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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

HEBE

UPOV Code: HEBEE

Hebe Comm. ex Juss.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

Alternative Names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Hebe Comm. ex Juss.	Hebe	Véronique	Strauchveronika	Verónica

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 *Hebe* 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 material is to be supplied in the form of young plants capable of flowering and expressing relevant characteristics of the variety in the first growing cycle.

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

8 plants.

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

2.5 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

3. Method of Examination

3.1 Number of Growing Cycles

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 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 8 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, for the purposes of distinctness, all observations on single plants should be made on 7 plants or parts taken from each of 7 plants and any other observations made on all plants in the test, disregarding any off-type plants. In the case of observations of parts taken from single plants, the number of parts to be taken from each of the plants should be 2.

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 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 8 plants, 1 off-type is allowed.

4.3 Stability

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

4.3.2 Where appropriate, or in cases of doubt, stability may be further examined by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the initial material supplied.

5. Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness are aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.

5.3 The following have been agreed as useful grouping characteristics:

(a) Plant: habit (characteristic 1)
(b) Leaf blade: width (characteristic 15)
(c) Leaf blade: main color (characteristic 22) with the following groups:
white
yellowish white
yellow
yellow green
green
yellow brown
reddish brown
reddish purple
purple
purplish black

(d) Leaf blade: secondary color (characteristic 24) with the following color groups:
none
white
yellowish white
yellow
yellow green
green
yellow brown
reddish brown
reddish purple
purple
purplish black

(e) Inflorescence: shape in profile (characteristic 31)

(f) Corolla lobe: color of inner side (characteristic 37) with the following groups:
white
pink
pink red
purple
violet
blue

