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# INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

## OXYPETALUM

UPOV Code(s): OXYPE\_CAE

*Oxypetalum coeruleum* (D. Don) Decne.

\*

## GUIDELINES FOR THE CONDUCT OF TESTS FOR DISTINCTNESS, UNIFORMITY AND STABILITY

Alternative names:<sup>\*</sup>

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Oxypetalum coeruleum</i> (D. Don) Decne., <i>Gothofreda coerulea</i> (D. Don) Kuntze, <i>Tweedia coerulea</i> D. Don	Oxypetalum	Oxypetalum	Oxypetalum	Oxipetalum

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 *Oxypetalum coeruleum* (D. Don) Decne.

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 seeds or rooted cuttings.

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

seed-propagated varieties: sufficient seeds to produce 30 plants  
vegetatively propagated varieties: 15 rooted cuttings

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.

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 In the case of seed-propagated varieties, each test should be designed to result in a total of at least 30 plants.

3.4.2 In the case of vegetatively propagated varieties, each test should be designed to result in a total of at least 15 plants.

### 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

In the case of seed-propagated varieties, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 20 plants or parts taken from each of 20 plants and any other observation made on all plants in the test, disregarding any off-type plants.

In the case of vegetatively propagated varieties, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 10 plants or parts taken from each of 10 plants and any other observation 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 self-pollinated seed-propagated and 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 seed-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 30 plants, 1 off-type is allowed.

4.2.4 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 15 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 seed or 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) Flower: type (characteristic 15)
- (b) Corolla lobe: number of colors on upper side (characteristic 22)
- (c) Corolla lobe: main color of upper side (characteristic 23) with the following groups:
  - Gr. 1: white
  - Gr. 2: pink
  - Gr. 3: red
  - Gr. 4: purple
  - Gr. 5: blue
- (d) Corona: conspicuousness (characteristic 27)

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)				– see Chapter 4.1.5			
	MG, MS, VG, VS							
5	(+)		See Explanations on the Table of Characteristics in Chapter 8.2					
6	(a)-(g)		See Explanations on the Table of Characteristics in Chapter 8.1					
7	Not applicable							

- 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)-(g) 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.	PQ	VG	(+)	(a)				
	Plant: growth habit		Plante : port		Pflanze: Wuchsform	Planta: hábito de crecimiento		
	upright		dressé		aufrecht	erguido	Shane Blue, Tanioka 2go	1
	arched		arqué		nach unten gebogen	ardeado	Sasaodemu	2
	spreading		étalé		breitwüchsig	extendido		3
2. (*)	QN	MG/MS/VG	(+)	(a)				
	Plant: height		Plante : hauteur		Pflanze: Höhe	Planta: altura		
	very short		très basse		sehr niedrig	muy baja		1
	very short to short		très basse à basse		sehr niedrig bis niedrig	muy baja a baja		2
	short		basse		niedrig	baja		3
	short to medium		basse à moyenne		niedrig bis mittel	baja a media		4
	medium		moyenne		mittel	media	Shane Blue, Tanioka 2go	5
	medium to tall		moyenne à haute		mittel bis hoch	media a alta	Sasabrand	6
	tall		haute		hoch	alta		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
3.	PQ	VG		(a), (b)				
	Stem: color		Tige : couleur		Stängel: Farbe	Tallo: color		
	light green		vert clair		hellgrün	verde clara	Shane Blue, Tanioka 2go	1
	medium green		vert moyen		mittelgrün	verde medio	Ikeda Pink 1go	2
	green brown		brun vert		grünbraun	marrón verdoso		3
4.	QN	VG		(a), (b)				
	Stem: density of pubescence		Tige : densité de la pilosité		Stängel: Dichte der Behaarung	Tallo: densidad de pubescencia		
	absent or very sparse		absente ou très lâche		fehlend oder sehr locker	ausente o muy escasa		1
	sparse		lâche		locker	escasa	INTA-GEISEI001	2
	medium		moyenne		mittel	media	Shane Blue, Tanioka 2go	3
	dense		dense		dicht	densa	Pegasus White	4
	very dense		très dense		sehr dicht	muy densa		5

