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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

HARDY GERANIUM *

UPOV Code(s):

GERAN

Geranium L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

Alternative names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Geranium L.	Hardy Geranium, Crane's Bill	Géranium	Storchschnabel	Geranio

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 *Geranium* L..

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.

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

10 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 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 or Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 9 plants or parts of plants taken from each of 9 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 Table of Characteristics (see document TGP/9 “Examining Distinctness”, Section 4 “Observation of characteristics”):

MG: single measurement of a group of plants or parts of plants
MS: measurement of a number of individual plants or parts of plants
VG: visual assessment by a single observation of a group of plants or parts of plants
VS: visual assessment by observation of individual plants or parts of plants

Type of observation: visual (V) or measurement (M)

“Visual” observation (V) is an observation made on the basis of the expert’s judgment. For the purposes of this document, “visual” observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, “G” provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness.

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

4.2 Uniformity

4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

4.2.2 These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation, the recommendations in the General Introduction and document TGP/13 "Guidance for new types and species" Section 4.5 "Testing Uniformity" should be followed.

4.2.3 For the assessment of uniformity of 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 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 further examined by testing a new seed 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) Plant: height (characteristic 3)
(c) Leaf: main color (characteristic 8)
Gr. 1: whitish
Gr. 2: green
Gr. 3: purplish or brownish green
Gr. 4: yellow green
Gr. 5: yellow
Gr. 6: purple
Gr. 7: brownish purple
Gr. 8: brownish
Gr. 9: reddish brown
(d) Flower: attitude (characteristic 29)
(e) Flower: type (characteristic 30)
(f) Petal: main color (characteristic 39)
Gr. 1: white
Gr. 2: light pink
Gr. 3: medium pink
Gr. 4: dark pink
Gr. 5: orange red
Gr. 6: red purple
Gr. 7: purple
Gr. 8: violet
Gr. 9: blue
Gr. 10: reddish brown

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

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1 **2**	**3** **4**	**5** **6**	**7**			
	Name of characteristics in English	**Nom du caractère en français**	**Name des Merkmals auf Deutsch**	**Nombre del carácter en español**		
	states of expression	types d'expression	Ausprägungsstufen	tipos de expresión		

1 Characteristic number

2 (*) Asterisked characteristic – see Chapter 6.1.2

3 Type of expression
QL Qualitative characteristic – see Chapter 6.3
QN Quantitative characteristic – see Chapter 6.3
PQ Pseudo-qualitative characteristic – see Chapter 6.3

