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GENEVA

DRAFT

BOUGAINVILLEA
UPOV Code: BOUGA
Bougainvillea Comm. ex Juss.

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

prepared by experts from Australia and Denmark

to be considered by

*the Enlarged Editorial Committee at its meeting
to be held in Geneva, Switzerland, on January 6, 2011*

Alternative Names:*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Bougainvillea</i> Comm. Ex Juss., <i>Bougainvillea</i> Comm.	Bougainvillea	Bougainvillée, Bougainvillier	Bougainvillea	Bugambilia, Buganvilla

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 *Bougainvillea* Comm. ex Juss.

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 minimum quantity of plant material, to be provided by the applicant, should be:

10 plants

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

2.4 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.

3.3.2 *Observation of color by eye*

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 10 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 / Parts of Plants to be Examined

Unless otherwise indicated, all observations for the purposes of distinctness should be made on 9 plants or parts taken from each of 9 plants, 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 second column of 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 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 10 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 tested, either by growing a further generation, or by testing a new 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) Leaf blade: secondary color (characteristic 12)
- (b) Inflorescence: type of bract (characteristic 22)
- (c) Young bract: main color of inner side (calyx lobe open) (characteristic 30) with the following groups:
 - Group 1: white
 - Group 2: yellow
 - Group 3: orange
 - Group 4: red
 - Group 5: pink
 - Group 6: red purple
 - Group 7: purple
 - Group 8: violet

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 In the case of qualitative and pseudo-qualitative characteristics (see Chapter 6.3), all relevant states of expression are presented in the characteristic. However, in the case of quantitative characteristics with 5 or more states, an abbreviated scale may be used to minimize the size of the Table of Characteristics. For example, in the case of a quantitative characteristic with 9 states, the presentation of states of expression in the Test Guidelines may be abbreviated as follows:

State	Note
small	3
medium	5
large	7

However, it should be noted that all of the following 9 states of expression exist to describe varieties and should be used as appropriate:

State	Note
very small	1
very small to small	2
small	3
small to medium	4
medium	5
medium to large	6
large	7
large to very large	8
very large	9

