



TG/177/3

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

ZANTEDESCHIA

(Zantedeschia Spreng.)

GENEVA
2001

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ORIGINAL: English

DATE: 2001-04-04

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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 *Zantedeschia* Spreng. of the family Araceae.

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:

20 tubers/rhizomes of flowering size or
20 young plants.

2. The plant material supplied should be visibly healthy, not lacking in vigor or affected by any important pests or diseases.

3. The plant material must not have undergone any treatment, especially not with gibberellic acid. If the competent authorities allow or request some other treatment, full details of the treatment must be given.

III. Conduct of Tests

1. A test should normally be conducted for one growing period. If distinctness and/or uniformity cannot be sufficiently established in one growing period, the test should be extended for a second growing period.

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. The tests should be carried out under the following growing conditions:

Temperature: Preferably between 15 – 25°C.

Planting time: March (Northern Hemisphere), August to October (Southern Hemisphere).

Substrate: Very well-drained substrate rich in humus.

Fertilization: Not too much nitrogen for deciduous varieties. Trace elements may be added.

Irrigation: Deciduous varieties: keep moist but not wet.
Zantedeschia aethiopica: prefers more water.

Air humidity:	Deciduous varieties prefer less humidity than <i>Zantedeschia aethiopica</i> .
Shading:	Without shading or with 40 % shade cloth, depending on local conditions.

The size of the plots should be such that plants or parts of plants may be removed for measurement and counting without prejudice to the observations which must be made up to the end of the growing period. Each test should include a total of 20 plants. 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 measurement or counting should be made on 10 plants or parts taken from each of 10 plants.
2. For the assessment of uniformity a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 20 plants, the maximum number of off-types allowed would be 1.
3. All observations should be made on plants that have flowers of maximum size, during the peak flowering time.
4. All observations on the leaf should be made on fully developed leaves from flowering shoots. The width of the leaf blade should be measured at the broadest part, which would sometimes include the lobes.
5. Unless otherwise indicated, all observations on the flower should be made at the beginning of anther dehiscence.
6. All observations on the fading, intensifying and greening of the flower color with age should be made two to three weeks after pollen shed.
7. 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 British Standard 950, Part I. These determinations should be made with the plant part placed against a white background.

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) Plant: type (characteristic 1)
- (b) Leaf blade: spots on upper side (characteristic 15)
- (c) Spathe: natural length (viewed from above) (characteristic 23)
- (d) Spathe: natural width (viewed from above) (characteristic 24)
- (e) Spathe: main color of inner side (excluding throat spot color, if present) (characteristic 27) with the following groups:
 - Gr. 1: white
 - Gr. 2: cream
 - Gr. 3: yellow
 - Gr. 4: yellow brown
 - Gr. 5: yellow orange
 - Gr. 6: orange
 - Gr. 7: orange red
 - Gr. 8: red
 - Gr. 9: purple red
 - Gr. 10: pink
 - Gr. 11: red pink
 - Gr. 12: purple
- (f) Spathe: presence of throat spot (characteristic 31)