4 Method of observation (and type of plot, if applicable)
MG, MS, VG, VS – see Chapter 4.1.5

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

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

7 Not applicable

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

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*) PQ VG		**(+)**				
	Plant: habit	**Plante : port**	**Pflanze: Wuchsform**	**Planta: hábito**		
	upright	dressé	aufrecht	erguida		1
	semi-upright	demi-dressé	halbaufrecht	semierguida	Midnightlyona	2
	spreading	étalé	breitwüchsig	extendida	Gerwat	3
	horizontal	horizontal	waagerecht	horizontal	Noorthava	4
2. QN VG						
	Plant: density	**Plante : densité**	**Pflanze: Dichte**	**Planta: densidad**		
	very sparse	très faible	sehr locker	muy laxa		1
	sparse	faible	locker	laxa	Melody	2
	medium	moyenne	mittel	media	Gerwat	3
	dense	forte	dicht	densa	Thunder Cloud	4
	very dense	très forte	sehr dicht	muy densa		5
3. (*) QN MG/MS/VG						
	Plant: height	**Plant : hauteur**	**Pflanze: Höhe**	**Planta: altura**		
	very short	très basse	sehr niedrig	muy baja	Thunder Cloud	1
	short	basse	niedrig	baja	Noorthava	3
	medium	moyenne	mittel	media	Catherine Deneuve	5
	tall	haute	hoch	alta	Samobor	7
	very tall	très haute	sehr hoch	muy alta		9
4. QN MG/MS/VG		**(+)**				
	Stem: internode length	**Tige : longueur de l'entrenœud**	**Trieb: Internodienlänge**	**Tallo: longitud del entrenudo**		
	very short	très court	sehr kurz	muy corto	Blushing Turtle	1
	short	court	kurz	corto	Thunder Cloud	2
	medium	moyen	mittel	medio	Bremdra	3
	long	long	lang	largo	Catherine Deneuve	4
	very long	très long	sehr lang	muy largo		5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
5.	**(*)**	**QN MG/MS/VG**	**(+) (a)**				
		Leaf: length	**Feuille : longueur**	**Blatt: Länge**	**Hoja: longitud**		
		very short	très courte	sehr kurz	muy corta	Melody	1
		short	courte	kurz	corta	Blushing Turtle	3
		medium	moyenne	mittel	media	Noorthava	5
		long	longue	lang	larga		7
		very long	très longue	sehr lang	muy larga	Catherine Deneuve	9
6.	**(*)**	**QN MG/MS/VG**	**(+) (a)**				
		Leaf: width	**Feuille : largeur**	**Blatt: Breite**	**Hoja: anchura**		
		very narrow	très étroite	sehr schmal	muy estrecha	Melody	1
		narrow	étroite	schmal	estrecha	Blushing Turtle	3
		medium	moyenne	mittel	media	Noorthava	5
		broad	large	breit	ancha		7
		very broad	très large	sehr breit	muy ancha	Catherine Deneuve	9
7.	**(*)**	**QN MG/MS/VG**	**(+)**				
		Leaf: length/width ratio	**Feuille : rapport longueur/largeur**	**Blatt: Verhältnis Länge/Breite**	**Hoja: relación longitud/anchura**		
		very low	très bas	sehr klein	muy baja		1
		low	bas	klein	baja		2
		medium	moyen	mittel	media		3
		high	élevé	groß	alta		4
		very high	très élevé	sehr groß	muy alta		5
8.	**(*)**	**PQ VG**		**(a), (b), (c)**			
		Leaf: main color	**Feuille : couleur principale**	**Blatt: Hauptfarbe**	**Hoja: color principal**		
		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
9.	**(*)** **PQ** **VG**		**(a), (b)**				
		Leaf: secondary color	**Feuille : couleur secondaire**	**Blatt: Sekundärfarbe**	**Hoja: color secundario**		
		none	aucune	keine	ausente		1
		whitish	blanchâtre	weißlich	blanquecino	Jester's Jacket	2
		light green	vert clair	hellgrün	verde claro	Noorthava	3
		medium green	vert moyen	mittelgrün	verde medio	Springtime	4
		dark green	vert foncé	dunkelgrün	verde oscuro		5
		yellow green	vert-jaune	gelbgrün	verde amarillento	Margaret Wilson	6
		grey green	vert-gris	graugrün	verde grisáceo		7
		yellow	jaune	gelb	amarillo	Spring Fling	8
		pink	rose	rosa	rosa		9
		red	rouge	rot	rojo		10
		purple	pourpre	purpurn	púrpura		11
		brownish purple	pourpre brunâtre	bräunlich purpurn	púrpura amarronado		12
		brownish	brunâtre	bräunlich	amarronado	Samobor	13
		reddish brown	brun rougeâtre	rötlich braun	marrón rojizo	Katherine Adele	14
10.	**(*)** **PQ** **VG**		**(+)** **(a), (b)**				
		Leaf: distribution of secondary color	**Feuille : répartition de la couleur secondaire**	**Blatt: Verteilung der Sekundärfarbe**	**Hoja: distribución del color secundario**		
		on margin	au bord	am Rand	en el borde		1
		marginal zone	zone marginale	im Randbereich	en la zona del borde	Springtime	2
		central zone	zone centrale	im Mittelbereich	en la zona central	Katherine Adele	3
		intermediate zone	zone intermédiaire	im Zwischenbereich	en la zona intermedia	Samobor	4
		at sinus	au sinus	an den Buchten	en los senos		5
		throughout	partout	überall	en la totalidad	Jester's Jacket	6
11.	**(*)** **PQ** **VG**		**(+)** **(a), (b)**				
		Leaf: pattern of secondary color	**Feuille : distribution de la couleur secondaire**	**Blatt: Muster der Sekundärfarbe**	**Hoja: forma de disposición del color secundario**		
		solid or nearly solid	uniforme ou presque	durchgefärbt oder fast durchgefärbt	liso o prácticamente liso		1
		flushed	diffuse	verschwommen	difuso		2
		blotched	taches	gefleckt	en manchas		3
		veined	nervurée	geadert	en la nervadura		4
		irregular sectors	parties irrégulières	unregelmäßige Sektoren	en sectores irregulares		5

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
12.	**PQ VG**	**(a), (b)**				
	Leaf: tertiary color	**Feuille : couleur tertiaire**	**Blatt: Tertiärfarbe**	**Hoja: color terciario**		
	none	aucune	keine	ausente		1
	whitish	blanchâtre	weißlich	blanquecino		2
	light green	vert clair	hellgrün	verde claro		3
	medium green	vert moyen	mittelgrün	verde medio		4
	dark green	vert foncé	dunkelgrün	verde oscuro		5
	yellow green	vert-jaune	gelbgrün	verde amarillento		6
	grey green	vert-gris	graugrün	verde grisáceo		7
	yellow	jaune	gelb	amarillo		8
	pink	rose	rosa	rosa	Jester's Jacket	9
	red	rouge	rot	rojo	Spring Fling	10
	purple	pourpre	purpurn	púrpura		11
	brownish purple	pourpre brunâtre	bräunlich purpurn	púrpura amarronado		12
	brownish	brunâtre	bräunlich	amarronado		13
	reddish brown	brun rougeâtre	rötlich braun	marrón rojizo		14
13.	**PQ VG**	**(+)** **(a), (b)**				
	Leaf: distribution of tertiary color	**Feuille : répartition de la couleur tertiaire**	**Blatt: Verteilung der Tertiärfarbe**	**Hoja: distribución del color terciario**		
	on margin	au bord	am Rand	en el borde		1
	marginal zone	zone marginale	im Randbereich	en la zona del borde		2
	central zone	zone centrale	im Mittelbereich	en la zona central		3
	intermediate zone	zone intermédiaire	im Zwischenbereich	en la zona intermedia		4
	at sinus	au sinus	an den Buchten	en los senos		5
	throughout	partout	überall	en la totalidad		6
14.	**PQ VG**	**(+)** **(a), (b)**				
	Leaf: pattern of tertiary color	**Feuille : distribution de la couleur tertiaire**	**Blatt: Muster der Tertiärfarbe**	**Hoja: forma de disposición del color terciario**		
	solid or nearly solid	uniforme ou presque	durchgefärbt oder fast durchgefärbt	liso o prácticamente liso		1
	flushed	diffuse	verschwommen	difuso		2
	blotched	taches	gefleckt	en manchas		3
	veined	nervurée	geadert	en la nervadura		4
	irregular sectors	parties irrégulières	unregelmäßige Sektoren	en sectores irregulares		5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
15.		**QN VG**	**(a)**				
		Leaf: pubescence	**Feuille : pubescence**	**Blatt: Behaarung**	**Hoja: pubescencia**		
		absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy escasa	Clos du Coudray	1
		weak	faible	gering	escasa	Thunder Cloud	2
		medium	moyenne	mittel	media	Bremdream	3
		strong	forte	stark	abundante	Purple Passion	4
		very strong	très forte	sehr stark	muy abundante		5
16.		**QN VG**	**(a)**				
		Leaf: glossiness	**Feuille : brillance**	**Blatt: Glanz**	**Hoja: brillo**		
		absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy ligero	Noorthava	1
		weak	faible	gering	ligero	Blushing Turtle	2
		medium	moyenne	mittel	medio	Purple Passion	3
		strong	forte	stark	intenso	Thunder Cloud	4
		very strong	très forte	sehr stark	muy intenso	Clos du Coudray	5
17.	**(*)**	**QN VG**	**(a)**				
		Leaf: rugosity	**Feuille : rugosité**	**Blatt: Blasigkeit**	**Hoja: rugosidad**		
		absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy leve	Melody	1
		weak	faible	gering	leve		2
		medium	moyenne	mittel	media	Bremdream	3
		strong	forte	stark	marcada	Catherine Deneuve	4
		very strong	très forte	sehr stark	muy marcada	Philippe Vapelle	5
18.	**(*)**	**QN VG**	**(+)**	**(a), (c)**			
		Leaf: depth of sinus	**Feuille : profondeur du sinus**	**Blatt: Tiefe der Buchten**	**Hoja: profundidad de los senos**		
		absent or very shallow	absent ou très peu profond	fehlend oder sehr flach	ausentes o muy poco profundos		1
		shallow	peu profond	flach	poco profundos		3
		medium	moyen	mittel	medianamente profundos		5
		deep	profond	tief	profundos		7
		very deep	très profond	sehr tief	muy profundos		9