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)-(f) 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: habit**	**Plante : port**	**Pflanze: Wuchsform**	**Planta: hábito**		
PQ	**(a)**	upright	dressé	aufrecht	erguido	Sandra Joy, Turkish Delight	1
		semi upright	demi-dressé	halbaufrecht	semierguido	Beverley Hills	2
		spreading	étalé	breitwüchsig	abierto	Orphan Annie, Pretty N Pink	3
		horizontal	horizontal	waagerecht	horizontal	First Light, Hartii	4
2. **(*)**	**VG/ MG**	**Plant: height**	**Plante : hauteur**	**Pflanze: Höhe**	**Planta: altura**		
QN	**(a)**	very short	très courte	sehr niedrig	muy corta	Hartii	1
		short	courte	niedrig	corta	Orphan Annie, Rosie	3
		medium	moyenne	mittel	media	Beverley Hills, Nicola's Blush	5
		tall	haute	hoch	alta	Eveline, Wiri Desire	7
		very tall	très haute	sehr hoch	muy alta	Andersonii	9
3.	**VG**	**Plant: density of foliage**	**Plante : densité du feuillage**	**Pflanze: Dichte des Laubes**	**Planta: densidad del follaje**		
QN	**(a)**	sparse	lâche	locker	laxa	Sandra Joy, Wiri Prince	3
		medium	moyenne	mittel	media	Champseiont, First Light	5
		dense	dense	dicht	densa	Wiri Mist	7
4. **(*)**	**VG**	**Young shoot: anthocyanin coloration**	**Jeune rameau : pigmentation anthocyanique**	**Junger Trieb: Anthocyanfärbung**	**Tallo joven: pigmentación antociánica**		
QN	**(b)**	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Champseiont	1
		weak	faible	gering	débil	Rosie	2
		medium	moyenne	mittel	media	Wiri Desire	3
		strong	forte	stark	fuerte	Turkish Delight	4
		very strong	très forte	sehr stark	muy fuerte	Orphan Annie	5
5. **(*)**	**VG**	**Young shoot: pubescence**	**Jeune rameau : pubescence**	**Junger Trieb: Behaarung**	**Tallo joven: pubescencia**		
QL	**(b)**	absent	absente	fehlend	ausente	Champseiont	1
		present	présente	vorhanden	presente	Orphan Annie	9
6.	**VG**	**Young shoot: density of pubescence**	**Jeune rameau : densité de la pubescence**	**Junger Trieb: Dichte der Behaarung**	**Tallo joven: densidad de la pubescencia**		
QN	**(b)**	very sparse	très lâche	sehr locker	muy laxa	First Light	1
		sparse	lâche	locker	laxa	Rosie	2
		medium	moyenne	mittel	media	Orphan Annie	3
		dense	dense	dicht	densa		4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
7. (*)	**VG**	**Young stem: color**	**Jeune tige : couleur**	**Junger Trieb: Farbe**	**Tallo joven: color**		
PQ	**(b)**	yellow green	vert jaune	gelbgrün	verde amarillento	Lavender Lace, Oratia Beauty	1
		green	verte	grün	verde	Wiri Mist	2
		yellow brown	brun jaune	gelbbraun	marrón amarillento	Diosmifolia Minor	3
		greenish brown	brun verdâtre	grünlich braun	marrón verdoso	Pagei	4
		brown	brune	braun	marrón	Gina Maree	5
		reddish brown	brun rougeâtre	rötlich braun	marrón rojizo	Mary Antoinette, Wiri Prince	6
		reddish purple	pourpre rougeâtre	rötlich purpurn	púrpura rojizo	Pretty N Pink	7
		purple	pourpre	purpurn	púrpura	Santa Monica	8
		purplish black	noir violacé	purpurschwarz	negro purpúreo	Pascal	9
8. (*)	**VG/ MG**	**Stem: length of internodes**	**Tige : longueur des entre-nœuds**	**Trieb: Internodienlänge**	**Tallo: longitud de los entrenudos**		
QN	**(c)**	very short	très courts	sehr kurz	muy corta	Karo Golden Esk	1
		short	courts	kurz	corta	Beverley Hills	3
		medium	moyens	mittel	media	Wiri Desire	5
		long	longs	lang	larga	Moonlight	7
9.	**VG**	**Stem: anthocyanin coloration of internodes**	**Tige : pigmentation anthocyanique des entre-nœuds**	**Trieb: Anthocyanfärbung der Internodien**	**Tallo: pigmentación antociánica de los entrenudos**		
QN	**(c)**	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Champseiont	1
		weak	faible	gering	débil	Beverley Hills	3
		medium	moyenne	mittel	media	Wiri Vogue	5
		strong	forte	stark	fuerte	Rosie	7
10. (*) (+)	**VG**	**Leaf bud: presence of sinus**	**Bourgeon à feuilles : présence du sinus**	**Blattknospe: Vorhandensein einer Einbuchtung**	**Yema foliar: presencia de seno**		
QL		absent	absent	fehlend	ausente	Orphan Annie	1
		present	présent	vorhanden	presente	Beverley Hills	9
11. (*)	**VG**	**Leaf: presence of petiole**	**Feuille : présence du pétiole**	**Blatt: Vorhandensein eines Blattstiels**	**Hoja: presencia de peciolo**		
QL	**(d)**	absent	absent	fehlend	ausente	Oratia Beauty, Red Edge	1
		present	présent	vorhanden	presente	Ohakea, Wiri Desire	9
12. (*)	**VG**	**Leaf: length of petiole**	**Feuille : longueur du pétiole**	**Blatt: Länge des Blattstiels**	**Hoja: longitud del peciolo**		
QN	**(d)**	short	court	kurz	corta	Champseiont, Wiri Desire	1
		medium	moyen	mittel	media	Lavender Lace, Sandra Joy	2
		long	long	lang	larga	Otari Delight, Silver Queen	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
13.	**VG**	**Leaf: attitude**	**Feuille : port**	**Blatt: Haltung**	**Hoja: porte**		
(+)							
QN	**(d)**	adpressed	appliqué	anliegend	adpreso	Karo Golden Esk	1
		erect	dressé	aufrecht	erecto	Silver Queen	2
		semi erect	demi-dressé	halbaufrecht	semierecto	Wiri Mist	3
		horizontal	horizontal	waagerecht	horizontal	Pagei	4
		downwards	retombant	abwärts gerichtet	hacia abajo		5
14. **(*)**	**VG/ MS**	**Leaf blade: length**	**Limbe : longueur**	**Blattspreite: Länge**	**Limbo: longitud**		
QN	**(d)**	very short	très court	sehr kurz	muy corto	Greensleeves, Hartii	1
		short	court	kurz	corto	Headfortii, Orphan Annie	3
		medium	moyen	mittel	medio	La Seduisante, Wiri Vogue	5
		long	long	lang	largo	Sandra Joy, Wiri Prince	7
		very long	très long	sehr lang	muy largo	Eveline	9
15. **(*)**	**VG/ MS**	**Leaf blade: width**	**Limbe : largeur**	**Blattspreite: Breite**	**Limbo: anchura**		
QN	**(d)**	very narrow	très étroit	sehr schmal	muy estrecho	Karo Golden Esk	1
		narrow	étroit	schmal	estrecho	Mary Antoinette, Silver Queen	3
		medium	moyen	mittel	medio	Eveline, Wiri Desire	5
		broad	large	breit	ancho	Andersonii, La Seduisante	7
16. **(*)** **(+)**	**VG/ MS**	**Leaf blade: ratio length/width**	**Limbe : rapport longueur/largeur**	**Blattspreite: Verhältnis Länge/Breite**	**Limbo: relación longitud/anchura**		
QN	**(d)**	very low	très bas	sehr klein	muy baja	Silver Queen	1
		low	bas	klein	baja	Turkish Delight	3
		medium	moyen	mittel	media	Sunstreak	5
		high	élevé	groß	alta		7
		very high	très élevé	sehr groß	muy alta	Lavender Lace	9
17. **(*)** **(+)**	**VG**	**Leaf blade: shape**	**Limbe : forme**	**Blattspreite: Form**	**Limbo: forma**		
PQ	**(d)**	lanceolate	lancéolé	lanzettlich	lanceolado	Orphan Annie	1
		ovate	ovale	eiförmig	ovado		2
		oblong	oblong	rechteckig	oblongo	Beverley Hills	3
		elliptic	elliptique	elliptisch	elíptico	First Light	4
		oblanceolate	oblancéolé	verkehrt lanzettlich	oblanceolado	Moonlight	5
		obovate	obovale	verkehrt eiförmig	obovado		6

