF TESTS**  
**FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

**LOQUAT**

*(Eriobotrya japonica*  
*(Thunb.) Lindl.)*

**GENEVA**  
**1998**

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**ORIGINAL:** English

**DATE :** 1998-04-01

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## **GUIDELINES**

### **FOR THE CONDUCT OF TESTS**

#### **FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

### **LOQUAT**

*(Eriobotrya japonica  
(Thunb.) Lindl.)*

These Guidelines should be read in conjunction with document TG/1/2, which contains explanatory notes on the general principles on which the Guidelines have been established.

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## I. Subject of these Guidelines

These Test Guidelines apply to all vegetatively propagated varieties of *Eriobotrya japonica* (Thunb.) Lindl.

## II. Material Required

1. The competent authorities decide when, where and in what quantity and quality the plant material required for testing the variety is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must make sure that all customs formalities are complied with. As a minimum, the following quantity of plant material is recommended:

(a) Varieties obtained from crossings:

6 one-year-old plants grafted on *Eriobotrya japonica* seedlings or

(b) Varieties obtained by mutation:

10 one year-old plants grafted on *Eriobotrya japonica*.

2. The plant material supplied should be visibly healthy, not lacking in vigor or affected by any important pests or diseases. It should preferably not be obtained from *in vitro* propagation.

3. The plant material must not have undergone any treatment unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

## III. Conduct of Tests

1. To assess distinctness, it is essential for the plants under test to bear a satisfactory crop of fruit for at least two growing periods.

2. The tests should normally be conducted at one place. If any important characteristics of the variety cannot be seen at that place, the variety may be tested at an additional place.

3. Fruits should be thinned to leave 3 or 4 fruits per cluster, which should be bagged in paper. The tests should be carried out under conditions ensuring normal growth. Each test should include a total of 6 plants of varieties obtained from crossings or 10 plants for varieties obtained by mutation. Separate plots for observation and for measuring can only be used if they have been subject to similar environmental conditions.

4. Additional tests for special purposes may be established.

#### IV. Methods and Observations

1. All observations determined by measurements, weighing or counting should be made on 5 plants or 10 parts 2 from each of 5 plants for varieties obtained from crossings or 10 plants or 20 parts 2 from each of 10 plants for varieties obtained by mutation.
2. For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95% should be applied for varieties obtained from crossings, and a population standard of 2% with the same acceptance probability for varieties obtained by mutation. In the case of a sample size of 6 plants, the maximum number of off-types allowed would be 1, in the case of 10 plants the maximum number of off-types allowed would also be 1.
3. All observations on the tree should be made after the growing period, before pruning.
4. All observations on the central and lateral shoots should be made on well-developed current season shoots after the growing period, before pruning.
5. All observations on the leaf should be made on fully developed leaves at the middle part of the current season central shoot after hardening.
6. All observations on the flower cluster should be made at the beginning of flowering on the central current seasons shoots (when 10% of the flowers on 10% of the flower clusters have opened).
7. All observations on the flower should be made on the current seasons central shoots at the time of full flowering. The flowering period lasts until 90% of the flower clusters have opened.
8. Unless otherwise stated, all observations on the fruit should be made on fruits of moderate size from more than 5 clusters at the time of maturity for consumption (50% of fully colored fruits bagged in paper).

#### V. Grouping of Varieties

1. The collection of varieties to be grown should be divided into groups to facilitate the assessment of distinctness. Characteristics which are suitable for grouping purposes are those which are known from experience not to vary, or to vary only slightly, within a variety. Their various states of expression should be fairly evenly distributed throughout the collection.
2. It is recommended that the competent authorities use the following characteristics for grouping varieties:
  - (a) Fruit: shape in longitudinal section (characteristic 24)
  - (b) Fruit: color of skin (characteristic 28)
  - (c) Time of maturity (characteristic 46).

## VI. Characteristics and Symbols

1. To assess distinctness, uniformity and stability, the characteristics and their states as given in the Table of Characteristics should be used.

2. Notes (numbers), for the purposes of electronic data processing, are given opposite the states of expression for each characteristic.

### 3. Legend

(\*) Characteristics that should be used on all varieties in every growing period over which examinations are made and always be included in the variety descriptions, except when the state of expression of a preceding characteristic or regional environmental conditions render this impossible.

(+) See Explanations on the Table of Characteristics in chapter VIII.

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

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>1. Tree: habit (*)</b>	<b>Arbre: port</b>	<b>Baum: Wuchsform</b>	<b>Árbol: porte</b>		
upright	dressé	aufrecht	erecto	Mogi, Tsukumo	1
semi-upright	demi-dressé	halbaufrecht	semierecto	Nojima-wase	2
spreading	étalé	breitwüchsig	rastrero	Tanaka	3
<b>2. Tree: vigor (*)</b>	<b>Arbre: vigueur</b>	<b>Baum: Wuchsstärke</b>	<b>Árbol: vigor</b>		
weak	faible	gering	débil	Morimoto	3
medium	moyenne	mittel	medio	Yukawa	5
strong	forte	stark	fuerte	Mogi, Tanaka	7
<b>3. Central shoot: thickness (*)</b>	<b>Pousse centrale: épaisseur</b>	<b>Haupttrieb: Dicke</b>	<b>Tallo central: grosor</b>		
thin	mince	dünn	delgado	Fukujuin	3
medium	moyen	mittel	medio	Tanaka	5
thick	épais	dick	grueso	Amakusa-wase, Mogi	7
<b>4. Central shoot: number of lateral shoots (*)</b>	<b>Pousse centrale: nombre de pousses latérales</b>	<b>Haupttrieb: Anzahl Seitentriebe</b>	<b>Tallo central: número de tallos laterales</b>		
few	petit	gering	bajo	Amakusa-wase, Fukuhara-wase	3
medium	moyen	mittel	medio	Mogi, Tanaka	5
many	grand	groß	alto	Champagne	7
<b>5. Lateral shoot: length (*)</b>	<b>Pousse latérale: longueur</b>	<b>Seitentrieb: Länge</b>	<b>Tallo lateral: longitud</b>		
short	courte	kurz	corto	Wase-dai	3
medium	moyenne	mittel	medio	Mogi, Tanaka	5
long	longue	lang	largo	Nagasaki-wase	7