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
19.	**QN** **MG/VG**	**(+)** **(a), (c)**					
	Leaf: width of lobe	**Feuille : largeur du lobe**	**Blatt: Breite des Lappens**	**Hoja: anchura de los lóbulos**			
	very narrow	très étroit	sehr schmal	muy estrechos		Blushing Turtle	1
	narrow	étroit	schmal	estrechos		Thunder Cloud	3
	medium	moyen	mittel	medios		Noorthava	5
	broad	large	breit	anchos		Catherine Deneuve	7
	very broad	très large	sehr breit	muy anchos			9
20.	**PQ** **VG**	**(+)** **(a), (c)**					
	Leaf: margins of lobe	**Feuille : bords du lobe**	**Blatt: Ränder des Lappens**	**Hoja: bordes de los lóbulos**			
	diverging	divergents	auseinanderlaufend	divergentes			1
	straight	droits	gerade	rectos			2
	converging	convergents	zusammenlaufend	convergentes			3
	overlapping	se recouvrant	überlappend	solapados			4
21.	**PQ** **VG**	**(+)** **(a), (c)**					
	Leaf: shape of lobe apex	**Feuille : Forme de l'extrémité du lobe**	**Blatt: Form der Lappenspitze**	**Hoja: forma del ápice de los lóbulos**			
	acute	aiguë	spitz	agudo			1
	obtuse	obtuse	stumpf	obtuso			2
	rounded	arrondie	abgerundet	redondeado			3
	truncate	tronquée	abgestumpft	truncado			4
22.	**PQ** **VG**	**(+)** **(a)**					
	Leaf: basal lobes	**Feuille : lobes basaux**	**Blatt: Basallappen**	**Hoja: lóbulos basales**			
	strongly diverging	fortement divergents	stark auseinanderlaufend	muy divergentes			1
	moderately diverging	modérément divergents	mäßig auseinanderlaufend	medianamente divergentes			2
	weakly diverging	légèrement divergents	etwas auseinanderlaufend	ligeramente divergentes			3
	straight	droits	gerade	rectos			4
	overlapping	se recouvrant	überlappend	solapados			5
23.	**(*)** **QN** **VG**	**(+)** **(a)**					
	Leaf: number of incisions of margin	**Feuille : nombre d'incisions du bord**	**Blatt: Anzahl der Randeinschnitte**	**Hoja: número de incisiones del borde**			
	few	petit	gering	bajo			3
	medium	moyen	mittel	medio			5
	many	grand	groß	alto			7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
24.	**(*)** **QN** **VG**		**(+)** **(a)**				
		Leaf: depth of incisions of margin	**Feuille : profondeur des incisions du bord**	**Blatt: Tiefe der Randeinschnitte**	**Hoja: profundidad de las incisiones del borde**		
		shallow	peu profondes	flach	poco profundas		3
		medium	moyennes	mittel	medianamente profundas		5
		deep	profondes	tief	profundas		7
25.	**(*)** **QL** **VG**		**(+)**				
		Flowering stem: branching habit	**Tige florifère : port des ramifications**	**Blühender Trieb: Verzweigung**	**Tallo floral: hábito de ramificación**		
		laterals branching both sides	ramifications latérales des deux côtés	seitliche Verzweigung auf beiden Seiten	ramificaciones laterales en ambos lados		1
		laterals branching one side only	ramifications latérales d'un côté seulement	seitliche Verzweigung nur auf einer Seite	ramificaciones laterales en un solo lado		2
26.	**PQ** **VG**						
		Flowering stem: color	**Tige florifère : couleur**	**Blühender Trieb: Farbe**	**Tallo floral: color**		
		green	vert	grün	verde	Bremdream	1
		yellow green	vert-jaune	gelbgrün	verde amarillento		2
		orange red	rouge orangé	orangerot	rojo anaranjado	Rise and Shine	3
		red	rouge	rot	rojo	Thunder Cloud	4
		purplish or brownish green	vert violacé ou vert brunâtre	purpurgrün oder bräunlichgrün	verde purpúreo o amarronado	Blushing Turtle	5
		purple	pourpre	purpurn	púrpura		6
		brownish purple	pourpre brunâtre	bräunlich purpurn	púrpura amarronado	Midnightlyona	7
		reddish brown	brun rougeâtre	rötlich braun	marrón rojizo		8
27.	**QN** **MG/MS/VG**						
		Inflorescence: peduncle length	**Inflorescence : longueur du pédoncule**	**Blütenstand: Länge des Blütenstandsstiels**	**Inflorescencia: longitud del pedúnculo**		
		short	court	kurz	corto	Rise and Shine	3
		medium	moyen	mittel	medio	Blushing Turtle	5
		long	long	lang	largo	Noorthava	7
28.	**QN** **MG/MS/VG**						
		Flower: length of pedicel	**Fleur : longueur du pédicelle**	**Blüte: Länge des Blütenstiels**	**Flor: longitud del pedicelo**		
		short	court	kurz	corto	Blushing Turtle	3
		medium	moyen	mittel	medio	Noorthava	5
		long	long	lang	largo	Bremdream	7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
29.	**(*)**	**QN VG**	**(+) (d)**				
		Flower: attitude	**Fleur : port**	**Blüte: Haltung**	**Flor: porte**		
		upwards	vers le haut	aufwärts gerichtet	erguida		1
		slightly outwards	légèrement vers l'extérieur	etwas seitlich gerichtet	ligeramente hacia afuera	Gerwat	2