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
18. (*)	**VG**	**Leaf blade: position of broadest part**	**Limbe : position de la partie la plus large**	**Blattspreite: Position des breitesten Teils**	**Limbo: posición de la parte más ancha**		
QN	**(d)**	towards base	vers la base	zur Basis hin	hacia la base	Orphan Annie	1
		in middle	au milieu	in der Mitte	en la mitad	Beverley Hills	2
		towards apex	vers le sommet	zur Spitze hin	hacia el ápice	Moonlight	3
19. (+)	**VG**	**Leaf blade: shape of apex**	**Limbe : forme du sommet**	**Blattspreite: Form der Spitze**	**Limbo: forma del ápice**		
PQ	**(d)**	acuminate	acuminé	zugespitzt	acuminado		1
		acute	pointu	spitz	agudo	Rosie	2
		rounded	arrondi	abgerundet	redondeado	Turkish Delight	3
20.	**VG**	**Leaf blade: profile in cross section**	**Limbe : profil en section transversale**	**Blattspreite: Profil im Querschnitt**	**Limbo: perfil en sección transversal**		
QN	**(d)**	concave	concave	konkav	cóncavo		1
		flat	plat	flach	plano		2
		convex	convexe	konvex	convexo		3
21. (*)	**VG**	**Leaf blade: incisions on margin**	**Limbe : incisions du bord**	**Blattspreite: Randeinschnitte**	**Limbo: incisiones en el margen**		
QL	**(d)**	absent	absentes	fehlend	ausente	Silver Queen	1
		present	présentes	vorhanden	presente	Diosmifolia Minor	9
22. (*) (+)	**VG**	**Leaf blade: main color**	**Limbe : couleur principale**	**Blattspreite: Hauptfarbe**	**Limbo: color principal**		
PQ	**(d)**	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)		
23. (+)	**VG**	**Leaf blade : distribution of secondary color**	**Limbe : répartition de la couleur secondaire**	**Blattspreite: Verteilung der Sekundärfarbe**	**Limbo: distribución del color secundario**		
PQ	**(d)**	none	aucune	keine	ninguna		1
		on margin only	en bordure seulement	nur am Rand	sólo en el margen	Frozen Flame, Red Edge	2
		broad margin	bordure large	breiter Rand	en margen amplio	Heartbreaker	3
		intermediate zone	zone intermédiaire	intermediäre Zone	zona intermedia	Wild Romance	4
		central zone	zone centrale	Mittelzone	zona central	Neprock	5
		on mid rib only	sur la nervure médiane seulement	nur auf der Mittelrippe	sólo en la vena central	Pacific Paradise	6
		on margin and on midrib	en bordure et sur la nervure médiane	am Rand und auf der Mittelrippe	en el margen y en la vena central	Flame, Tullylrr	7
		irregular	irrégulière	unregelmäßig	irregular		8
24. (+)	**VG**	**Leaf blade: secondary color**	**Limbe : couleur secondaire**	**Blattspreite: Sekundärfarbe**	**Limbo: color secundario**		
PQ	**(d)**	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
25.	**VG**	**Leaf blade : area covered by secondary color**	**Limbe : surface couverte par la couleur secondaire**	**Blattspreite: Fläche der Sekundärfarbe**	**Limbo: superficie que ocupa el color secundario**		
QN	**(d)**	very small	très petite	sehr klein	muy pequeña	Marilyn Monroe	1
		small	petite	klein	pequeña	Wild Romance	3
		medium	moyenne	mittel	media	Baby Boo	5
		large	grande	groß	grande	Vero 1	7
		very large	très grande	sehr groß	muy grande	Sweet Kim	9
26. **(+)**	**VG**	**Leaf blade : distribution of tertiary color**	**Limbe : répartition de la couleur tertiaire**	**Blattspreite: Verteilung der Tertiärfarbe**	**Limbo: distribución del color terciario**		
PQ	**(d)**	none	aucune	keine	ninguno		1
		on margin only	en bordure seulement	nur am Rand	sólo en el margen	Frozen Flame	2
		on mid rib only	sur la nervure médiane seulement	nur auf der Mittelrippe	sólo en la vena central	Wild Romance	3
		on margin and on midrib	en bordure et sur la nervure médiane	am Rand und auf der Mittelrippe	en el margen y en la vena central	Baby Boo	4
27. **(+)**	**VG**	**Leaf blade: tertiary color**	**Limbe : couleur tertiaire**	**Blattspreite: Tertiärfarbe**	**Limbo: color terciario**		
PQ	**(d)**	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**	**Leaf blade: glossiness**	**Limbe : brillance**	**Blattspreite: Glanz**	**Limbo: brillo**		
QN	**(d)**	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Wiri Desire	1
		weak	faible	gering	débil		2
		medium	moyenne	mittel	medio	Sunset Boulevard	3