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
1. Plant: type (*)	Type de plante	Pflanze: Typ	Planta: tipo		
deciduous	caduque	laubabwerfend	caducifolia		1
semi-deciduous	semi-caduque	halblaubabwerfend	semicaducifolia		2
evergreen	toujours verte	immergrün	de hoja perenne		3
2. Plant: height (*)	Plante: hauteur	Pflanze: Höhe	Planta: altura		
short	basse	niedrig	baja	Hope Cross	3
medium	moyenne	mittel	media	Black Magic	5
tall	haute	hoch	alta	Green Tip	7
3. Deciduous varieties only: Plant: total number of shoots	Variétés caduques seulement: plante: nombre total de pousses	Nur laubabwerfende Sorten: Pflanze: Anzahl Triebe	Variedades caducifolias únicamente: planta: número total de tallos		
few	petit	gering	bajo	Pink Persuasion	3
medium	moyen	mittel	medio	Inspiration	5
many	grand	groß	alto	Celeste	7
4. Young shoot: color (*)	Jeune pousse: couleur	Junger Trieb: Farbe	Tallo joven: color		
yellow green	vert-jaune	gelbgrün	verde amarillento	Black Magic	1
green	verte	grün	verde	Pink Persuasion	2
red purple	violet-rouge	rotpurpur	rojo púrpura		3
5. Petiole: length	Pétiole: longueur	Blattstiel: Länge	Pecíolo: longitud		
short	courte	kurz	corta	Hope Cross	3
medium	moyenne	mittel	media	Pink Persuasion	5
long	longue	lang	larga	Green Tip	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
6. Petiole: color of lower part (*)	Pétiole: couleur de la partie inférieure	Blattstiel: Farbe des unteren Teils	Pecíolo: color de la parte inferior		
yellow green	vert-jaune	gelbgrün	verde amarillento	Schwarzwald	1
light green	vert clair	hellgrün	verde claro	Heidi	2
medium green	vert moyen	mittelgrün	verde medio	Inspiration	3
dark green	vert foncé	dunkelgrün	verde oscuro	Majestic Red	4
brown red	rouge-brun	braunrot	marrón rojizo	Black Magic	5
purple	violet-pourpre	purpur	púrpura		6
7. Leaf blade: attitude (*)	Limbe: port	Blattspreite: Haltung	Limbo: porte		
erect	dressé	aufrecht	erecto		1
semi-erect	demi-dressé	halbaufrecht	semierecto		2
horizontal	horizontal	waagrecht	horizontal		3
8. Leaf blade: length (excluding lobes) (*)	Limbe: longueur (à l'exclusion des lobes)	Blattspreite: Länge (ohne Lappen)	Limbo: longitud (excluidos los lóbulos)		
very short	très court	sehr kurz	muy corto		1
short	court	kurz	corto	Goldilocks	3
medium	moyen	mittel	medio	Majestic Red	5
long	long	lang	largo	Schwarzwald	7
very long	très long	sehr lang	muy largo	Green Tip	9
9. Leaf blade: width (*)	Limbe: largeur	Blattspreite: Breite	Limbo: anchura		
narrow	étroit	schmal	estrecho	Celeste	1
narrow to medium	étroit à moyen	schmal bis mittel	estrecho a medio	Inspiration	3
medium	moyen	mittel	medio	Majestic Red	5
medium to broad	moyen à large	mittel bis breit	medio a ancho	Cameo	7
broad	large	breit	ancho	Green Tip	9

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
10. Leaf blade: position of broadest part (*)	Limbe: position de la partie la plus large	Blattspreite: Position des breitesten Teils	Limbo: posición de la parte más ancha		
in middle	au centre	in der Mitte	en la mitad		1
slightly below middle	légèrement en dessous du milieu	etwas unterhalb der Mitte	ligeramente por debajo de la mitad	Celeste	2
far below middle	bien en dessous du milieu	weit unterhalb der Mitte	claramente por debajo de la mitad	Black Magic	3
11. Leaf blade: lobes (*)	Limbe: lobes	Blattspreite: Lappen	Límbo: lóbulos		
absent	absents	fehlend	ausentes	Hope Cross	1
present	présents	vorhanden	presentes	Black Magic	9
12. Leaf blade: length of lobe (+)	Limbe: longueur du lobe	Blattspreite: Länge der Lappen	Limbo: longitud del lóbulo		
short	court	kurz	corto	Pink Persuasion	3
medium	moyen	mittel	medio	Black Magic	5
long	long	lang	largo	Green Tip	7
13. Leaf blade: shape at apex (excluding caudate tip)	Limbe: forme au sommet (à l'exclusion du sommet en forme de queue)	Blattspreite: Form an der Spitze (ohne langgezogene Spitze)	Limbo: forma del ápice (excluida la punta caudada)		
acute	aiguë	spitz	aguda	Celeste	1
right-angled	parallélépipedique	rechteckig	en ángulo recto	Red Sox	2
obtuse	obtuse	stumpf	obtusa	Green Tip	3
14. Leaf blade: intensity of green color of <u>upper</u> side (*)	Limbe: intensité de la couleur verte sur la partie <u>supérieure</u>	Blattspreite: Intensität der grünen Farbe der <u>Oberseite</u>	Limbo: intensidad del color verde del <u>haz</u>		
light	claire	hell	clara	Black Magic	3
medium	moyenne	mittel	media	Hope Cross	5
dark	foncée	dunkel	oscura	Red Sox	7