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*

(*) Asterisked 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

MG, MS, VG, VS – see Chapter 4.1.5

(a)-(c) 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
1. VG	Plant: growth habit	Plante : type de croissance	Pflanze: Wuchsform	Planta: hábito de crecimiento		
PQ	upright	dressé	aufrecht	erguido	Pixie Queen	1
	semi-upright	semi-dressé	halbaufrecht	semierguido		2
	spreading	étalé	breitwüchsig	extendido	Poultoni, Vera Pink	3
2. VG	Young shoot: color	Jeune rameau : couleur	Jungtrieb: Farbe	Retoño: color		
PQ	(a) light green	vert clair	hellgrün	verde claro	Alexandra	1
	medium green	vert moyen	mittelgrün	verde mediano		2
	reddish green	vert rougeâtre	rötlichgrün	verde rojizo	Barbera Karst	3
	reddish	rougeâtre	rötlich	rojizo	Vera Deep Purple	4
3. VG/M (*)	Plant: length of internodes	Plante : longueur des entre-nœuds	Pflanze: Länge der Internodien	Planta: longitud de los intranudos		
QN	(b) short	courts	kurz	corta		3
	medium	moyens	mittel	mediana	Vera Deep Purple	5
	long	longs	lang	larga	Killie Campbell	7
4. VG	Stem: thorns	Tige : épines	Trieb: Dornen	Tallo: espinas		
QL	(a) absent	absentes	fehlend	ausentes	Poultoni	1
	(b) present	présentes	vorhanden	presentes		9
5. VG (*) (+)	Thorn: length	Épine : longueur	Dorn: Länge	Espina: longitud		
QN	(b) short	courte	kurz	corta	Pixie Queen	1
	medium	moyenne	mittel	mediana	Alexandra	2
	long	longue	lang	larga	Rijnbo705	3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
6. (*)	VG Thorn: curvature	Épine : courbure	Dorn: Biegung	Espina: curvatura		
QN (b)	absent or weak	absente ou faible	fehlend oder gering	ausente o débil	Killie Campbell	1
	medium	moyenne	mittel	mediana		2
	strong	prononcée	stark	larga	Vera Deep Purple	3
7. (*)	MG/MS Leaf blade: length	Limbe : longueur	Blattspreite: Länge	Limbo: longitud		
QN (c)	short	courte	kurz	corta	Tosca	3
	medium	moyenne	mittel	mediana	Wabag	5
	long	longue	lang	larga	Vera Deep Purple	7
8. (*)	MG/MS Leaf blade: width	Limbe : largeur	Blattspreite: Breite	Limbo: anchura		
QN (c)	narrow	étroite	schmal	estrecha	Pixie Queen	3
	medium	moyenne	mittel	mediana	Vera Deep Purple	5
	broad	large	breit	ancha	Killie Campbell	7
9. (*) (+)	VG Leaf blade: shape	Limbe : forme	Blattspreite: Form	Limbo: forma		
PQ (c)	lanceolate	lancéolée	lanzettlich	lanceolada		1
	medium ovate	ovale moyenne	mittel eiförmig	oval mediana	Alexandra	2
	broad ovate	ovale large	breit eiförmig	oval ancha	Barbera Karst	3
	elliptic	elliptique	elliptisch	elíptica	Elisabeth	4
	circular	arrondie	kreisförmig	circular	Sea Foam	5
10. (+)	VG Leaf blade: shape of base	Limbe : forme de la base	Blattspreite: Form der Basis	Limbo: forma de la base		
PQ (c)	attenuate	atténuée	verjüngt	atenuada	Vera Deep Purple	1
	acute	pointue	spitz	aguda		2
	obtuse	obtuse	stumpf	obtusa	Nancy Gardner	3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
11.	VG	Leaf blade: main color	Limbe : couleur principale	Blattspreite: Hauptfarbe	Limbo: color principal	
(+)						
PQ	(c)	yellowish white	blanc jaunâtre	gelblichweiß	blanco amarillento	1
		yellow	jaune	gelb	amarillo	2
		yellowish green	vert jaunâtre	gelblichgrün	verde amarillento	Pixie Queen 3
		light green	vert clair	hellgrün	verde claro	Mini Thai Variegated 4
		medium green	vert moyen	mittelgrün	verde mediano	5
		dark green	vert foncé	dunkelgrün	verde oscuro	6
		very dark green	vert très foncé	sehr dunkelgrün	verde muy oscuro	7
		grey green	vert-gris	graugrün	verde grisáceo	8
12.	VG	Leaf blade: secondary color	Limbe : couleur secondaire	Blattspreite: Sekundärfarbe	Limbo: color secundario	
(*)						
(+)						
PQ	(c)	none	aucune	keine	ninguno	1
		white	blanche	weiß	blanco	2
		yellowish white	blanc jaunâtre	gelblichweiß	blanco amarillento	3
		yellow	jaune	gelb	amarillo	Mini Thai Variegated 4
		light green	vert clair	hellgrün	verde claro	5
		medium green	vert moyen	mittelgrün	verde mediano	Pixie Queen 6
		dark green	vert foncé	dunkelgrün	verde oscuro	7
		very dark green	vert très foncé	sehr dunkelgrün	verde muy oscuro	8
		grey green	vert-gris	graugrün	verde grisáceo	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
13.	VG	Leaf blade: distribution of secondary color	Limbe : répartition de la couleur secondaire	Blattspreite: Verteilung der Sekundärfarbe	Limbo: distribución del color secundario		
(+)		absent	aucune	fehlend	ausente	1	
	(c)	narrow marginal	marginale étroite	schmal marginal	marginal estrecho	Zuki	2
		broad marginal	marginale large	breit marginal	marginal ancho		3
		around mid rib	autour de la nervure médiane	um die Mittelrippe	alrededor del nervio central	Pixie Queen	4
		speckled	tachetée	gefleckt	en motas	Mini Thai Variegated	5
		irregular	irrégulière	unregelmäßig	irregular		6
14.	VG	Leaf blade: tertiary color	Limbe : couleur tertiaire	Blattspreite: Tertiärfarbe	Limbo: color terciario		
(+)							
PQ	(c)	none	aucune	keine	ninguno		1
		white	blanche	weiß	blanco		2
		yellowish white	blanc jaunâtre	gelblichweiß	blanco amarillento		3
		yellow	jaune	gelb	amarillo		4
		light green	vert clair	hellgrün	verde claro	Pixie Queen	5