		strong	forte	stark	fuerte	Champseiont	4
29. **(+)**	**VG**	**Leaf blade: glaucosity**	**Limbe : glaucescence**	**Blattspreite: Bereifung**	**Limbo: glauescencia**		
QN	**(d)**	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil		1
		weak	faible	gering	débil	Turkish Delight	2
		medium	moyenne	mittel	media		3
		strong	forte	stark	fuerte	First Light	4
30. **(*)** **(+)**	**VG**	**Inflorescence: arrangement**	**Inflorescence : disposition**	**Blütenstand: Anordnung**	**Inflorescencia: disposición**		
PQ		terminal only	terminale seulement	nur terminal	solamente terminal	Champseiont, Greensleeves	1
		terminal and lateral	terminale et latérale	terminal und lateral	terminal y lateral		2
		lateral only	latérale seulement	nur lateral	solamente lateral	Beverley Hills	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
31. (*) (+)	**VG**	**Inflorescence: shape in profile**	**Inflorescence : forme de profil**	**Blütenstand: Form im Profil**	**Inflorescencia: forma de perfil**		
PQ	**(e)**	triangular	triangulaire	dreieckig	triangular	Moonlight	1
		oblong	oblongue	rechteckig	oblongo	Eveline, Wiri Vogue	2
		elliptic	elliptique	elliptisch	elíptico	Icing Sugar, Wiri Joy	3
32. (*) (+)	**VG/ MS**	**Inflorescence: length of flowering part**	**Inflorescence : longueur de la partie florifère**	**Blütenstand: Länge des blühenden Teils**	**Inflorescencia: longitud de la parte en floración**		
QN	**(e)**	very short	très courte	sehr kurz	muy corta	County Park	1
		short	courte	kurz	corta	Beverley Hills	3
		medium	moyenne	mittel	media	Moonlight	5
		long	longue	lang	larga	Sandra Joy, Sunset Boulevard	7
33. (*) (+)	**VG/ MS**	**Inflorescence: width of flowering part**	**Inflorescence : largeur de la partie florifère**	**Blütenstand: Breite des blühenden Teils**	**Inflorescencia: anchura de la parte en floración**		
QN	**(e)**	narrow	étroite	schmal	estrecha	Tullylrr	3
		medium	moyenne	mittel	media	Zerina	5
		broad	large	breit	ancha	Grethe	7
34.	**VG**	**Inflorescence: density of flowers**	**Inflorescence : densité des fleurs**	**Blütenstand: Dichte der Blüten**	**Inflorescencia: densidad de flores**		
QN	**(e)**	sparse	faible	locker	laxa		3
		medium	moyenne	mittel	media	Ohakea	5
		dense	forte	dicht	densa	Beverley Hills	7
35. (*) (+)	**VG**	**Inflorescence: corolla color change with age**	**Inflorescence : changement de couleur de la corolle avec l'âge**	**Blütenstand: Farbveränderung der Krone mit dem Alter**	**Inflorescencia: cambio de color con el paso del tiempo**		
QN		absent or weak	absent ou faible	fehlend oder sehr gering	ausente o débil	Purple Queen	1
		medium	moyen	mittel	medio	Nicola's Blush	2
		strong	fort	stark	fuerte	Great Orme	3
36. (*) (+)	**VG/ MS**	**Corolla: width**	**Corolle : largeur**	**Krone: Breite**	**Corola: anchura**		
QN	**(e)**	narrow	étroite	schmal	estrecha	Wiri Vogue	3
	(f)	medium	moyenne	mittel	media	Orphan Annie	5
		broad	large	breit	ancha	Silver Queen	7
37. (*)	**VG**	**Corolla lobe: color of inner side**	**Lobe de la corolle : couleur de la face interne**	**Kronlappen: Farbe der Innenseite**	**Lóbulo de la corola: color de la cara interior**		
PQ	**(e) (f)**	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
38. **(*)** **(+)**	**VG**	**Corolla tube: length in relation to calyx**	**Tube de la corolle : longueur par rapport au calice**	**Kronröhre: Länge im Verhältnis zum Kelch**	**Tubo de la corola: longitud en relación con cáliz**		
QN	**(e)**	shorter	plus court	kürzer	más corto	Beverley Hills	1
	(f)	equal	égal	gleich lang	igual	Rosie	2
		longer	plus long	länger	más largo	Wiri Vogue	3
39. **(*)**	**VG**	**Corolla tube: color of outer side**	**Tube de la corolle : couleur de la face externe**	**Kronröhre: Farbe der Außenseite**	**Tubo de la corola: color de la cara externa**		
PQ	**(e)** **(f)**	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)		
40. **(+)**	**VG**	**Plant: number of inflorescences**	**Plante : nombre d'inflorescences**	**Pflanze: Anzahl Blütenstände**	**Planta: número de inflorescencias**		
QN		few	petit	gering	bajo		3
		medium	moyen	mittel	medio		5
		many	grand	groß	alto		7