		strongly outwards	fortement vers l'extérieur	stark seitlich gerichtet	marcadamente hacia afuera	Midnightlyona	3
		downwards	vers le bas	abwärts gerichtet	hacia abajo		4
30.	**(*)**	**QL VG**	**(+) (d)**				
		Flower: type	**Fleur : type**	**Blüte: Typ**	**Flor: tipo**		
		single	simple	einfach	simple	Gerwat	1
		double	double	gefüllt	doble	Gernic	2
31.	**(*)**	**QN MG/MS/VG**	**(d)**				
		Flower: diameter	**Fleur : diamètre**	**Blüte: Durchmesser**	**Flor: diámetro**		
		small	petit	klein	pequeño	Melody	3
		medium	moyen	mittel	medio	Noorthava	5
		large	grand	groß	grande	Ivan	7
32.	**(*)**	**QN VG**	**(+) (d)**				
		Only varieties with flower type: single: Flower: profile in cross section	**Seulement les variétés à type de fleur : simple : Fleur : profil en section transversale**	**Nur Sorten mit Blütentyp: einfach: Blüte: Profil im Querschnitt**	**Solo variedades con tipo de flor: simple: Flor: perfil en sección transversal**		
		strongly concave	fortement concave	stark konkav	muy cóncavo		1
		moderately concave	moyennement concave	mäßig konkav	medianamente cóncavo		2
		weakly concave	légèrement concave	leicht konkav	ligeramente cóncavo		3
		flat	plat	flach	plano		4
		weakly convex	légèrement convexe	leicht konvex	ligeramente convexo		5
		moderately convex	moyennement convexe	mäßig konvex	medianamente convexo		6
		strongly convex	fortement convexe	stark konvex	muy convexo		7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
33.	**(*) QN VG**		**(+) (d), (e)**				
		Petal: arrangement	**Pétale : disposition**	**Blütenblatt: Anordnung**	**Pétalo: disposición**		
		moderately separate	moyennement distincts	mäßig freistehend	moderadamente separados		1
		weakly separate	légèrement distincts	leicht freistehend	ligeramente separados		2
		touching	tangents	sich berührend	en contacto		3
		weakly overlapping	se recouvrant légèrement	leicht überlappend	ligeramente solapados		4
		moderately overlapping	se recouvrant modérément	mäßig überlappend	moderadamente solapados		5
34.	**QN VG**		**(+) (d), (e)**				
		Petal: curvature	**Pétale : courbure**	**Blütenblatt: Biegung**	**Pétalo: curvatura**		
		moderately incurving	s'incurvant modérément	mäßig aufgebogen	moderadamente incurvado		1
		weakly incurving	s'incurvant légèrement	leicht aufgebogen	ligeramente incurvado		2
		straight	droit	gerade	recto		3
		weakly reflexing	légèrement retombant	leicht zurückgebogen	ligeramente reflexo		4
		moderately reflexing	modérément retombant	mäßig zurückgebogen	moderadamente reflexo		5
35.	**(*) QN MG/MS/VG**		**(d), (e)**				
		Petal: length	**Pétale : longueur**	**Blütenblatt: Länge**	**Pétalo: longitud**		
		short	court	kurz	corto	Purple Passion	3
		medium	moyen	mittel	medio	Midnightlyona	5
		long	long	lang	largo	Philippe Vapelle	7
36.	**(*) QN MG/MS/VG**		**(d), (e)**				
		Petal: width	**Pétale : largeur**	**Blütenblatt: Breite**	**Pétalo: anchura**		
		narrow	étroit	schmal	estrecho	Catherine Deneuve	3
		medium	moyen	mittel	medio	Midnightlyona	5
		broad	large	breit	ancho	Ivan	7
37.	**(*) QN MG/MS/VG**		**(+) (d), (e)**				
		Petal: length/width ratio	**Pétale : rapport longueur/largeur**	**Blütenblatt: Verhältnis Länge/Breite**	**Pétalo: relación longitud/anchura**		
		low	bas	klein	baja		3
		medium	moyen	mittel	media		5
		high	élevé	groß	alta		7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
38.	**(*)**	**PQ** **VG**	**(+)** **(d), (e)**				
		Petal: shape of apex	**Pétale : forme de l'extrémité**	**Blütenblatt: Form der Spitze**	**Pétalo: forma del ápice**		
		acute	aiguë	spitz	agudo		1
		obtuse	obtuse	stumpf	obtuso		2
		rounded	arrondie	abgerundet	redondeado		3
		truncate	tronquée	abgestumpft	truncado		4
		cordate	cordée	herzförmig	cordado		5
		laciniate	laciniée	gefranst	laciniado		6
39.	**(*)**	**PQ** **VG**	**(d), (e), (f)**				
		Petal: main color	**Pétale : couleur principale**	**Blütenblatt: Hauptfarbe**	**Pétalo: color principal**		
		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.	**(*)**	**PQ** **VG**	**(+)** **(d), (e), (f)**				
		Petal: distribution of secondary color	**Pétale : répartition de la couleur secondaire**	**Blütenblatt: Verteilung der Sekundärfarbe**	**Pétalo: distribución del color secundario**		
		none	aucune	keine	ausente		1
		marginal zone	zone marginale	im Randbereich	en la zona del borde		2
		distal quarter	quart distal	im distalen Viertel	en el cuarto distal		3
		distal half	moitié distale	in der distalen Hälfte	en la mitad distal		4
		basal half	moitié basale	in der basalen Hälfte	en la mitad basal		5
		basal quarter	quart basal	im basalen Viertel	en el cuarto basal		6
