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# INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

# DRAFT

# ZANTEDESCHIA

UPOV Code(s): ZANTE

Zantedeschia Spreng.

## GUIDELINES

## FOR THE CONDUCT OF TESTS

## FOR DISTINCTNESS, UNIFORMITY AND STABILITY

#### prepared by experts from the Netherlands to be considered by the Technical Working Party for Ornamental Plants and Forest Trees at its fifty-sixth session, to be held virtually from 2024-04-29 to 2024-05-02

Disclaimer: this document does not represent UPOV policies or guidance

## Alternative names:\*

Botanical name	English	French	German	Spanish
Zantedeschia Spreng.	Zantedeschia	Zantédesquie	Zantedeschia	Cala

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.

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

These Test Guidelines apply to all varieties of Zantedeschia Spreng.

## 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 rhizomes/tubers of flowering size.
- 2.3 The minimum quantity of plant material, to be supplied by the applicant, should be:

#### 20 rhizomes/tubers

- 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
- 3.1.1 The minimum duration of tests should normally be a single growing cycle.
- 3.1.2 The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test.
- 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 Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within the tolerances set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background. The color chart and version used should be specified in the variety description.
- 3.4 Test Design
- 3.4.1 Each test should be designed to result in a total of at least 20 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 Additional Tests

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

#### 4. Assessment of Distinctness, Uniformity and Stability

#### 4.1 Distinctness

#### 4.1.1 General Recommendations

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

#### 4.1.2 Consistent Differences

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

#### 4.1.3 Clear Differences

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

#### 4.1.4 Number of Plants or Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 10 plants or parts of plants taken from each of 10 plants and any other observations made on all plants in the test, disregarding any off-type plants.

#### 4.1.5 Method of Observation

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

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

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

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

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

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

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

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

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

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

## 4.2 Uniformity

- 4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:
- 4.2.2 These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation, the recommendations in the General Introduction and document TGP/13 "Guidance for new types and species" Section 4.5 "Testing Uniformity" should be followed.
- 4.2.3 For the assessment of uniformity of vegetatively propagated 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 further examined by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the initial material supplied.

#### 5. <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) Leaf blade: size of lobes (characteristic 8)
  - (b) Leaf blade: number of spots (characteristic 10)
  - (c) Leaf blade: variegation (characteristic 12)
  - (d) Spathe: main color of inner side (characteristic 31)
  - (e) Spathe: size of throat spot (characteristic 35)
- 5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction and document TGP/9 "Examining Distinctness".

## 6. <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
- 6.2.1 States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.
- 6.2.2 All relevant states of expression are presented in the characteristic.
- 6.2.3 Further explanation of the presentation of states of expression and notes is provided in document TGP/7 "Development of Test Guidelines".
- 6.3 Types of Expression

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudoqualitative) 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.

	English		h français deutsch español		Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota			
1 2	2 3 4		5	6	7				
	Name of characteristics in English		Nom o caract frança	ère en	Name des Merkmals auf Deutsch	Nombre del carácter en español			
	in English states of expression		types	d'expression	Ausprägungsstufen	tipos de expresión			

6.5 Legend

1 Characteristic number

2	(*)	Asterisked characteristic	- see Chapter 6.1.2
3	Type of expression QL QN PQ	Qualitative characteristic Quantitative characteristic Pseudo-qualitative characteristic	– see Chapter 6.3 – see Chapter 6.3 e – see Chapter 6.3
4	Method of observation (and type MG, MS, VG, VS	e of plot, if applicable)	- see Chapter 4.1.5
5	(+)	See Explanations on the Table of	of Characteristics in Chapter 8.2
6 7	(a)-(d) Not applicable	See Explanations on the Table of	of Characteristics in Chapter 8.1