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

Unless otherwise indicated, all characteristics should be examined at the time of full flowering.

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

(a) The assessment of plant characteristics should be carried out towards the end of active growth.

(b) Observations on young shoot and young stem characteristics should be made in the first flush of growth in the season. The young stem is on the upper third on a current seasons shoot.

(c) Observations on stem internodes should be made on the middle third of a well developed shoot in active growth.

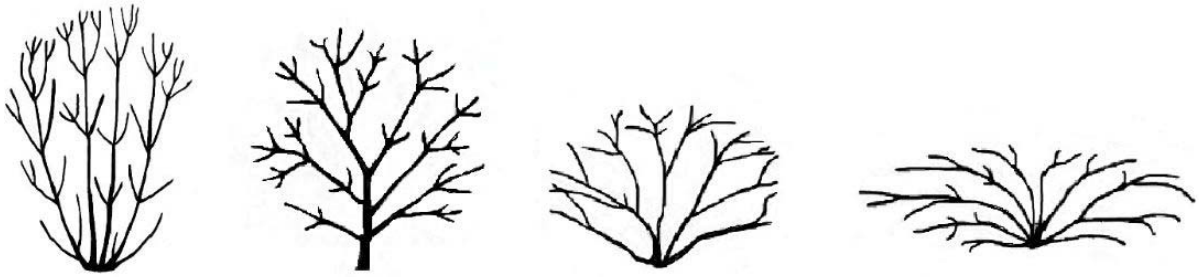
(d) Observations on the leaf and petiole should be made on a leaf from the middle third of a flowering shoot. All color observations are made on the inner side of the leaf. The inner side is the same as the upper side.

(e) Observations on the inflorescence and flower should be made when the flowers which have opened first, at the base of an inflorescence, are beginning to dehisce.

(f) Observations on the corolla should be made from flowers in the middle third of the inflorescence.