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota	
5.	QN	MG/MS/VG	(+)	(a), (c)					
Leaf blade: length	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		3	
	short to medium		courte à moyenne		kurz bis mittel	corta a media	Mayor Pink	4	
	medium		moyenne		mittel	media	Sasaodemu	5	
	medium to long		moyenne à longue		mittel bis lang	media a larga		6	
	long		longue		lang	larga		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	
6.	QN	MG/MS/VG	(+)	(a), (c)					
Leaf blade: width	Leaf blade: width		Limbe : largeur		Blattspreite: Breite	Limbo: anchura			
	very narrow		très étroite		sehr schmal	muy estrecha		1	
	narrow		étroite		schmal	estrecha	Sasapawel	2	
	medium		moyenne		mittel	media	Sasaodemu	3	
	broad		large		breit	ancha		4	
	very broad		très large		sehr breit	muy ancha		5	
7. (*)	PQ	VG	(+)	(a), (c)					
Leaf blade: shape of apex	Leaf blade: shape of apex		Limbe : forme de l'apex		Blattspreite: Form des Apex	Limbo: forma del ápice			
	acuminate		acuminée		zugespitzt	acuminada		1	
	acute		aigue		spitz	aguda		2	
	obtuse		obtuse		stumpf	obtusa		3	
	rounded		arrondie		abgerundet	redondeada		4	
8. (*)	PQ	VG	(+)	(a), (c)					
Leaf blade: shape of base	Leaf blade: shape of base		Limbe : forme de la base		Blattspreite: Form der Basis	Limbo: forma de la base			
	truncate		tronquée		gerade	truncada		1	
	cordate		cordiforme		herzförmig	cordada		2	
	auriculate		auriculée		geöhrt	auriculada		3	

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
9.	QN	VG	(a), (c)				
	Leaf blade: intensity of green color of upper side	Limbe : intensité de la couleur verte sur la face supérieure	Blattspreite: Intensität der Grünfärbung der Oberseite	Limbo: intensidad del color verde en el haz			
	very light	très claire	sehr hell	muy clara		1	
	light	claire	hell	clara	INTA-GEISEI001	2	
	medium	moyenne	mittel	media	Shane Blue	3	
	dark	foncée	dunkel	oscura		4	
	very dark	très foncée	sehr dunkel	muy oscura		5	
10.	QN	VG	(a), (c)				
	Leaf blade: pubescence	Limbe: pilosité	Blattspreite: Behaarung	Limbo: pubescencia			
	absent or very sparse	absente ou très lâche	fehlend oder sehr locker	ausente o muy escasa		1	
	sparse	lâche	locker	escasa	INTA-GEISEI001	2	
	medium	moyenne	mittel	media	Shane Blue, Tanioka 2go	3	
	dense	dense	dicht	densa		4	
	very dense	très dense	sehr dicht	muy densa		5	
11.	QN	MG/MS/VG	(+)	(a), (c)			
	Petiole: length	Pétiole : longueur	Blattstiel: Länge	Peciolo: longitud			
	very short	très courte	sehr kurz	muy corta	Mayor Pink	1	
	short	courte	kurz	corta	Tanioka 2go	2	
	medium	moyenne	mittel	media		3	
	long	longue	lang	larga		4	
	very long	très longue	sehr lang	muy larga		5	
12.	QN	MG/MS/VG	(+)	(d)			
	Inflorescence: length	Inflorescence : longueur	Blütenstand: Länge	Inflorescencia: 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	Sasapawel	3	
	short to medium	courte à moyenne	kurz bis mittel	corta a media		4	
	medium	moyenne	mittel	media	Tanioka 2go	5	
	medium to long	moyenne à longue	mittel bis lang	media a larga		6	
	long	longue	lang	larga		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	Note/ Nota	
13.	QN	MG/MS/VG	(d)						
	Inflorescence: number of flowers		Inflorescence : nombre de fleurs		Blütenstand: Anzahl Blüten	Inflorescencia: número de flores			
	very few		très petit		sehr gering	muy bajo		1	
	few		petit		gering	bajo	INTA-GEISEI001	2	
	medium		moyen		mittel	medio	Shane Blue, Tanioka 2go	3	
	many		élevé		groß	alto		4	
	very many		très élevé		sehr groß	muy alto		5	
14.	QN	MG/MS/VG	(+)	(e)					
	Pedicel: length		Pédicelle : longueur		Blütenstiell: Länge	Pedicelo: longitud			
	very short		très courte		sehr kurz	muy corta		1	
	short		courte		kurz	corta	Hoppy Pegasus	2	
	medium		moyenne		mittel	media	Sasaodemu	3	
	long		longue		lang	larga		4	
	very long		très longue		sehr lang	muy larga		5	
15. (*)	PQ	VG	(+)	(e)					
	Flower: type		Fleur : type		Blüte: Typ	Flor: tipo			
	single		simple		einfach	simple	Shane Blue, Tanioka 2go	1	
	semi-double		semi-double		halbgefüllt	semidoble	Blue Dia	2	
	double		double		gefüllt	doble	Sasadango	3	
16.	QN	VG	(+)	(e), (f)					
	Flower: attitude of corolla lobes		Fleur : port des lobes de la corolle		Blüte: Haltung der Kronlappen	Flor: porte de los lóbulos de la corola			
	upwards		vers le haut		aufwärts gerichtet	ascendente		1	
	upwards to horizontal		vers le haut à horizontal		aufwärts gerichtet bis waagerecht	ascendente a horizontal		2	
	horizontal		horizontal		waagerecht	horizontal	Tanioka 2go	3	
	horizontal to downwards		horizontale à vers le bas		waagerecht bis abwärts gerichtet	horizontal a descendente		4	
	downwards		vers le bas		abwärts gerichtet	descendente	Sasadango	5	