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

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*)	QN MG/MS/VG	(+)				
	Plant: height					
	very short					1
	very short to short					2
	short					3
	short to medium					4
	medium					5
	medium to tall					6
	tall					7
	tall to very tall					8
	very tall					9
2.	QN MG/MS/VG					
	Plant: total number of	f				
	shoots					
	very few					1
	very few to few					2
	few					3
	few to medium					4
	medium					5
	medium to many					6
	many					7
	many to very many					8
	very many					9
3.	PQ VG					
	Young shoot: color					
	yellow green					1
	green					2
	red purple					3
4.	QN VG	(a)				
	Leaf blade: attitude					
	erect					1
	erect to horizontal					2
	horizontal					3

		English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
5. (*)	QN	MG/MS/VG	(+)	(a)				- 1
	Leaf b	plade: length						
	very s	hort						1
		hort to short						2
	short							3
		o medium						4
	mediu	m						5
	mediu	m to long						6
	long							7
	long to	o very long						8
	very lo	ong						9
6. (*)	QN	MG/MS/VG	(+)	(a)		·		
	Leaf b	olade: width						
	verv n	arrow						1
	very narrow very narrow to narrow							2
	narrov							3
		v to medium						4
	mediu							5
		m to broad						6
	broad							7
	broad	to very broad						8
		-						9
7. (*)		MG/MS/VG	(+)	(a)				
		lade: ratio						
		n /width						
	very lo	 W						1
	very lo	ow to low						2
	low							3
	low to	medium						4
	mediu	m						5
	mediu	m to high						6
	high							7
	high to	o very high						8
	very h	igh						9

		English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
8. (*)	QN	MG/MS/VG	(+)	(a)				
	Leaf lobes	blade: size of						
	abser	nt or very small						1
	very s	small to small						2
	small							3
	small	to medium						4
	mediu							5
		um to large						6
	large							7
	large	to very large						8
	very l	arge						9
9. (*)	PQ	VG	(+)	(a)				
	Leaf apex	blade: angle of						
	acute							1
	appro angle	ximately right						2
	obtus	e						3
10 (*)	QN	MG/MS/VG	(+)	(a)				
	Leaf spots	blade: number of						
		nt or very few						1
		ew to few						2
	few							3
		medium						4
	mediu							5
		um to many						6
	many							7
	many	to very many				[		8
	very r	nany	Ι			T		9

		English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
11 (*)	QN	MG/MS/VG	(+)	(a)				
	Leaf I spots	plade: size of						
	abser	t or very small						1
	very s	mall to small						2
	small							3
		to medium						4
	mediu							5
		im to large						6
	large							7
	large	to very large	1					8
	very la	arge	†					9
12 (*)	QL	VG		(a)		<u> </u>		
	Leaf I	blade: variegation		:				
	abser	t						1
	prese	nt						9
13 (*)	PQ	VG	(+)	(a)				1
· ·	Leaf blade: distribution of variegation			·				
	on ma	argin						1
		nal zone						2
	throug							3
14 (*)		VG		(a)				
	Leaf I	blade: color of gation						
	yellow	1						1
	red							2
	red pu	ırple						3
	purple							4
15 (*)	QN	VG		(a)				1
	QN VG Leaf blade: intensity of green color of <u>upper</u> side							
	very li	ght						1
	light							2
	mediu	ım						3
	dark							4
	very c	lark						5

		English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
16	QN	VG		(a)				
	Leaf I of ma	blade: undulation argin						
	abser	nt or very weak						1
	weak							2
	mediu							3
	strong							4
	very s	strong						5
17 (*)	QN	MG/MS/VG	(+)	(a)			·	
	Petio	le: length						
	very s	short						1
	very short to short							2
	short							3
		short to medium						4
	mediu	ım						5
	mediu	um to long						6
	long							7
	long t	o very long						8
	very l	ong						9
18 (*)	PQ	VG		(a)				
	Petio part	le: color of basal						
	yellow	v green	•••••					1
	light g	green						2
	mediu	um green						3
	dark g	green						4
	browr	n red						5
	purple	9						6

