

TG/CHAYO(proj.1) ORIGINAL: English DATE: 2007-05-14

# INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA



## CHAYOTE

UPOV Code: SECHI\_EDUL

Sechium edule (Jacq.) Sw.

## GUIDELINES

## FOR THE CONDUCT OF TESTS

## FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by experts from Mexico

to be considered by the Technical Working Party for Vegetables at its forty-first session, to be held in Nairobi, Kenya, from June 11 to 15, 2007

Alternative Names:\*

Botanical name	English	French	German	Spanish
<i>Sechium edule</i> (Jacq.) Sw.	Chayote, Vegetable pear, Madeira marrow,	Chouchou, Christophine, Mirliton		Calabaza con espinas, Cayota, Chayote, Cidrayota, Erizo, Gayota Güisquil, Huisquil, Papa de aire, Uisquil

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.

<sup>\*</sup> These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.]

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#### 1. <u>Subject of these Test Guidelines</u>

These Test Guidelines apply to all varieties of Sechium edule (Jacq.) Sw.

### 2. <u>Material Required</u>

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

## 100 fruits per cycle

The seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority. In cases where the seed is to be stored, the germination capacity should be as high as possible and should, be stated by the applicant.

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. <u>Method of Examination</u>

#### 3.1 Number of Growing Cycles

The minimum duration of tests should normally be two independent growing cycles.

#### 3.2 Testing Place

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 "Examining Distinctness".

#### 3.3 Conditions for Conducting the Examination

3.3.1 The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

3.3.2 The recommended method of observing the characteristic is indicated by the following key in the second column of the Table of Characteristics:

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- 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

#### 3.4 Test Design

3.4.1 Each test should be designed to result in a total of at least 20 plants, which should be divided between two or more replicates.

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 on single plants should be made on 10 plants or parts taken from each of 10 plants and any other observations made on all plants in the test.

#### 3.6 Additional Tests

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

#### 4. <u>Assessment of Distinctness, Uniformity and Stability</u>

#### 4.1 Distinctness

#### 4.1.1 General Recommendations

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

#### 4.1.2 Consistent Differences

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

#### 4.1.3 Clear Differences

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

#### 4.2 Uniformity

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

4.2.2 Cross-pollinated varieties: the assessment of uniformity for cross-pollinated varieties should be according to the recommendations for cross-pollinated varieties in the General Introduction.

4.2.3 Hybrid varieties: for the assessment of uniformity of hybrid varieties, a population standard of 1 % and an acceptance probability of at least 95 % should be applied. In the case of a sample size of 20 plants, 1 off-type is 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. <u>Grouping of Varieties and Organization of the Growing Trial</u>

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) Stem: color young stage (characteristic 1)
- (b) Leaf blade: shape (characteristic 10)
- (c) Leaf blade: color (characteristic 11)
- (d) Female flower: color (characteristic 21)
- (e) Fruit: size (characteristic 29)
- (f) Fruit: shape in longitudinal section (characteristic 33)
- (g) Fruit: main color of skin (characteristic 40)
- (h) Fruit: spines (characteristic 45)

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

#### 6. <u>Introduction to the Table of Characteristics</u>

#### 6.1 *Categories of Characteristics*

#### 6.1.1 Standard Test Guidelines Characteristics

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

#### 6.1.2 Asterisked Characteristics

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

#### 6.2 States of Expression and Corresponding Notes

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

#### 6.3 Types of Expression

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

#### 6.4 Example Varieties

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

#### 6.5 Legend

(\*) Asterisked characteristic – see Chapter 6.1.2

- QL: Qualitative characteristic see Chapter 6.3
- QN: Quantitative characteristic see Chapter 6.3
- PQ: Pseudo-qualitative characteristic see Chapter 6.3

#### MG, MS, VG, VS: See Chapter 3.3.2

- (a)-(c) See Explanations on the Table of Characteristics in Chapter 8.1
- (+) See Explanations on the Table of Characteristics in Chapter 8.2