	English		français		deutsch	español	Example Varieties	Note/ Nota	
17. (*)	QN	MG/MS/VG	(+)	(e)					
Flower: diameter	very small		très petit		sehr klein	muy pequeño	1		
	very small to small		très petit à petit		sehr klein bis klein	muy pequeño a pequeño	2		
	small		petit		klein	pequeño	3		
	small to medium		petit à moyen		klein bis mittel	pequeño a medio	4		
	medium		moyen		mittel	medio	Sasabrand, Sasaiku	5	
	medium to large		moyen à grand		mittel bis groß	medio a grande	6		
	large		grand		groß	grande	King Sapphire	7	
	large to very large		grand à très grand		groß bis sehr groß	grande a muy grande		8	
	very large		très grand		sehr groß	muy grande		9	
18.	QN	MG/MS/VG		(e)					
Calyx: length of lobe	very short		très courte		sehr kurz	muy corta	1		
	short		courte		kurz	corta	Sasabrand	2	
	medium		moyenne		mittel	media	Shane Blue, Tanioka 2go	3	
	long		longue		lang	larga		4	
	very long		très longue		sehr lang	muy larga		5	
19.	QN	MG/MS/VG	(+)	(e), (f)					
Corolla lobe: length	very short		très courte		sehr kurz	muy corta	1		
	short		courte		kurz	corta	Shane Blue	2	
	medium		moyenne		mittel	media	Sasaiku	3	
	long		longue		lang	larga	Sasadango	4	
	very long		très longue		sehr lang	muy larga		5	
20.	QN	MG/MS/VG	(+)	(e), (f)					
Corolla lobe: width	very narrow		très étroite		sehr schmal	muy estrecha	1		
	narrow		étroite		schmal	estrecha	2		
	medium		moyenne		mittel	media	INTA-GEISEI001, Sasaiku	3	
	broad		large		breit	ancha	Ikeda Pink 1go	4	
	very broad		très large		sehr breit	muy ancha		5	

