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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

ANTHURIUM

UPOV Code(s): ANTHU

Anthurium Schott

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by experts from Japan

to be considered by

the Technical Committee at its fifty-eighth session
to be held in Geneva on October 24 and 25, 2022

Disclaimer: this document does not represent UPOV policies or guidance

Alternative names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Anthurium Schott	Anthurium	Anthurium	Flamingoblume	Anthurium

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.

* 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. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Anthurium* Schott.

2. Material Required

2.1 The competent authorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.

2.2 The material is to be supplied in the form of young plants.

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

6 plants

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. Method of Examination

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 6 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 5 plants or parts of plants taken from each of 5 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 6 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. Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness 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) Plant: height (characteristic 1)
(b) Inflorescence: number of spathes (characteristic 16)
(c) Spathe: length (characteristic 17)
(d) Spathe: main color of upper side (characteristic 25) with the following groups:
Gr. 1: white
Gr. 2: green
Gr. 3: yellow
Gr. 4: orange
Gr. 5: pink
Gr. 6: red
Gr. 7: purple
Gr. 8: brown
(e) Spathe: secondary color of upper side (characteristic 26) with the following groups:
Gr. 1: white
Gr. 2: green
Gr. 3: yellow
Gr. 4: orange
Gr. 5: pink
Gr. 6: red
Gr. 7: purple
Gr. 8: brown
(f) Spathe: distribution of secondary color of upper side (characteristic 27)
(g) Spadix: rolling (characteristic 36)
(h) Spadix: main color of basal part (characteristic 39)
(i) Spadix: main color of distal part (characteristic 41)

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. Introduction to the Table of Characteristics

6.1 Categories of Characteristics

6.1.1 Standard Test Guidelines Characteristics

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

6.1.2 Asterisked Characteristics

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

6.2 States of Expression and Corresponding Notes

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 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

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

1 Characteristic number

2 (*) Asterisked characteristic – see Chapter 6.1.2

3 Type of expression
QL Qualitative characteristic – see Chapter 6.3
QN Quantitative characteristic – see Chapter 6.3
PQ Pseudo-qualitative characteristic – see Chapter 6.3

4 Method of observation (and type of plot, if applicable)
MG, MS, VG, VS – see Chapter 4.1.5

5 (+) See Explanations on the Table of Characteristics in Chapter 8.2

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

7 Not applicable

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

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*) QN MG/MS/VG		**(+)**				
	Plant: height	**Plante : hauteur**	**Pflanze: Höhe**	**Planta: altura**		
	very short	très courte	sehr niedrig	muy baja		1
	very short to short	très courte à courte	sehr niedrig bis niedrig	muy baja a baja		2
	short	courte	niedrig	baja	ANTHDOSDOH	3
	short to medium	courte à moyenne	niedrig bis mittel	baja a media		4
	medium	moyenne	mittel	media	ANTHCAPBUK	5
	medium to tall	moyenne à haute	mittel bis hoch	media a alta		6
	tall	haute	hoch	alta	ANTHARYSIA	7
	tall to very tall	haute à très haute	hoch bis sehr hoch	alta a muy alta		8
	very tall	très haute	sehr hoch	muy alta		9
2. (*) QN MG/MS/VG		**(+)**	**(a)**			
	Leaf blade: length	**Limbe : longueur**	**Blattspreite: Länge**	**Limbo: longitud**		
	very short	très courte	sehr kurz	muy corta		1
	very short to short	très courte à courte	sehr kurz bis kurz	muy corta a corta		2
	short	courte	kurz	corta	ANTHEPEDI	3
	short to medium	courte à moyenne	kurz bis mittel	corta a media		4
	medium	moyenne	mittel	media	ANTHCAPBUK	5
	medium to long	moyenne à longue	mittel bis lang	media a larga		6
	long	longue	lang	larga	ANTHARYSIA	7
	long to very long	longue à très longue	lang bis sehr lang	larga a muy larga		8
	very long	très longue	sehr lang	muy larga		9
3. (*) QN MG/MS/VG		**(+)**	**(a)**			
	Leaf blade: width	**Limbe : largeur**	**Blattspreite: Breite**	**Limbo: anchura**		
	very narrow	très étroite	sehr schmal	muy estrecha		1
	very narrow to narrow	très étroite à étroite	sehr schmal bis schmal	muy estrecha a estrecha		2
	narrow	étroite	schmal	estrecha	RYN2009006	3
	narrow to medium	étroite à moyenne	schmal bis mittel	estrecha a media		4
	medium	moyenne	mittel	media	ANTHCAPBUK	5
	medium to broad	moyenne à large	mittel bis breit	media a ancha		6
	broad	large	breit	ancha	ANTHAQUIRE	7
	broad to very broad	large à très large	breit bis sehr breit	ancha a muy ancha		8
	very broad	très large	sehr breit	muy ancha		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
4. **(*)**	**QN** **MG/MS/VG**	**(+)** **(a)**				
	Leaf blade: ratio length/width	**Limbe : rapport longueur/largeur**	**Blattspreite: Verhältnis Länge/Breite**	**Limbo: relación longitud/anchura**		
	very low	très bas	sehr klein	muy baja		1
	very low to low	très bas à bas	sehr klein bis klein	muy baja a baja		2
	low	bas	klein	baja		3
	low to medium	bas à moyen	klein bis mittel	baja a media		4
	medium	moyen	mittel	media	ANTHCAMZIP	5
	medium to high	moyen à élevé	mittel bis groß	media a alta		6
	high	élevé	groß	alta	ANTHDUBAQ	7
	high to very high	élevé à très élevé	groß bis sehr groß	alta a muy alta		8
	very high	très élevé	sehr groß	muy alta	ANTHDOSDOH	9
5. **(*)**	**QN** **VG**	**(+)** **(a)**				
	Leaf blade: size of lobes	**Limbe : taille des lobes**	**Blattspreite: Größe der Lappen**	**Limbo: tamaño de los lóbulos**		
	absent or very small	absente ou très petite	fehlend oder sehr klein	ausente o muy pequeño	ANTHDOSDOH	1
	very small to small	très petite à petite	sehr klein bis klein	muy pequeño a pequeño		2
	small	petite	klein	pequeño	ANTHZUPAP	3
	small to medium	petite à moyenne	klein bis mittel	pequeño a medio		4
	medium	moyenne	mittel	medio	ANTHCOTBIK	5
	medium to large	moyenne à grande	mittel bis groß	medio a grande		6
	large	grande	groß	grande	ANTHAQUIRE	7
	large to very large	grande à très grande	groß bis sehr groß	grande a muy grande		8
	very large	très grande	sehr groß	muy grande		9
6.	**PQ** **VG**	**(+)** **(a)**				
	Leaf blade: relative position of lobes at base	**Limbe: position relative des lobes à la base**	**Blattspreite: relative Stellung der Lappen an der Basis**	**Limbo: posición relativa de los lóbulos en la base**		
	incurved but not touching	incurvée mais ne se touchant pas	aufgebogen, aber nicht berührend	incurvada sin contacto	RIJN200449	1
	free	libre	freistehend	libre	ANTHEPEDI	2
	touching	tangente	einander berührend	en conacto	ANTHQUODO	3
	overlapping	se recouvrant	überlappend	solapada		4
	adpressed	appliquée	anliegend	adpresa		5

