

UPOV

TG/29/7(proj.3)

ORIGINAL: English

DATE: 2005-10-19

## INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

ALSTROEMERIA

UPOV Code: ALSTR

*Alstroemeria* L.

## GUIDELINES

## FOR THE CONDUCT OF TESTS

## FOR DISTINCTNESS, UNIFORMITY AND STABILITY

*prepared by an expert from the Netherlands**to be considered by the Enlarged Editorial Committee at its meeting  
to be held in Geneva, Switzerland, January 10, 2006*

## Alternative Names:\*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Alstroemeria</i> L.	Alstroemeria, Herb Lily	Alstroemère, Lis des Incas	Inkalilie	Alstromeria

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](http://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 *Alstroemeria* L. of family *Liliaceae*.

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 plants or seed.

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

- for vegetatively propagated varieties: 8 plants
- for seed-propagated varieties: 250 seeds

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

2.5 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease.

2.6 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*

The minimum duration of tests should normally be a single growing cycle.

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. In particular, unless otherwise indicated, all observations should be made on fully grown, typical organs at the time of full flowering

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.

#### 3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least eight plants (vegetatively propagated varieties) or 50 plants (seed-propagated varieties).

3.4.2 The design of the tests should be such that plants or parts of plants may be removed for measurement or counting without prejudice to the observations which must be made up to the end of the growing cycle.

#### 3.5 *Number of Plants / Parts of Plants to be Examined*

3.5.1 Vegetatively propagated varieties: unless otherwise indicated, all observations on single plants should be made on eight plants or parts taken from each of eight plants and any other observations made on all plants in the test.

3.5.2 Seed-propagated varieties: unless otherwise indicated, all observations on single plants should be made on 50 plants or parts taken from each of 50 plants and any other observations made on all plants in the test.

#### 3.6 *Additional Tests*

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

### 4. 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.

#### 4.2 *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 Vegetatively propagated varieties: 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 eight plants, one off-type is allowed.

4.2.3 Seed-propagated varieties: the assessment of uniformity should be according to the recommendations for cross-pollinated varieties in the General Introduction.

#### 4.3 *Stability*

4.3.1 In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated that, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.

4.3.2 Where appropriate, or in cases of doubt, stability may be tested, either by growing a further generation, or by testing a new seed or plant stock to ensure that it exhibits the same characteristics as those shown by the previous 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) Flower: main color (characteristic 8)

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

## 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*

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

### 6.3 *Types of Expression*

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

### 6.4 *Example Varieties*

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

6.5 *Legend*

(\*) Asterisk characteristic – see Chapter 6.1.2

QL Qualitative characteristic – see Chapter 6.3

QN Quantitative characteristic – see Chapter 6.3

PQ Pseudo-qualitative characteristic – see Chapter 6.3

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

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

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

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>1. (* (*)</b>	<b>Plant: height</b>	<b>Plante: hauteur</b>	<b>Pflanze: Höhe</b>	<b>Planta: altura</b>		
<b>QN</b>	short	basse	niedrig	baja	Zanspot, Koglow	3
	medium	moyenne	mittel	media	Prealpech, Koanti	5
	tall	haute	hoch	alta	Teswhite, Kofuji	7
<b>2.</b>	<b>Stem: thickness</b>	<b>Tige: grosseur</b>	<b>Stengel: Dicke</b>	<b>Tallo: grosor</b>		
<b>QN</b>	thin	mince	dünn	delgado	Zaprijul, Koanti	3
	medium	moyenne	mittel	medio	Tesdoro, Tesfortun	5
	thick	épaisse	dick	grueso	Kofuji, Tescow	7
<b>3.</b>	<b>Leaf: length</b>	<b>Feuille: longueur</b>	<b>Blatt: Länge</b>	<b>Hoja: longitud</b>		
<b>QN</b>	short	courte	kurz	corta	Zaprijul, Zanrina	3
	medium	moyenne	mittel	media	Stasach, Kofuji, Tessalm	5
	long	longue	lang	larga	Teswhite, Tesdoro	7
<b>4.</b>	<b>Leaf: width</b>	<b>Feuille: largeur</b>	<b>Blatt: Breite</b>	<b>Hoja: anchura</b>		
<b>QN</b>	narrow	étroite	schmal	estrecha	Teswhite, Koglow	3
	medium	moyenne	mittel	media	Statiren, Zalsaccept, Koudrey	5
	broad	large	breit	ancha	Kofuji, Tesdoro	7
<b>5. (* (*) (+)</b>	<b>Umbel: number of branches</b>	<b>Ombelle: nombre de ramifications</b>	<b>Dolde: Anzahl Strahlen</b>	<b>Umbela: número de ramas</b>		
<b>QN</b>	few	faible	gering	bajo	Staprisis, Koglow, Zapribel	3
	medium	moyen	mittel	medio	Statiren, Teswhite, Zalsaccept	5
	many	élevé	groß	alto	Tescow, Tessalm	7