8.2 Explanations for individual characteristics

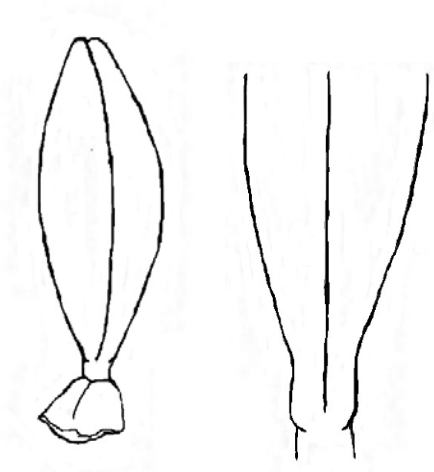
Ad. 1: Plant: habit



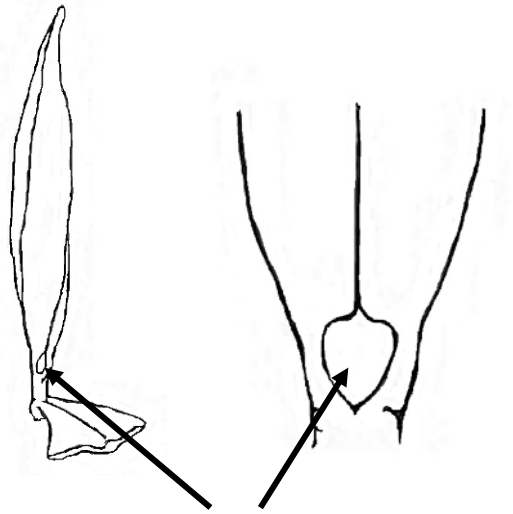
1 upright | 2 semi upright | 3 spreading | 4 horizontal

Ad. 10: Leaf bud: presence of sinus

The sinus is located in the leaf bud, a gap between the bases of two leaves of a pair when in bud. It can be seen by the naked eye for some varieties but should be observed with a magnifying glass for other varieties. The presence or absence of a petiole or the shape of the leaf blade can indicate the presence of the sinus. Narrower leaves and those with petioles are more likely to have a sinus.



1
absent



9
present

Ad. 13: Leaf: attitude

1
adpressed

2
erect

3
semi erect

4
horizontal

5
downwards

Ad. 16: Leaf blade: ratio length/width
Ad. 17: Leaf blade: shape

← broadest part →		
(below middle)	at middle	(above middle)

width (ratio length/width) → narrow (high) / ← broad (low)			
	 1 lanceolate	 3 oblong	 5 oblanceolate
	 2 ovate		
		 4 elliptic	 6 obovate

Ad. 19: Leaf blade: shape of apex

1
acuminate

2
acute

3
rounded

Ad. 22: Leaf blade: main color

The main color is determined as the color with the largest surface area present on the inner side of a leaf. Observations should be made on plants not subjected to chilling. For varieties with glaucosity, the waxy layer is removed. The inner side is the same as the upper side.

Ad. 23: Leaf blade: distribution of secondary color

1
none

2
on margin only

3
broad margin
(whitish)

4
intermediate zone
(light green)

5
central zone
(dark green)

6
on mid rib only

7
on margin and
on mid rib
(red purple)

8
irregular
(light yellow)

Ad. 24: Leaf blade: secondary color

The secondary color is determined as the color with the second largest surface area, usually observed as a defined pattern on the inner side of a leaf.

Ad. 26: Leaf blade: distribution of tertiary color

1
none

2
on margin only
(purple)

3
on mid rib only
(blackish)

4
on margin and on mid rib
(purple)

Ad. 27: Leaf blade: tertiary color

The tertiary color is determined as the color with the third largest surface area, usually observed as a defined pattern on the inner side of a leaf. For varieties with glaucosity, the waxy layer is removed. The inner side is the same as the upper side.

Ad. 29: Leaf blade: glaucosity

The glaucosity is the bloom or waxy layer covering the leaf surface and generally gives a leaf a bluish or milky coloration. The layer can be removed.