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
7.	**PQ VG**	**(+) (a)**				
	Leaf blade: angle of apex	**Limbe: angle de l'apex**	**Blattspreite: Winkel des Apex**	**Limbo: ángulo del ápice**		
	acute	aigu	spitz	agudo		1
	approximately right angle	presque droit	annähernd rechter Winkel	aproximadamente ángulo recto		2
	obtuse	obtus	stumpf	obtuso		3
8.	**(*) PQ VG**	**(+) (a)**				
	Leaf blade: differentiated tip	**Limbe: extrémité différenciée**	**Blattspreite: aufgesetzte Spitze**	**Limbo: punta diferenciada**		
	absent	absente	fehlend	ausente		1
	narrow acuminate	acuminée étroite	schmal zugespitzt	acuminada estrecha		2
	medium acuminate	acuminée moyenne	mittel zugespitzt	acuminada media		3
	broad acuminate	acuminée large	breit zugespitzt	acuminada ancha		4
9.	**QN VG**	**(a)**				
	Leaf blade: intensity of green color of <u>upper</u> side	**Limbe: intensité de la couleur verte la face <u>supérieure</u>**	**Blattspreite: Intensität der Grünfärbung der <u>Ober</u>seite**	**Limbo: intensidad del color verde del <u>haz</u>**		
	very light	très claire	sehr hell	muy clara		1
	very light to light	très claire à claire	sehr hell bis hell	muy clara a clara		2
	light	claire	hell	clara	ANTHDOSDOH	3
	light to medium	claire à moyenne	hell bis mittel	clara a media		4
	medium	moyenne	mittel	media	ANTHBNZL	5
	medium to dark	moyenne à foncée	mittel bis dunkel	media a oscura		6
	dark	foncée	dunkel	oscura	ANTHARYSIA	7
	dark to very dark	foncée à très foncée	dunkel bis sehr dunkel	oscura a muy oscura		8
	very dark	très foncée	sehr dunkel	muy oscura		9
10.	**QN VG**	**(a)**				
	Leaf blade: blistering of <u>upper</u> side	**Limbe : cloqûre de la face <u>supérieure</u>**	**Blattspreite: Blasigkeit der <u>Oberseite</u>**	**Limbo: abullonado del <u>haz</u>**		
	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	ANTHDOSDOH	1
	very weak to weak	très faible à faible	sehr gering bis gering	muy débil a débil		2
	weak	faible	gering	débil	ANTHCIMWI	3
	weak to medium	faible à moyenne	gering bis mittel	débil a medio		4
	medium	moyenne	mittel	medio	ANTHCAPBUK	5
	medium to strong	moyenne à forte	mittel bis stark	medio a fuerte		6
	strong	forte	stark	fuerte	ANTHAHOTO	7
	strong to very strong	forte à très forte	stark bis sehr stark	fuerte a muy fuerte		8
	very strong	très forte	sehr stark	muy fuerte		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
11.	**QN MG/MS/VG**	**(a)**				
	Petiole: length	**Pétiole : longueur**	**Blattstiel: Länge**	**Peciolo: longitud**		
	very short	très courte	sehr kurz	muy corta		1
	very short to short	très courte à courte	sehr kurz bis kurz	muy corta a corta		2
	short	courte	kurz	corta	ANTHEBENEX	3
	short to medium	courte à moyenne	kurz bis mittel	corta a media		4
	medium	moyenne	mittel	media	ANTHBNZL	5
	medium to long	moyenne à longue	mittel bis lang	de media a larga		6
	long	longue	lang	larga	ANTHAQUIRE	7
	long to very long	longue à très longue	lang bis sehr lang	de larga a muy larga		8
	very long	très longue	sehr lang	muy larga		9
12. **(*)**	**QN MG/MS/VG**	**(b)**				
	Peduncle: length	**Pédoncule : longueur**	**Blütenstandsstiel: Länge**	**Pedúnculo: longitud**		
	very short	très courte	sehr kurz	muy corta		1
	very short to short	très courte à courte	sehr kurz bis kurz	muy corta a corta		2
	short	courte	kurz	corta	ANTHEPEDI	3
	short to medium	courte à moyenne	kurz bis mittel	corta a media		4
	medium	moyenne	mittel	media	ANTHCAPBUK	5
	medium to long	moyenne à longue	mittel bis lang	media a larga		6
	long	longue	lang	larga	ANTHAQUIRE	7
	long to very long	longue à très longue	lang bis sehr lang	larga a muy larga		8
	very long	très longue	sehr lang	muy larga		9
13.	**QN MG/MS/VG**	**(+)** **(b)**				
	Peduncle: thickness	**Pédoncule : épaisseur**	**Blütenstandsstiel: Dicke**	**Pedúnculo: grosor**		
	very thin	très mince	sehr dünn	muy delgado		1
	thin	mince	dünn	delgado	ANTHEPEDI	2
	medium	moyenne	mittel	medio	ANTHCAPBUK	3
	thick	épaisse	dick	grueso	ANTHAQUIRE	4
	very thick	très épaisse	sehr dick	muy grueso		5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14.		**QN VG**	**(b)**				
		Peduncle: anthocyanin coloration	**Pédoncule : pigmentation anthocyanique**	**Blütenstandsstiel: Anthocyanfärbung**	**Pedúnculo: pigmentación antociánica**		
		absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	ANTHCAPBUK	1
		very weak to weak	très faible à faible	sehr gering bis gering	muy débil a débil		2
		weak	faible	gering	débil	ANTHBNZL	3
		weak to medium	faible à moyenne	gering bis mittel	débil a media		4
		medium	moyenne	mittel	media		5
		medium to strong	moyenne à forte	mittel bis stark	media a fuerte		6
		strong	forte	stark	fuerte	ANTHEBENEX	7
		strong to very strong	forte à très forte	stark bis sehr stark	fuerte a muy fuerte		8
		very strong	très forte	sehr stark	muy fuerte		9
15.	**(*)**	**QN VG**	**(+)** **(b)**				
		Inflorescence: position in relation to foliage	**Inflorescence : position par rapport au feuillage**	**Blütenstand: Stellung im Verhältnis zum Laub**	**Inflorescencia: posición en relación con el follaje**		
		below	au-dessous	unterhalb	debajo		1
		same level	au même niveau	auf gleicher Höhe	al mismo nivel	ANTHBNEK	2
		slightly above	légèrement au-dessus	leicht oberhalb	ligeramente por encima	ANTHEPEDI	3
		strongly above	fortement au-dessus	stark oberhalb	fuertemente por encima	ANTHEBENEX	4
16.	**(*)**	**QL VG**	**(+)** **(b)**				
		Inflorescence: number of spathes	**Inflorescence : nombre de spathes**	**Blütenstand: Anzahl Spatha**	**Inflorescencia: número de espatas**		
		one	un	eine	un	ANTHBNZL	1
		two	deux	zwei	dos	KURIN HEART	2
17.	**(*)**	**QN MG/MS/VG**	**(+)** **(b)**				
		Spathe: length	**Spathe : longueur**	**Spatha: Länge**	**Espata: longitud**		
		very short	très courte	sehr kurz	muy corta		1
		very short to short	très courte à courte	sehr kurz bis kurz	muy corta a corta		2
		short	courte	kurz	corta	ANTHEBENEX	3
		short to medium	courte à moyenne	kurz bis mittel	corta a media		4
		medium	moyenne	mittel	media	ANTHEPEDI	5
		medium to long	moyenne à longue	mittel bis lang	media a larga		6
		long	longue	lang	larga	ANTHARYSIA	7
		long to very long	longue à très longue	lang bis sehr lang	larga a muy larga		8
		very long	très longue	sehr lang	muy larga		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
18. (*)	**QN MG/MS/VG**	**(+) (b)**				
	Spathe: width	**Spathe : largeur**	**Spatha: Breite**	**Espata: anchura**		
	very narrow	très étroite	sehr schmal	muy estrecha		1
	very narrow to narrow	très étroite à étroite	sehr schmal bis schmal	muy estrecha a estrecha		2
	narrow	étroite	schmal	estrecha	ANTHDUBAQ	3
	narrow to medium	étroite à moyenne	schmal bis mittel	estrecha a media		4
	medium	moyenne	mittel	media	ANTHEPEDI	5
	medium to broad	moyenne à large	mittel bis breit	media a ancha		6
	broad	large	breit	ancha	ANTHAQUIRE	7
	broad to very broad	large à très large	breit bis sehr breit	ancha a muy ancha		8
	very broad	très large	sehr breit	muy ancha		9
19.	**QN MS/VG**	**(+) (b)**				
	Spathe: ratio length/width	**Spathe : rapport longueur/largeur**	**Spatha: Verhältnis Länge/Breite**	**Espata: relación longitud/anchura**		
	very low	très bas	sehr klein	muy baja		1
	very low to low	très bas à bas	sehr klein bis klein	muy baja a baja		2
	low	bas	klein	baja	ANTHCAPBUK	3
	low to medium	bas à moyen	klein bis mittel	baja a media		4
	medium	moyen	mittel	media	ANTHAQUIRE	5
	medium to high	moyen à élevé	mittel bis groß	media a alta		6
	high	élevé	groß	alta		7
	high to very high	élevé à très élevé	groß bis sehr groß	alta a muy alta		8
	very high	très élevé	sehr groß	muy alta	ANTHDOSDOH	9
20. (*)	**QN VG**	**(+) (b)**				
	Spathe: position of broadest part	**Spathe : position de la partie la plus large**	**Spatha: Position des breitesten Teils**	**Espata: posición de la parte más ancha**		
	at base	à la base	an der Basis	en la base	ANTHBNZL	1
	between base and middle	entre la base et le milieu	zwischen Basis und Mitte	entre la base y el centro	ANTHOLYL	2
	at middle	au milieu	in der Mitte	en el centro	ANTHITOXO	3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
21. **(*)**	**QN** **VG**	**(+)** **(b)**				
	Spathe: size of lobes	**Spathe : taille des lobes**	**Spatha: Größe der Lappen**	**Espata: tamaño de los lóbulos**		
	absent or very small	absente ou très petite	fehlend oder sehr klein	ausente o muy pequeño	ANTHDOSDOH	1
	very small	très petite	sehr klein bis klein	muy pequeño		2
	small	petite	klein	pequeño	ANTHZUPAP	3
	small to medium	petite à moyenne	klein bis mittel	pequeño a medio		4
	medium	moyenne	mittel	medio	ANTHOLYL	5
	medium to large	moyenne à grande	mittel bis groß	medio a grande		6
	large	grande	groß	grande	ANTHAHOTO	7
	large to very large	grande à très grande	groß bis sehr groß	grande a muy grande		8
	very large	très grande	sehr groß	muy grande		9
22.	**PQ** **VG**	**(+)** **(b)**				
	Spathe: relative position of lobes at base	**Spathe : position relative des lobes à la base**	**Spatha: relative Stellung der Lappen an der Basis**	**Espata: posición relativa de los lóbulos en la base**		
	incurved but not touching	incurvée mais ne se touchant pas	aufgebogen, aber nicht berührend	incurvada sin contacto		1
	free	ouverte	freistehend	libre		2
	touching	tangente	einander berührend	en conacto		3
	overlapping	se recouvrant	überlappend	solapada		4
	adpressed	appliquée	anliegend	adpresa		5
23.	**PQ** **VG**	**(+)** **(b)**				
	Spathe: shape of apex	**Spathe : forme de l'apex**	**Spatha: Form des Apex**	**Espata: forma del ápice**		
	acute	aiguë	spitz	aguda		1
	obtuse	obtuse	stumpf	obtusa		2
	rounded	arrondie	abgerundet	redondeada		3
24. **(*)**	**PQ** **VG**	**(+)** **(b)**				
	Spathe: differentiated tip	**Spathe : extrémité différenciée**	**Spatha: aufgesetzte Spitze**	**Espata: punta diferenciada**		
	absent	absente	fehlend	ausente		1
	narrow acuminate	acuminée étroite	schmal zugespitzt	acuminada estrecha		2
	medium acuminate	acuminée moyenne	mittel zugespitzt	acuminada media		3
	broad acuminate	acuminée large	breit zugespitzt	acuminada ancha		4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
25.	**(*)**	**PQ** **VG**	**(b), (c)**				
		Spathe: main color of <u>upper</u> side	**Spathe: couleur principale de la face <u>supérieure</u>**	**Spatha: Hauptfarbe der <u>Ober</u>seite**	**Espata: color principal del <u>haz</u>**		
		RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
26.	**(*)**	**PQ** **VG**	**(b), (c)**				
		Spathe: secondary color of <u>upper</u> side	**Spathe: couleur secondaire de la face <u>supérieure</u>**	**Spatha: Sekundärfarbe der <u>Ober</u>seite**	**Espata: color secundario del <u>haz</u>**		
		RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
27.	**(*)**	**PQ** **VG**	**(+)** **(b), (c)**				
		Spathe: distribution of secondary color of <u>upper</u> side	**Spathe: distribution de la couleur secondaire de la face <u>supérieure</u>**	**Spatha: Verteilung der Sekundärfarbe der <u>Ober</u>seite**	**Espata: distribución del color secundario del <u>haz</u>**		
		none	aucune	keine	ninguna		1
		at basal zone	en zone basale	in basaler Zone	en la zona basal		2
		at central zone	en zone centrale	in mittlerer Zone	en la zona central		3
		at apex	à l'apex	am Apex	en el ápice		4
		at marginal zone	en zone marginale	im Randbereich	en la zona del borde		5
		along veins	le long des nervures	entlang der Adern	a lo largo de los nervios		6
		at apex and along veins	à l'apex et le long des nervures	am Apex und entlang der Adern	en el ápice y a lo largo de los nervios		7
		throughout	partout	überall	en la totalidad		8
28.	**(*)**	**PQ** **VG**	**(+)**				
		Spathe: pattern of secondary color of <u>upper</u> side	**Spathe: répartition de la couleur secondaire de la face <u>supérieure</u>**	**Spatha: Muster der Sekundärfarbe der <u>Ober</u>seite**	**Espata: forma de disposición del color secundario del <u>haz</u>**		
		solid	uniforme	durchgefärbt	lisa	ANTHIUFEN	1
		flushed	diffuse	verschwommen	pátina		2
		spotted	mouchetée	gepunktet	en lunares		3
		irregular	irrégulière	unregelmäßig	irregular		4
29.		**PQ** **VG**	**(b), (c)**				
		Spathe: main color of <u>lower</u> side	**Spathe: couleur principale du côté <u>inférieur</u>**	**Spatha: Hauptfarbe der <u>Unter</u>seite**	**Espata: color principal del <u>envés</u>**		
		RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
30.	**QN VG**	**(b)**				
	Spathe: glossiness on upper side	**Spathe: brillance de la face supérieure**	**Spatha: Glanz der Oberseite**	**Espata: brillo en el haz**		
	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	ARINOS	1
	very weak to weak	très faible à faible	sehr gering bis gering	muy débil a débil		2
	weak	faible	gering	débil	KURIN HEART	3
	weak to medium	faible à moyenne	gering bis mittel	débil a medio		4
	medium	moyenne	mittel	medio	ANTHARYSIA	5
	medium to strong	moyenne à forte	mittel bis stark	medio a fuerte		6
	strong	forte	stark	fuerte	ANTHBNZL	7
	strong to very strong	forte à très forte	stark bis sehr stark	fuerte a muy fuerte		8
	very strong	très forte	sehr stark	muy fuerte		9
31. **(*)**	**QN VG**	**(b)**				
	Spathe: blistering	**Spathe: cloqûre**	**Spatha: Blasigkeit**	**Espata: abullonado**		
	absent or very weak	absent ou très faible	fehlend oder sehr gering	ausente o muy débil	ANTHDOSDOH	1
	very weak to weak	très faible à faible	sehr gering bis gering	muy débil a débil		2
	weak	faible	gering	débil	ANTHCAPBUK	3
	weak to medium	faible à moyenne	gering bis mittel	débil a media		4
	medium	moyenne	mittel	media	ANTHEPEDI	5
	medium to strong	moyenne à forte	mittel bis stark	media a fuerte		6
	strong	forte	stark	fuerte	ANTHBNZL	7
	strong to very strong	forte à très forte	stark bis sehr stark	fuerte a muy fuerte		8
	very strong	très forte	sehr stark	muy fuerte		9
32.	**QN VG**	**(+)** **(b)**				
	Spathe: shape in cross section of middle zone	**Spathe: forme de la zone médiane en section transversale**	**Spatha: Form der Mittelzone im Querschnitt**	**Espata: forma en sección transversal de la zona media**		
	concave	concave	konkav	cóncava		1
	flat	plate	gerade	plana		2
	convex	convexe	konvex	convexa		3
33.	**QN VG**	**(+)** **(b)**				
	Spathe: angle of distal part to peduncle	**Spathe: angle de la partie distincte par rapport au pédoncule**	**Spatha: Winkel des distalen Teils zum Blütenstandsstiel**	**Espata: ángulo de la parte distal con respecto al pedúnculo**		
	acute	aigu	spitz	agudo		1
	right angle	angle droit	rechter Winkel	ángulo recto		2
	obtuse	obtus	stumpf	obtuso		3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34. **(*)**	**QN** **MG/MS/VG**	**(+)** **(b)**				
	Spadix: length	**Spathe: longueur**	**Kolben: Länge**	**Espádice: longitud**		
	very short	très courte	sehr kurz	muy corta		1
	very short to short	très courte à courte	sehr kurz bis kurz	muy corta a corta		2
	short	courte	kurz	corta	ANTHEPEDI	3
	short to medium	courte à moyenne	kurz bis mittel	corta a media		4
	medium	moyenne	mittel	media	ANTHBNZL	5
	medium to long	moyenne à longue	mittel bis lang	media a larga		6
	long	longue	lang	larga	ANTHAQUIRE	7
	long to very long	longue à très longue	lang bis sehr lang	larga a muy larga		8
	very long	très longue	sehr lang bis sehr lang	muy larga		9
35.	**QN** **MG/MS/VG**	**(+)** **(b)**				
	Spadix: thickness	**Spadice: épaisseur**	**Kolben: Dicke**	**Espádice: grosor**		
	very thin	très mince	sehr dünn	muy delgado		1
	very thin to thin	très mince à mince	sehr dünn bis dünn	muy delgado a delgado		2
	thin	mince	dünn	delgado	RYN2009006	3
	thin to medium	mince à moyenne	dünn bis mittel	delgado a medio		4
	medium	moyenne	mittel	medio	ANTHBNZL	5
	medium to thick	moyenne à épaisse	mittel bis dick	medio a grueso		6
	thick	épaisse	dick	grueso	ANTHIOWIR	7
	thick to very thick	épaisse à très épaisse	dick bis sehr dick	grueso a muy grueso		8
	very thick	très épaisse	sehr dick	muy grueso		9
36. **(*)**	**QL** **VG**	**(+)** **(b)**				
	Spadix: rolling	**Spadice: enroulement**	**Kolben: Einrollen**	**Espádice: curvatura**		
	absent	absent	fehlend	ausente	ANTHBNZL	1
	present	présent	vorhanden	presente	ARINOS	9
37. **(*)**	**QN** **VG**	**(+)** **(b)**				
	Excluding varieties with Spadix: rolling: present: Spadix: curvature of longitudinal axis	**À l'exclusion des variétés à Spadice : enroulement : présent : Spadice : courbure de l'axe longitudinal**	**Außer Sorten mit Kolben: Einrollen: vorhanden: Kolben: Krümmung der Längsachse**	**Excluidas las variedades con Espádice: curvatura: presente: Espádice: curvatura del eje longitudinal**		
	strongly incurved	fortement incurvée	stark aufgebogen	fuertemente incurvada		1
	weakly incurved	faiblement incurvée	schwach aufgebogen	débilmente incurvada		2
	straight	droite	gerade	recta		3
	weakly recurved	faiblement recourbée	schwach zurückgebogen	débilmente recurvada		4
	strongly recurved	fortement recourbée	stark zurückgebogen	fuertemente recurvada		5