	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>6. (* (+)</b>	<b>Umbel: length of branches</b>	<b>Ombelle: longueur des ramifications</b>	<b>Dolde: Länge der Strahlen</b>	<b>Umbela: longitud de las ramas</b>		
<b>QN</b>	short	courtes	kurz	cortas	Staprisis, Koglow, Little Moon	3
	medium	moyennes	mittel	medianas	Stamond, Zalsaccept, Kofuji	5
	long	longues	lang	largas	Stasach, Tescow, Tesamad	7
<b>7. (* (+)</b>	<b>Flower: length of pedicel</b>	<b>Fleur: longueur du pédicelle</b>	<b>Blüte: Länge des Stiels</b>	<b>Flor: longitud del pedicelo</b>		
<b>QN (a)</b>	short	court	kurz	corto	Staprilan, Zalsamot, Prealpech	3
	medium	moyen	mittel	medio	Stasach, Zalsaccept, Tesdoro	5
	long	long	lang	largo	Teswhite, Zaprijul	7
<b>8. (* (+)</b>	<b>Flower: main color</b>	<b>Fleur: couleur principale</b>	<b>Blüte: Hauptfarbe</b>	<b>Flor: color principal</b>		
<b>PQ (a)</b>	white	blanc	weiß	blanco	Stamond, Teswhite	1
	light yellow	jaune clair	hellgelb	amarillo claro	Koanti	2
	medium yellow	jaune moyen	mittelgelb	amarillo medio	Staprilan, Tespluto	3
	greenish	verdâtre	grünlich	verdoso	Kofuji	4
	orange	orange	orange	naranja	Little Moon	5
	orange red	rouge orange	orangerot	rojo anaranjado	Zapribel	6
	red	rouge	rot	rojo	Stasach, Staflam	7
	light pink	rose clair	hellrosa	rosa claro	Prealpech	8
	medium pink	rose moyen	mittelrosa	rosa medio	Staprisis, Tescow	9
	purple pink	rose pourpre	purpurrosa	rosa purpureo		10
	red purple	violet rouge	rotpurpurn	púrpura rojizo	Tesamad	11
	light purple	violet clair	hellpurpurn	púrpura claro	Zapriko	12
	medium purple	violet moyen	mittelpurpurn	púrpura medio	Zalsamot	13
	dark purple	violet foncé	dunkelpurpurn	púrpura oscuro	Tesamad	14