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
19	QN	MG/MS/VG	(b)			-	- <b>!</b>
÷	Pedu	ncle: length	:				
	very s	short					1
	very s	short to short					2
	short						3
		to medium					4
	mediu	ım					5
		Im to long					6
	long						7
		o very long					8
	very lo						9
20	QN	MG/MS/VG	(b)				
	Pedu	ncle: thickness					
	very t	hin					1
	thin						2
	mediu	ım					3
	thick						4
	very t	hick					5
21	QN	VG	(b)				
	color	ocyanin ation					
		nt or very weak					1
	weak						2
	mediu	ım					3
	strong	9					4
	very s	strong					5
22	QN	VG	(b)				
	Pedu basal	ncle: mottling at part	i				
	abser	nt or very weak					1
	weak						2
	mediu	ım					3
	strong						4
		strong					5

	English			français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
23 (*)	QN	VG		(b)				
		escence: ion in relation to je						
	below	,						1
	same	same level						2
	slightl	y above					3	
	strong	ly above						4
24 (*)	QN	MG/MS/VG	(+)	(b)				
	Spath view	ne: length in side						
	very s	short						1
	very s	short to short						2
	short							3
	short to medium							4
	mediu	ım						5
	mediu	im to long						6
	long							7
	long t	o very long						8
	very l	ong						9
25 (*)	QN	MG/MS/VG	(+)	(b)				
	Spath overla	ne: length of apping part						
	abser	nt or very short						1
	very s	short to short						2
	short							3
		to medium						4
	mediu	ım						5
	mediu	ım to long						6
	long							7
		o very long						8
	very l	ong						9

		English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
26 (*)	QN	MG/MS/VG	(+)	(b)				
	Spath from a	ne: length (viewed above)						
	very s	hort						1
	very s	hort to short						2
	short							3
	short	to medium						4
	mediu	ım						5
	mediu	Im to long						6
	long							7
	long to	o very long						8
	very lo	ong						9
27 (*)	QN	MG/MS/VG	(+)	(b)		1	1	-
	Spath from a	ne: width (viewed above)						
	very n	arrow						1
	very n	arrow to narrow						2
	narrov	N						3
		w to medium						4
	mediu	ım						5
		im to broad						6
	broad							7
		to very broad						8
	very b	oroad						9
28 (*)	QN	VG	(+)	(b)				
	Spath margi	ne: undulation of in						
	absen	t or very weak						1
	weak							2
	mediu	ım						3
	strong	]						4
	very s	trong						5

		English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
29 (*)	QN	VG	(+)	(b)		•		-1
i	Spath margi	e: recurving of n iding caudate tip)						
		t or very weak						1
	weak							2
	mediu	m						3
	strong							4
	very s	trong						5
30 (*)	QN	VG	(+)	(b)		•		<u> </u>
·	Spath tip	e: recurving of		·				
	absen	t or very weak						1
	weak							2
	mediu							3
	strong							4
	very s	trong						5
31	PQ	VG		(b), (c)				
	Spath inner	e: main color of side						
		Colour Chart ate reference er)						
32	PQ	VG		(b), (c)				1
	Spath color	e: secondary of inner side		·				
		Colour Chart ate reference er)						
33	PQ	VG		(b), (c)				
	Spath secor inner	e: distribution of dary color of side						
	none							1
		al zone						2
		tral zone						3
								4
	·····							5
								6

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34	PQ	VG	(b), (c)				
	Spath secor inner	ne: pattern of ndary color of side					
	solid						1
	flushe	ed					2
	stripe	d					3
	speck	led					4
35	QN	MG/MS/VG	(b)				
	Spath spot	ne: size of throat					
	abser	nt or very small					1
	small						2
	mediu						3
	large						4
	very la	arge					5
36	PQ	VG	(b)				
	Spathe: color of throat spot						
		Colour Chart ate reference er)					
37	PQ	VG	(b), (c)				
	Spath outer	ne: main color of side					
	RHS (indica numb	Colour Chart ate reference er)					
38	QN	MG/MS/VG	(b)				
	Spad midd	ix: thickness at le of male part					
	very t	hin					1
	very t	hin to thin					2
	thin						3
	thin to	o medium					4
	mediu						5
		um to thick					6
	thick						7
	thick t	to very thick					8
	very thick						9