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
38.	**QN VG**	**(+) (b)**				
	Spadix: tapering towards the tip	**Spadice : effilage vers l'extrémité**	**Kolben: Verjüngung zur Spitze hin**	**Espádice: estrechado hacia la punta**		
	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil		1
	weak	faible	gering	débil		2
	medium	moyenne	mittel	medio		3
	strong	forte	stark	fuerte		4
	very strong	très forte	sehr stark	muy fuerte		5
39.	**(*) PQ VG**	**(+) (b), (c)**				
	Spadix: main color of <u>basal</u> part	**Spadice: couleur principale de la partie <u>basale</u>**	**Kolben: Hauptfarbe des <u>basalen</u> Teils**	**Espádice: color principal de la parte <u>basal</u>**		
	whitish	blanchâtre	weißlich	blanquecino		1
	green	vert	grün	verde		2
	yellow	jaune	gelb	amarillo		3
	orange	orange	orange	naranja		4
	pink	rose	rosa	rosa		5
	red	rouge	rot	rojo		6
	red purple	rouge-pourpre	rotpurpurn	púrpura rojizo		7
	purple	pourpre	purpurn	púrpura		8
	brown	brun	braun	marrón		9
40.	**PQ VG**	**(+) (b), (c)**				
	Spadix: main color of <u>middle</u> part (only if different from basal and distal part)	**Spadice: couleur principale de la partie <u>médiane</u> (seulement si distincte des parties basale et distale)**	**Kolben: Hauptfarbe des <u>Mittel</u>teils (nur bei Unterschied zum basalen und distalen Teil)**	**Espádice: color principal de la parte <u>media</u> (sólo si es distinto de la parte basal y distal)**		
	whitish	blanchâtre	weißlich	blanquecino		1
	green	vert	grün	verde		2
	yellow	jaune	gelb	amarillo		3
	orange	orange	orange	naranja		4
	pink	rose	rosa	rosa		5
	red	rouge	rot	rojo		6
	red purple	rouge-pourpre	rotpurpurn	púrpura rojizo		7
	purple	pourpre	purpurn	púrpura		8
	brown	brun	braun	marrón		9

