



TG/LOBEL(proj.3)

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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

LOBELIA

UPOV Codes: LOBEL_ALS;
 LOBEL_ERI; LOBEL_VAL;
 LOBEL_AER; LOBEL_EVA;

Lobelia alsinoides Lam.; *Lobelia erinus* L.;
Lobelia valida L. Bolus;
 Hybrids between *Lobelia erinus* and *Lobelia alsinoides*;
 Hybrids between *Lobelia erinus* and *Lobelia valida*

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from Canada

to be considered by the

*Enlarged Editorial Committee at its meeting
 to be held in Geneva, on January 9 and 10, 2013*

Alternative Names:^{*}

Botanical name	English	French	German	Spanish
<i>Lobelia alsinoides</i> Lam.				
<i>Lobelia erinus</i> L.	Lobelia, True Lobelia of Gardens	Lobélie, Lobélie des jardins	Lobelia, Männertreu	Lobelia
<i>Lobelia valida</i> L. Bolus				
Hybrids between <i>Lobelia erinus</i> and <i>Lobelia alsinoides</i>				
Hybrids between <i>Lobelia erinus</i> and <i>Lobelia valida</i>				

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 *Lobelia alsinoides* Lam., *Lobelia erinus* L., *Lobelia valida* L. Bolus, Hybrids between *Lobelia erinus* and *Lobelia alsinoides* and Hybrids between *Lobelia erinus* and *Lobelia valida*.

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 or seed.

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

vegetatively propagated varieties: 15 rooted cuttings
seed propagated varieties: a sufficient quantity of seed to produce 30 plants.

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*

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 Vegetatively propagated varieties: each test should be designed to result in a total of at least 15 plants.

3.4.2 Seed propagated varieties: each test should be designed to result in a total of at least 30 plants.

3.4.3 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

4.1.4.1 Unless otherwise indicated, for vegetatively propagated varieties, 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 observations made on all plants in the test, disregarding any off-type plants.

4.1.4.2 Unless otherwise indicated, for seed-propagated varieties, 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 observations made on all plants in the test, disregarding any off-type plants.

4.1.5 Method of Observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the 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 15 plants, 1 off-type is allowed.

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.

4.3 *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.

4.3.3 Where appropriate, or in cases of doubt, the stability of a hybrid variety may, in addition to an examination of the hybrid variety itself, also be assessed by examination of the uniformity and stability of its parent lines.

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: attitude of shoots (characteristic 1)
- (b) Flower: type (characteristic 16)
- (c) Lower lip: main color of upper side (excluding white zone) (characteristic 25) with the following groups:
 - Gr. 1: white
 - Gr. 2: light blue
 - Gr. 3: blue/violet
 - Gr. 4: red/purple
- (d) Lower lip: white zone on upper side (characteristic 27)
- (e) Lower lip: markings (characteristic 29)

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)-(e) 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: attitude of shoots	Plante : port des rameaux	Pflanze: Wuchsform der Triebe	Planta: porte de las ramas		
QN		upright	dressé	aufrecht	erecto	Lobetis	1
		semi-upright	demi-dressé	halbaufrecht	semierecto	Tech Hevio, USLOB13	3
		horizontal	horizontal	waagrecht	horizontal	Tec Hewhitt, Wesloti	5
		semi drooping	semi-retombant	halbhängend	semicolgante	Wespinstar	7
		drooping	retombant	hängend	colgante		9
2.	VG/ MS	Plant: height	Plante : hauteur	Pflanze: Höhe	Planta: altura		
QN		short	courte	niedrig	baja	GRÜLO 01	3
		medium	moyenne	mittel	media	Lobmounwi	5
		tall	haute	hoch	alta	Tec Travio	7
3.	VG/ MS	Shoot: length	Rameau : longueur	Trieb: Länge	Tallo: longitud		
QN		short	court	kurz	corto	Lobmounwi	3
		medium	moyen	mittel	medio	Wesstar	5
		long	long	lang	largo	Lobmounlila	7
4.	VG/ MS	Shoot: length of internodes	Rameau : longueur des entre-nœuds	Trieb: Länge der Internodien	Tallo: longitud del entrenudo		
QN	(a)	short	courte	kurz	corto	Weslosu	3
		medium	moyenne	mittel	medio	Tech Elebule	5
		long	longue	lang	largo		7
5.	VG	Shoot: thickness	Rameau : épaisseur	Trieb: Dicke	Tallo: grosor		
QN	(a)	very thin	très mince	sehr dünn	muy delgado	Loboudtis	1
		thin	mince	dünn	delgado	Lobmounwi	2
		medium	moyen	mittel	medio	Weslosu	3
		thick	épais	dick	grueso	DANANAB 8	4
		very thick	très épais	sehr dick	muy grueso		5
6.	VG	Shoot: intensity of green color	Rameau : intensité de la couleur verte	Trieb: Intensität der Grünfärbung	Tallo: intensidad del color verde		
QN	(a)	light	claire	hell	clara	Wesloti	1
		medium	moyenne	mittel	media	Tec Travio	3
		dark	foncée	dunkel	oscura	Loboudtis	5