		English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
39 (*)	QN	MG/MS/VG	(+)	(b)				•
	Spad	ix: length						
	very s	short						1
	very s	short to short						2
	short							3
	short	to medium						4
	mediu							5
	mediu	um to long						6
	long							7
		o very long						8
	very l	ong						9
40	PQ	VG		(b)				•
	Spad	ix: main color						
	white							1
	yellov	v green						2
	light y	ellow						3
	mediu	um yellow						4
	yellov	v orange						5
		je brown						6
	orang							7
	pink							8
	purple	e red						9
	purple	9						10
41	PQ	VG		(d)				
	Spathe: main color by aging							
RHS Colour Chart (indicate reference number)								

## 8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

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

(a)

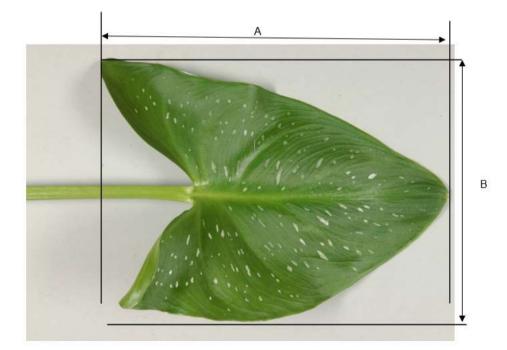
- (b) Observations should be made when the flowers are fully ripe, This is the stage that the pollen begin to become loose.
- (c) The main color is the color with the largest surface area, the secondary color is the color with the second largest surface area, and the tertiary color is the color with the third largest surface area. In cases where the area of the main and secondary color are too similar to reliably decide which color has the largest area, the darker color is considered to be the main color. In cases where the area of the secondary and tertiary color are too similar to reliably decide which color has the second area, the darker color is considered to be the secondary color has the second largest area, the darker color is considered to be the secondary color.
- (d) Observations should be made after three to four weeks that the pollen begin to become loose.

## 8.2 Explanations for individual characteristics

## Ad. 1: Plant: height

Picture follows

#### Ad. 5: Leaf blade: length

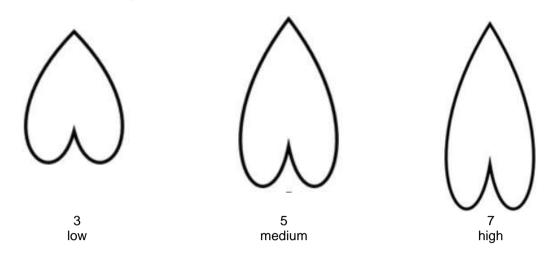


A = Leaf blade: length B = Leaf blade: width

Ad. 6: Leaf blade: width

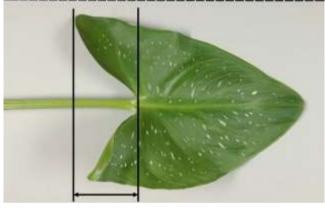
see ad Leaf blade: length

## Ad. 7: Leaf blade: ratio length /width



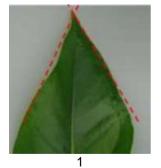
# Ad. 8: Leaf blade: size of lobes

Observations should be made relative to the full size of the leaf blade.

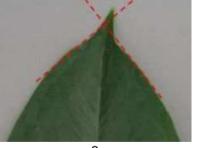


## 

## Ad. 9: Leaf blade: angle of apex



acute

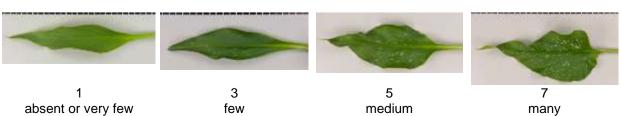


2 approximately right angle



3 obtuse

# Ad. 10: Leaf blade: number of spots



## Ad. 11: Leaf blade: size of spots

Observation should be made relative to the full size of the leaf blade.