#### Example Varieties/ English français deutsch Exemples/ Note/ español Beispielssorten/ Nota Variedades ejemplo 1. Stem: color at young Tallo: color en estado VG (\*) stage joven QN white blanco 1 **(a)** amarillo 2 yellow 3 light green verde claro green verde 4 5 dark green verde obscuro 2. Stem: pubescence of Tallo: pubescencia del VG internodes entrenudo absent or very few 1 QN ausente o muy poco **(a)** few poco 3 medium 5 medio 7 many mucho Stem: pubescence of Tallo: pubescencia del 3. VG node nudo 1 PQ absent or very few **(a)** ausente o muy poco few poco 3 medium medio 5 7 mucho many Tallo: color en estado Stem: color at VG 4. maduro mature stage dark green with verde oscuro con rayas 1 QN **(b)** brown stripe café verde 2 green 3 light green with verde claro con rayas brown stripes café yellow with brown amarillo con raya café 4 stripes

#### 7. <u>Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres</u>

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		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
5.	MS	Tendril: length			Zarcillos: longitud		
QN	<b>(a)</b>	short			corto		1
		medium			medio		3
		long			largo		5
6.	MG	Tendril: branching			Zarcillo: ramificación	l	
QN	(a)	two			dos		1
		three			tres		2
		five or more of five			cinco o más		3
7.	VG	Tendrils: color			Zarcillos: color		
	<b>(a)</b>	light green			verde claro		1
		green			verde		2
		dark green			verde obscuro		3
8.		Tendril: striaete			Zarcillo: estriado		
	<b>(a)</b>	few			росо		1
		medium			intermedio		3
		strong			abundante		5
9.	MS	Leaf blade: size			Hoja: tamaño		
QN	<b>(a)</b>	very small			muy pequeña		3
		small			pequeña		5
		medium			mediana		7
		large			grande		9

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		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
10. (*) (+)	VG	Leaf blade: shape			Hoja: forma		
PQ	<b>(a)</b>	angular			angulada		1
		cordiform			cordiforme		2
		palmately lobed			palmo lobulada		3
		tripartite			trisectada		4
		deltoid			deltada		5
		sectate			sectada		6
11. (*)	VG	Leaf blade: color			Hoja: color		
PQ	<b>(a)</b>	light green			verde claro		1
		green			verde		2
		dark green			verde obscuro		3
12.	VG	Leaf blade: color of venation			Hoja: color de la venación		
QN	<b>(a)</b>	white			blanco		3
		light green			verde claro		5
		dark green			verde oscuro		7
13.	VG	Leaf blade: abaxial pubescence			Hoja: pubescencia abaxial		
QN	<b>(a)</b>	absent or very few			ausente o muy poca		1
		few			poca		3
		medium			media		5
		many			abundante		7
14.	VG	Leaf blade: venatior order	1		Hoja: orden de la venación		
QN	<b>(a)</b>	third			tercero		1
		fourth			cuarto		3
		fifth			quinto		5

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		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
15.	VG	Leaf blade: number of mucrone			Hoja: número de mucrones		
QN	<b>(a)</b>	few			pocos		1
		medium			medios		3
		many			muchos		5
16.	VG	Petiole: length			Pecíolo: longitud		
QN	<b>(a)</b>	short			corto		3
		medium			medio		5
		long			largo		7
		very long			muy largo		9
17.	MS / VG	Petiole: diameter			Pecíolo: diámetro		
QN	<b>(a)</b>	very small			muy pequeño		1
		small			pequeño		3
		medium			medio		5
		large			grande		7
18.	VG	Petiole: color			Pecíolo: color		
PQ	<b>(a)</b>	white			blanco		1
		light green			verde claro		2
		green			verde		3
		dark green			verde obscuro		4
		very dark black			verde muy obscuro		5
19.	VG	Petiole: striate			Pecíolo: estriado		
QL	<b>(a)</b>	absent			ausente		1
		present			presente		9