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota	
21. (*)	PQ	VG	(+)	(e), (f)					
	Corolla lobe: shape		Lobe de la corolle : forme		Kronlappen: Form	Lóbulo de la corola: forma			
	lanceolate		lancéolée		lanzettlich	lanceolada		1	
	broad elliptic		elliptique large		breit elliptisch	elíptica ancha	Shane Blue, Tanioka 2go	2	
	medium elliptic		elliptique moyenne		mittel elliptisch	elíptica media		3	
	narrow elliptic		elliptique étroite		schmal elliptisch	elíptica estrecha	Sasaiku	4	
	spatulate		spatulée		spatelförmig	espatulada	Sasadango	5	
22. (*)	QL	VG		(e), (f)					
	Corolla lobe: number of colors on upper side		Lobe de la corolle : nombre de couleurs sur la face supérieure		Kronlappen: Anzahl Farben auf Oberseite	Lóbulo de la corola: número de colores en el haz			
	one		un		eine	uno	Shane Blue, Tanioka 2go	1	
	more than one		plus d'un		mehr als eine	más de uno	Blue Heart	2	
23. (*)	PQ	VG		(e), (f), (g)					
	Corolla lobe: main color of <u>upper</u> side		Lobe de la corolle : couleur principale de la face <u>supérieure</u>		Kronlappen: Hauptfarbe der Oberseite	Lóbulo de la corola: 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)			
24. (*)	PQ	VG		(e), (f), (g)					
	<u>Only varieties with more than one color:</u> Corolla lobe: secondary color of upper side		<u>Seulement variétés avec plus d'une couleur :</u> Lobe de la corolle : couleur secondaire de la face supérieure		Nur Sorten mit mehr als einer Farbe: Kronlappen: Sekundärfarbe der Oberseite	<u>Solo variedades con más de un color:</u> Lóbulo de la corola: color secundario del haz			
	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)			
25.	PQ	VG	(+)	(e), (f), (g)					
	<u>Only varieties with more than one color:</u> Corolla lobe: distribution of secondary color of upper side		<u>Seulement variétés avec plus d'une couleur :</u> Lobe de la corolle : distribution de la couleur secondaire de la face supérieure		Nur Sorten mit mehr als einer Farbe: Kronlappen: Verteilung der Sekundärfarbe der Oberseite	<u>Solo variedades con más de un color:</u> Lóbulo de la corola: distribución del color secundario del haz			
	at margin		au bord		am Rand	al margen	Blue Heart	1	
	central		centrale		in der Mitte	en el centro		2	

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
26.	PQ	VG	(+)	(e), (f)				
	<b>Corolla lobe: color of lower side</b>		<b>Lobe de la corolle : couleur de la face inférieure</b>		<b>Kronlappen: Farbe der Unterseite</b>	<b>Lóbulo de la corola: color de la cara inferior</b>		
	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. (*)	QL	VG	(+)	(e)				
	<b>Corona: conspicuousness</b>		<b>Couronne : netteté</b>		<b>Krone: Ausprägung</b>	<b>Corona: visibilidad</b>		
	conspicuous		nette		deutlich	visible	Shane Blue, Tanioka 2go	1
	inconspicuous		peu nette		undeutlich	no visible	Sasadango	9
28. (*)	PQ	VG	(+)	(e)				
	<b>Only varieties with conspicuous corona: Corona: color of distal part</b>		<b>Seulement variétés avec couronne nette : Couronne : couleur de la partie distale</b>		<b>Nur Sorten mit deutlicher Krone: Krone: Farbe des distalen Teils</b>	<b>Solo variedades con corona visible: Corona: color de la parte distal</b>		
	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)		

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

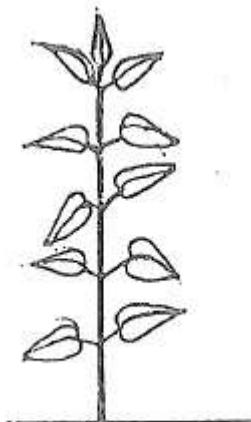
Unless otherwise indicated observations should be made at the time of full flowering.