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>9. (*)</b>	<b>Flower: size</b>	<b>Fleur: taille</b>	<b>Blüte: Größe</b>	<b>Flor: tamaño</b>		
<b>QN</b>	<b>(a)</b> small	petite	klein	pequeña	Elegance, Tespluto	3
	medium	moyenne	mittel	mediana	Stasach, Zalsamot, Koglow	5
	large	grande	groß	grande	Statiren, Tesdoro, Tescow	7
<b>10. (*)</b>	<b>Outer tepal: shape of blade</b>	<b>Tépale externe: forme du limbe</b>	<b>Äußeres Tepalum: Form der Spreite</b>	<b>Tépalo externo: forma del limbo</b>		
<b>PQ</b>	<b>(a)</b> medium elliptic	elliptique moyen	mittel elliptisch	elíptica media	Zalsanion, Zanmirac	1
	broad elliptic	elliptique large	breit elliptisch	elíptica ancha	Teswhite, Zanbritta	2
	circular	circulaire	rund	circular	Stamond, Gamanda	3
	medium obovate	obovale moyen	mittel verkehrt eiförmig	oboval media	Tesdoro, Prealpech	4
	broad obovate	obovale large	breit verkehrt eiförmig	oboval ancha	Statiren, Zalscept, Koglow	5
<b>11. (*)</b>	<b>Outer tepal: depth of emargination</b>	<b>Tépale externe: profondeur de l'échancrure</b>	<b>Äußeres Tepalum: Tiefe der Kerbung</b>	<b>Tépalo externo: profundidad del margen</b>		
<b>QN</b>	<b>(a)</b> shallow	peu profonde	flach	poco profundo	Stasach, Teswhite, Koglow	3
	medium	moyenne	mittel	medio	Tesamad, Zalsamay	5
	deep	profonde	tief	profundo	Zaprijul, Tessalm	7
<b>12. (*) (+)</b>	<b>Outer tepal: main color of <u>central</u> zone</b>	<b>Tépale externe: couleur principale de la zone <u>centrale</u></b>	<b>Äußeres Tepalum: Farbe der <u>Mittelzone</u></b>	<b>Tépalo externo: color principal de la zona <u>central</u></b>		
<b>PQ</b>	<b>(a)</b> RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indicar número de referencia)		
<b>13. (*) (+)</b>	<b>Outer tepal: main color of <u>top</u> zone (green tip excluded)</b>	<b>Tépale externe: couleur principale de la zone <u>supérieure</u> (sommets vert exclu)</b>	<b>Äußeres Tepalum: Hauptfarbe der <u>oberen Zone</u> (ohne grüne Spitze)</b>	<b>Tépalo externo: color principal de la zona <u>superior</u> (excluyendo la extremidad verde)</b>		
<b>PQ</b>	<b>(a)</b> RHS Colour Chart (indicate reference number)	Code 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
<b>14.</b> (*) (+)	<b>Outer tepal: main color of <u>lateral</u> zone</b>	<b>Tépale externe: couleur principale de la zone <u>latérale</u></b>	<b>Äußeres Tepalum: Hauptfarbe der <u>lateralen</u> Zone</b>	<b>Tépalo externo: color principal de la zona <u>lateral</u></b>		
<b>PQ</b>	<b>(a)</b> RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indicar número de referencia)		
<b>15.</b> (*) (+)	<b>Outer tepal: main color of <u>basal</u> zone</b>	<b>Tépale externe: couleur principale de la zone <u>basale</u></b>	<b>Äußeres Tepalum: Hauptfarbe der <u>basalen</u> Zone</b>	<b>Tépalo externo: color principal de la zona <u>inferior</u></b>		
<b>PQ</b>	<b>(a)</b> RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indicar número de referencia)		
<b>16.</b> (*)	<b>Outer tepal: very small or small stripes on marginal part of lateral zone of upper side of blade</b>	<b>Tépale externe: très petites ou petites stries sur la partie marginale de la zone latérale de la face supérieure du limbe</b>	<b>Äußeres Tepalum: sehr kleine oder kleine Streifen am Rand der lateralen Zone der Oberseite der Spreite</b>	<b>Tépalo externo: estrías muy pequeñas o pequeñas en la parte marginal de la zona <u>lateral</u> del lado superior del limbo</b>		
<b>QL</b>	<b>(a)</b> absent	absentes	fehlend	ausente	Koanti	1
	present	présentes	vorhanden	presente	Statistrip	9
<b>17.</b> (*)	<b>Outer tepal: large or very large stripes on upper side of blade (marginal zone excluded)</b>	<b>Tépale externe: larges ou très larges stries sur la face supérieure du limbe (zone marginale exclue)</b>	<b>Äußeres Tepalum: große oder sehr große Streifen an der Oberseite der Spreite (ohne Randzone)</b>	<b>Tépalo externo: estrías anchas o muy anchas en el lado superior del limbo (excluida la zona marginal)</b>		
<b>QL</b>	<b>(a)</b> absent	absentes	fehlend	ausente	Zalsamot	1
	present	présentes	vorhanden	presente	Prealpech	9
<b>18.</b> (*)	<b>Outer tepal: number of large or very large stripes on upper side of blade (marginal zone excluded)</b>	<b>Tépale externe: nombre de stries larges ou très larges sur la face supérieure du limbe (zone marginale exclue)</b>	<b>Äußeres Tepalum: Anzahl großer oder sehr großer Streifen an der Oberseite der Spreite (ohne Randzone)</b>	<b>Tépalo externo: número de estrías anchas o muy anchas en el lado superior del limbo (excluida la zona marginal)</b>		
<b>QN</b>	<b>(a)</b> few	petit	gering	bajo	Sratistrip	3
	medium	moyen	mittel	medio	Prealbour	5
	many	grand	groß	alto	Prealpech	7