		medium green	vert moyen	mittelgrün	verde mediano		6
		dark green	vert foncé	dunkelgrün	verde oscuro		7
		very dark green	vert très foncé	sehr dunkelgrün	verde muy oscuro		8
		grey green	vert-gris	graugrün	verde grisáceo		9
15.	VG	Leaf blade: undulation of margin	Limbe : ondulation du bord	Blattspreite: Randwellung	Limbo: ondulación del borde		
QN	(c)	absent or weak	absente ou faible	fehlend oder gering	ausente o débil		1
		medium	moyenne	mittel	mediana		2
		strong	forte	stark	fuerte		3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
16.	MG/ (*) (+)	Petiole: length	Pétiole : longueur	Stiel: Länge	Peciole: longitud		
QN	(c)	short	courte	kurz	corta	Mini Thai	1
		medium	moyenne	mittel	mediana	Vera Deep Purple	2
		long	longue	lang	larga	Killie Campbell	3
17.	MG/ (+)	Peduncle: length	Pédoncule : longueur	Blütenstiel: Länge	Pedúnculo: longitud		
QN		short	courte	kurz	corta	Vera Deep Purple	3
		medium	moyenne	mittel	mediana	Rijnbo705	5
		long	longue	lang	larga	Barbera Karst	7
18.	VG/M G	Inflorescence: number of bract clusters	Inflorescence : nombre de groupes de bractées	Blütenstand: Anzahl der Hochblatt- büschel	Inflorescencia: número de racimos de brácteas		
QN		few	petit	gering	bajo		3
		medium	moyen	mittel	mediano		5
		many	élevé	hoch	alto		7
19.	VG	Inflorescence: density of bract clusters	Inflorescence : densité des groupes de bractées	Blütenstand: Dichte der Hochblatt- büschel	Inflorescencia: densidad de los racimos de brácteas		
QN		sparse	faible	locker	escasa		3
		medium	moyenne	mittel	mediana		5
		dense	dense	dicht	densa		7
20.	VG (+)	Inflorescence: arrangement	Inflorescence : disposition	Blütenstand: Anordnung	Inflorescencia: disposición		
QL		terminal	terminale	terminal	terminal		1
		axillary	axillaire	axillar	axilar		2
		axillary and terminal	axillaire et terminale	axillar und terminal	axilar y terminal		3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
21. VG	Inflorescence: presence of flowers	Inflorescence : présence de fleurs	Blütenstand: Vorhandensein von Blüten	Inflorescencia: presencia de flores		
QL	absent	absente	fehlend	ausentes	Dania	1
	present	présente	vorhanden	presentes	Alexandra, Vera Deep Purple	9
22. VG (* (+)	Inflorescence: type of bract	Inflorescence : type de bractée	Blütenstand: Typ des Hochblatts	Inflorescencia: tipo de bráctea		
QL	single	simple	einfach	simple	Alexandra	1
	double	double	gefüllt	doble	Dania	2
23. MG/ MS	Bract: length	Bractée : longueur	Hochblatt: Länge	Bráctea: longitud		
QN	short	courte	kurz	corta	Mini Thai	3
	medium	moyenne	mittel	mediana		5
	long	longue	lang	larga	Killie Campbell	7
24. MG/ MS	Bract: width	Bractée : largeur	Hochblatt: Breite	Bráctea: anchura		
QN	narrow	étroite	schmal	estrecha	Mini Thai	3
	medium	moyenne	mittel	mediana	Vera Deep Purple	5
	broad	large	breit	ancha	Killie Campbell	7
25. VG (* (+)	Bract: shape	Bractée : forme	Hochblatt: Form	Bráctea: forma		
PQ	narrow ovate	ovale étroite	schmal eiförmig	oval estrecha	Elisabeth	1
	medium ovate	ovale moyenne	mittel eiförmig	oval mediana	Alexandra	2
	broad ovate	ovale large	breit eiförmig	oval ancha	Vera Deep Purple	3
	circular	circulaire	kreisförmig	circular	Afterglow	4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
26.	VG	Bract: shape of base	Bractée : forme de la base	Frucht: Form der Basis	Bráctea: forma de la base	
(*)						
(+)						
PQ	acute	pointue	spitz	aguda	Easter Parade	1
	obtuse	obtuse	stumpf	obtusa	Pixie Queen	2
	cordate	cordiforme	herzförmig	cordiforme	Siggi	3
27.	VG	<u>Only varieties with inflorescence type of bract: single:</u> Calyx lobes: color of upper side	<u>Seulement les variétés avec un type de bractée à inflorescence :</u> simple : lobes du calice : couleur de la face supérieure	<u>Nur Sorten mit Blütenstand: Typ des Hochblatts: einfach:</u> Kelchlappen: Farbe der Oberseite	<u>Únicamente variedades con inflorescencia tipo de bráctea: simple:</u> lóbulos del cáliz: color de la cara superior	
PQ	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)		
28.	VG	Small young bract: main color of outer side	Petite bractée jeune : couleur principale de la face externe	Kleines junges Hochblatt: Hauptfarbe der Außenseite	Bractéola joven: color principal de la cara exterior	
(*)						
(+)						
PQ	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)		
29.	VG	Young bract: main color of inner side (calyx <u>not</u> open)	Jeune bractée : couleur principale de la face interne (calice <u>non</u> ouvert)	Junges Hochblatt: Hauptfarbe der Innenseite (Kelchlappen <u>nicht</u> geöffnet)	Bráctea joven: color principal de la cara interior (cáliz <u>no</u> abierto)	
(*)						
(+)						
PQ	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)		
30.	VG	Young bract: main color of inner side (calyx lobe <u>open</u>)	Jeune bractée : couleur principale de la face interne (lobe du calice <u>ouvert</u>)	Junges Hochblatt: Hauptfarbe der Innenseite (<u>Kelchlappen geöffnet</u>)	Bráctea joven: color principal de la cara interior (lóbulo del cáliz <u>abierto</u>)	
(*)						
(+)						
PQ	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)		