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		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
20.	MS	Female inflorescence: number of flowers per node			Inflorescencia femenina: número de flores por nudo		
PQ	(a)	one			una		1
		two			dos		3
		tree or more			tres o más		5
21. (*)	VG	Female flower: color			Flor femenina: color		
PQ	(a)	white			blanca		1
		green			verde		2
		green yellow			verde amarillo		3
22.	VG	Female flower: color of calyx	•		Flor femenina: color de caliz		
PQ	(a)	light green			verde claro		1
		green			verde		2
		dark green			verde oscuro		3
23.	VG	Male flower: color			Flor masculina: color		
QL	(b)	white			blanca		1
		green			verde		5
		green yellow			verde amarillo		9
24.	VG	Male inflorescence: number of flowers			Inflorescencia masculina: número do flores	2	
QN	(a)	few			pocas		1
		medium			medio		3
		many			muchas		5

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		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
25.	VG	Male inflorescence: length of rachis			Inflorescencia masculina: longitud del raquis		
QN	<b>(a)</b>	few			corto		1
		medium			medio		3
		many			largo		5
26.	VG	Male flower: color of calyx			Flor masculina: color de caliz		
QN	<b>(a)</b>	light green			verde claro		1
		green			verde		5
		dark green			verde oscuro		9
27.	VG	Peduncle: length			Pedúnculo: longitud		
QN	<b>(a)</b>	short			corto		3
		medium			medio		5
		long			largo		7
28.	VG	Peduncle: diameter			Pedúnculo: diámetro		
QN	<b>(a)</b>	small			pequeño		3
		medium			medio		5
		large			grande		7
29. (*)	MG	Fruit: size			Fruto: tamaño		
QN	(b)	very short			muy pequeño		1
		short			pequeño		3
		medium			mediano		5
		long			grande		7
		very long			muy grande		9

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		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
30.	VG / MS	Fruit: length			Fruto: longitud		
QN	(b)	very short			muy pequeño		1
		short			pequeño		3
		medium			mediano		5
		long			grande		7
		very long			muy grande		9
31.	VG / MS	Fruit: maximum diameter			Fruto: diámetro máximo		
QN	(b)	very small			muy pequeño		1
		small			pequeño		3
		medium			medio		5
		large			grande		7
		very large			muy grande		7
32.	MS	Fruit: ratio length/ maximum diameter			Fruto: relación largo/ diámetro		
QN	(b)	very small			muy pequeña		1
		small			pequeña		3
		medium			media		5
		large			grande		7
		very large			muy grande		9

#### TG/CHAYO(proj.1) Chayote, 2007-05-14 -14-

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
33. (*) (+)	VG	Fruit: shape in longitudinal section			Fruto: forma en sección longitudinal		
PQ	(b)	conical			cónico		1
		pyriform			piriforme		2
		spheroid			esferoide		3
		oblong			oblongo		4
		cylindrical			cilindrico		5
		obovoid			obovoide		6
		broadly obovoid			obovoide amplio		7
		ellipsoid			elipsoide		8
		broadly ellipsoid			elipsoide amplio		9
34.	VG	Fruit: shape in cross			Fruto: forma en sección transversal		
(+)		section					
PQ	(b)	flattened			aplastada		1
		oval			ovalada		2
		round			redonda		3
35.	VG	Fruit: profile of base	2		Fruto: perfil de la base		
(+)					buse		
QN	(b)	depressed			profunda		1
		flat			plana		3
		raised			protuberante		5
		very raised			muy protuberante		7
36. (+)	VG	<u>Only varieties with</u> <u>Fruit</u> : profile of base: <u>depressed:</u> Fruit: depth of depression at base			<u>Solamente variedade</u> <u>con Fruto</u> : perfil de l base <u>profunda</u> : Fruto profundidad de la depresión de la base	<u>s</u> a ):	
QN	(b)	shallow			poco profunda		1
		medium			media		3
		deep			profunda		5

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		English	français	deutsch	españ	iol	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
37.	VG	Fruit: profile of			Frute	o: perfil de la		
(+)		apical part			parte	e apical		
PQ	(b)	depressed			profu	nda		1
		flat			plana			3
		raised			protu	berante		5
38. (+)	VG	Fruit: size of cross fissure in apical part	t		Fruto fisura la pa	o: tamaño de a transversal en rte apical		
QN	(b)	absent or very small			ausen	ite o muy pequeña		1
		small			peque	eña		3
		medium			media	a		5
		large			grand	le		7
39.	VG	Fruit: grooves			Frute	o: surcos		
(+)								
QL	(b)	absent			ausen	ite		1
		present			prese	nte		9
40. (*)	VG	Fruit: main color of skin			Frute de la	o: color principal piel		
PQ	(b)	white			blanc	0		1
		yellowish cream			crema	a amarillento		2
		light green			verde	e claro		3
		green			verde	•		4
		dark green			verde	oscuro		5
41.	VG	Fruit: smooth texture of skin			Fruto la pie	o: textura lisa de el		
QL	(b)	absent			ausen	ite		1
		present			prese	nte		9