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>19. (* (*)</b>	<b>Inner tepal: shape of blade</b>	<b>Tépale interne: forme du limbe</b>	<b>Inneres Tepalum: Form der Spreite</b>	<b>Tépalo interno: forma del limbo</b>		
<b>QL</b>	<b>(a)</b> elliptic	elliptique	elliptisch	elíptica	Statiren, Teswhite, Tessalm	1
	obovate	obovale	verkehrt eiförmig	oboval	Zalsaccept, Kofuji	2
<b>20. (* (*) (+)</b>	<b>Inner lateral tepal: size of striped zone on upper side (claw and top part of blade excluded)</b>	<b>Tépale interne latéral: taille de la zone striée sur la face supérieure (onglet et partie supérieure du limbe exclus)</b>	<b>Inneres laterales Tepalum: Größe der gestreiften Zone an der Oberseite (ohne Nagel und oberen Teil der Spreite)</b>	<b>Tépalo lateral interno: tamaño de la zona con estrías del lado superior (excluidas la uña y la parte superior del limbo)</b>		
<b>QN</b>	<b>(a)</b> small	petite	klein	pequeña	Fuego	3
	medium	moyenne	mittel	mediana	Teswhite	5
	large	grande	groß	ancha	Prealbour	7
<b>21. (* (*)</b>	<b>Inner lateral tepal: main color of striped zone on upper side (as for 20)</b>	<b>Tépale interne latéral: couleur principale de la zone striée sur la face supérieure (comme pour 20)</b>	<b>Inneres laterales Tepalum: Hauptfarbe der gestreiften Zone an der Oberseite (wie für 20)</b>	<b>Tépalo lateral interno: color principal de la zona con estrías del lado superior (como para 20)</b>		
<b>PQ</b>	<b>(a)</b> RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indicar número de referencia)		
<b>22. (* (*)</b>	<b>Inner lateral tepal: number of stripes on upper side (as for 20)</b>	<b>Tépale interne latéral: nombre de stries sur la face supérieure (comme pour 20)</b>	<b>Inneres laterales Tepalum: Anzahl Streifen an der Oberseite</b>	<b>Tépalo lateral interno: número de estrías en el lado superior (como para 20)</b>		
<b>QN</b>	<b>(a)</b> absent or few	nul ou petit	fehlend oder sehr gering	ausente o bajo	Staqueen, Koanti	1
	medium	moyen	mittel	medio	Stamond, Tesdoro, Tessalm	2
	many	grand	groß	alto	Prealpech, Preallad	3

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>23.</b> (*)	<b>Inner lateral tepal: length of longest stripes on upper side (as for 20)</b>	<b>Tépale interne latéral: longueur des stries les plus longues sur la face supérieure (comme pour 20)</b>	<b>Inneres laterales Tepalum: Länge der längsten Streifen an der Oberseite</b>	<b>Tépalo lateral interior: longitud de las estrías más largas del lado superior (como para 20)</b>		
<b>QN</b>	<b>(a)</b> short	petite	kurz	cortas	Koanti	3
	medium	moyenne	mittel	medias	Koice	5
	long	grande	lang	largas	Prealbour	7
<b>24.</b> (*)	<b>Inner lateral tepal: width of widest stripes on upper side (as for 20)</b>	<b>Tépale interne latéral : largeur des stries les plus larges sur la face supérieure (comme pour 20)</b>	<b>Inneres laterales Tepalum: Breite der breitesten Streifen an der Oberseite (wie für 20)</b>	<b>Tépalo lateral interior: anchura de las estrías más anchas del lado superior (como para 20)</b>		
<b>QN</b>	<b>(a)</b> narrow	étroites	schmal	estrechas	Teswhite	3
	medium	moyennes	mittel	medias	Stapricamil	5
	broad	larges	breit	anchas	Zanfier	7
<b>25.</b> (*)	<b>Inner median tepal: difference in striped pattern to inner lateral tepal</b>	<b>Tépale interne médián: différence de configuration des stries vers le tépale interne latéral</b>	<b>Inneres mittleres Tepalum: Unterschied beim gestreiften Muster zum inneren lateralen Tepalum</b>	<b>Tépalo mediano interior: diferencia en las estrías con respecto al tépalo lateral interior</b>		
<b>QL</b>	<b>(a)</b> absent	absente	fehlend	ausente	Tesdoro	1
	present	présente	vorhanden	presente	Stapricamil	9