		at base	à la base	an der Basis	en la base		7
		transverse band	bande transversale	als transversales Band	banda transversal		8
		throughout	partout	überall	en la totalidad		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
41. (*)	**PQ VG**	**(d), (e), (f)**				
	Petal: secondary color	**Pétale : couleur secondaire**	**Blütenblatt: Sekundärfarbe**	**Pétalo: color secundario**		
	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)		
42.	**PQ VG**	**(+) (d), (e), (f)**				
	Petal: pattern of secondary color	**Pétale : distribution de la couleur secondaire**	**Blütenblatt: Muster der Sekundärfarbe**	**Pétalo: forma de disposición del color secundario**		
	solid or nearly solid	uniforme ou presque	durchgefärbt oder fast durchgefärbt	liso o prácticamente liso		1
	flushed	diffuse	verschwommen	difuso		2
	speckled and striped	piquetée et striée	gefleckt und gestreift	en granos y rayas		3
43.	**PQ VG**	**(+) (d), (e), (f)**				
	Petal: distribution of tertiary color	**Pétale : répartition de la couleur tertiaire**	**Blütenblatt: Verteilung der Tertiärfarbe**	**Pétalo: distribución del color terciario**		
	none	nulle	keine	ausente		1
	marginal zone	zone marginale	im Randbereich	en la zona del borde		2
	distal quarter	quart distal	im distalen Viertel	en el cuarto distal		3
	basal quarter	quart basal	im basalen Viertel	en el cuarto basal		4
	at base	à la base	an der Basis	en la base		5
	transverse band	bande transversale	als transversales Band	banda transversal		6
	throughout	partout	überall	en la totalidad		7
44.	**PQ VG**	**(d), (e), (f)**				
	Petal: tertiary color	**Pétale : couleur tertiaire**	**Blütenblatt: Tertiärfarbe**	**Pétalo: color terciario**		
	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)		
45.	**PQ VG**	**(+) (d), (e), (f)**				
	Petal: pattern of tertiary color	**Pétale : distribution de la couleur tertiaire**	**Blütenblatt: Muster der Tertiärfarbe**	**Pétalo: forma de disposición del color terciario**		
	solid or nearly solid	uniforme ou presque	durchgefärbt oder fast durchgefärbt	liso o prácticamente liso		1
	flushed	diffuse	verschwommen	difuso		2
	speckled and striped	piquetée et striée	gefleckt und gestreift	en granos y rayas		3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
46.	**(*)**	**QN VG**	**(+)**	**(d), (e)**			
		Petal: conspicuousness of veins	**Pétale : netteté des nervures**	**Blütenblatt: Ausprägung der Aderung**	**Pétalo: visibilidad de la nervadura**		
		very weak	très faible	sehr gering	muy poco visible		1
		weak	faible	gering	poco visible		2
		medium	moyenne	mittel	medianamente visible		3
		strong	forte	stark	claramente visible		4
		very strong	très forte	sehr stark	muy claramente visible		5
47.		**PQ VG**	**(+)**	**(d), (e)**			
		Petal: distribution of conspicuous veins	**Pétale : répartition des nervures nettes**	**Blütenblatt: Verteilung der deutlich ausgeprägten Adern**	**Pétalo: distribución de la parte visible de la nervadura**		
		distal quarter	quart distal	im distalen Viertel	en el cuarto distal		1
		distal half	moitié distale	in der distalen Hälfte	en la mitad distal		2
		distal three quarters	trois quarts distaux	im distalen Dreiviertel	en los tres cuartos distales		3
		middle part	partie médiane	im Mittelteil	en la parte central		4
		basal three quarters	trois quarts basaux	im basalen Dreiviertel	en los tres cuartos basales		5
		basal half	moitié basale	in der basalen Hälfte	en la mitad basal		6
		basal quarter	quart basal	im basalen Viertel	en el cuarto basal		7
		throughout	partout	überall	en la totalidad		8
48.	**(*)**	**PQ VG**	**(+)**	**(d), (e)**			
		Petal: color of veins	**Pétale : couleur des nervures**	**Blütenblatt: Farbe der Adern**	**Pétalo: color de la nervadura**		
		light pink	rose pâle	hellrosa	rosa claro		1
		medium pink	rose moyen	mittelrosa	rosa medio	Blushing Turtle	2
		dark pink	rose foncé	dunkelrosa	rosa oscuro		3
		red	rouge	rot	rojo		4
		light red purple	pourpre-rouge clair	hellrotpurpurn	púrpura rojizo claro		5
		medium red purple	pourpre-rouge moyen	mittelrotpurpurn	púrpura rojizo medio		6
		dark red purple	pourpre-rouge foncé	dunkelrotpurpurn	púrpura rojizo oscuro	Catherine Deneuve	7
		light purple	pourpre clair	hellpurpurn	púrpura claro		8
		medium purple	pourpre moyen	mittelpurpurn	púrpura medio		9
		dark purple	pourpre foncé	dunkelpurpurn	púrpura oscuro	Noorthava	10
		violet blue	bleu-violet	violettblau	azul violáceo		11
		blue	bleu	blau	azul		12
		blackish	noirâtre	schwärzlich	negruzco	Bremdream	13