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
41.	**(*)** **PQ** **VG**		**(+)** **(b), (c)**				
		Spadix: main color of <u>distal</u> part	**Spadice: couleur principale de la partie <u>distale</u>**	**Kolben: Hauptfarbe des <u>distalen</u> Teils**	**Espádice: color principal de la parte <u>distal</u>**		
		whitish	blanchâtre	weißlich	blanquecino		1
		green	vert	grün	verde		2
		yellow	jaune	gelb	amarillo		3
		orange	orange	orange	naranja		4
		pink	rose	rosa	rosa		5
		red	rouge	rot	rojo		6
		red purple	rouge-pourpre	rotpurpurn	púrpura rojizo		7
		purple	pourpre	purpurn	púrpura		8
		brown	brun	braun	marrón		9
42.	**PQ** **VG**		**(+)** **(c)**				
		Spadix: main color of <u>basal</u> part after dehiscence of anthers	**Spadice: couleur principale de la partie <u>basale</u> après déhiscence des anthères**	**Kolben: Hauptfarbe des <u>basalen</u> Teils nach dem Pollenstäuben**	**Espádice: color principal de la parte <u>basal</u> tras la dehiscencia de las anteras**		
		whitish	blanchâtre	weißlich	blanquecino		1
		green	vert	grün	verde		2
		yellow	jaune	gelb	amarillo		3
		orange	orange	orange	naranja		4
		pink	rose	rosa	rosa		5
		red	rouge	rot	rojo		6
		red purple	rouge-pourpre	rotpurpurn	púrpura rojizo		7
		purple	pourpre	purpurn	púrpura		8
		brown	brun	braun	marrón		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
43.	**PQ VG**	**(+) (c)**				
	Spadix: main color of distal part after dehiscence of anthers	**Spadice: couleur principale de la partie distale après déhiscence des anthères**	**Kolben: Hauptfarbe des distalen Teils nach dem Pollenstäuben**	**Spádice: color principal de la parte distal tras la dehiscencia de las anteras**		
	whitish	blanchâtre	weißlich	blanquecino		1
	green	vert	grün	verde		2
	yellow	jaune	gelb	amarillo		3
	orange	orange	orange	naranja		4
	pink	rose	rosa	rosa		5
	red	rouge	rot	rojo		6
	red purple	rouge-pourpre	rotpurpurn	púrpura rojizo		7
	purple	pourpre	purpurn	púrpura		8
	brown	brun	braun	marrón		9