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>26. (*)</b>	<b>(a) Filament: main colour</b>	<b>Filament: couleur principale</b>	<b>Staubfaden: Hauptfarbe</b>	<b>Filamento: color principal</b>		
<b>PQ</b>	white	blanc	weiß	blanco	Teswhite, Zalsarest	1
	yellow	jaune	gelb	amarillo	Tesfortun, Zanbritta	2
	orange	orange	orange	naranja	Zanrina, Tespluto	3
	orange red	rouge orange	orangerot	rojo anaranjado	Tessalm, Staqueen	4
	red	rouge	rot	rojo	Tescow, Macondo	5
	pink	rose	rosa	rosa	Stamond, Kofuji, Tampa	6
	red purple	violet rouge	rotpurpurn	púrpura rojizo	Preallad, Tesbay	7
	light purple	violet clair	hellpurpurn	púrpura claro	Koglow, Zaprijul	8
	medium purple	violet moyen	mittelpurpurn	púrpura medio	Zalsamot, Tesazur	9
<b>27. (*)</b>	<b>(a) Filament: small spots</b>	<b>Filament: petites taches</b>	<b>Staubfaden: kleine Flecken</b>	<b>Filamento: manchas pequeñas</b>		
<b>QL</b>	absent	absentes	fehlend	ausentes	Tesdoro, Kofuji	1
	present	présentes	vorhanden	presentes	Gamanda, Staneltor	9
<b>28. (*)</b>	<b>Anther: color at the start of dehiscence</b>	<b>Anthère: couleur au début de la déhiscence</b>	<b>Anthere: Farbe bei Beginn des Pollenstäubens</b>	<b>Anteras: color al comienzo de la dehiscencia</b>		
<b>PQ (a)</b>	yellowish	jaunâtre	gelblich	amarillento	Green Bell, Zanpri	1
	greenish	verdâtre	grünlich	verdoso	Staprinag, Koglow, Tespro	2
	orange	orange	orange	naranja	Zaprijul, Tessalm	3
	purplish	violacée	purpurn	purpúreo	Zanrina, Stapripame	4
	brownish	brunâtre	bräunlich	pardusco	Kofuji, Tesdoro	5
	medium grey	gris moyen	mittelgrau	gris medio	Zapribel, Tesazur	6
	dark grey	gris foncé	dunkelgrau	gris oscuro		7
	blue	bleue	blau	azul	Carmelita	8

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>29.</b> (*) (+)	<b>Ovary: anthocyanin coloration</b>	<b>Ovaire: pigmentation anthocyanique</b>	<b>Fruchtknoten: Anthocyanfärbung</b>	<b>Ovario: coloración antociánica</b>		
<b>QL</b>	absent	absente	fehlend	ausente	Tesdoro	1
	present	présente	vorhanden	presente	Pealpech	9
<b>30.</b> (*) (+)	<b>Ovary: intensity of anthocyanin coloration</b>	<b>Ovaire: intensité de la pigmentation anthocyanique</b>	<b>Fruchtknoten: Intensität der Anthocyanfärbung</b>	<b>Ovario: intensidad de la coloración antociánica</b>		
<b>QN</b>	weak	faible	gering	débil	Staprilan, Ivory, Stadicrem	3
	moderate	modérée	mittel	moderada	Tescow, Zaprijul,	5
	strong	forte	stark	fuerte	Tesazur, Prealpech	7