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

Observations should be made at the time of full flowering.

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

(a) Observations should be made on the upper side of fully expanded leaves from the middle third of a flowering stem, excluding the inflorescence.

(b) Any color effect caused by the leaf pubescence should be ignored. The main color is the color with the largest surface area. The color with the second largest area is the secondary color. The color with the third largest area is the tertiary color. In cases where the areas of the colors are too similar to reliably decide which color has the largest area, the darker color is considered to be the main color.

(c) Observations should be made on the terminal lobe. Where it is not possible to clearly differentiate the terminal lobe, this should be observed on the lobe that is most directly opposite the attachment point of the petiole.

(d) Observations should be made on new fully open flowers.

(e) In double flowered varieties, observations should be made on the outer whorl of petals.

(f) Observations should be made on the inner surface. The color of the veins should be excluded. The main color is the color with the largest surface area. The color with the second largest area is the secondary color, and the color with the third largest area is the tertiary color. In cases where the areas are too similar to reliably decide which color has the largest area, the darker color is considered to be the main color. The guideline makes provision for three colors; if more colors are present, those with the smallest area should not be observed.

8.2 Explanations for individual characteristics

Ad. 1: Plant: habit

1
upright

2
semi-upright

3
spreading

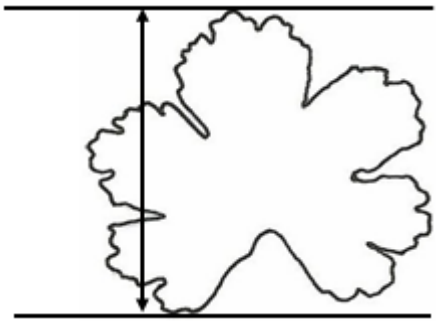
4
horizontal

Ad. 4: Stem: internode length

To be observed in the mid third of the stem.

Ad. 5: Leaf: length

To observe the leaf length from the lowest to highest point of the leaf.



Ad. 6: Leaf: width

Observe at widest point.

Ad. 7: Leaf: length/width ratio

2
low

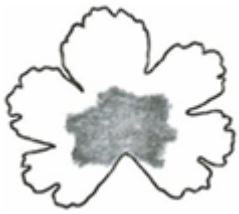
3
medium

4
high

Ad. 10: Leaf: distribution of secondary color

1
on margin

2
marginal zone



3
central zone

4
intermediate zone

5
at sinus

6
throughout

Ad. 11: Leaf: pattern of secondary color

1
solid or nearly solid

2
flushed

3
blotched

4
veined

5
irregular sectors

Ad. 13: Leaf: distribution of tertiary color

See Ad. 10

Ad. 14: Leaf: pattern of tertiary color

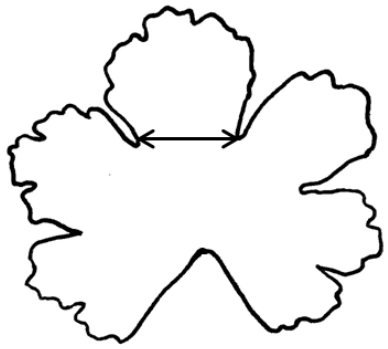
See Ad. 11

Ad. 18: Leaf: depth of sinus

1	3	5	7	9
absent or very shallow	shallow	medium	deep	very deep

Ad. 19: Leaf: width of lobe

To be observed as the width of the lobe at the sinuses of the terminal lobe of the leaf.