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
15. Leaf blade: spots on upper side (*)	Limbe: taches sur la partie supérieure	Blattspreite: Flecken auf der Oberseite	Limbo: manchas en el haz		
absent	absentes	fehlend	ausentes	Hope Cross	1
present	présentes	vorhanden	presentes	Majestic Red	9
16. Leaf blade: size of spots on upper side	Limbe: taille des taches sur la partie supérieure	Blattspreite: Größe der Flecken auf der Oberseite	Limbo: tamaño de las manchas del haz		
small	petites	klein	pequeño	Inspiration	3
medium	moyennes	mittel	medio	Majestic Red	5
large	grandes	groß	grande	Black Magic	7
17. Leaf blade: number of spots on upper side (*)	Limbe: nombre de taches sur la partie supérieure	Blattspreite: Anzahl der Flecken auf der Oberseite	Limbo: número de manchas en el haz		
very few	très peu nombreuses	sehr gering	muy bajo	Aries	1
few	peu nombreuses	gering	bajo	Pixie	3
medium	moyennement nombreuses	mittel	medio	Majestic Red	5
many	nombreuses	groß	alto	Black Magic	7
very many	très nombreuses	sehr groß	muy alto		9
18. Leaf blade: undulation of margin	Limbe: ondulation du bord	Blattspreite: Randwellung	Limbo: ondulación del borde		
absent or very weakly expressed	absente ou faiblement exprimée	fehlend oder sehr schwach ausgeprägt	ausente o expresada muy débilmente		1
weakly expressed	faiblement exprimée	schwach ausgeprägt	expresada débilmente	Black Magic	2
strongly expressed	fortement exprimée	stark ausgeprägt	expresada fuertemente	Inspiration	3
19. Scape: thickness	Pédoncule: épaisseur	Schaft: Dicke	Escapo: grosor		
thin	mince	dünn	delgado	Scarlet Pimpernel	3
medium	moyen	mittel	medio	Black Magic	5
thick	épais	dick	grueso	Red Soxs	7

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
20. Scape: red coloration	Pédoncule: coloration rouge	Schaft: Rotfärbung	Escapo: coloración roja		
absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil	Majestic Red	1
weak	faible	gering	débil		3
medium	moyenne	mittel	media	Black Magic	5
strong	forte	stark	fuerte	Cameo	7
very strong	très forte	sehr stark	muy fuerte		9
21. Scape: mottling at basal part	Pédoncule: marbrures sur la partie basale	Schaft: Marmorierung am basalen Teil	Escapo: jaspeado de la parte basal		
absent or very weakly expressed	absentes ou très faiblement exprimées	fehlend oder sehr schwach ausgeprägt	ausente o expresado muy débilmente	Red Soxs	1
weakly expressed	faiblement exprimées	schwach ausgeprägt	expresado débilmente	Black Magic	2
strongly expressed	fortement exprimées	stark ausgeprägt	expresado fuertemente	Sensation	3
22. Spathe: natural height (*) (+)	Spathe: hauteur naturelle	Spatha: natürliche Höhe	Espata: altura		
low	basse	niedrig	baja	Scarlet Pimpernel	1
low to medium	basse à moyenne	niedrig bis mittel	baja a media	Hope Cross	3
medium	moyenne	mittel	media	Black Magic	5
medium to high	moyenne à haute	mittel bis hoch	media a alta	Majestic Red	7
high	haute	hoch	alta	Green Tip	9
23. Spathe: natural length (viewed from above) (*) (+)	Spathe: longueur naturelle (vue d'en haut)	Spatha: natürliche Länge (von oben betrachtet)	Espata: longitud (vista desde arriba)		
short	courte	kurz	corta	Celeste	1
short to medium	courte à moyenne	kurz bis mittel	corta a media	Pink Persuasion	3
medium	moyenne	mittel	media	Schwarzwald	5
medium to long	moyenne à longue	mittel bis lang	media a larga		7
long	longue	lang	larga	Green Tip	9