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
7.	VG	Shoot: anthocyanin coloration	Rameau : pigmentation anthocyanique	Trieb: Anthocyanfärbung	Tallo: pigmentación antociánica	
QN	(b)	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Weslosu 1
		weak	faible	gering	débil	Tech Elebule 3
		medium	moyenne	mittel	media	Wespinstar 5
		strong	forte	stark	fuerte	Wespurstar 7
8.	VG	Shoot: pubescence	Rameau : pubescence	Trieb: Behaarung	Tallo: pubescencia	
QN	(a)	absent or very sparse	absente ou très éparse	fehlend oder sehr wenig	ausente o muy escasa	1
		sparse	éparse	wenig	escasa	2
		medium	moyenne	mittel	media	3
		dense	dense	dicht	densa	4
		very dense	très dense	sehr dicht	muy densa	5
9.	VG/ (*) MS	Leaf: length	Feuille : longueur	Blatt: Länge	Hoja: longitud	
QN	(c)	short	courte	kurz	corta	3
		medium	moyenne	mittel	media	Lobtrawi 5
		long	longue	lang	larga	Tech Heplib 7
10.	VG/ (*) MS	Leaf: width	Feuille : largeur	Blatt: Breite	Hoja: anchura	
QN	(c)	narrow	étroite	schmal	estrecha	3
		medium	moyenne	mittel	media	Tech Elebule 5
		broad	large	breit	ancha	Weslowei 7
11.	VG (*)	Leaf: incisions of margin	Feuille : incisions du bord	Blatt: Randeinschnitte	Hoja: incisiones del borde	
QN	(c)	absent or very shallow	nulles ou très peu profondes	fehlend oder sehr flach	ausentes o muy poco profundas	1
		shallow	peu profondes	flach	poco profundas	Wespinstar 3
		medium	moyennes	mittel	medias	Tech Hevio 5
		deep	profondes	tief	profundas	Lobstrahob 7
		very deep	très profondes	sehr tief	muy profundas	9
12.	VG (+)	Leaf: shape	Feuille : forme	Blatt: Form	Hoja: forma	
PQ	(c)	broad ovate	ovale large	breit eiförmig	oval ancha	1
		elliptic	elliptique	elliptisch	elíptica	2
		circular	circulaire	kreisförmig	circular	3
		oblanceolate	oblanceolée	verkehrt lanzettlich	oblanceolada	4
		obovate	obovale	verkehrt eiförmig	oboval	5
		spatulate	spatulée	spatelförmig	espatulada	6