Ad. 20: Leaf: margins of lobe

1	2	3	4
diverging	straight	converging	overlapping

Ad. 21: Leaf: shape of lobe apex

1 acute | 2 obtuse | 3 rounded | 4 truncate

Ad. 22: Leaf: basal lobes

1 strongly diverging | 2 moderately diverging | 3 weakly diverging

4 straight | 5 overlapping

Ad. 23: Leaf: number of incisions of margin

3 few | 5 medium | 7 many

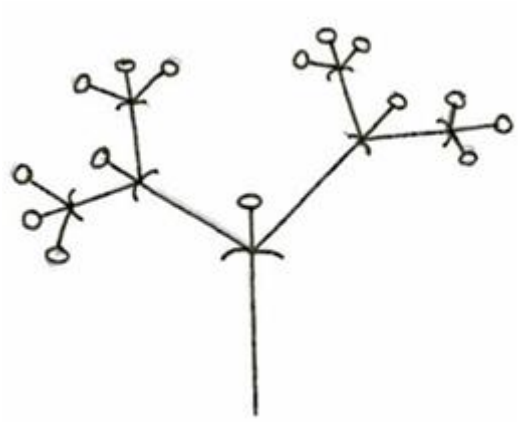
Ad. 24: Leaf: depth of incisions of margin

3
shallow

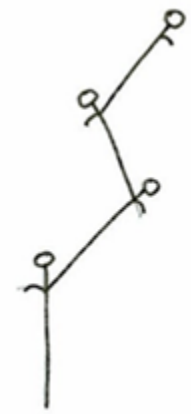
5
medium

7
deep

Ad. 25: Flowering stem: branching habit



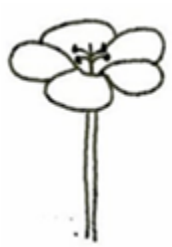
1
laterals branching both sides



2
laterals branching one side only

Ad. 29: Flower: attitude

The expression of this characteristic should be observed irrespective of the angle of the pedicel.



1
upwards

2
slightly outwards

3
strongly outwards

4
downwards

Ad. 30: Flower: type

A single flower has one whorl containing 5 petals, a double flower has more than one whorl of petals or has petaloids in addition to the whorl of petals.

1
single

2
double

Ad. 32: Only varieties with flower type: single: Flower: profile in cross section

1
strongly concave

2
moderately concave

3
weakly concave

4
flat

5
weakly convex

6
moderately convex

7
strongly convex

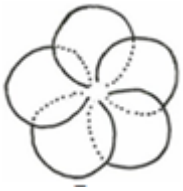
Ad. 33: Petal: arrangement

1
moderately separate

2
weakly separate

3
touching

4
weakly overlapping

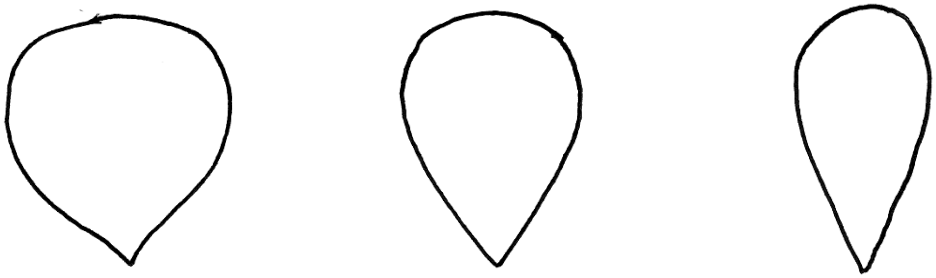


5
moderately overlapping

Ad. 34: Petal: curvature

1 moderately incurving | 2 weakly incurving | 3 straight | 4 weakly reflexing | 5 moderately reflexing

Ad. 37: Petal: length/width ratio



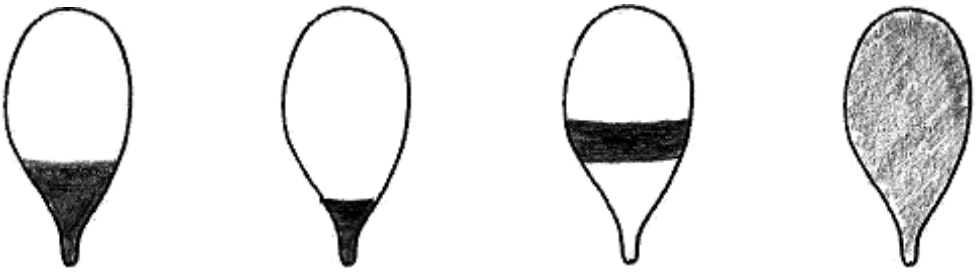
3 low | 5 medium | 7 high

Ad. 38: Petal: shape of apex

1 acute | 2 obtuse | 3 rounded | 4 truncate | 5 cordate | 6 laciniate

Ad. 40: Petal: distribution of secondary color

1 none | 2 marginal zone | 3 distal quarter | 4 distal half | 5 basal half



6 basal quarter | 7 at base | 8 transverse band | 9 throughout

Ad. 42: Petal: pattern of secondary color

1 solid or nearly solid | 2 flushed | 3 speckled and striped

Ad. 43: Petal: distribution of tertiary color

See Ad. 40

Ad. 45: Petal: pattern of tertiary color

See Ad. 42

Ad. 46: Petal: conspicuousness of veins

The conspicuousness is defined as the contrast between the color of the petal and the color of the veins. A greater contrast in color will give stronger conspicuousness of the veins.

1
very weak

2
weak

3
medium

4
strong

5
very strong

Ad. 47: Petal: distribution of conspicuous veins

The characteristic should only be observed when the conspicuousness of veins (Characteristic 46) is weak or higher. Only the conspicuous part of the veins should be considered.

1
distal quarter

2
distal half

3
distal three quarters

4
middle part

5
basal three quarters

6
basal half

7
basal quarter

8
throughout

Ad. 48: Petal: color of veins

The characteristic should only be observed when the conspicuousness of veins (Characteristic 46) is weak or higher. Only the conspicuous part of the veins should be considered.