## Ad. 13: Leaf blade: distribution of variegation



1 on margin



throughout

# Ad. 17: Petiole: length

Observations should be made including leaf sheath.



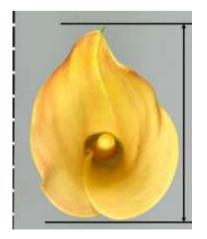
# Ad. 24: Spathe: length in side view



Ad. 25: Spathe: length of overlapping part



Ad. 26: Spathe: length (viewed from above)



# Ad. 27: Spathe: width (viewed from above)



## Ad. 28: Spathe: undulation of margin

Photo will follow

## Ad. 29: Spathe: recurving of margin (excluding caudate tip)



weak

Ad. 30: Spathe: recurving of tip

Photo will follow

1 absent or very weak

3 medium

5 very strong

Ad. 39: Spadix: length

Observations should be made at the middle of male part.



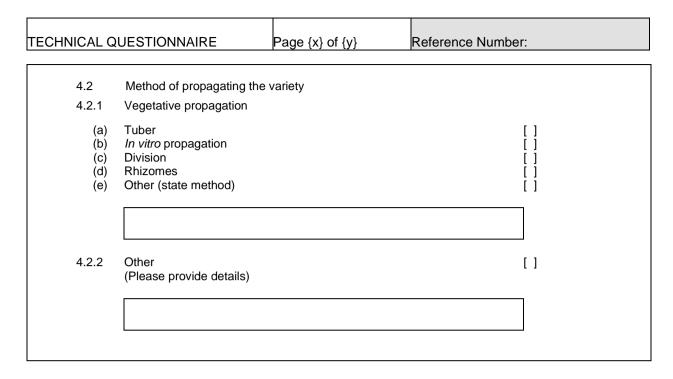
4 strong

# 9. <u>Literature</u>

# 10. <u>Technical Questionnaire</u>

TECHNICAL QUESTIONNAIRE				Page {x} of {y}	Reference Number:			
					Application date: (not to be filled in by the applicar	nt)		
				CHNICAL QUESTIONNA	NRE I for plant breeders' rights			
1.	Subject of the Technical Questionnaire							
	1.1.1	Botanical name	Za	ntedeschia Spreng.		[]		
	1.1.2	Common name	Za	ntedeschia				
2.	Applica	int						
	Name							
	Addres	S						
	Teleph	one No.						
	Fax No							
	E-mail	address						
	Breede applica	r (if different from nt)						
3.	Propos	ed denomination and bree	der	's reference				
	Proposed denomination (if available)							
	Breede	r's reference						

TECHNIC	CAL QI	UESTIONNAIRE	Page {x} of {y}	Reference Number	
#4. Ir	nformat	ion on the breeding scheme	and propagation of the var	iety	
4	.1	Breeding scheme			
V	/ariety r	resulting from:			
	4.1.1	Crossing			
	(a)	controlled cross			[]
		(please state parent variety)			
		(	) x	(	)
		female parent		male parent	
	(b)	partially known cross			[]
		(please state known parent v	variety(ies))		
		(	) x	(	)
		female parent		male parent	
	(c)	unknown cross			[]
4	.1.2	Mutation (please state parent variety)			[]
4	.1.3	Discovery and development (please state where and whe	en discovered and how de	veloped)	[]
4	.1.4	Other (Please provide details)			[]



TECHN	NICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
	Characteristics of the variety to be characteristic in Test Guidelines;			nding
	Characteristics		Example Varieties	Note
5.1 (8)	Leaf blade: size of lobes			
	absent or very small			1[]
	very small to small			2[]
	small			3[]
	small to medium			4[]
	medium			5[]
	medium to large			6[]
	large			7[]
	large to very large			8[]
	very large			9[]
5.2 (10)	Leaf blade: number of spots			
	absent or very few			1[]
	very few to few			2[]
	few			3[]
	few to medium			4[]
	medium			5[]
	medium to many			6[]
	many			7[]
	many to very many			8[]
	very many			9[]
5.3 (12)	Leaf blade: variegation			
	absent			1[]
	present			9[]