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
24. Spathe: natural width (viewed from above) (*) (+)	Spathe: largeur naturelle (vue d'en haut)	Spatha: natürliche Breite (von oben betrachtet)	Espata: anchura vista desde arriba		
narrow	étroite	schmal	estrecha	Schwarzwaldler	1
narrow to medium	étroite à moyenne	schmal bis mittel	estrecha a media	Inspiration	3
medium	moyenne	mittel	media	Pink Persuasion	5
medium to broad	moyenne à large	mittel bis breit	media a ancha		7
broad	large	breit	ancha		9
25. Spathe: height of overlapping part (+)	Spathe: hauteur de la partie recouvrante	Spatha: Höhe des überlappenden Teils	Espata: altura de la parte superpuesta		
low	basse	niedrig	baja	Green Tip	3
medium	moyenne	mittel	media	Majestic Red	5
high	haute	hoch	alta	Cameo	7
26. Spathe: natural shape of distal part (excluding caudate tip)	Spathe: forme naturelle de la partie distale (à l'exclusion du sommet en forme de queue)	Spatha: natürliche Form des oberen Endes (ohne langgezogene Spitze)	Espata: forma natural de la parte distal (excluida la punta caudada)		
acute	pointue	spitz	aguda	Inspiration	1
obtuse	obtuse	stumpf	obtusa	Black Magic	2
rounded	arrondie	abgerundet	redondeada	Green Tip	3
27. Spathe: main color of inner side (excluding throat spot color, if present) (*)	Spathe: couleur principale de la face interne (à l'exclusion de couleur de la tache sur la gorge, si présente)	Spatha: Hauptfarbe der Innenseite (ohne Farbe des Schlundflecks, wenn vorhanden)	Espata: color principal de la cara interna (excluido el color de la mancha de la garganta, de estar presente)		
RHS Colour Chart (indicate reference number)	RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indicar número de referencia)		

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
28. Spathe: secondary color of inner side (excluding the throat spot color) (*)	Spathe: couleur secondaire de la face interne (à l'exclusion de couleur de la tache sur la gorge)	Spatha: Sekundärfarbe der Innenseite (ohne Farbe des Schlundflecks)	Espata: color secundario de la cara interna (excluido el color de la mancha de la garganta)		
dark green	vert foncé	dunkelgrün	verde oscuro		1
red orange	orange-rouge	rotorange	naranja rojizo		2
red	rouge	rot	rojo		3
orange pink	rose orangé	orangerosa	rosa anaranjado		4
pink	rose	rosa	rosa		5
red pink	rose-rouge	rotrosa	rosa rojizo		6
purple pink	rose-violet	purpurrosa	rosa púrpura		7
blue pink	rose-bleu	blaurosa	rosa azulado		8
red purple	violet-rouge	rotpurpur	púrpura rojizo		9
dark red purple	violet-rouge foncé	dunkelrotpurpur	púrpura rojizo oscuro		10
29. Spathe: gradual color change from base to apex (inner side, excluding varieties with throat spot)	Spathe : changement graduel de couleur de la base au sommet (face interne, à l'exclusion des variétés ayant une tache sur la gorge)	Spatha: allmähliche Veränderung der Farbe von der Basis zur Spitze (Innenseite, ohne Sorten mit Schlundfleck)	Espata: Cambio gradual de color de la base al ápice (cara interna, excluidas las variedades con mancha en la garganta)		
strongly shading off	fortement dégradé	stark abgeschattiert	fuertemente atenuado	Pixie	1
weakly shading off	faiblement dégradé	schwach abgeschattiert	débilmente atenuado	Inspiration	2
no change or very little	aucun changement ou très peu	keine oder sehr geringe Veränderung	sin cambios o cambios muy leves	Celeste, Schwarzwald	3
weakly intensifying	faiblement intensifié	sich schwach intensivierend	intensificándose débilmente	Elmaro	4
strongly intensifying	fortement intensifié	sich stark intensivierend	intensificándose fuertemente	Red Soxs	5