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

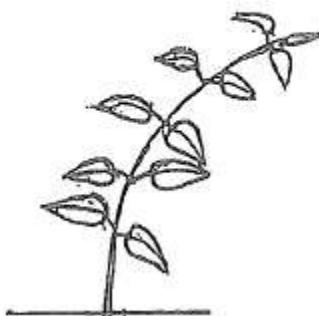
- (a) Observations should be made when about 50 % of flowers on the first inflorescence are open.
- (b) Observations should be made at the middle third of the stem.
- (c) Observations should be made on leaves taken from the middle third of the stem.
- (d) Observations should be made on the longest branch when the flowers on the fourth node from the bottom of the inflorescence are fully open.
- (e) Observations should be made on fully open flowers.
- (f) For varieties with semi-double or double flowers, observations should be made on the outermost corolla lobes.
- (g) The main color is the color with the largest surface area. The color with the second largest area is the secondary color. In cases where the areas of the colors are too similar to reliably decide which color has the largest area, the darker color is considered to be the main color.

8.2 *Explanations for individual characteristics*

Ad. 1: Plant: growth habit



1  
upright

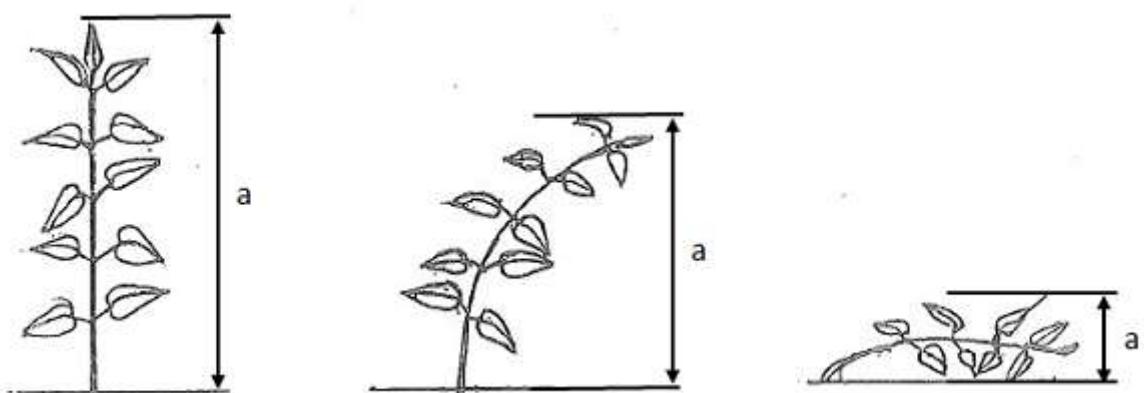


2  
arched



3  
spreading

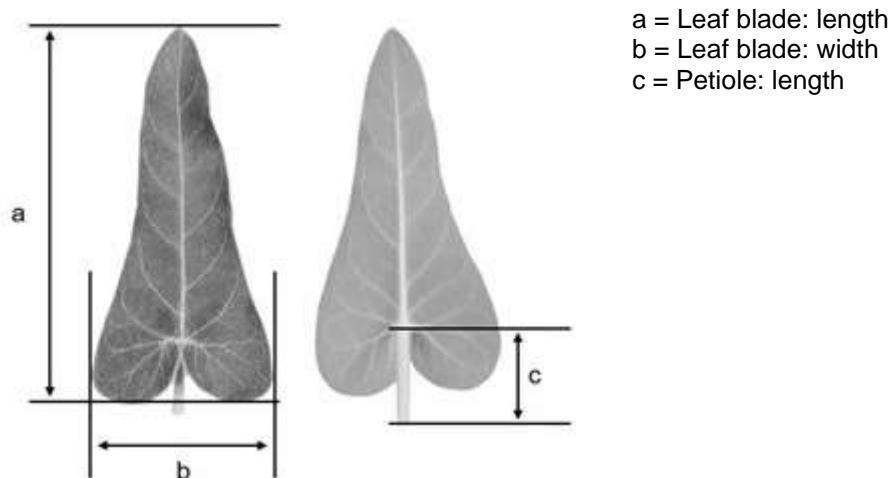
Ad. 2: Plant: height



a = Plant: height

The plant height should be observed from the base to the highest point of the plant.