	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>6. (*)</b>	<b>Lateral shoot: thickness</b>	<b>Pousse latérale: épaisseur</b>	<b>Seitentrieb: Dicke</b>	<b>Tallo lateral: grosor</b>		
	thin	fine	dünn	delgado	Mogi	3
	medium	moyenne	mittel	medio	Tanaka	5
	thick	épaisse	dick	grueso	Amakusa-wase	7
<b>7. (*)</b>	<b>Leaf blade: length</b>	<b>Limbe: longueur</b>	<b>Blattspreite: Länge</b>	<b>Limbo: longitud</b>		
	short	court	kurz	corto		3
	medium	moyen	mittel	medio	Mogi, Tanaka	5
	long	long	lang	largo	Nojima-wase	7
<b>8. (*)</b>	<b>Leaf blade: width</b>	<b>Limbe: largeur</b>	<b>Blattspreite: Breite</b>	<b>Limbo: anchura</b>		
	narrow	étroit	schmal	estrecho	Togoshi	3
	medium	moyen	mittel	medio	Mogi, Tanaka	5
	broad	large	breit	ancho	Fukuhara-wase, Yukawa	7
<b>9. (*)</b>	<b>Leaf blade: ratio length/width</b>	<b>Limbe: rapport longueur/largeur</b>	<b>Blattspreite: Verhältnis Länge/Breite</b>	<b>Limbo: razón longitud/anchura</b>		
	small	petit	klein	pequeña	Mogi, Obusa	3
	medium	moyen	mittel	media	Tanaka	5
	large	grand	groß	grande	Togosi	7
<b>10.</b>	<b>Leaf blade: thickness</b>	<b>Limbe: épaisseur</b>	<b>Blattspreite: Dicke</b>	<b>Limbo: grosor</b>		
	thin	mince	dünn	delgado	Fukujuin	3
	medium	moyen	mittel	medio	Tanaka	5
	thick	épais	dick	grueso	Amakusa-wase, Mogi	7

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>11. Leaf blade: shape of tip (+)</b>	<b>Limbe: forme du sommet</b>	<b>Blattspreite: Form der Spitze</b>	<b>Limbo: forma del ápice</b>		
sharp acute	aigu à bout pointu	zugespitzt	puntiagudo	Togoshi	1
blunt acute	aigu à bout arrondi	abgestumpft	agudo romo	Tanaka	2
rounded	arrondi	abgerundet	redondeado	Mogi	3
<b>12. Leaf blade: shape in cross section</b>	<b>Limbe: forme en section transversale</b>	<b>Blattspreite: Form im Querschnitt</b>	<b>Limbo: forma en sección transversal</b>		
concave	concave	konkav	cóncavo	Togoshi, Yukawa	1
flat	plat	eben	plano	Mogi	2
convex	convexe	konvex	convexo	Kusunoki	3
<b>13. Leaf blade: density of serrations of margin</b>	<b>Limbe: densité de la denticulation du bord</b>	<b>Blattspreite: Dichte der Säugung des Randes</b>	<b>Limbo: densidad de la forma dentada del borde</b>		
sparse	lâche	locker	laxa	Morio-wase	3
medium	moyenne	mittel	media	Mogi, Tanaka	5
dense	dense	dicht	densa	Mizuho, Obusa	7
<b>14. Leaf blade: green color of upper side (*)</b>	<b>Limbe: couleur verte de la face supérieure</b>	<b>Blattspreite: Grünfärbung der Oberseite</b>	<b>Limbo: color verde del haz</b>		
light	claire	hell	claro	Champagne, Kanton	3
medium	moyenne	mittel	medio	Tanaka	5
dark	foncée	dunkel	oscuro	Togoshi	7
<b>15. Leaf: attitude in relation to shoot</b>	<b>Feuille: port par rapport à la pousse</b>	<b>Blatt: Haltung im Verhältnis zum Trieb</b>	<b>Limbo: porte en relación al tallo</b>		
upwards	vers le haut	nach oben	hacia arriba	Amakusa-wase	1
outwards	perpendiculaire	abstehend	perpendicular	Mogi, Tanaka	2
downwards	vers le bas	nach unten	hacia abajo	Wase-dai	3