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		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
42. (*)	VG	Fruit: main color of flesh			Fruto: color principal de la pulpa		
PQ	(b)	white			blanco		1
		cream			crema		2
		light green			verde ligero		3
		green			verde		4
_		geen dark			verde fuerte		5
43.	VG	Fruit: thickness of flesh			Fruto: grosor de la		
(+)		licsii			ршра		
QN	(b)	thin			delgada		1
		medium			media		3
		thick			gruesa		5
44.	VG	Fruit: fibrous flesh			Fruto: presencia de fibras en la pulpa		
(+)					noras en la pulpa		
QN	(c)	absent or very few			ausente o muy poca		1
		medium			medio		3
		many			mucha		5
45. (*)	VG	Fruit: spines			Fruto: espinas		
QL	(c)	absent			ausente		1
		present			presente		9
46.	VG	Only varieties with:			Solamente variedades		
		<u>present:</u> Fruit: density of spines			<u>presente</u> : Fruit: densidad de espinas		
ON	(c)	verv few			muy poca		1
×.,		few			poca		3
		medium			mediana		5
		many			mucha		2 7
		د.					-

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		English	français	deutsch	españ	ol	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
47.	VG	Fruit: length of spines			Fruit espin	: longitud de las as		
QN	(c)	short			corta			1
		medium			media	ı		3
		long			larga			5
48.	VG	Fruit: thickness of spines			Fruit espina	: grosor de las as		
QN	(c)	small			delga	do		1
		medium			media	nno		3
		large			grues	0		5
49.	VG	Fruit: flavor			Fruit	: sabor		
QL	(c)	neutral			neutro	)		1
		sweet			dulce			2
50.	VG	Seed: size			Semil	lla: tamaño		
QN	(c)	very small			muy p	pequeña		1
		small			peque	eña		3
		medium			media	ı		5
		large			grand	e		7
51.	VG	Seed: length			Semil	lla: longitud		
QN	(c)	short			corta			1
		medium			media	ı		3
		long			larga			5
52.	VG	Seed: diameter			Semil	lla: ancho		
QN	(c)	short			angos	ta		1
		medium			media	ı		3
		long			grues	0		5

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		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
53.	VG	Seed: ratio length / width			Semilla: relación largo / ancho		
QN	(c)	small			pequeña		1
		medium			media		3
		large			grande		5
54.	VG	Seed: shape			Semilla: forma		
(+)							
PN	(c)	conical			cónico		1
		pyriform			piriforme		2
		epheroid			esferoide		3
		oblonque			oblongo		4
		cilindric			cilindrico		5
		obovoid			obovoide		6
		broadly obovoid			obovoide amplio		7
		ellipsoid			elipsoide		8
		broadly ellipsoid			elipsoide amplio		9
55.	VG	Seed: adorn			Semilla: ornamentación		
(+)					ornamentación		
QN	(c)	absent			ausente		1
		present			presente		9
56.	VG	Seed: color			Semilla: color		
PQ	(c)	whitish			blancuzco		1
		cream			crema		2
57.	VG	Seed: flavor			Semilla: sabor		
QN	(c)	neutral			neutro		1
		sweet			dulce		3
		bitter			amargo		5

#### TG/CHAYO(proj.1) Chayote, 2007-05-14 -19-

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
58.	VG	Root: flavor			Raíz: sabor		
QL	(c)	neutral			neutro		1
		sweet			dulce		2
		bitter			amargo		3

#### 8. <u>Explanations on the Table of Characteristics</u>

#### 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) Characteristics which should be examined when flowering begins.

(b) Characteristics which should be examined at harvest maturity, i.e. after the time of the first fruit change.