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

Unless otherwise indicated, observations should be made on fully grown plants with fully developed flowers.

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

(a) Observations should be made on largest fully developed leaf.

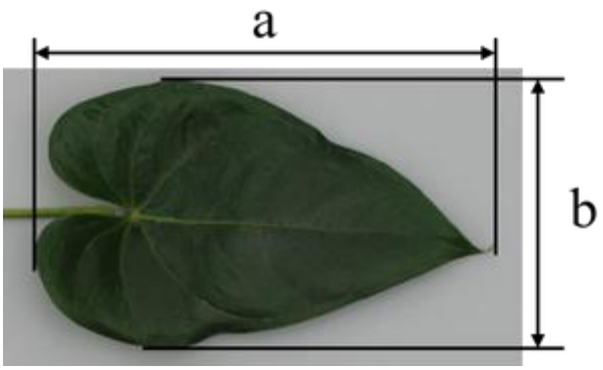
(b) Observations should be made when the basal 1/3 to 2/3 of the flowers spadix are developed and feel rough.

(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 largest area, the darker color is considered to be the secondary color.

8.2 Explanations for individual characteristics

Ad. 1: Plant: height

Ad. 2: Leaf blade: length



a = Leaf blade: length
b = Leaf blade: width

Ad. 3: Leaf blade: width

See Ad. 2

Ad. 4: Leaf blade: ratio length/width

3
low

5
medium

7
high

Ad. 5: Leaf blade: size of lobes

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

1
absent or very small

3
small

5
medium

7
large

Ad. 6: Leaf blade: relative position of lobes at base

1
incurved but not touching

2
free

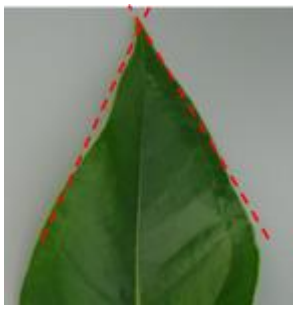
3
touching

4
overlapping

5
adpressed

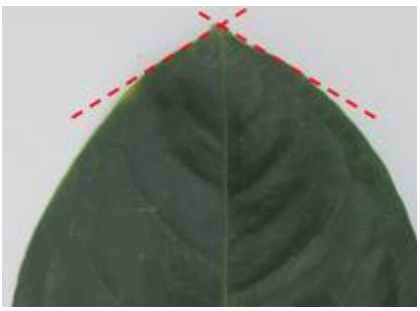
Ad. 7: Leaf blade: angle of apex

The general shape of the apex should be observed.
If present, the tip should be excluded from observation.