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>16. Flower cluster: shape (*)</b>	<b>Bouquet de fleurs: forme</b>	<b>Blütenstand: Form</b>	<b>Racimo floral: forma</b>		
conical	conique	konisch	cónico	Tsukumo	1
truncate conical	tronconique	stumpf konisch	cónico truncado	Mogi	2
cylindrical	cylindrique	zylindrisch	cilíndrico	Champagne	3
<b>17. Flower cluster: size (*)</b>	<b>Bouquet de fleurs: taille</b>	<b>Blütenstand: Größe</b>	<b>Racimo floral: tamaño</b>		
small	petite	klein	pequeño	Tsukumo	3
medium	moyenne	mittel	medio	Mogi, Tanaka	5
large	grande	groß	grande	Morio-wase	7
<b>18. Flower cluster: length of lowest lateral (*) (+)</b>	<b>Bouquet de fleurs: longueur du rameau le plus bas</b>	<b>Blütenstand: Länge der untersten Verzweigung</b>	<b>Racimo floral: longitud del racimo lateral más bajo</b>		
short	court	kurz	corto	Kusunoki, Obusa	3
medium	moyen	mittel	medio	Mogi, Tanaka	5
long	long	lang	largo	Amakusa-wase	7
<b>19. Flower cluster: attitude of lateral in relation to peduncle (*) (+)</b>	<b>Bouquet de fleurs: port du rameau par rapport au pédoncule</b>	<b>Blütenstand: Stellung der Verzweigung im Verhältnis zum Blumenstiel</b>	<b>Racimo floral: porte del racimo lateral en relación al pedúnculo</b>		
upwards	vers le haut	nach oben	hacia arriba	Amakusa-wase	1
outwards	perpendiculaire	abstehend	perpendicular	Mogi	2
downwards	vers le bas	nach unten	hacia abajo	Tanaka	3
<b>20. Flower cluster: number of flowers (*)</b>	<b>Bouquet de fleurs: nombre de fleurs</b>	<b>Blütenstand: Anzahl Blüten</b>	<b>Racimo floral: número de flores</b>		
few	faible	gering	bajo	Yukawa	3
medium	moyen	mittel	medio	Nagasaki-wase, Obusa	5
many	élevé	groß	elevado	Mogi, Tanaka	7

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>21. Flower: size</b> (* )	<b>Fleur: taille</b>	<b>Blüte: Größe</b>	<b>Flor: tamaño</b>		
small	petite	klein	pequeño	Mogi, Nagasaki-wase	3
medium	moyenne	mittel	medio	Tsukumo, Yukawa	5
large	grande	groß	grande	Tanaka, Obusa	7
<b>22. Petal: color</b> (* )	<b>Pétale: couleur</b>	<b>Blütenblatt: Farbe</b>	<b>Pétalo: color</b>		
white	blanc	weiß	blanco	Ikeda	1
yellowish white	blanc jaunâtre	gelblichweiß	blanco amarillento	Mogi, Tanaka	2
yellow	jaune	gelb	amarillo	Champagne	3
<b>23. Fruit: size</b> (* )	<b>Fruit: taille</b>	<b>Frucht: Größe</b>	<b>Fruto: tamaño</b>		
small	petit	klein	pequeño	Fukujuin, Kanton	3
medium	moyen	mittel	medio	Mogi	5
large	grand	groß	grande	Tanaka	7
<b>24. Fruit: shape in longitudinal section</b> (* ) (+)	<b>Fruit: forme en section longitudinale</b>	<b>Frucht: Form im Längsschnitt</b>	<b>Fruto: forma en sección longitudinal</b>		
elliptic	elliptique	elliptisch	elíptico	Muroto-wase	1
broad elliptic	elliptique large	breit elliptisch	elíptico ancho	Ono-wase	2
round	rond	rund	redondo	Gold nugget	3
oblate	aplati	breitrund	achatado	Kanton, Toi	4
broad obovate	obovale large	breit verkehrt eiförmig	oboval ancho	Tanaka	5
obovate	obovale	verkehrt eiförmig	oboval	Mogi	6

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>25. Fruit: shape in cross section</b> (* (+)	<b>Fruit: forme en section transversale</b>	<b>Frucht: Form im Querschnitt</b>	<b>Fruto: forma en sección transversal</b>		
round	rond	rund	redonda	Mogi, Toi	1
slightly angular	faiblement anguleux	leicht eckig	ligeramente angular	Mizuho, Yukawa	2
strongly angular	fortement anguleux	stark eckig	fuertemente angular	Obusa	3
<b>26. Fruit: shape at stalk end</b> (* (+)	<b>Fruit: forme au pôle pédonculaire</b>	<b>Frucht: Form am Stielansatz</b>	<b>Fruto: forma en el extremo peduncular</b>		
acute	aigu	spitz	agudo	Mogi	1
obtuse	obtus	stumpf	obtuso	Nagasaki-wase, Obusa	2
rounded	arrondi	abgerundet	redondo	Toi	3
<b>27. Fruit: shape of apex</b> (* (+)	<b>Fruit: forme de l'apex</b>	<b>Frucht: Form der Spitze</b>	<b>Fruto: forma del ápice</b>		
depressed	déprimé	eingesunken	deprimido	Obusa	1
flat	plat	flach	plano	Mogi, Tanaka	2
raised	saillant	vorgewölbt	elevado	Muroto-wase	3
<b>28. Fruit: color of skin</b> (*	<b>Fruit: couleur de l'épiderme</b>	<b>Frucht: Farbe der Epidermis</b>	<b>Fruto: color de la piel</b>		
white	blanche	weiß	blanca	Toi	1
yellowish white	blanc jaunâtre	gelblichweiß	blanca amarillenta	Shiromogi	2
yellow	jaune	gelb	amarilla	Advance	3
orange yellow	jaune orangé	orange gelb	amarilla naranja	Obusa, Tanaka	4
orange	orangé	orange	naranja	Gold nugget	5