(c) Characteristics which should be examined at physiological maturity, i.e. after the time of the first fruit change.

#### 8.2 *Explanations for individual characteristics*

#### Ad. 10: Leaf blade: shape





Ad. 34: Fruit: shape in cross section

Ad. 35: Fruit: profile of base

Ad. 36: Fruit: Only varieties with Fruit: profile of base: depressed: Fruit: depth of depression at base

Ad. 37: Fruit: profile of apical part.

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Ad. 38: Fruit: size of cross fissure in apical part:

Ad. 39: Fruit: grooves.

Ad. 43: Fruit: thickness of flesh.

Ad. 54: Seed: shape

Ad. 55: Seed: adorn

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# 9. <u>Literature</u>

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10. <u>Technical Questionnaire</u>

TECHNICAL QUESTIONNAIREPage {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 Q	uest	ionnaire					
	1.1 Botanical name	Sec	<i>chium edule</i> (Jacq.) Sw	Ι.				
	1.2 Common name	Ch	ayote					
2.	Applicant							
	Name							
	Address							
	Telephone No.							
	Fax No.							
	E-mail address							
	Breeder (if different from	appli	icant)					
3.	Proposed denomination an	d br	eeder's reference					
	Proposed denomination (if available)							
	Breeder's reference							

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TECHNICAL O	UESTIONNAIRE	Page $\{x\}$ of $\{y\}$	Reference Number	r:					
#4 Information on the broading scheme and propagation of the variates									
4. Informatio	4. Information on the breeding scheme and propagation of the variety								
4.1 Bree	ling scheme								
Vari	ety resulting from:								
4.1.1	Crossing								
	(a) controlled c (please state	eross e parent varieties)	]	]					
	(b) partially known (please state	own cross e known parent variety(	[ ies))	]					
	(c) unknown cr	ross	[	]					
4.1.2	<ul> <li>4.1.2 Mutation (please state parent variety)</li> <li>4.1.3 Discovery and development (please state where and when discovered and how developed)</li> </ul>			]					
4.1.3				]					
4.1.4	Other (please provide de	etails)"	[	]					
4.2 Method of	propagating the vari	ety							
Seed-	propagated varieties								
	(b) Cross-pollination								
(c) Hybrid [ ]									
	(d) Other (please provid	de details)	[ ]						

 $<sup>^{\#}</sup>$  Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

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TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
5. Characteristics of the variety corresponding characteristic in T corresponds).	to be indicated (the Sest Guidelines; plea	number in brackets re ase mark the note w	efers to the which best
Characteristics		Example Varieties	Note
			1
			i

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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	Characteristic(s) in	Describe the	Describe the
variety(ies) similar to	which your candidate	expression of the	expression of the
your candidate variety	variety differs from the	characteristic(s) for the	characteristic(s) for
	similar variety(ies)	<pre>similar variety(ies)</pre>	your candidate variety
Example	Fruit: main color of skin	yellow	orange brown

Comments:

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TEC	HNICAI	LOUF	STIONNAIRE	Page $\{x\}$	of $\{v\}$	Reference Number	
#							
<sup>#</sup> 7.	Additio	onal in	formation which	may help in	the examination of the examinati	nation of the variety	
7.1	In add charact	ition t teristic	o the information s which may help	n provided to distingu	in section ish the vari	s 5 and 6, are there any additional ety?	
	Yes	[]		No []			
	(If yes,	please	provide details)				
7.2	Are the	ere any	special conditior	ns for growi	ng the vari	ety or conducting the examination?	
	Yes	[]		No []			
	(If yes,	please	provide details)				
7.3	Other i	nform	ation				
A re	presentat	tive co	lor photograph of	the variety	should acc	ompany the Technical Questionnaire.	
8.	Author	izatior	n for release				
	(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?						
	У	les	[]	No	[]		
	(b) H	Has suc	ch authorization b	een obtaine	d?		
	Ŋ	les	[]	No	[]		
	If the answer to (b) is yes, please attach a copy of the authorization.						

 $<sup>^{\#}</sup>$  Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

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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".									
10. form	0. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:									
	Appl	icant's name								
	Signa	nture Date								

[End of document]