Ad. 5: Leaf blade: length

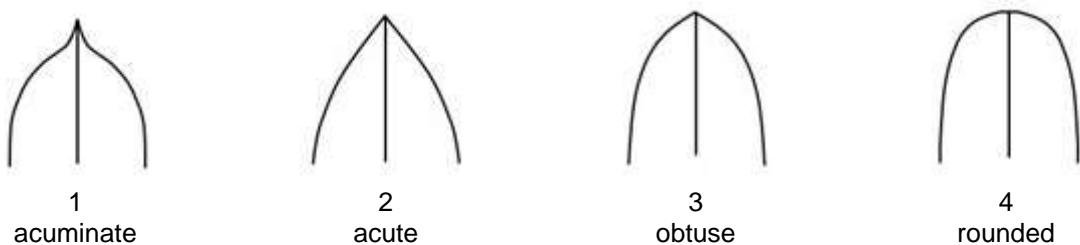


a = Leaf blade: length  
b = Leaf blade: width  
c = Petiole: length

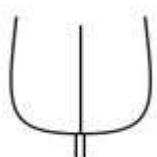
Ad. 6: Leaf blade: width

See Ad. 5

Ad. 7: Leaf blade: shape of apex



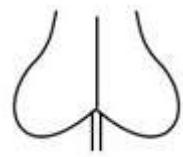
Ad. 8: Leaf blade: shape of base



1  
truncate



2  
cordate



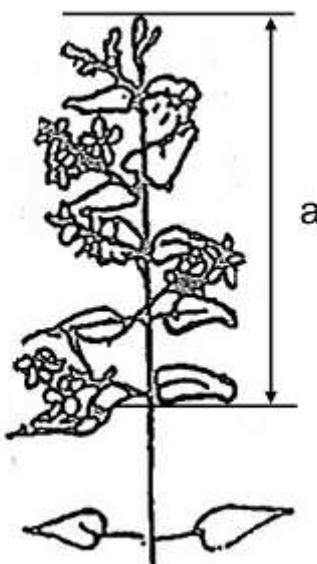
3  
auriculate

Ad. 11: Petiole: length

See Ad. 5

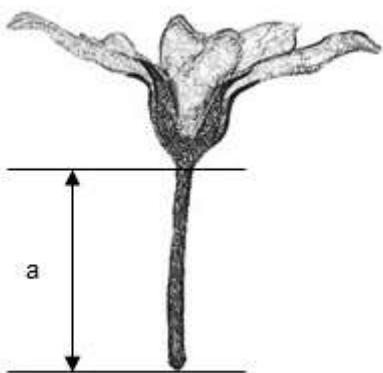
Ad. 12: Inflorescence: length

$a$  = Inflorescence: length



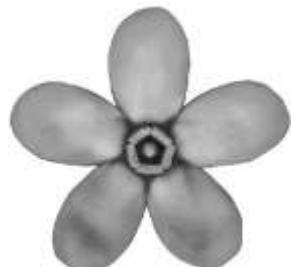
Ad. 14: Pedicel: length

$a$  = Pedicel: length



Ad. 15: Flower: type

1. Single: flowers with 5 or less corolla lobes.
2. Semi-double: flowers with 6 to 10 corolla lobes.
3. Double: flowers with 11 or more corolla lobes.



1  
single



2  
semi-double



3  
double

Ad. 16: Flower: attitude of corolla lobes



1  
upwards

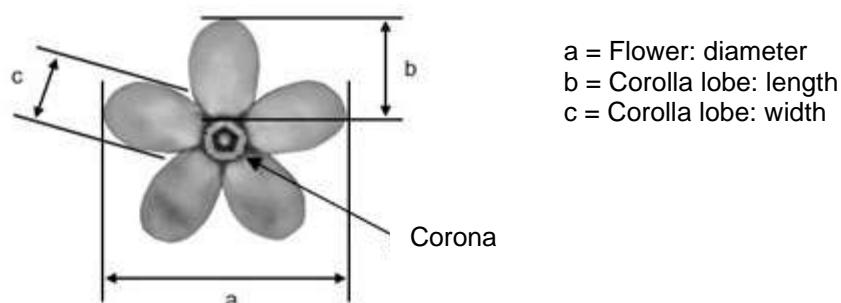


3  
horizontal



5  
downwards

Ad. 17: Flower: diameter



The diameter should be observed at the broadest part of the flower.