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>29.</b>	<b>Fruit: aperture of eye</b>	<b>Fruit: ouverture de l'oeil</b>	<b>Frucht: Öffnung der Kelchhöhle</b>	<b>Fruto: apertura del ojo</b>		
(*)						
(+)						
	closed	fermé	geschlossen	cerrado	Nojima-wase	1
	slightly open	légèrement ouvert	teilweise geöffnet	ligeramente abierto	Mogi	2
	fully open	complètement ouvert	vollkommen offen	completamente abierto	Gold nugget, Satomi	3
<b>30.</b>	<b>Fruit: length of sepal</b>	<b>Fruit: longueur du sépale</b>	<b>Frucht: Länge des Kelchblattes</b>	<b>Fruto: longitud del sépalo</b>		
(*)						
(+)						
	short	court	kurz	corto	Nagasaki-wase	3
	medium	moyen	mittel	medio	Mogi, Tanaka	5
	long	long	lang	largo	Morimoto	7
<b>31.</b>	<b>Fruit: width of sepal at its base</b>	<b>Fruit: largeur du sépale à sa base</b>	<b>Frucht: Breite des Kelchblattes an seiner Basis</b>	<b>Fruto: anchura del sépalo en su base</b>		
(*)						
(+)						
	narrow	étroit	schmal	estrecho	Tanaka	3
	medium	moyen	mittel	medio	Mogi, Obusa	5
	broad	large	breit	ancho	Morimoto	7
<b>32.</b>	<b>Fruit: diameter of core at base of calyx tube</b>	<b>Fruit: diamètre du coeur à la base du tube du calice</b>	<b>Frucht: Durchmesser des Kerngehäuses an der Basis der Kelchhöhle</b>	<b>Fruto: diámetro del corazón en la base del tubo del cáliz</b>		
(*)						
(+)						
	small	petit	klein	pequeño	Morio-wase, Nojima-wase	3
	medium	moyen	mittel	medio	Mogi	5
	large	grand	groß	grande	Obusa, Tanaka	7
<b>33.</b>	<b>Fruit: depth of calyx tube</b>	<b>Fruit: profondeur du tube du calice</b>	<b>Frucht: Tiefe der Kelchhöhle</b>	<b>Fruto: profundidad del tubo del cáliz</b>		
(*)						
(+)						
	shallow	peu profond	flach	poco profundo	Kusunoki, Toi	3
	medium	moyen	mittel	medio	Mogi, Tanaka	5
	deep	profond	tief	profundo	Mizuho, Tsukumo	7

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>34. Fruit: adherence of skin (peeling from stalk end)</b> (* )	<b>Fruit: adhérence à l'épiderme (détachement du pôle pédonculaire)</b>	<b>Frucht: Anhaften der Schale (Schälen vom Stielende aus)</b>	<b>Fruto: adherencia de la piel (separación desde el extremo peduncular)</b>		
weak	faible	gering	débil	Tsukumo	3
medium	moyenne	mittel	media	Mogi	5
strong	forte	stark	fuerte	Ono-wase	7
<b>35. Fruit: thickness of flesh</b> (* )	<b>Fruit: épaisseur de la chair</b>	<b>Frucht: Dicke des Fleisches</b>	<b>Fruto: espesor de la carne</b>		
thin	mince	dünn	delgado	Amakusa-wase	3
medium	moyenne	mittel	medio	Mogi, Tanaka	5
thick	épaisse	dick	grueso	Morimoto	7
<b>36. Fruit: color of flesh</b> (* )	<b>Fruit: couleur de la chair</b>	<b>Frucht: Farbe des Fleisches</b>	<b>Fruto: color de la carne</b>		
white	blanche	weiß	blanca	Kanton	1
yellowish white	blanc jaunâtre	gelblichweiß	blanca amarillenta	Champagne	2
yellow	jaune	gelb	amarilla		3
orange yellow	jaune orangé	orange gelb	amarilla naranja	Mizuho, Mogi, Tanaka	4
orange	orangé	orange	naranja	Gold nugget	5
<b>37. Fruit: firmness of flesh</b>	<b>Fruit: fermeté de la chair</b>	<b>Frucht: Festigkeit des Fleisches</b>	<b>Fruto: firmeza de la carne</b>		
soft	tendre	locker	suave	Kanton, Toi	3
medium	moyenne	mittel	media	Mogi, Yukawa	5
firm	ferme	fest	firme	Obusa, Tanaka	7
<b>38. Fruit: total soluble solids of juice</b>	<b>Fruit: teneur en matières solubles</b>	<b>Frucht: Gesamtgehalt an gelösten Stoffen</b>	<b>Fruto: contenido de sólidos solubles del jugo</b>		
low	faible	niedrig	bajo	Fukujuin	3
medium	moyenne	mittel	medio	Mogi, Tanaka	5
high	élevée	hoch	alto	Kusunoki, Toi	7