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
13.	VG	Leaf: intensity of green color on upper side	Feuille : intensité de la couleur verte sur la face supérieure	Blatt: Intensität der Grünfärbung an der Oberseite	Hoja: intensidad del color verde en el haz	
QN	(c)	light	claire	hell	clara	Lobmounlila 1
		medium	moyenne	mittel	media	Tech Travio 2
		dark	foncée	dunkel	oscura	Weslowei 3
14.	VG	Leaf: anthocyanin coloration on lower side	Feuille : pigmentation anthocyanique sur la face inférieure	Blatt: Anthocyanfärbung an der Unterseite	Hoja: pigmentación antocianica del envés	
(+)						
QN	(c)	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Kirilo-LV63 1
		weak	faible	gering	débil	Lobtramidblu 2
		medium	moyenne	mittel	media	Tech Heplib 3
		strong	forte	stark	fuerte	Regatta Midnight Blue 4
15.	VG	Leaf: pubescence on upper side	Feuille : pubescence sur la face supérieure	Blatt: Behaarung an der Oberseite	Hoja: pubescencia en el haz	
QN	(c)	absent or very sparse	absente ou très éparse	fehlend oder sehr wenig	ausente o muy escasa	Riviera Lilac 1
		sparse	éparse	wenig	escasa	Lobmounlila 2
		medium	moyenne	mittel	media	3
		dense	dense	dicht	densa	USLOB13 4
		very dense	très dense	sehr dicht	muy densa	5
16.	VG	Flower: type	Fleur : type	Blüte: Typ	Flor: tipo	
(*)						
(+)						
QL		single	simple	einfach	simple	KLELE08621 1
		double	double	gefüllt	doble	Kathleen Mallard 2
17.	VG/MS	Only for varieties with flower type: double: Flower: diameter	Variétés à type de fleur double seulement : Fleur : diamètre	Nur für Sorten mit Blütentyp: gefüllt: Blüte: Durchmesser	Sólo para las variedades con tipo de flor: doble: Flor: diámetro	
QN		small	petit	klein	pequeño	3
		medium	moyen	mittel	medio	5
		large	grand	groß	grande	7
18.	VG	Only for varieties with flower type: double: Flower: main color	Variétés à type de fleur double seulement : Fleur : couleur principale	Nur für Sorten mit Blütentyp: gefüllt: Blüte: Hauptfarbe	Sólo para las variedades con tipo de flor: doble: Flor: color principal	
PQ		RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese número de referencia)	
19.	VG/MS	Corolla: length	Corolle : longueur	Krone: Länge	Corola: longitud	
(*)						
(+)						
QN	(d)	short	courte	kurz	corta	Lobmounwi 3
		medium	moyenne	mittel	media	Tech Elebule 5
		long	longue	lang	largo	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
20.	VG	Upper lip: shape of lobes	Labelle supérieur : forme des lobes	Oberlippe: Form der Lappen	Labio superior: forma de los lóbulos	
(+)						
PQ	(d)	elliptic	elliptique	elliptisch	elíptica	Lobantis 1
		oblanceolate	oblancéolée	verkehrt lanzettlich	oblanceolada	Lobmounwi 2
		obovate	obovale	verkehrt eiförmig	oboval	Balwalila 3
		obtriangular	obtriangulaire	verkehrt dreieckig	obtriangular	Regatta Sapphire 4
21.	VG	Upper lip: main color of inner side	Labelle supérieur : couleur principale de la face interne	Oberlippe: Hauptfarbe der Innenseite	Labio superior: color principal de la cara interior	
PQ	(d)	RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)	
22.	VG/MS	Lower lip: length	Labelle inférieur : longueur	Unterlippe: Länge	Labio inferior: longitud	
(*)						
(+)						
QN	(d)	very short	très court	sehr kurz	muy corto	Loboudtis 1
		short	court	kurz	corto	Lobtrawi 2
		medium	moyen	mittel	medio	3
		long	long	lang	largo	Wespurstar 4
		very long	très long	sehr lang	muy largo	Tech Hewhitt 5
23.	VG/MS	Lower lip: width	Labelle inférieur : largeur	Unterlippe: Breite	Labio inferior: anchura	
(*)						
(+)						
QN	(d)	narrow	étroit	schmal	estrecho	Lobmounwi 3
		medium	moyen	mittel	medio	Tech Elebule 5
		broad	large	breit	ancho	Weslosu 7
24.	VG/MS	Lower lip: width of middle lobe	Labelle inférieur : largeur du lobe médian	Unterlippe: Breite des Mittellappens	Labio inferior: anchura del lóbulo medio	
(*)						
(+)						
QN	(d)	narrow	étroit	schmal	estrecho	Loboudtis 1
		medium	moyen	mittel	medio	Tech Elebule 2
		broad	large	breit	ancho	Tec Hewhitt 3
25.	VG	Lower lip: main color of upper side (excluding white zone)	Labelle inférieur : couleur principale de la face supérieure (sauf la zone blanche)	Unterlippe: Hauptfarbe der Oberseite (ohne weiße Zone)	Labio inferior: color principal de la cara superior (excluida la zona blanca)	
(*)						
(+)						
PQ	(d)	RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)	
26.	VG	Lower lip: secondary color of upper side (excluding white zone)	Labelle inférieur : couleur secondaire de la face supérieure (sauf la zone blanche)	Unterlippe: Sekundärfarbe der Oberseite (ohne weiße Zone)	Labio inferior: color secundario de la cara superior (excluida la zona blanca)	
(+)						
PQ	(d)	RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)	