Ad. 30: Inflorescence: arrangement

1
terminal only

2
terminal and lateral

3
lateral only

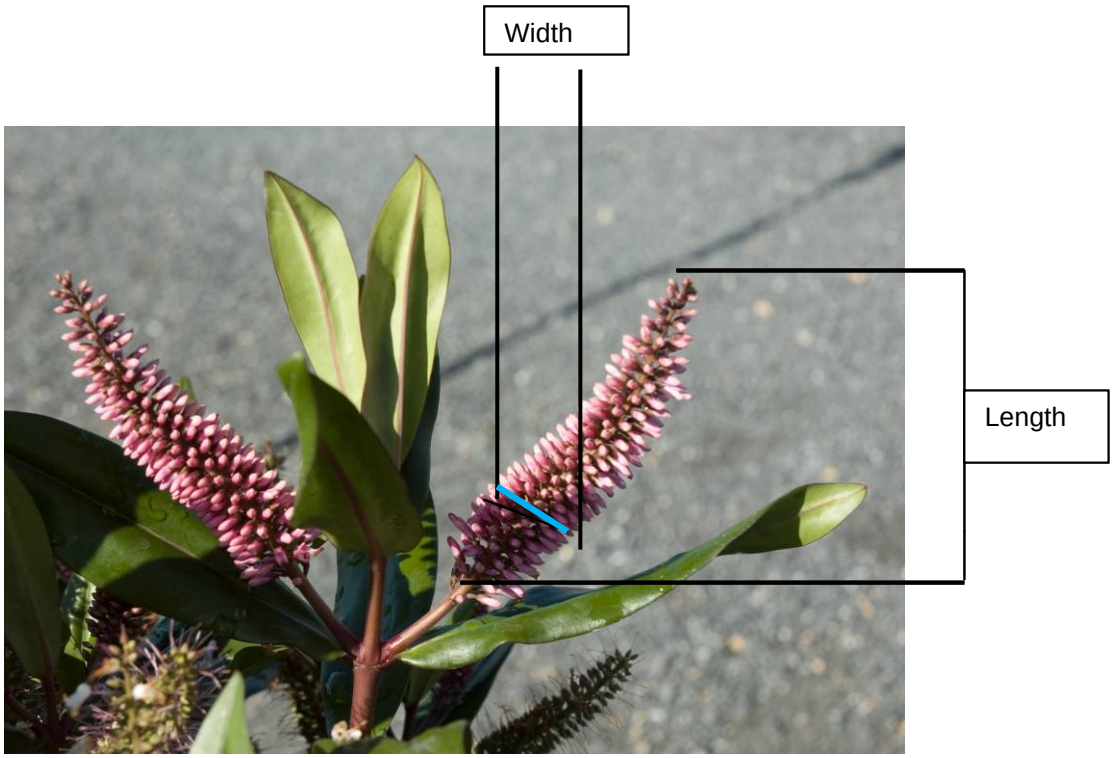
Ad. 31: Inflorescence: shape in profile

1
triangular

2
oblong

3
elliptic

Ad. 32: Inflorescence: length of flowering part
Ad 33: Inflorescence: width of flowering part



The width of the inflorescence is taken at the broadest point.

Ad. 35: Inflorescence: corolla color change with age

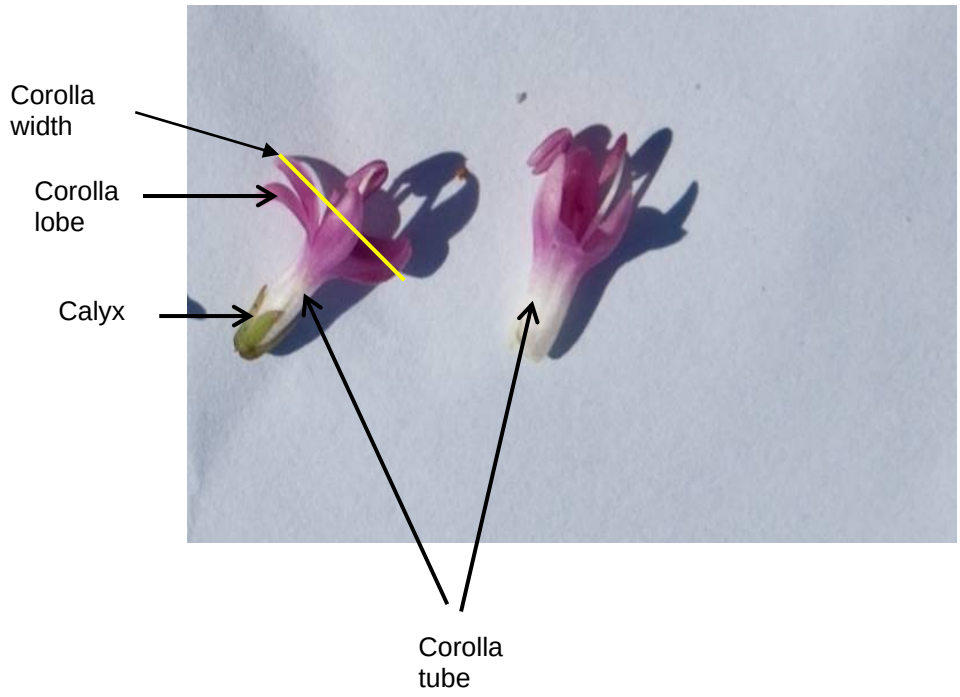
Observations are made when half to two thirds of all flowers on a single inflorescence are open comparing recently opened flowers with aged flowers on the inflorescence.