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
30. Spathe: size of un- changed color area at base (as for 29)	Spathe: taille de la zone qui n'a pas changé de couleur (comme pour 29)	Spatha: Größe des Bereichs der unveränderten Farbe an der Basis (wie für 29)	Espata: tamaño de la zona de color inalterado de la base (como para 29)		
small	petite	klein	pequeño	Scarlet Pimpernel	3
medium	moyenne	mittel	medio	Inspiration	5
large	grande	groß	grande	Dominique	7
31. Spathe: presence of (*) throat spot	Spathe: présence d'une tache sur la gorge	Spatha: Vorhandensein des Schlundflecks	Espata: presencia de mancha en la garganta		
absent	absente	fehlend	ausente	Inspiration	1
present	présente	vorhanden	presente	Black Magic	9
32. Spathe: size of throat spot	Spathe: taille de la tache sur la gorge	Spatha: Größe des Schlundflecks	Espata: tamaño de la mancha de la garganta		
small	petite	klein	pequeño	Treasure	3
medium	moyenne	mittel	mediano	Cameo	5
large	grande	groß	grande		7
33. Spathe: color of (*) throat spot	Spathe: couleur de la tache sur la gorge	Spatha: Farbe des Schlundflecks	Espata: color de la mancha de la garganta		
pink	rose	rosa	rosa		1
purple	violette	purpur	púrpura		2