9. Literature

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Yeo, P. F., 1992: Hardy Geraniums. B. T. Batsford Ltd. London, GB.

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	*Geranium* L.
1.2	Common name	Hardy Geranium
1.3	Species (please specify):	

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 Seed [ ]

4.2.3 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		1 [ ]
	semi-upright	Midnightlyona	2 [ ]
	spreading	Gerwat	3 [ ]
	horizontal	Noorthava	4 [ ]
5.2 (3)	**Plant: height**		
	very short	Thunder Cloud	1 [ ]
	very short to short		2 [ ]
	short	Noorthava	3 [ ]
	short to medium		4 [ ]
	medium	Catherine Deneuve	5 [ ]
	medium to tall		6 [ ]
	tall	Samobor	7 [ ]
	tall to very tall		8 [ ]
	very tall		9 [ ]
5.3(i) (8)	**Leaf: main color**		
	RHS Colour Chart (indicate reference number)		
5.3(ii) (8)	**Leaf: main color**		
	whitish	Springtime	1 [ ]
	green	Catherine Deneuve	2 [ ]
	purplish or brownish green		3 [ ]
	yellow green	Ann Folkard	4 [ ]
	yellow	Blogold	5 [ ]
	purple		6 [ ]
	brownish purple	Midnight Reiter	7 [ ]
	brownish	Espresso	8 [ ]
	reddish brown		9 [ ]

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

	Characteristics	Example Varieties	Note
5.4 (9)	**Leaf: secondary color**		
	none		1 [ ]
	whitish	Jester's Jacket	2 [ ]
	light green	Noorthava	3 [ ]
	medium green	Springtime	4 [ ]
	dark green		5 [ ]
	yellow green	Margaret Wilson	6 [ ]
	grey green		7 [ ]
	yellow	Spring Fling	8 [ ]
	pink		9 [ ]
	red		10 [ ]
	purple		11 [ ]
	brownish purple		12 [ ]
	brownish	Samobor	13 [ ]
	reddish brown	Katherine Adele	14 [ ]
5.5 (10)	**Leaf: distribution of secondary color**		
	on margin		1 [ ]
	marginal zone	Springtime	2 [ ]
	central zone	Katherine Adele	3 [ ]
	intermediate zone	Samobor	4 [ ]
	at sinus		5 [ ]
	throughout	Jester's Jacket	6 [ ]
5.6 (29)	**Flower: attitude**		
	upwards		1 [ ]
	slightly outwards	Gerwat	2 [ ]
	strongly outwards	Midnightlyona	3 [ ]
	downwards		4 [ ]
5.7 (30)	**Flower: type**		
	single	Gerwat	1 [ ]
	double	Gernic	2 [ ]

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

	Characteristics	Example Varieties	Note
5.8 (31)	**Flower: diameter**		
	very small		1 [ ]
	very small to small		2 [ ]
	small	Melody	3 [ ]
	small to medium		4 [ ]
	medium	Noorthava	5 [ ]
	medium to large		6 [ ]
	large	Ivan	7 [ ]
	large to very large		8 [ ]
	very large	Philippe Vapelle	9 [ ]
5.9(i) (39)	**Petal: main color**		
	RHS Colour Chart (indicate reference number)		
5.9(ii) (39)	**Petal: main color**		
	white	Midnightlyona	1 [ ]
	light pink	Purple Passion	2 [ ]
	medium pink	Blushing Turtle	3 [ ]
	dark pink	Noortjjras	4 [ ]
	orange red	Noortjjcor	5 [ ]
	red purple	Catherine Deneuve	6 [ ]
	purple		7 [ ]
	violet	Havana Blues	8 [ ]
	blue	Gerwat	9 [ ]
	reddish brown	Samobor	10 [ ]
5.10(i) (41)	**Petal: secondary color**		
	RHS Colour Chart (indicate reference number)		
5.10(ii) (41)	**Petal: secondary color**		
	white	Gerwat	1 [ ]
	pink	Clos du Coudray	2 [ ]
	red purple		3 [ ]
	violet		4 [ ]
	blue	Striatum	5 [ ]
	purple black	Catherine Deneuve	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	*Petal: conspicuousness of veins*	*medium*	*very strong*

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 Other information

A representative color photograph of the variety displaying its main distinguishing feature(s), should accompany the Technical Questionnaire. The photograph will provide a visual illustration of the candidate variety which supplements the information provided in the Technical Questionnaire.

The key points to consider when taking a photograph of the candidate variety are:

- Indication of the date and geographic location
- Correct labeling (breeder's reference)
- Good quality printed photograph (minimum 10 cm x 15 cm) and/or sufficient resolution electronic format version (minimum 960 x 1280 pixels)"

Further guidance on providing photographs with the Technical Questionnaire is available in document TGP/7 "Development of Test Guidelines", Guidance Note 35 (http://www.upov.int/tgp/en/).

[The link provided may be deleted by members of the Union when developing authorities' own test guidelines.]

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:

8. Authorization for release

(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

If the answer to (b) is yes, please attach a copy of the authorization.

9. Information on plant material to be examined or submitted for examination

9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.

9.2 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

(a)	Microorganisms (e.g. virus, bacteria, phytoplasma)	Yes [ ]	No [ ]
(b)	Chemical treatment (e.g. growth retardant, pesticide)	Yes [ ]	No [ ]
(c)	Tissue culture	Yes [ ]	No [ ]
(d)	Other factors	Yes [ ]	No [ ]

Please provide details for where you have indicated “yes”.

.....

10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Applicant’s name

Signature Date

[End of document]