1
absent or weak

2
medium

3
strong

Ad. 36: Corolla: width
Ad. 38: Corolla tube: length in relation to calyx



Ad. 40: Plant: number of inflorescences

The observation should be made when approximately 50% of inflorescences have open flowers.

9. Literature

Hutchins, G., 1997: Hebes Here and There, Hutchins and Davies, Reading, GB

Metcalf, L.J., 1975: The Cultivation of New Zealand Trees and Shrubs, AH & AW Reed Ltd. Auckland, NZ

Metcalf, L.J., 2001: International Register of Hebe Cultivars, Royal New Zealand Institute of Horticulture

Metcalf, L.J., 2006: Hebe: a guide to species, hybrids and allied genera, Timber Press, Oregon, US

Poole, A.L., Adams, N.M. 1986: Trees and Shrubs of New Zealand, Government Printing, Wellington, NZ, pp. 218 to 237

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	*Hebe* Comm. ex Juss.
1.2	Common name	Hebe
1.3	Species	

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 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:

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 Other [ ]
(please provide details)

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

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

	Characteristics	Example Varieties	Note
5.1 (1)	**Plant: habit**		
	upright	Sandra Joy, Turkish Delight	1[ ]
	semi upright	Beverley Hills	2[ ]
	spreading	Orphan Annie, Pretty N Pink	3[ ]
	horizontal	First Light, Hartii	4[ ]
5.2 (15)	**Leaf blade: width**		
	very narrow	Karo Golden Esk	1[ ]
	very narrow to narrow		2[ ]
	narrow	Mary Antoinette, Silver Queen	3[ ]
	narrow to medium		4[ ]
	medium	Eveline, Wiri Desire	5[ ]
	medium to broad		6[ ]
	broad	Andersonii, La Seduisante	7[ ]
	broad to very broad		8[ ]
	very broad		9[ ]
5.3 i (22)	**Leaf blade: main color**		
	RHS Colour Chart (indicate reference number)		
5.3 ii (22)	**Leaf blade: main color**		
	white		1[ ]
	yellowish white		2[ ]
	yellow		3[ ]
	yellow green		4[ ]
	green		5[ ]
	yellow brown		6[ ]
	reddish brown		7[ ]
	reddish purple		8[ ]
	purple		9[ ]
	purplish black		10[ ]

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

	Characteristics	Example Varieties	Note
5.4 i (24)	**Leaf blade: secondary color**		
	RHS Colour Chart (indicate reference number)		
5.4 ii (24)	**Leaf blade: secondary color**		
	none		1[ ]
	white		2[ ]
	yellowish white	Sunstreak	3[ ]
	yellow	Orphan Annie	4[ ]
	yellow green	Moonlight	5[ ]
	green		6[ ]
	yellow brown		7[ ]
	reddish brown		8[ ]
	reddish purple		9[ ]
	purple		10[ ]
	purplish black		11[ ]
5.5 (31)	**Inflorescence: shape in profile**		
	triangular	Moonlight	1[ ]
	oblong	Eveline, Wiri Vogue	2[ ]
	elliptic	Icing Sugar, Wiri Joy	3[ ]
5.6 i (37)	**Corolla lobe: color of inner side**		
	RHS Colour Chart (indicate reference number)		
5.6 ii (37)	**Corolla lobe: color of inner side**		
	white		1[ ]
	pink		2[ ]
	pink red		3[ ]
	purple		4 [ ]
	violet		5[ ]
	blue		6[ ]

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

6. Similar varieties and differences from these varieties

Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knowledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the **similar** variety(ies)	Describe the expression of the characteristic(s) for **your** candidate variety
Example	*Plant: habit*	*semi-upright*	*spreading*

Comments:

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

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

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

Yes [ ] No [ ]

(If yes, please provide details)

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

Yes [ ] No [ ]

(If yes, please provide details)

7.3 Main use of the variety

(a) pot plant [ ]
(b) garden plant [ ]
(c) other [ ]
(please provide details)

.....

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:

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]