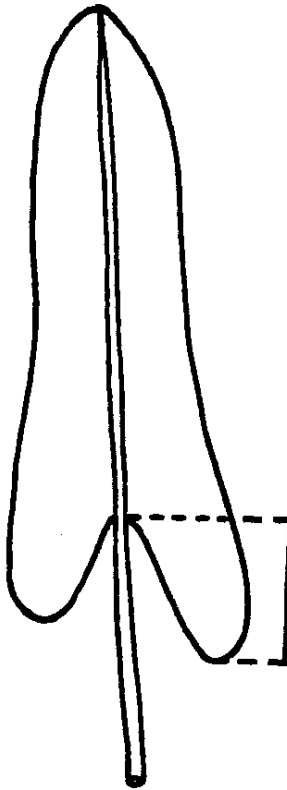
English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34. Spathe: main color of outer side	Spathe: couleur principale de la face externe	Spatha: Hauptfarbe der Außenseite	Espata: color principal de la cara externa		
white	blanche	weiß	blanco	Green Tip	1
greenish white	blanc verdâtre	grünlich weiß	blanco verdoso	Green Goddess	2
light yellow	jaune clair	hellgelb	amarillo claro	Pink Persuasion	3
medium yellow	jaune moyen	mittelgelb	amarillo medio	Black Magic	4
yellow orange	jaune-orange	gelborange	naranja amarillento	Fandango	5
red orange	rouge orangé	rotorange	naranja rojizo	Treasure	6
yellow red	jaune-rouge	gelbrot	rojo amarillento	Sensation	7
red pink	rose-rouge	rotrosa	rosa rojizo	Aries	8
purple pink	rose-violet	purpurrosa	rosa púrpura	Hope Cross	9
red purple	violet-rouge	rotpurpur	púrpura rojizo	Majestic Red	10
brown purple	violet-brun	braunpurpur	púrpura marrón	Scarlet Pimpernel	11
purple	violette	purpur	púrpura	Schwarzwaldler	12
35. Spathe: recurving of margin	Spathe: courbure du bord	Spatha: Zurückbiegung des Randes	Espata: curvatura del borde		
weak	faiblement recourbé	gering	débil	Black Magic	3
medium	moyennement recourbé	mittel	media	Inspiration	5
strong	fortement recourbé	stark	fuerte	Aries	7
36. Spadix: length (*)	Spadice: longueur	Kolben: Länge	Espádice: longitud		
short	court	kurz	corto	Cameo	3
medium	moyen	mittel	medio	Pink Persuasion	5
long	long	lang	largo		7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
37. Spadix: width at middle of male part	Spadice: largeur au centre de la partie mâle	Kolben: Breite in der Mitte des männlichen Teils	Espádice: anchura del medio de la parte masculina		
narrow	étroite	schmal	estrecha	Black Magic	3
medium	moyenne	mittel	media	Sensation	5
broad	large	breit	ancha	Majestic Red	7
38. Spadix: main color just before pollen shed	Spadice: couleur principale juste avant la libération du pollen	Kolben: Hauptfarbe kurz vor dem Pollenstäuben	Espádice: color principal justo antes de la emisión del polen		
white	blanche	weiß	blanco		1
yellow green	vert-jaune	gelbgrün	verde amarillento		2
light yellow	jaune clair	hellgelb	amarillo claro	Cameo	3
medium yellow	jaune moyen	mittelgelb	amarillo medio	Pink Persuasion	4
yellow orange	orange-jaune	gelborange	naranja amarillento	Majestic Red	5
orange brown	brun orangé	orangebraun	marrón anaranjado	Elmaro	6
orange red	rouge orangé	orangerot	rojo anaranjado		7
pink	rose	rosa	rosa	Green Tip	8
purple red	rouge-violet	purpurrot	rojo púrpura	Schwarzwald	9
purple	violette	purpur	púrpura		10
39. Degree of fading of flower color with age	Degré de décoloration de la fleur avec l'âge	Stärke des Verblassens der Blütenfarbe mit dem Alter	Grado de decoloración de la flor con el tiempo		
absent or very weakly expressed	nulle ou très faiblement exprimée	fehlend oder sehr schwach ausgeprägt	ausente o expresado muy débilmente	Schwarzwald	1
weakly expressed	faiblement exprimée	schwach ausgeprägt	expresado débilmente	Hope Cross	2
strongly expressed	fortement exprimée	stark ausgeprägt	expresado fuertemente	Sensation	3

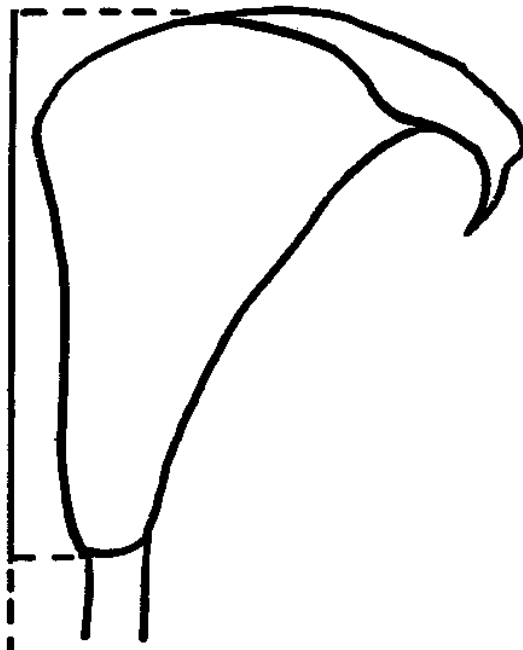
English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
40. Color change with age	Changement de couleur avec l'âge	Veränderung der Farbe mit dem Alter	Cambio de color con el tiempo		
strongly fading	fortement délavé	stark verblassend	fuertemente atenuado	Sensation	1
weakly fading	faiblement délavé aucun	schwach verblassend	débilmente atenuado	Hope Cross	2
no change or very little	changement ou très peu	keine oder sehr geringe Veränderung	sin cambios o cambios muy leves	Dominique, Schwarzwald	3
weakly intensifying	faiblement intensifié	sich schwach intensivierend	intensificándose débilmente	Pixie	4
strongly intensifying	fortement intensifié	sich stark intensivierend	intensificándose fuertemente	Inspiration	5