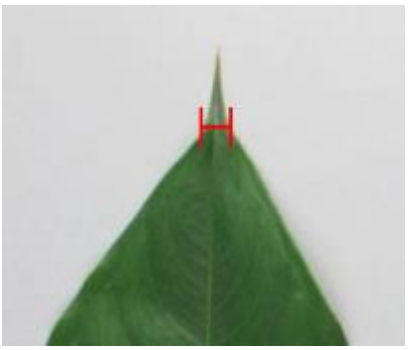
1
acute

2
approximately right angle



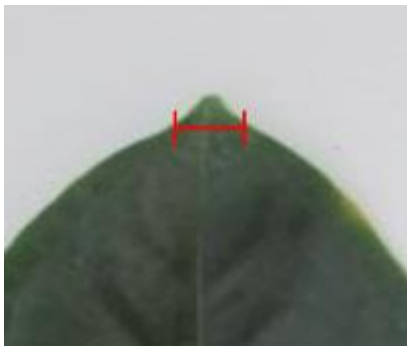
3
obtuse

Ad. 8: Leaf blade: differentiated tip



2
narrow acuminate

3
medium acuminate



4
broad acuminate

Ad. 13: Peduncle: thickness

Observation should be made at the middle of the peduncle.

Ad. 15: Inflorescence: position in relation to foliage

2
same level

3
slightly above

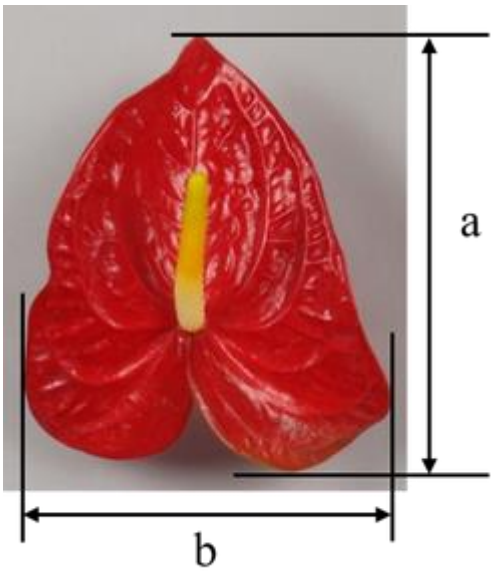
4
strongly above

Ad. 16: Inflorescence: number of spathes

1
one

2
two

Ad. 17: Spathe: length



a = Spathe: length
b = Spathe: width

Ad. 18: Spathe: width

See Ad. 17

Ad. 19: Spathe: ratio length/width

3
low

5
medium

7
high

Ad. 20: Spathe: position of broadest part

1
at base

2
between base and middle

3
at middle

Ad. 21: Spathe: size of lobes

Observations should be made on size of lobes relative to the full size of the spathe.

1
absent or very small

3
small

5
medium

7
large

Ad. 22: Spathe: relative position of lobes at base

See Ad. 6

Ad. 23: Spathe: shape of apex

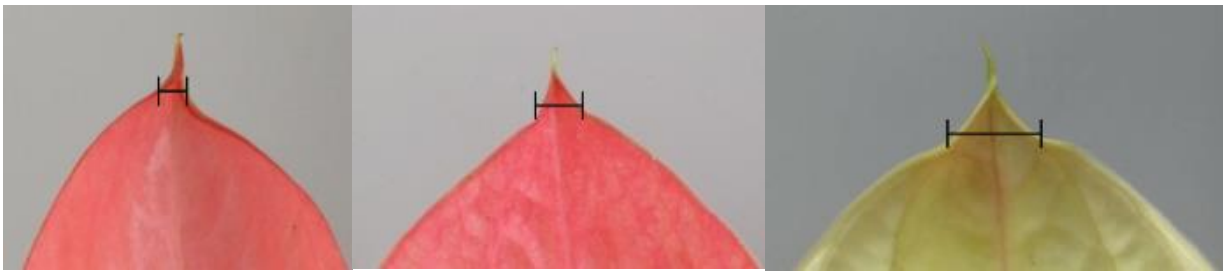
If present, the tip should be excluded from observation.