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>39. Fruit: acid content of juice</b>	<b>Fruit: teneur du jus en acide</b>	<b>Frucht: Säuregehalt des Saftes</b>	<b>Fruto: contenido de ácido del jugo</b>		
low	faible	niedrig	bajo	Mogi	3
medium	moyenne	mittel	medio	Tanaka	5
high	élevée	hoch	alto	Fukujuin	7
<b>40. Fruit: average number of seed</b>	<b>Fruit: nombre moyen de semences</b>	<b>Frucht: durchschnittliche Anzahl Samen</b>	<b>Fruto: número medio de semillas</b>		
less than three	moins de trois	weniger als drei	menos de tres		1
three to five	trois à cinq	drei bis fünf	tres a cinco	Mogi, Tanaka	2
more than five	plus de cinq	mehr als fünf	más de cinco	Mizuho	3
<b>41. (*) Fruit: weight of seeds compared to fruit</b>	<b>Fruit: poids des semences par rapport au fruit</b>	<b>Frucht: Gewicht der Samen im Verhältnis zur Frucht</b>	<b>Fruto: peso de las semillas en relación al fruto</b>		
low	faible	niedrig	bajo	Mogi, Obusa	3
medium	moyen	mittel	medio	Nagasaki-wase, Tanaka, Yukawa	5
high	élevé	hoch	alto	Mizuho	7
<b>42. (*) (+) Fruit: shape of seed</b>	<b>Fruit: forme des semences</b>	<b>Frucht: Form der Samen</b>	<b>Fruto: forma de las semillas</b>		
elliptic	elliptiques	elliptisch	elípticas	Mogi, Tanaka	1
round	rondes	rund	redondas	Toi	2
obovate	obovales	verkehrt eiförmig	obovales	Nagasaki-wase	3
<b>43. Time of leaf bud burst (20-30% burst)</b>	<b>Époque du débourrement (20-30 % des bourgeons)</b>	<b>Zeitpunkt des Blattknospenaufbruchs (20-30 % der Knospen aufgebrochen)</b>	<b>Fecha de apertura de la yemas (20-30 % abiertas)</b>		
early	précoce	früh	temprana		3
medium	moyenne	mittel	media	Tanaka	5
late	tardive	spät	tardía	Togoshi	7

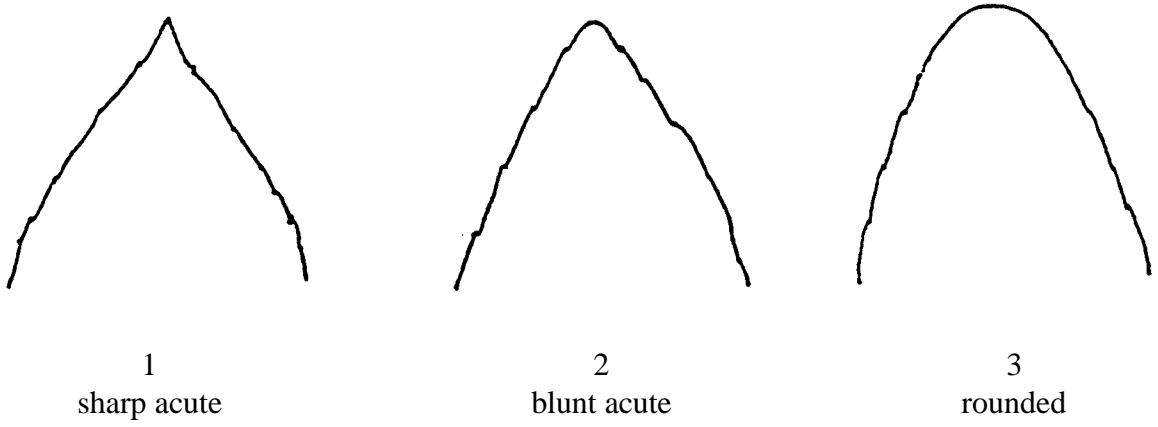


English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>44. Time of beginning of flowering (*)</b>	<b>Époque du début de floraison</b>	<b>Zeitpunkt des Blühbeginns</b>	<b>Fecha del comienzo de la floración</b>		
early	précoce	früh	temprana	Morio-wase	3
medium	moyenne	mittel	media	Mogi, Tanaka	5
late	tardive	spät	tardía	Obusa	7
<b>45. Duration of flowering (*)</b>	<b>Durée de floraison</b>	<b>Dauer der Blüte</b>	<b>Duración de la floración</b>		
short	courte	kurz	corta	Champagne	3
medium	moyenne	mittel	media	Mogi, Tanaka	5
long	longue	lang	larga	Obusa	7
<b>46. Time of maturity (*)</b>	<b>Époque de maturité</b>	<b>Zeitpunkt der Reife</b>	<b>Fecha de la madurez</b>		
very early	très précoce	sehr früh	muy temprana	Amakusa-wase, Morio-wase	1
early	précoce	früh	temprana	Nagasaki-wase	3
medium	moyenne	mittel	media	Mogi	5
late	tardive	spät	tardía	Tanaka	7
very late	très tardive	sehr spät	muy tardía	Morimoto	9
<b>47. Fruit bearing on central shoots: ratio number of bearing central shoots/total number of central shoots</b>	<b>Production de fruits sur des pousses centrales: rapport nombre de pousses centrales avec fruits/nombre total de pousses centrales</b>	<b>Produktion von Früchten an Haupttrieben: Verhältnis Anzahl Haupttriebe mit Früchten/Gesamtzahl Haupttriebe</b>	<b>Producción de frutos en los tallos centrales: razón entre los tallos centrales con frutos/número total de tallos centrales</b>		
small	petit	klein	pequeño	Kanton, Toi	3
medium	moyen	mittel	medio	Mogi	5
large	grand	groß	grande	Mizuho, Morimoto, Tanaka	7