VIII. Explanations on the Table of Characteristics

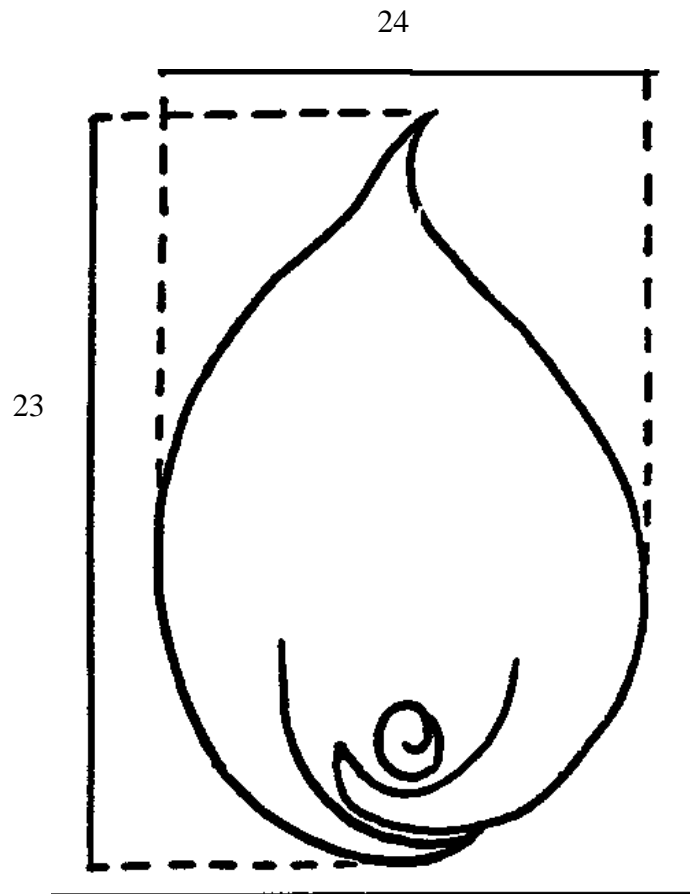
Ad. 12: Leaf blade: length of lobe



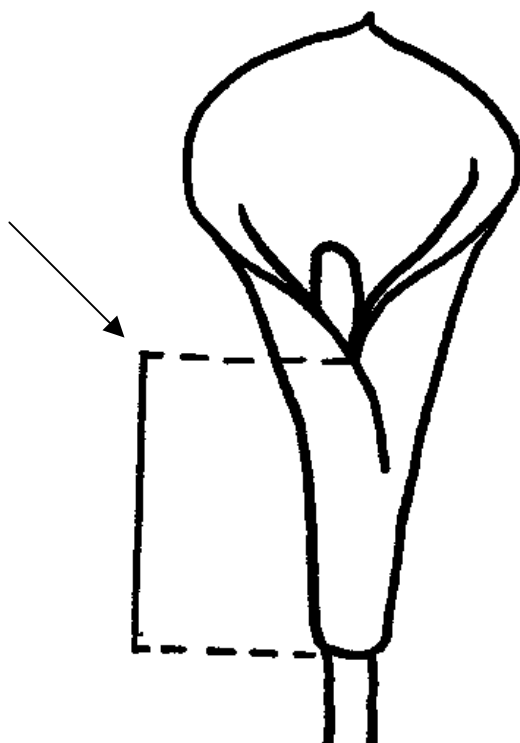
Ad. 22: Spathe: natural height



Ad. 23 and 24: Spathe: natural length (viewed from above) (23) and natural width (viewed from above) (24)



Ad. 25: Spathe: height of overlapping part



IX. Literature

Batten, Auriol, 1988: "Flowers of Southern Africa", Southern Book Publishers (Pty) Ltd., Johannesburg, 3pp.

Letty, Cythna, 1973: "The Genus *Zantedeschia*", *Bothalia* 11, 1 & 2, pp 5 - 26.

Singh, Y.; Van Wyk, A.E.; Baijnath, H., 1996: "Taxonomic notes on the genus *Zantedeschia* Spreng. (Araceae) in Southern Africa", *S. Afr. J. Bot.* 62(6), pp 321-324.

Still, S.M., 1980: "Manual of Herbaceous Ornamental Plants", STIPES Publishing Company, Illinois, pp 716-717.

Tija, B.O., 1989: *Zantedeschia* in Handbook of Flowering (Halevy, A.H. ed.) Volume VI, CRC Press, Boca Raton, pp 697-702.

X. Technical Questionnaire

	Reference Number (not to be filled in by the applicant)
<p>TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights</p>	
1.1 Genus:	<p><i>Zantedeschia</i> Spreng. ZANTEDESCHIA</p> <p>1.2 Species:</p> <p>(indicate species)</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 Origin

(a) Seedling (indicate parent varieties)

..... []

(b) Mutation (indicate parent variety)

..... []

(c) Discovery (indicate where and when)

..... []

4.2 Method of reproduction

(a) *in vitro*

..... []

(b) Tuber

..... []

(c) Other (specify)

..... []

4.3 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	Note
5.1 Plant: type (1)		
deciduous		1[]