1
acute

2
obtuse

3
rounded

Ad. 24: Spathe: differentiated tip

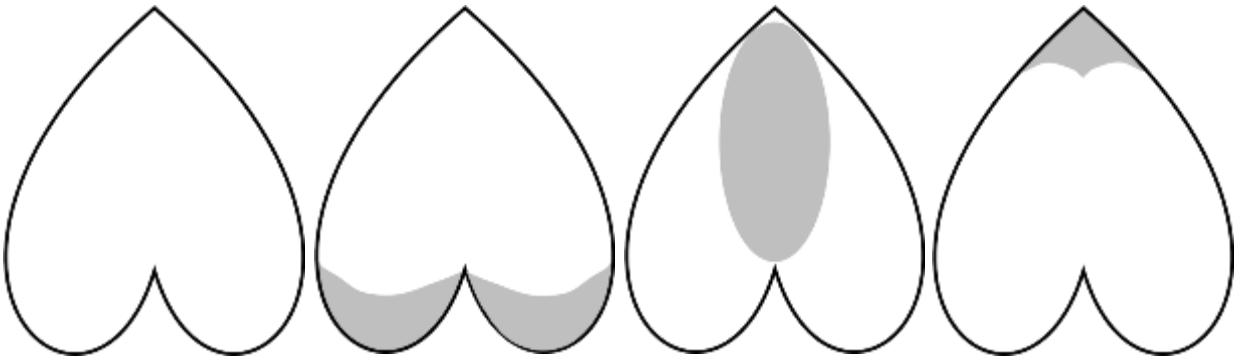


2
narrow acuminate

3
medium acuminate

4
broad acuminate

Ad. 27: Spathe: distribution of secondary color of upper side

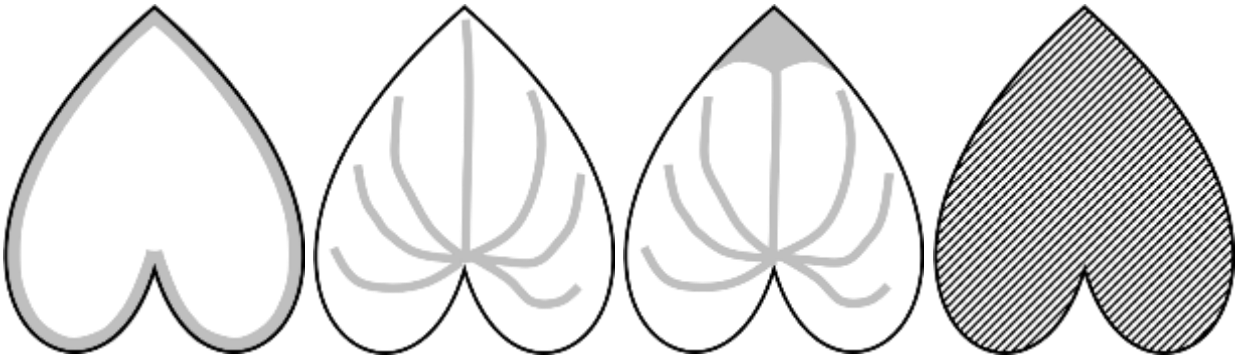


1
none

2
at basal zone

3
at central zone

4
at apex



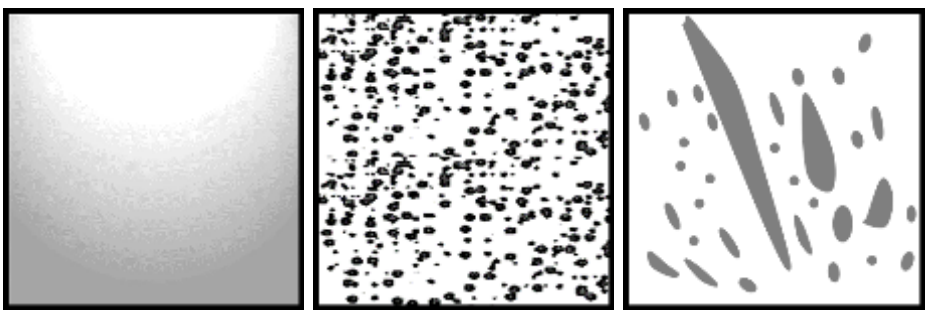
5
at marginal zone

6
along veins

7
at apex and along veins

8
throughout

Ad. 28: Spathe: pattern of secondary color of upper side



2
flushed

3
spotted

4
irregular

Ad. 32: Spathe: shape in cross section of middle zone

1
concave

2
flat

3
convex

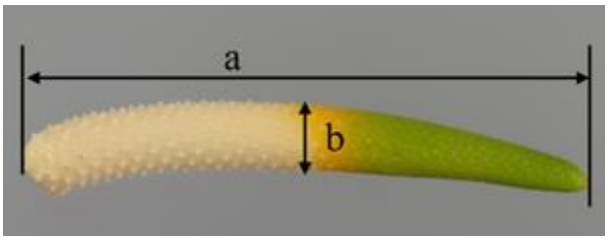
Ad. 33: Spathe: angle of distal part to peduncle

1
acute

2
right angle

3
obtuse

Ad. 34: Spadix: length



a = length
b = thickness

Ad. 35: Spadix: thickness

See Ad. 34

Observation should be made at the middle of the spadix.

Ad. 36: Spadix: rolling

1
absent

9
present

Ad. 37: Excluding varieties with Spadix: rolling: present: Spadix: curvature of longitudinal axis

1
strongly incurved

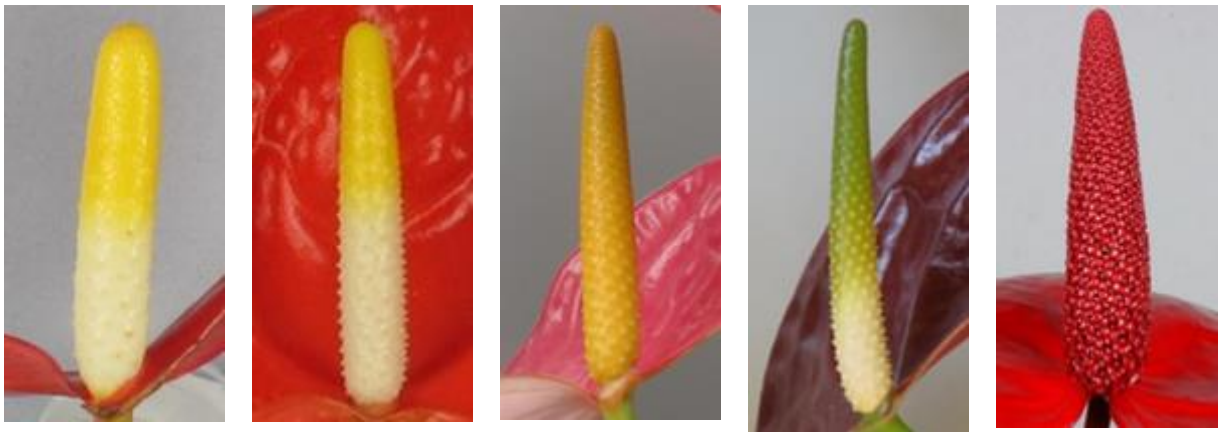
2
weakly incurved

3
straight

4
weakly recurved

5
strongly recurved

Ad. 38: Spadix: tapering towards the tip



1
absent or very weak

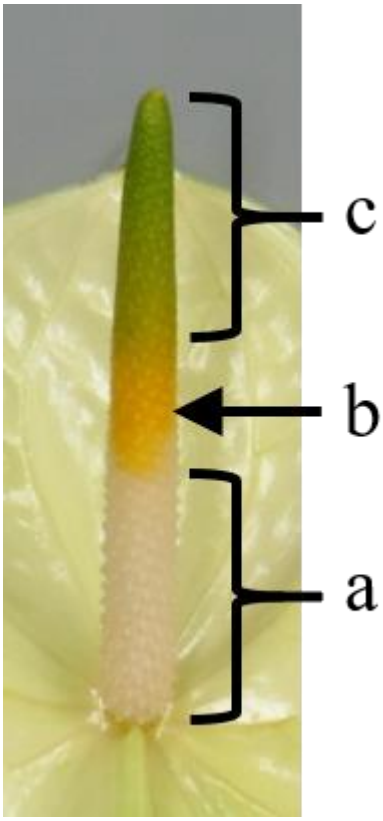
2
weak

3
medium

4
strong

5
very strong

Ad. 39: Spadix: main color of basal part



a = main color of basal part (Char. 39)

b = main color of middle part (only if different from basal part and distal part) (Char. 40)

c = main color of distal part (Char. 41)

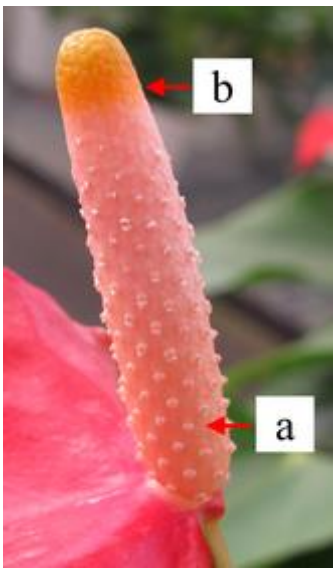
Ad. 40: Spadix: main color of middle part (only if different from basal and distal part)

See Ad. 39

Ad. 41: Spadix: main color of distal part

See Ad. 39

Ad. 42: Spadix: main color of basal part after dehiscence of anthers



Observations should be made when basal 1/3 to 2/3 of anthers on spadix are dehisced.
Some modern varieties don't show these signs at all. In those cases, observation should be made when the flowers at the top of spadix are developed and feel rough.