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
27.	VG	Lower lip: white zone on upper side	Labelle inférieur : zone blanche sur la face supérieure	Unterlippe: weiße Zone an der Oberseite	Labio inferior: zona blanca en la cara superior	
QN	(d)	absent or very small	absente ou très petite	fehlend oder sehr klein	ausente o muy pequeña	Riviera Lilac 1
		small	petite	klein	pequeña	Loboudtis 3
		medium	moyenne	mittel	media	Tech Hevio 5
		large	grande	groß	grande	Tech Heplib 7
		very large	très grande	sehr groß	muy grande	9
28.	VG	Lower lip: shape of white zone on upper side	Labelle inférieur : forme de la zone blanche sur la face supérieure	Unterlippe: Form der weißen Zone an der Oberseite	Labio inferior: forma de la zona blanca en la cara superior	
PQ	(d)	elongated only	allongée seulement	nur länglich	únicamente alargada	1
		elongated and rounded	allongée et arrondie	länglich und abgerundet	alargada y redondeada	2
		rounded only	arrondie seulement	nur abgerundet	únicamente redondeada	3
		irregular	irrégulière	unregelmäßig	irregular	4
29.	VG	Lower lip: markings	Labelle inférieur : taches	Unterlippe: Sprekelung	Labio inferior: marcas	
QL	(d)	absent	absentes	fehlend	ausentes	Tech Hepdab 1
	(e)	present	présentes	vorhanden	presentes	Balwalila 9
30.	VG	Lower lip: size of markings	Labelle inférieur : taille des taches	Unterlippe: Größe der Sprekelung	Labio inferior: tamaño de las marca	
QN	(d)	small	petite	klein	pequeñas	Azuro 1
	(e)	medium	moyenne	mittel	medias	Lobstrahob 2
		large	grande	groß	grandes	LOBZ0001 3
31.	VG	Lower lip: main color of lower side	Labelle inférieur : couleur principale de la face inférieure	Unterlippe: Hauptfarbe der Unterseite	Labio inferior: color principal de la cara inferior	
PQ	(d)	RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)	
32.	VG	Lower lip: arrangement of lobes	Labelle inférieur : disposition des lobes	Unterlippe: Anordnung der Lappen	Labio inferior: disposición de los lóbulos	
QN	(d)	free	ouverts	freistehend	separados	KLELE08621 1
		touching	tangents	sich berührend	en contacto	Regatta Sapphire 2
		overlapping	chevauchants	überlappend	solapados	Lobtrawi 3
33.	VG	Corolla tube: color of outer side	Tube de la corolle : couleur de la face externe	Kronröhre: Farbe der Unterseite	Tubo de la corola: color de la cara externa	
PQ	(d)	RHS Colour Chart (indicate RHS reference number)	Code de couleurs RHS (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, 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) Unless otherwise indicated, all shoot characteristics should be observed on the middle third of the shoot.
- (b) Anthocyanin colouration on the shoot should be observed on the upper third.
- (c) All leaf characteristics should be observed on fully developed leaves on the lower third of the shoot just before flowering.
- (d) Observe for single varieties only.
- (e) Markings on the lower lip do not include the white zone or any yellow markings extending from the throat.

8.2 *Explanations for individual characteristics*

Ad. 1: Plant: attitude of shoots



1
upright



3
semi-upright



5
horizontal



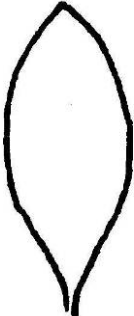

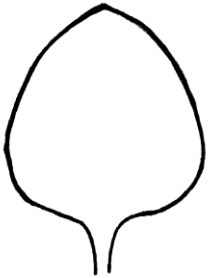
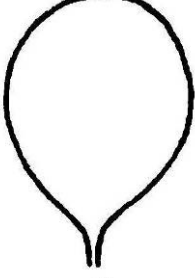


9
drooping

Ad. 2: Plant: height

Plant height should be assessed from the surface of the growing medium.