semi-deciduous		2[]
evergreen		3[]
5.2 Leaf blade: spots on upper side (15)		
absent	Hope Cross	1[]
present	Majestic Red	9[]
5.3 Spathe: natural length (viewed from above) (23)		
short	Celeste	1[]
short to medium	Pink Persuasion	3[]
medium	Schwarzwald	5[]
medium to long		7[]
long	Green Tip	9[]
5.4 Spathe: natural width (viewed from above) (24)		
narrow	Schwarzwald	1[]
narrow to medium	Inspiration	3[]
medium	Pink Persuasion	5[]
medium to broad		7[]
broad		9[]

Characteristics	Example Varieties	Note
5.5i Spathe: main color of inner side (excluding throat spot color, if present) (27)		
RHS Colour Chart (indicate reference number)		
.....		
5.5ii Spathe: main color of inner side (excluding throat spot color, if present) (27)		
white		1[]
cream		2[]
yellow		3[]
yellow brown		4[]
yellow orange		5[]
orange		6[]
orange red		7[]
red		8[]
purple red		9[]
pink		10[]
red pink		11[]
purple		12[]
5.6 Spathe: presence of throat spot (31)		
absent	Inspiration	1[]
present	Black Magic	9[]

6. Similar varieties and differences from these varieties

Denomination of similar variety	Characteristic in which the similar variety is different ^{o)}	State of expression of similar variety	State of expression of candidate variety
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^{o)} In the case of identical states of expression 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

(a) Conditions for planting

- to be covered completely with soil []

- to be partly uncovered []

(b) Other conditions

7.3 Use of the variety

(a) garden []

(b) cut flower []

(c) pot plant []

7.4 Other information

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