	Characteristics	Example Varieties	Note
5.4 (26)	Spathe: length (viewed from above)		
	very short		1[]
	very short to short		2[]
	short		3[]
	short to medium		4[]
	medium		5[]
	medium to long		6[]
	long		7[]
	long to very long		8[]
	very long		9[]
5.5 (27)	Spathe: width (viewed from above)		
	very narrow		1[]
	very narrow to narrow		2[]
	narrow		3[]
	narrow to medium		4[]
	medium		5[]
	medium to broad		6[]
	broad		7[]
	broad to very broad		8[]
	very broad		9[]
5.6 (31)	Spathe: main color of inner side		
	RHS Colour Chart (indicate reference number)		
5.7 (35)	Spathe: size of throat spot		
	absent or very small		1[]
	small		2[]
	medium		3[]
	large		4[]
	very large		5[]

TECHNICAL QUESTION	NAIRE	Page {x} of	{y}	Reference Nu	umber:					
6. Similar varieties and o	6. Similar varieties and differences from these varieties									
Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knowledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.										
Denomination(s) of variety(ies) similar to your candidate variety	Characteristic your candidate from the simila	variety differs	the characte	expression of ristic(s) for the variety(ies)	Describe the expression of the characteristic(s) for <b>your</b> candidate variety					
Example	Leaf blade: nur	mber of spots	f	ew	many					
Comments:										

TECH	NICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:					
#7.	Additional information which may he	Ip in the examination of th	e variety					
7.1	In addition to the information provided in sections 5 and 6, are there any additional characteristics which r help to distinguish the variety?							
	Yes []	No	[]					
	(If yes, please provide details)							
7.2	Are there any special conditions for	growing the variety or cor	nducting the examination?					
	Yes []	No	[]					
	(If yes, please provide details)							
7.3	Other information							
Techn supple The k • • version Furthe "Devel [The I - Res - Sp (	ical Questionnaire. The photograph we ments the information provided in the ey points to consider when taking a ph Indication of the date and geograph Correct labeling (breeder's reference Good quality printed photograph (m n (minimum 960 x 1280 pixels)" er guidance on providing photographs opment of Test Guidelines", Guidance	rill provide a visual illustrat Technical Questionnaire. hotograph of the candidate nic location ee) hinimum 10 cm x 15 cm) and with the Technical Questic Note 35 (http://www.upow eers of the Union when dev	e variety are: nd/or sufficient resolution electronic format onnaire is available in document TGP/7					

TECH	HNICA		STIONNAIRE	Page {x}	of {y}	Reference	Number:				
8.	Autho	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 su	uch authorization bee	en obtained?							
		Yes	[]	No	[]						
	If the	answer	to (b) is yes, please	attach a copy c	f the authoriza	tion.					
9. In	formati	on on pla	ant material to be exa	amined or subr	nitted for exam	ination					
roots	s and stocks,	disease, scions ta	ssion of a characteris chemical treatment aken from different g	t (e.g. growth rowth phases c	retardants or of a tree, etc.	pesticides), et	fects of tissu	ue culture,	different		
chara has	acterist underg	tics of th	erial should not ha e variety, unless the h treatment, full deta wledge, if the plant r	competent aut ils of the treatr	thorities allow on the second se	or request suc given. In this r	ch treatment. espect, pleas	If the plan	t material		
	(a)	М	icroorganisms (e.g. v	virus, bacteria,	ohytoplasma)		Yes [ ]	No [	]		
	(b)	CI	hemical treatment (e	.g. growth retar	dant, pesticide	)	Yes [ ]	No [	]		
	(c)	Ti	ssue culture				Yes [ ]	No [	]		
	(d)	Ot	ther factors				Yes [ ]	No [	]		
	Please provide details for where you have indicated "yes".										
10.	I hereby declare that, to the best of my knowledge, the information provided in this form is correct:										
	Applicant's name										
				L							
	Się	gnature				Date					
L											

[End of document]