Ad. 12: Leaf: shape

		← broadest part →		
		(below middle)	at middle	(above middle)
broad (compressed) ← width (ratio length/width) → narrow (elongated)				
			4 oblanceolate	6 spatulate
				
	2 elliptic	5 obovate		
				
	1 broad ovate	3 circular		

Ad. 14: Leaf: anthocyanin coloration on lower side



1
absent or very weak



2
weak



3
medium



4
strong

Ad. 16: Flower: type

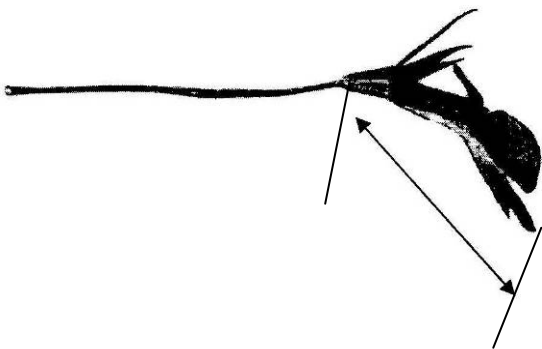


1
single



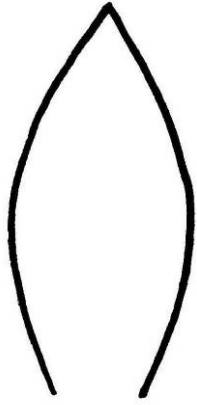
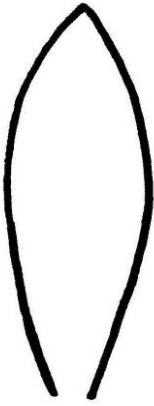
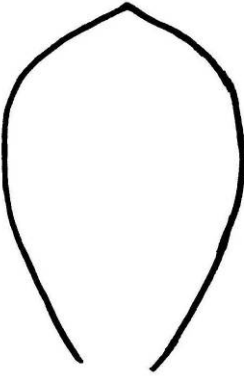
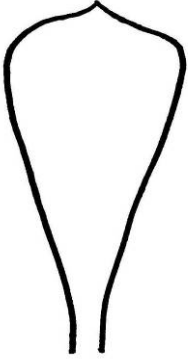
2
double

Ad. 19: Corolla: length



The length to assess is the real length and not the natural length. Flowers with strong recurvature should be flattened.

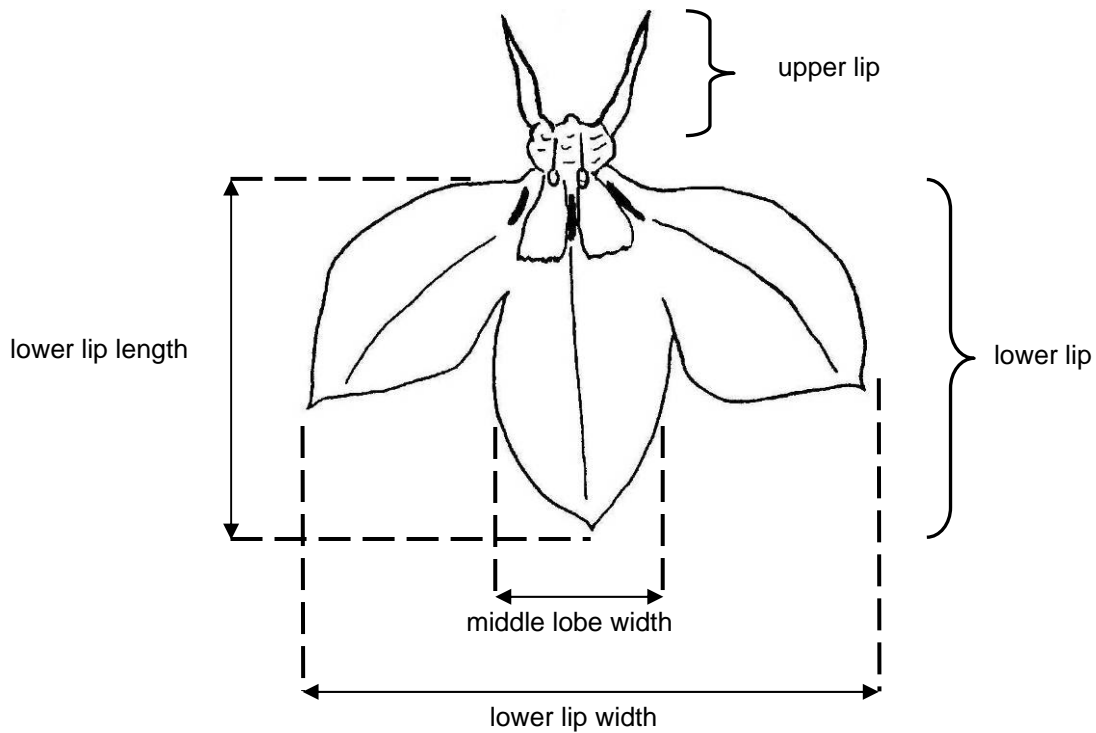
Ad. 20: Upper lip: shape of lobes

		← broadest part →	
		at middle	(above middle)
broad (compressed) ← width (ratio length/width) → narrow (elongated)			
	1 elliptic		
			