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
31. VG	Only varieties with inflorescence type of bract: double: Young outer bract: main color of inner side	Seulement les variétés avec un type de bractée à inflorescence : double : jeune bractée externe : couleur principale de la face interne	Ohne Sorten mit Blütenstand: Typ des Hochblatts: gefüllt: Junges äußeres Hochblatt: Hauptfarbe der Innenseite	Únicamente variedades con inflorescencia tipo de bráctea: doble: bráctea joven exterior: color principal de la cara interior		
PQ	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)		
32. VG	Only varieties with inflorescence type of bract: double: Young inner bract: main color of inner side	Seulement les variétés avec un type de bractée à inflorescence : double : jeune bractée interne : couleur principale de la face interne	Ohne Sorten mit Blütenstand: Typ des Hochblatts: gefüllt: Junges inneres Hochblatt: Hauptfarbe der Innenseite	Únicamente variedades con inflorescencia tipo de bráctea: doble: bráctea joven interior: color principal de la cara interior		
PQ	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)		
33. VG (+)	Young bract: secondary color of inner side (calyx lobe open)	Jeune bractée : couleur secondaire de la face interne (lobe du calice ouvert)	Junges Hochblatt: Sekundärfarbe der Innenseite (Kelchlappen geöffnet)	Bráctea joven: color secundario de la cara interior (lóbulo del cáliz abierto)		
PQ	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)		
34. VG (+)	Young bract: tertiary color of inner side (calyx lobe open)	Jeune bractée : couleur tertiaire de la face interne (lobe du calice ouvert)	Junges Hochblatt: Tertiärfarbe der Innenseite (Kelchlappen geöffnet)	Bráctea joven: color terciario de la cara interior (lóbulo del cáliz abierto)		
PQ	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)		