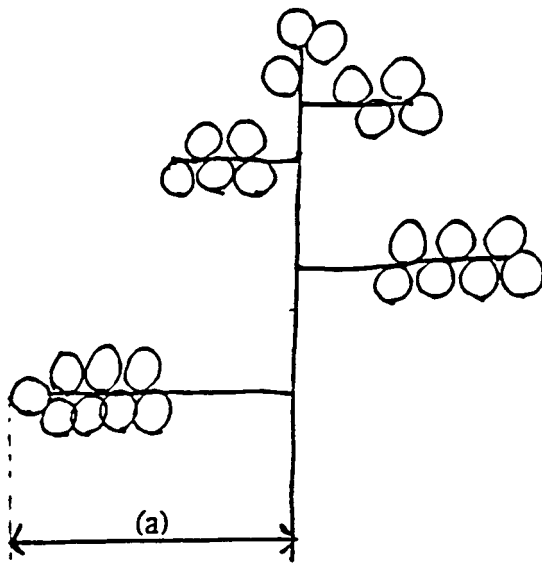
English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>48. Fruit bearing on <u>lateral shoots</u>: ratio number of bearing lateral shoots/total number of lateral shoots</b>	<b>Production des fruits sur <u>pousses latérales</u>: rapport nombre de pousses latérales avec fruits/nombre total de pousses latérales</b>	<b>Produktion von Früchten an <u>Seitentrieben</u>: Verhältnis Anzahl Seitentriebe mit Früchten/ Gesamtzahl Seitentriebe</b>	<b>Producción de frutos en los <u>tallos laterales</u>: razón entre el número de tallos laterales con frutos/número total de tallos laterales</b>		
small	petit	klein	pequeño	Kanton, Toi	3
medium	moyen	mittel	medio	Mogi, Tanaka	5
large	grand	groß	grande	Amakusa-wase	7
<b>49. Fruit bearing on <u>fruit spurs</u>: ratio number of bearing fruit spurs/total number of fruit spurs</b>	<b>Production des fruits sur les <u>brindilles</u>: rapport nombre des brindilles avec fruits/nombre total des brindilles</b>	<b>Produktion von Früchten an <u>kurzen Fruchtspiessen</u>: Verhältnis Anzahl kurze Fruchtspieße mit Früchten/Gesamtzahl kurzer Fruchtspieße</b>	<b>Producción de frutos en los <u>estolones</u>: razón entre el número de estolones con frutos/número total de estolones</b>		
small	petit	klein	pequeño	Toi	3
medium	moyen	mittel	medio	Mogi	5
large	grand	groß	grande	Mizuho	7

VIII. Explanation on the Table of Characteristics

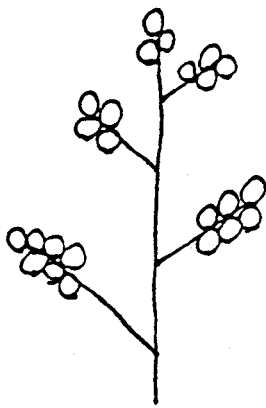
Ad. 11: Leaf blade: shape of tip



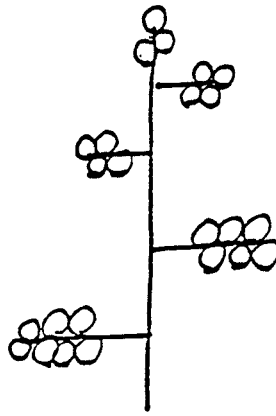
Ad. 18: Flower cluster: length of lowest lateral (a)



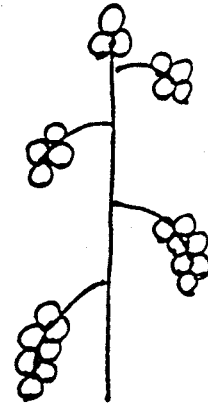
Ad. 19: Flower cluster: attitude of lateral in relation to peduncle



1  
upwards

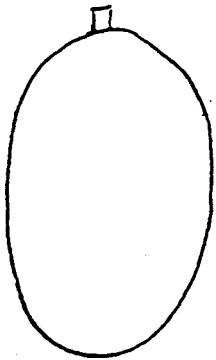


2  
outwards

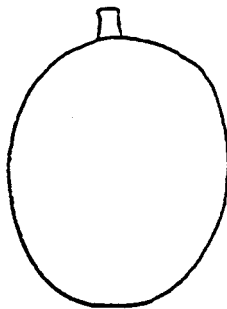


3  
downwards

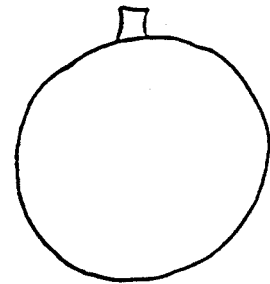
Ad. 24: Fruit: shape in longitudinal section