	2 oblanceolate		
			
	3 obovate		
			
			4 obtriangular

Ad. 22: Lower lip: length

Ad. 23: Lower lip: width

Ad. 24: Lower lip: width of middle lobe



Ad. 25: Lower lip: main color of upper side (excluding white zone)

Ad. 26: Lower lip: secondary color of upper side (excluding white zone)

The main color is defined as the color with the largest surface area, the secondary color (if present) is the color with the second largest surface area.

Ad. 27: Lower lip: white zone on upper side



1
absent



2
present



For white varieties, the white zone is recorded as absent.

Ad. 28: Lower lip: shape of white zone on upper side



1
elongated only



3
rounded only



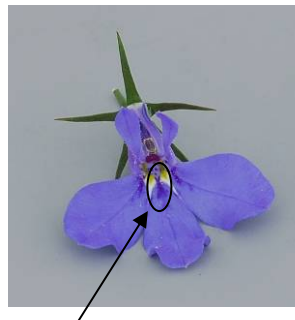
4
irregular

State 2 (elongated and rounded) means that elongated and rounded are both present on the same plant.

Ad. 29: Lower lip: markings



1
absent



2
present

Ad. 32: Lower lip: arrangement of lobes



1
free



2
touching



3
overlapping

9. Literature

Huxley, A. (ed.), Griffiths, M. (ed.), Levy, M. (ed.), 1999: The Royal Horticultural Society Dictionary of Gardening. Grove's Dictionaries Inc. New York, New York, US.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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	Application date: (not to be filled in by the applicant)
--	---

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

1. Subject of the Technical Questionnaire

1.1.1 Botanical name []

1.1.2 Common name

1.2.1 Botanical name []

1.2.2 Common name

1.3.1 Botanical name []

1.3.2 Common name

1.4.1 Botanical name []

1.4.2 Common name

1.5.1 Botanical name []

1.5.2 Common name

2. Applicant

Name

Address

Telephone No.

Fax No.

E-mail address

Breeder (if different from applicant)

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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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 Seed-propagated varieties

- (a) Self-pollination []
- (b) Cross-pollination
 - (i) population []
 - (ii) synthetic variety []
- (c) Hybrid []
(please provide details)

- (d) Other []
(please provide details)

4.2.2 Vegetatively propagated varieties

- (a) cuttings []
- (b) *in vitro* propagation []
- (c) other (state method) []

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 Plant: attitude of shoots (1)		
upright	Lobetis	1[]
upright to semi-upright		2[]
semi-upright	Tech Hevio, USLOB13	3[]
semi-upright to horizontal		4[]
horizontal	Tec Hewhitt, Weslotti	5[]
horizontal to semi-drooping		6[]
semi-drooping	Wespinstar	7[]
semi-drooping to drooping	Lobmounlila	8[]
drooping		9[]
5.2 Flower: type (16)		
single	KLELE08621	1[]
double	Kathleen Mallard	2[]
5.3 i Lower lip: main color of upper side (excluding white zone) (25)		
RHS Colour Chart (indicate reference number)		
5.3 ii Lower lip: main color of upper side (excluding white zone) (25)		
white		1[]
light blue		2[]
blue/violet		3[]
red/purple		4[]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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Characteristics	Example Varieties	Note
5.4 Lower lip: white zone on upper side (27)		
absent or very small	Riviera Lilac	1[]
very small to small		2[]
small	Loboudtis	3[]
small to medium		4[]
medium	Tech Hevio	5[]
medium to large		6[]
large	Tec Heplib	7[]
large to very large		8[]
very large		9[]
5.5 Lower lip: markings (29)		
absent	Tec Hepdab	1[]
present	Balwalila	9[]

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>color of upper side of lower lip</i>	<i>light blue</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]