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
35.	VG	Bract: main color of inner side (calyx lobe wilted)	Bractée : couleur principale de la face interne (lobe du calice fané)	Hochblatt: Hauptfarbe der Innenseite (Kelchlappen verwelkt)	Bráctea: color principal de la cara interior (lóbulo del cáliz marchito)	
(+)						
PQ	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*

The optimum stage of development for the assessment of the characteristics is at the time of opening of one flower in three inflorescences. In the case of double bract varieties, observations should be made when a third of the bracts are fully developed and open.

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






- (a) observations should be made on the upper third of the main shoot.
- (b) observations should be made on the middle third of the main shoot.
- (c) observations should be made on a developed leaf from the middle third of the main shoot.

8.2 *Explanations for individual characteristics*

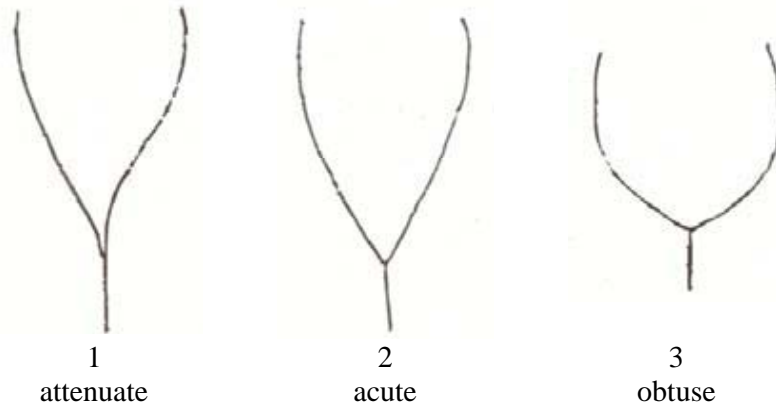
Ad. 5: Thorn: length

The natural length of thorn should be observed.