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

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

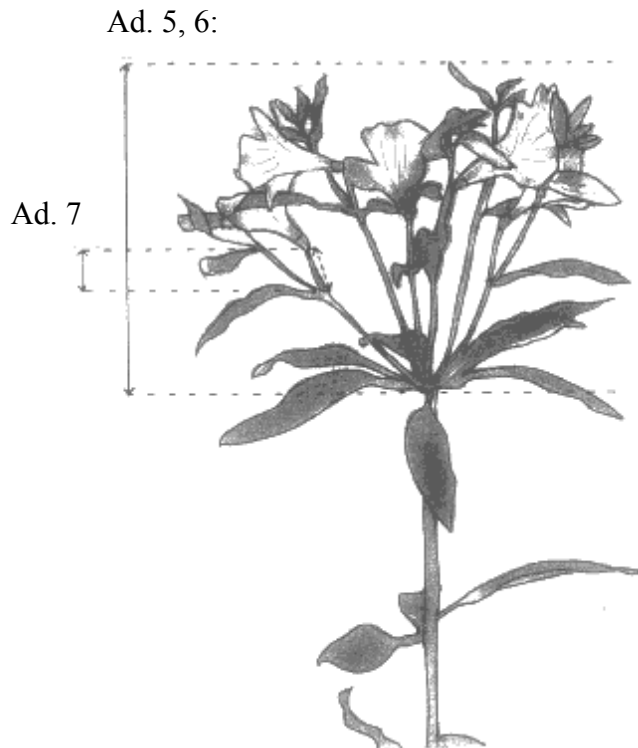
- (a) All observations on the flower should be made at the time of dehiscence of some of the anthers in an individual flower.

8.2 *Explanations for individual characteristics*

Ad. 5: Umbel: number of branches

Ad. 6: Umbel: length of branches

Ad. 7: Flower: length of pedicel



To be observed at the opening of the first flower on the umbel branch.