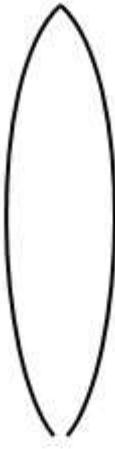
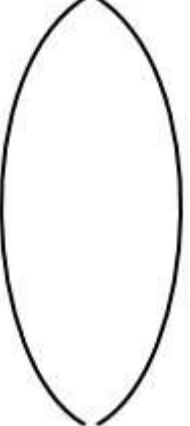
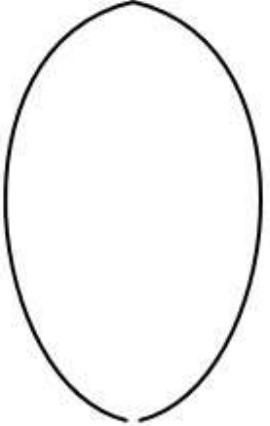
Ad. 19: Corolla lobe: length

See Ad. 17

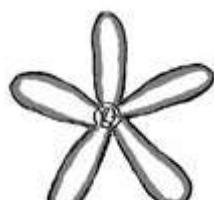
Ad. 20: Corolla lobe: width

See Ad. 17

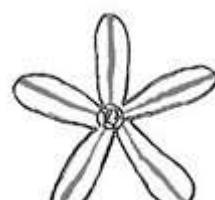
Ad. 21: Corolla lobe: shape

relative width	← broadest part →		
	below middle	at middle	above middle
narrow			
medium			
broad			

Ad. 25: Only varieties with more than one color: Corolla lobe: distribution of secondary color of upper side



1  
at margin



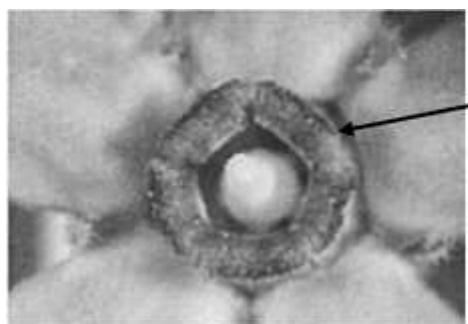
2  
central

Ad. 26: Corolla lobe: color of lower side

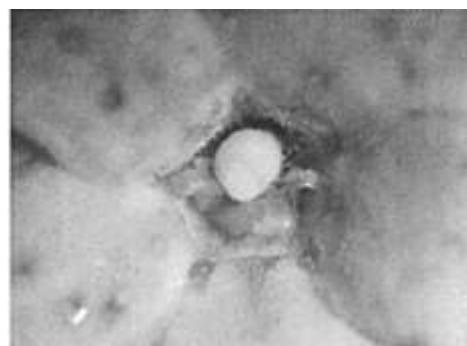
The darkest color should be observed regardless of its percentage of the surface area in the case with more than one color on lower side.

The green color on the midrib should be excluded.

Ad. 27: Corona: conspicuousness



1  
conspicuous



9  
inconspicuous

Ad. 28: Only varieties with conspicuous corona: Corona: color of distal part

See Ad. 27

9. Literature

Tsukamoto, Y., 1994: The Grand Dictionary of Horticulture, Volume 1. The Shogakukan Ltd. Chiyoda, Tokyo, JP, pp. 399-400

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
<b>TECHNICAL QUESTIONNAIRE</b> to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1	Botanical name	Oxypetalum coeruleum (D. Don) Decne.
1.2	Common name	Oxypetalum
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)		
<div style="border: 1px solid black; height: 80px;"></div>		
4.1.3 Discovery and development	[ ]	
(please state where and when discovered and how developed)		
<div style="border: 1px solid black; height: 80px;"></div>		
4.1.4 Other	[ ]	
(Please provide details)		
<div style="border: 1px solid black; height: 80px;"></div>		

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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4.2 Method of propagating the variety

4.2.1 Seed-propagated varieties

(a) Self-pollination

[ ]

(b) Other (please provide details)

[ ]

4.2.2 Vegetative propagation

(a) Cuttings

[ ]

(b) Other (state method)

[ ]

4.2.3 Other

[ ]

(Please provide details)