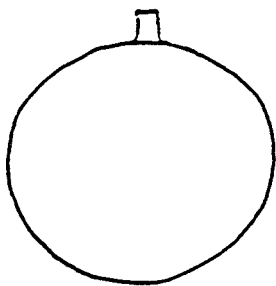
1  
elliptic



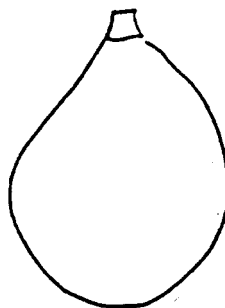
2  
broad elliptic



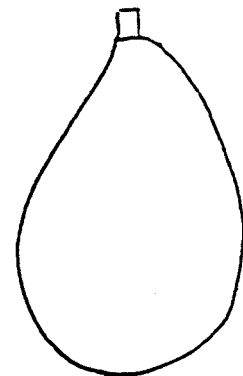
3  
round



4  
oblate

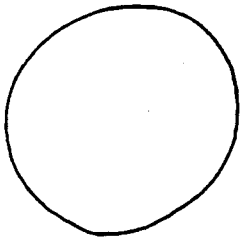


5  
broad obovate

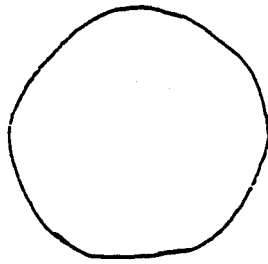


6  
obovate

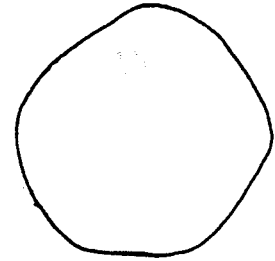
Ad. 25: Fruit: shape in cross section



1  
round



2  
slightly angular

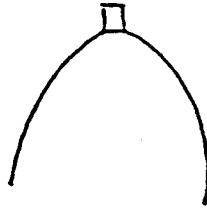


3  
strongly angular

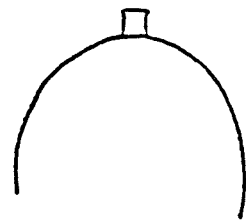
Ad. 26: Fruit: shape at stalk end



1  
acute

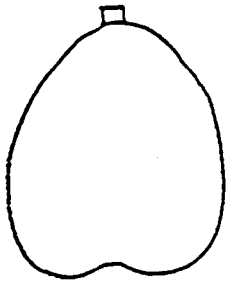


2  
obtuse

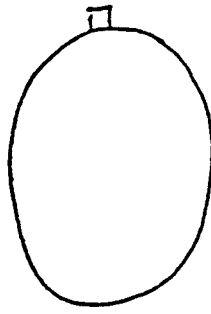


3  
rounded

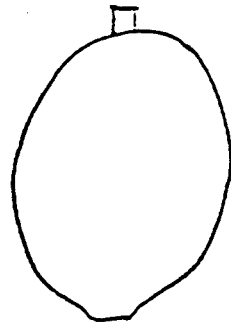
Ad. 27: Fruit: shape of apex



1  
depressed

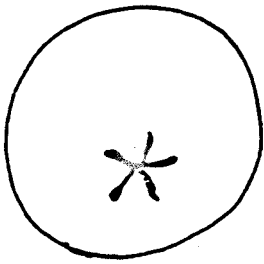


2  
flat

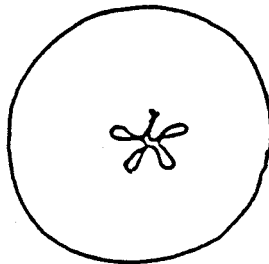


3  
raised

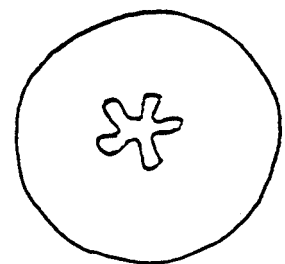
Ad. 29: Fruit: aperture of eye



1  
closed

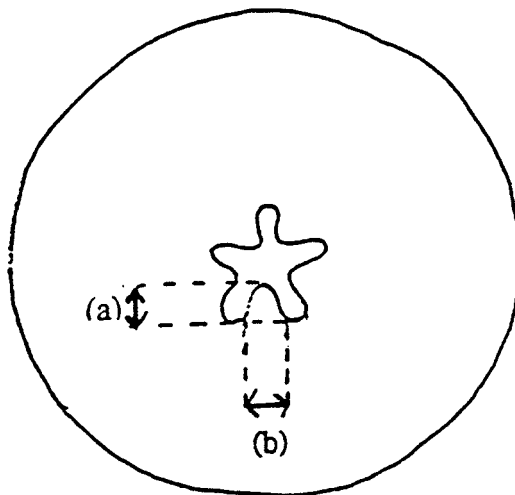


2  
slightly open

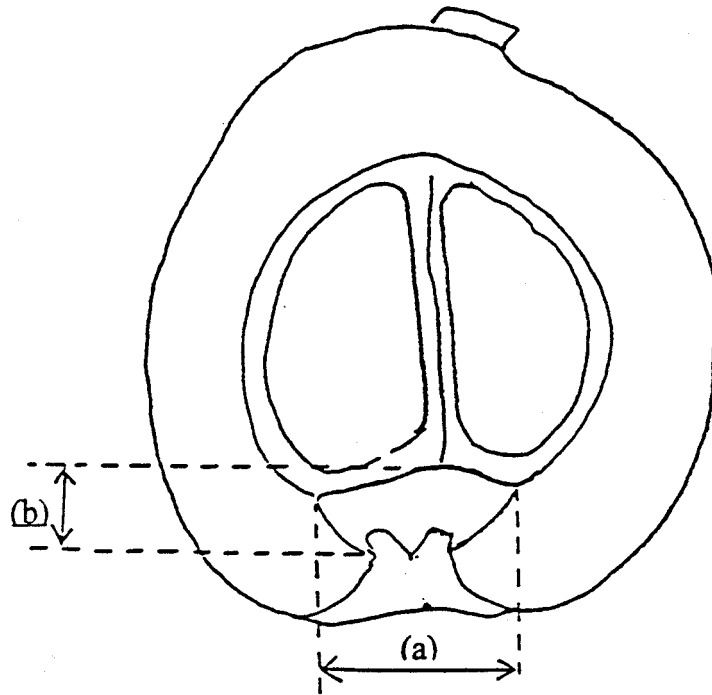


3  
fully open

Ad. 30 and 31: Fruit: length (a)/width (b) of sepal



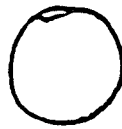
Ad. 32 and 33: Fruit: diameter (a) of core at base of calyx tube and depth (b) of calyx tube