a = Spadix: main color of basal part after dehiscence of anthers (Char. 42)

b = Spadix: main color of distal part after dehiscence of anthers (Char. 43)

Ad. 43: Spadix: main color of distal part after dehiscence of anthers

See Ad. 42

9. Literature

Tsukamoto, Y., 1994: The Grand Dictionary of Horticulture (Volume 1), Shogakukan Inc., Chiyoda-ku, Tokyo, JP, pp. 187-192

Brickel, C., 2003: A to Z Encyclopedia of Garden Plants, Seibundo Shinkosha Publishing Co. Ltd., Bunkyo-ku, Tokyo, JP, pp. 123, translated by Yokoi M et al.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Application date: (not to be filled in by the applicant)

TECHNICAL QUESTIONNAIRE
to be completed in connection with an application for plant breeders' rights

1. Subject of the Technical Questionnaire

1.1	Botanical name	*Anthurium* Schott
1.2	Common name	Anthurium
1.3	Species (please indicate):	

2. Applicant

Name	
Address	
Telephone No.	
Fax No.	
E-mail address	
Breeder (if different from applicant)	

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	
Breeder's reference	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

#4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

(a) controlled cross [ ]

(please state parent variety)

(……..……..…) x (……..……..…)

female parent male parent

(b) partially known cross [ ]

(please state known parent 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 when discovered and how developed)

4.1.4 Other [ ]
(Please provide details)

Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) *In vitro* propagation [ ]
(b) Other (state method) [ ]

4.2.2 Other [ ]
(Please provide details)

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

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

	Characteristics	Example Varieties	Note
5.1 (1)	**Plant: height**		
	very short		1 [ ]
	very short to short		2 [ ]
	short	ANTHDOSDOH	3 [ ]
	short to medium		4 [ ]
	medium	ANTHCAPBUK	5 [ ]
	medium to tall		6 [ ]
	tall	ANTHARYSIA	7 [ ]
	tall to very tall		8 [ ]
	very tall		9 [ ]
5.2 (2)	**Leaf blade: length**		
	very short		1 [ ]
	very short to short		2 [ ]
	short	ANTHEPEDI	3 [ ]
	short to medium		4 [ ]
	medium	ANTHCAPBUK	5 [ ]
	medium to long		6 [ ]
	long	ANTHARYSIA	7 [ ]
	long to very long		8 [ ]
	very long		9 [ ]
5.3 (16)	**Inflorescence: number of spathes**		
	one	ANTHBNZL	1 [ ]
	two	KURIN HEART	2 [ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Characteristics	Example Varieties	Note
5.4 (17)	**Spathe: length**		
	very short		1 [ ]
	very short to short		2 [ ]
	short	ANTHEBENEX	3 [ ]
	short to medium		4 [ ]
	medium	ANTHEPEDI	5 [ ]
	medium to long		6 [ ]
	long	ANTHARYSIA	7 [ ]
	long to very long		8 [ ]
	very long		9 [ ]
5.5 (18)	**Spathe: width**		
	very narrow		1 [ ]
	very narrow to narrow		2 [ ]
	narrow	ANTHDUBAQ	3 [ ]
	narrow to medium		4 [ ]
	medium	ANTHEPEDI	5 [ ]
	medium to broad		6 [ ]
	broad	ANTHAQUIRE	7 [ ]
	broad to very broad		8 [ ]
	very broad		9 [ ]
5.6(i) (25)	**Spathe: main color of <u>upper</u> side**		
	RHS Colour Chart (indicate reference number)		
5.6(ii) (25)	**Spathe: main color of <u>upper</u> side**		
	white		1 [ ]
	green		2 [ ]
	yellow		3 [ ]
	orange		4 [ ]
	pink		5 [ ]
	red		6 [ ]
	purple		7 [ ]
	brown		8 [ ]
	other (please indicate)		[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Characteristics	Example Varieties	Note
5.7(i) (26)	**Spathe: secondary color of <u>upper</u> side**		
	RHS Colour Chart (indicate reference number)		
5.7(ii) (26)	**Spathe: secondary color of <u>upper</u> side**		
	white		1 [ ]
	green		2 [ ]
	yellow		3 [ ]
	orange		4 [ ]
	pink		5 [ ]
	red		6 [ ]
	purple		7 [ ]
	brown		8 [ ]
	other (please indicate)		[ ]
5.8 (27)	**Spathe: distribution of secondary color of <u>upper</u> side**		
	none		1 [ ]
	at basal zone		2 [ ]
	at central zone		3 [ ]
	at apex		4 [ ]
	at marginal zone		5 [ ]
	along veins		6 [ ]
	at apex and along veins		7 [ ]
	throughout		8 [ ]
5.9 (36)	**Spadix: rolling**		
	absent	ANTHBNZL	1 [ ]
	present	ARINOS	9 [ ]
5.10 (39)	**Spadix: main color of <u>basal</u> part**		
	whitish		1 [ ]
	green		2 [ ]
	yellow		3 [ ]
	orange		4 [ ]
	pink		5 [ ]
	red		6 [ ]
	red purple		7 [ ]
	purple		8 [ ]
	brown		9 [ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Characteristics	Example Varieties	Note
5.11 (41)	**Spadix: main color of <u>distal</u> part**		
	whitish		1 [ ]
	green		2 [ ]
	yellow		3 [ ]
	orange		4 [ ]
	pink		5 [ ]
	red		6 [ ]
	red purple		7 [ ]
	purple		8 [ ]
	brown		9 [ ]

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 variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the **similar** variety(ies)	Describe the expression of the characteristic(s) for **your** candidate variety
Example	*Plant: height*	*high*	*medium*

Comments:

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

#7. Additional information which may help in the examination of the variety

7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?

Yes [ ] No [ ]

(If yes, please provide details)

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

Yes [ ] No [ ]

(If yes, please provide details)

7.3 Other information

A representative color photograph of the variety displaying its main distinguishing feature(s), should accompany the Technical Questionnaire. The photograph will provide a visual illustration of the candidate variety which supplements the information provided in the Technical Questionnaire.

The key points to consider when taking a photograph of the candidate variety are:

- Indication of the date and geographic location
- Correct labeling (breeder's reference)
- Good quality printed photograph (minimum 10 cm x 15 cm) and/or sufficient resolution electronic format version (minimum 960 x 1280 pixels)"

Further guidance on providing photographs with the Technical Questionnaire is available in document TGP/7 "Development of Test Guidelines", Guidance Note 35 (http://www.upov.int/tgp/en/).

[The link provided may be deleted by members of the Union when developing authorities' own test guidelines.]

- Resistance to pests and diseases

- (i) Use of variety
  - cut flower [ ]
  - pot plant [ ]

- (ii) Other conditions

Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

8. Authorization for release

(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

If the answer to (b) is yes, please attach a copy of the authorization.

9. 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. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Applicant’s name

Signature Date

[End of document]