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
<p>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).</p>		
Characteristics	Example Varieties	Note
<b>5.1 Plant: height (2)</b>		
very short		1 [ ]
very short to short		2 [ ]
short		3 [ ]
short to medium		4 [ ]
medium	Shane Blue, Tanioka 2go	5 [ ]
medium to tall	Sasabrand	6 [ ]
tall		7 [ ]
tall to very tall		8 [ ]
very tall		9 [ ]
<b>5.2 Leaf blade: shape of apex (7)</b>		
acuminate		1 [ ]
acute		2 [ ]
obtuse		3 [ ]
rounded		4 [ ]
<b>5.3 Leaf blade: shape of base (8)</b>		
truncate		1 [ ]
cordate		2 [ ]
auriculate		3 [ ]
<b>5.4 Flower: type (15)</b>		
single	Shane Blue, Tanioka 2go	1 [ ]
semi-double	Blue Dia	2 [ ]
double	Sasadango	3 [ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
Characteristics	Example Varieties	Note
<b>5.5 Flower: diameter (17)</b>		
very small		1 [ ]
very small to small		2 [ ]
small		3 [ ]
small to medium		4 [ ]
medium	Sasabrand, Sasaiku	5 [ ]
medium to large		6 [ ]
large	King Sapphire	7 [ ]
large to very large		8 [ ]
very large		9 [ ]
<b>5.6 Corolla lobe: shape (21)</b>		
lanceolate		1 [ ]
broad elliptic	Shane Blue, Tanioka 2go	2 [ ]
medium elliptic		3 [ ]
narrow elliptic	Sasaiku	4 [ ]
spatulate	Sasadango	5 [ ]
<b>5.7 Corolla lobe: number of colors on upper side (22)</b>		
one	Shane Blue, Tanioka 2go	1 [ ]
more than one	Blue Heart	2 [ ]
<b>5.8(i) Corolla lobe: main color of <u>upper</u> side (23)</b>	RHS Colour Chart (indicate reference number)	
<b>5.8(ii) Corolla lobe: main color of <u>upper</u> side (23)</b>		
white		1 [ ]
pink		2 [ ]
red		3 [ ]
purple		4 [ ]
blue		5 [ ]
other (indicate)		6 [ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
Characteristics	Example Varieties	Note
<b>5.9(i) Only varieties with more than one color: Corolla lobe: (24) secondary color of upper side</b>  RHS Colour Chart (indicate reference number)		
<b>5.9(ii) Only varieties with more than one color: Corolla lobe: (24) secondary color of upper side</b>  white pink red purple blue other (indicate)	1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ] 6 [ ]	
<b>5.10 Corona: conspicuousness (27)</b>  conspicuous inconspicuous	Shane Blue, Tanioka 2go Sasadango	1 [ ] 9 [ ]
<b>5.11(i) Only varieties with conspicuous corona: Corona: color of distal part (28)</b>  RHS Colour Chart (indicate reference number)		
<b>5.11(ii) Only varieties with conspicuous corona: Corona: color of distal part (28)</b>  white pink red purple blue other (indicate)	1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ] 6 [ ]	

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>Plant: height</i>	<i>short</i>	<i>medium</i>
Comments:			

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
<p>#7. Additional information which may help in the examination of the variety</p> <p>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?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(If yes, please provide details)</p> <p>7.2 Are there any special conditions for growing the variety or conducting the examination?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(If yes, please provide details)</p> <p>7.3 Other information</p> <p>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.</p> <p>The key points to consider when taking a photograph of the candidate variety are:</p> <ul style="list-style-type: none"><li>• Indication of the date and geographic location</li><li>• Correct labeling (breeder's reference)</li><li>• Good quality printed photograph (minimum 10 cm x 15 cm) and/or sufficient resolution electronic format version (minimum 960 x 1280 pixels)"</li></ul> <p>Further guidance on providing photographs with the Technical Questionnaire is available in document TGP/7 "Development of Test Guidelines", Guidance Note 35 (<a href="http://www.upov.int/tgp/en/">http://www.upov.int/tgp/en/</a>).</p> <p>[The link provided may be deleted by members of the Union when developing authorities' own test guidelines.]</p>		

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