Ad. 42: Fruit: shape of seed



1  
elliptic



2  
round



3  
obovate

IX. Literature

National Test Guidelines for Loquat in Japan.

Goubran, F. H., El-Zeftawi, B. M., 1983: "Assessment of Some Loquat Cultivars," Australian Horticultural Research Newsletter No. 55, p. 125, Australia.

"New Cultivars. Loquat": 1982, Agronomico Vol. 34, p. 15-17, Brazil.

"New IAC Cultivars. (Loquat)," 1987, Agronomico Vol. 39, No. 2, p. 114-115, Brazil.

Demir, S., 1983, "Promising Loquat (*Eriobotrya japonica* (Thunb.) Lindl.) Cultivars for the Antalya Region," Bahce Vol. 12, No. 1, p. 5-16, Turkey.

Blumenfeld, A., 1980, "Fruit Growth of Loquat," Journal of the American Society for Horticultural Science Vol. 105, No. 5, p. 747- 750.

Lupescu, F., Lupescu, T. , Khelil, A. , Tanislav, G.: "Agro-biological Performance of Some *Eriobotrya japonica* Varieties Grown at the Horticultural Station of the National Agronomic Institute of Algiers," Fruit Vol. 35, No. 4, p. 251-261, Algeria.

Huang, J. S., Xu, X. T., Fang, J. Q., 1990: "A New, Stable, Productive Loquat Variety. Changhong 3," China Fruit No. 2, p. 26- 27, 32, China.

Morita, A. , 1990: "Occurrence and Control of Loquat Disease from 1980 to 1989 in Nagasaki Prefecture," Proceeding of the Association for Plant Protection of kyushu Vol. 36, p. 79- 80, Japan

Kozaki, J., Ueno, J., Tsutiya, S., Kajiura, J., 1996: "The Fruits in Japan," Yoken-do, Japan (with English summary)



X. Technical Questionnaire

	<p>Reference Number (not to be filled in by the applicant)</p>
<p>TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights</p>	
1. Species	<p><i>Eriobotrya japonica</i> (Thunb.) Lindl.  LOQUAT</p>
2. Applicant (Name and address)	
3. Proposed denomination or breeder's reference	

4. Information on origin, maintenance and reproduction of the variety

4.1 Breeding method

(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 that question is yes, please attach a copy of such an authorization.

4.2 Origin

(a) Seedling of unknown parentage [ ]

(b) Produced by controlled pollination [ ]  
(indicate parent varieties)

– Seed bearing parent [ ]

.....

– Pollen parent [ ]

.....

(c) Produced by open pollination of [ ]  
(indicate seed bearing parent plant)

.....

(d) Mutation or sport from (indicate parent variety) [ ]  
.....

(e) Discovery (indicate where and when) [ ]  
.....

4.3. *In vitro* propagation

The plant material has been obtained by *in vitro* propagation      yes      [ ]  
no      [ ]

4.4 Virus status

The variety is

(a) virus free      [ ]  
(indicate viruses)

.....

(b) virus tested      [ ]  
(indicate against which virus)

.....

(c) The virus status is unknown      [ ]

4.5 Pollinator

Good pollinators are the following varieties:

.....

4.6 Other information

5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the state of expression which best corresponds).

Characteristics	Example Varieties	
<b>5.1 Fruit: shape in longitudinal section (24)</b>		
elliptic	Muroto-wase	1[ ]
broad elliptic	Ono-wase	2[ ]
round	Gold nugget	3[ ]
oblate	Kanton, Toi	4[ ]
broad obovate	Tanaka	5[ ]
obovate	Mogi	6[ ]
<b>5.2 Fruit: color of skin (28)</b>		
white	Toi	1[ ]
yellowish white	Shiromogi	2[ ]
yellow	Advance	3[ ]
orange yellow	Obusa, Tanaka	4[ ]
orange	Gold nugget	5[ ]
<b>5.3 Time of maturity (46)</b>		
very early	Amakusa-wase, Morio-wase	1[ ]
early	Nagasaki-wase	3[ ]
medium	Mogi	5[ ]
late	Tanaka	7[ ]
very late	Morimoto	9[ ]

6. Similar varieties and differences from these varieties

Denomination of similar variety	Characteristic in which the similar variety is different <sup>o)</sup>	State of expression of similar variety	State of expression of candidate variety
---------------------------------	--	--	--

<sup>o)</sup> In the case of identical states of expressions of both varieties, please indicate the size of the difference.

7. Additional information which may help to distinguish the variety

7.1 Resistance to pests and diseases

7.2 Special conditions for the examination of the variety

7.3 Other information

A representative color photo of the variety should be included in the Technical Questionnaire.

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