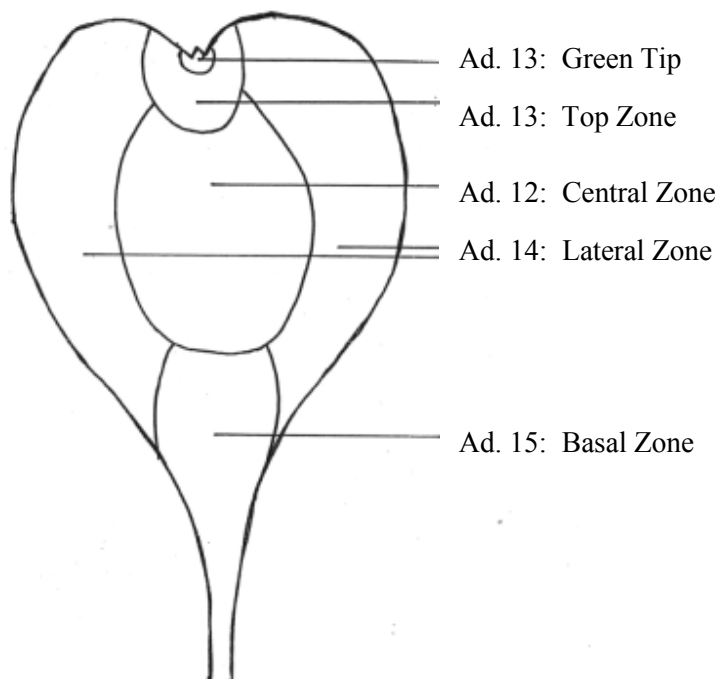


Ad. 12: Outer tepal: main color of **central zone**

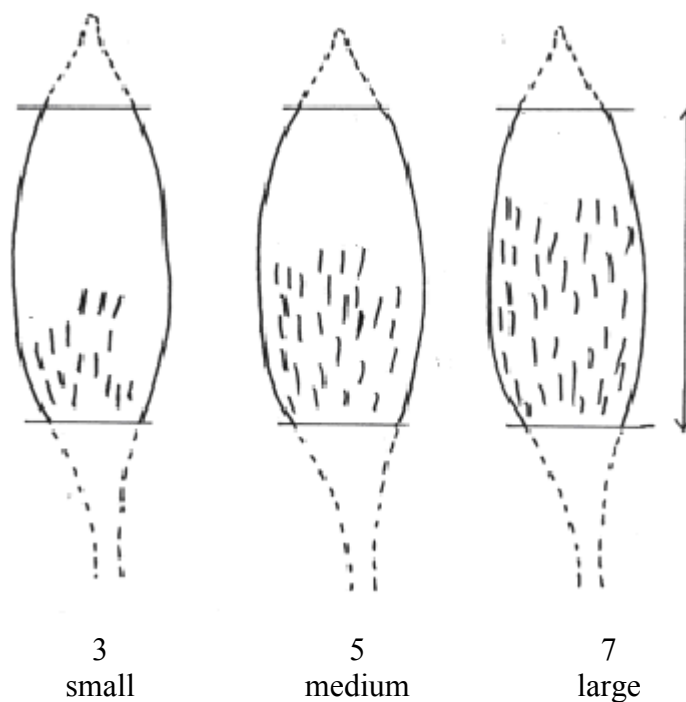
Ad. 13: Outer tepal: main color of **top zone** (green tip excluded)

Ad. 14: Outer tepal: main color of **lateral zone**

Ad. 15: Outer tepal: main color of **basal zone**



Ad. 20: Inner lateral tepal: size of striped zone on upper side (claw and top part of blade excluded)



Ad. 29 and 30: Ovary: intensity of anthocyanin coloration: Anthocyanin should be observed over the whole surface, including ribs.

9. Literature

The Royal General Bulbgrowers' Association, 1991: "International Checklist for Hyacinths and Miscellaneous Bulbs" (International Register and Classified List of Hyacinths and other bulbous, cormous and tuberous plants), Koninklijke Algemeene Vereeniging voor Bloembollencultuur, Hillegom, NL

Grunert, Christian, 1980: "Das Blumenzwiebelbuch", Verlag Eugen Ulmer, Stuttgart, DE

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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	Application date: (not to be filled in by the applicant)
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TECHNICAL QUESTIONNAIRE  
to be completed in connection with an application for plant breeders' rights

1. Subject of the Technical Questionnaire

1.1 Botanical name	<input type="text" value="Alstroemeria L."/>
1.2 Common name	<input type="text" value="Alstroemeria"/>

2. Applicant

Name	<input type="text"/>
Address	<input type="text"/>
Telephone No.	<input type="text"/>
Fax No.	<input type="text"/>
E-mail address	<input type="text"/>
Breeder (if different from applicant)	<input type="text"/>

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	<input type="text"/>
Breeder's reference	<input type="text"/>

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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#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 varieties)

(b) partially known cross [ ]  
(please state known parent variety(ies))

(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)

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) cuttings [ ]

(b) *in vitro* propagation [ ]

(c) other (state method) [ ]

4.2.2 Seed [ ]

4.2.3 Other [ ]  
(please provide details)

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# 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:
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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
<b>5.1</b>	<b>Plant: height</b>		
<b>(1)</b>			
	short	Zanspot, Koglow	3[ ]
	medium	Prealpech, Koanti	5[ ]
	tall	Teswhite, Kofuji	7[ ]
<b>5.2</b>	<b>Flower: main color</b>		
<b>(8)</b>			
	white	Stamond, Teswhite	1[ ]
	light yellow	Koanti	2[ ]
	medium yellow	Staprilan, Tespluto	3[ ]
	greenish	Kofuji	4[ ]
	orange	Little Moon	5[ ]
	orange red	Zapribel	6[ ]
	red	Stasach, Staflam	7[ ]
	light pink	Prealpech	8[ ]
	medium pink	Staprisis, Tescow	9[ ]
	purple pink		10[ ]
	red purple	Tesamad	11[ ]
	light purple	Zapriko	12[ ]
	medium purple	Zalsamot	13[ ]
	dark purple	Tesamad	14[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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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 <b>similar</b> variety(ies)	Describe the expression of the characteristic(s) for <b>your</b> candidate variety
<i>Example</i>	<i>Flower: main color</i>	<i>light pink</i>	<i>medium pink</i>

Comments:

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

7.3.1 Main use

- |                  |     |
|------------------|-----|
| (a) garden plant | [ ] |
| (b) pot plant    | [ ] |
| (c) cut-flower   | [ ] |
| (d) other        | [ ] |
- (please provide details)

A representative color photograph of the variety should accompany the Technical Questionnaire.

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.

# 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:
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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]