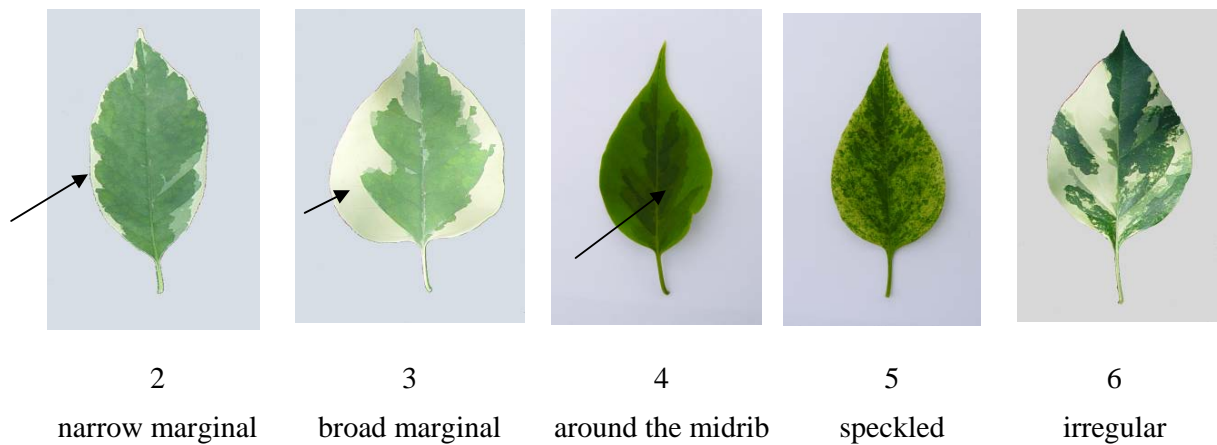
Ad. 9: Leaf blade: shape

		← broadest part →	
		below middle	at middle
(broad compressed) ← width (ratio length/width) → narrow (elongated)			
	1 lanceolate		
			
	2 medium ovate		
			
3 broad ovate			
5 circular			

Ad. 10: Leaf blade: shape of base



Ad. 13: Leaf blade: distribution of secondary color



Ad. 11: Leaf blade: main color

Ad. 12: Leaf blade: secondary color

Ad. 14: Leaf blade: tertiary color

The main color is the color with the largest surface area. The secondary color is the color with the second largest surface area. If the area of the colors is nearly half and half, the darker color is the main color. The tertiary color is the color with the third largest surface area. The main color may be the only color.

Ad. 16: Petiole: length

Ad. 17: Peduncle: length



Petiole: length

Peduncle: length

Ad. 20: Inflorescence: arrangement



1
terminal



2
axillary



3
terminal and axillary

Ad. 22: Inflorescence: type of bract



1
single



2
double

Ad. 25: Bract: shape



1
narrow ovate



2
medium ovate



3
broad ovate



4
circular

Ad. 26: Bract shape of base



1
acute



2
obtuse



3
cordate

Ad. 28: Small young bract: main color of outer side

Ad. 29: Young bract: main color of inner side (calyx not open)

Ad. 30: Young bract: main color of inner side (calyx lobe open)

Ad. 33: Young bract: secondary color of inner side (calyx lobe open)

Ad. 34: Young bract: tertiary color of inner side (calyx lobe open)

The main color is the color with the largest surface area. The secondary color is the color with the second largest surface area. If the area of the colors is nearly half and half, the darker color is the main color. The tertiary color is the color with the third largest surface area.

Ad. 28: Small young bract: main color of outer side

Ad. 29: Young bract: main color of inner side (calyx not open)

Ad. 30: Young bract: main color of inner side (calyx lobe open)

Ad. 35: Bract: main color of inner side (calyx lobe wilted)



Small young bract



Young bract – calyx lobe not open



Young bract – calyx lobe open



Bract – calyx lobe wilted

9. Literature

Iredell, J., 1990: The Bougainvillea Growers Handbook. Simon & Schuster, Brookvale, New South Wales, AU, 111 pp.

Iredell, J., 1994: Growing Bougainvilleas. Simon & Schuster, East Roseville, New South Wales, AU, 96 pp.

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	<input type="text" value="Bougainvillea Comm. ex Juss."/>	
1.2 Common name	<input type="text" value="Bougainvillea"/>	
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)

(.....) 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:
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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)

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
5.1 Leaf blade: secondary color (12)		
none		1[]
white		2[]
yellowish white		3[]
yellow	Mini Thai Variegated	4[]
light green		5[]
medium green	Pixie Queen	6[]
dark green		7[]
very dark green		8[]
grey green		9[]
5.2 Inflorescence: type of bract (22)		
single	Alexandra	1[]
double	Dania	2[]
5.2i Young bract: main color of inner side (calyx lobe <u>open</u>) (30)		
RHS Colour Chart (indicate reference number)		
5.3ii Young bract: main color of inner side (calyx lobe <u>open</u>) (30)		
white		1[]
yellow		2[]
orange		3[]
red		4[]
pink		5[]
red purple		6[]
purple		7[]
violet		8[]

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 similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>	<i>Leaf blade: secondary color</i>	<i>none</i>	<i>white</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

A representative color image 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]