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DRAFT

HARDY GERANIUM

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GERAN

*Geranium L.***GUIDELINES****FOR THE CONDUCT OF TESTS****FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

*prepared by experts from the United Kingdom
 to be considered by the
 Enlarged Editorial Committee
 at its meeting, to be held in Geneva
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Disclaimer: this document does not represent UPOV policies or guidance

Alternative names:^{*}

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Geranium L.</i>	Hardy Geranium, Crane's Bill	Géranium	Storhschnabel	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: yellow
 - Gr. 3: yellow green
 - Gr. 4: green
 - Gr. 5: green tinged brownish or purple
 - Gr. 6: reddish brown
 - Gr. 7: brownish
 - Gr. 8: brownish purple
 - Gr. 9: purple
 - (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
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- 5 (+) See Explanations on the Table of Characteristics in Chapter 8.2
- 6 (a)-(g) See Explanations on the Table of Characteristics in Chapter 8.1
- 7 Not applicable

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

		English		français		deutsch		español		Example Varieties Exemples Beispielssorten Variedades ejemplo		Note/ Nota
1.	(*)	PQ	VG	(+)	(a)							
	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		(a)							
	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		(a)							
	Plant: height		Plant : hauteur		Pflanze: Höhe		Planta: altura					
	very short		très basse		sehr kurz		muy baja		Thunder Cloud		1	
	short		basse		kurz		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	

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
4.	QN	MG/MS/VG	(+)	(a)				
	Stem: internode length		Tige : longueur de l'entreœud		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
5. (*)	QN	MG/MS/VG	(+)	(a), (b)				
	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), (b)				
	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	(+)	(a)				
	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), (c)				
Leaf: secondary color	Feuille : couleur secondaire		Blatt: Sekundärfarbe		Hoja: color secundario			
	none	aucune	keine	ausente				1
	whitish	blanchâtre	weißlich	blanquecino	Jester's Jacket			2
	yellow	jaune	gelb	amarillo	Spring Fling			3
	yellow green	vert-jaune	gelbgrün	verde amarillento	Margaret Wilson			4
	light green	vert clair	hellgrün	verde claro	Noorthava			5
	medium green	vert moyen	mittelgrün	verde medio				6
	dark green	vert foncé	dunkelgrün	verde oscuro				7
	grey green	vert-gris	graugrün	verde grisáceo				8
	pink	rose	rosa	rosa				9
	red	rouge	rot	rojo				10
	reddish brown	brun rougeâtre	rötlich braun	marrón rojizo	Katherine Adele			11
	brownish	brunâtre	bräunlich	amarronado	Samobor			12
	brownish purple	pourpre brunâtre	bräunlich purpur	púrpura amarronado				13
	purple	pourpre	purpur	púrpura				14
10. (*)	PQ	VG	(+)	(a), (b), (c)				
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	Randbereich	en la zona del borde				2
	central zone	zone centrale	Mittelbereich	en la zona central				3
	intermediate zone	zone intermédiaire	Zwischenbereich	en la zona intermedia				4
	at sinus	au sinus	an den Buchten	en los senos				5
	throughout	partout	gleichmäßig	en la totalidad				6
11. (*)	PQ	VG	(+)	(a), (b), (c)				
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	ganzflächig oder beinahe ganzflächig	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 Bereiche	en sectores irregulares				5

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
12.	PQ	VG		(a), (b), (c)				
Leaf: tertiary color	Leaf: tertiary color		Feuille : couleur tertiaire		Blatt: Tertiärfarbe	Hoja: color terciario		
	none		aucune		keine	ausente		1
	whitish		blanchâtre		weißlich	blanquecino		2
	yellow		jaune		gelb	amarillo		3
	yellow green		vert-jaune		gelbgrün	verde amarillento		4
	light green		vert clair		hellgrün	verde claro		5
	medium green		vert moyen		mittelgrün	verde medio		6
	dark green		vert foncé		dunkelgrün	verde oscuro		7
	grey green		vert-gris		graugrün	verde grisáceo		8
	pink		rose		rosa	Jester's Jacket		9
	red		rouge		rot	rojo	Spring Fling	10
	reddish brown		brun rougeâtre		rötlich braun	marrón rojizo		11
	brownish		brunâtre		bräunlich	amarronado		12
	brownish purple		pourpre brunâtre		bräunlich purpur	púrpura amarronado		13
	purple		pourpre		purpur	púrpura		14
13.	PQ	VG	(+)	(a), (b), (c)				
Leaf: distribution of tertiary color	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		Randbereich	en la zona del borde		2
	central zone		zone centrale		Mittelbereich	en la zona central		3
	intermediate zone		zone intermédiaire		Zwischenbereich	en la zona intermedia		4
	at sinus		au sinus		an den Buchten	en los senos		5
	throughout		partout		gleichmäßig	en la totalidad		6
14.	PQ	VG	(+)	(a), (b), (c)				
Leaf: pattern of tertiary color	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		ganzflächig oder beinahe ganzflächig	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		unregelmäßig verteilt	en sectores irregulares		5

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
15.	QN	VG		(a), (b)				
Leaf: pubescence	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
	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
16.	QN	VG		(a), (b)				
Leaf: glossiness	Leaf: glossiness		Feuille : brillance		Blatt: Glanz	Hoja: brillo		
	absent or very weak		nulle ou très faible		fehlend oder sehr schwach	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), (b)				
Leaf: rugosity	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), (b), (d)				
Leaf: depth of sinus	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), (b), (d)				
	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), (b), (d)				
	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), (b), (d)				
	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), (b)				
	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		schwach auseinanderlaufend	ligeramente divergentes		3
	straight		droits		gerade	rectos		4
	overlapping		se recouvrant		überlappend	solapados		5
23. (*)	QN	VG	(+)	(a), (b)				
	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), (b)			
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	(+)	(a)			
Flowering stem: branching habit		Tige florifère : port des ramifications		Blütenstiel: 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		(a)				
Flowering stem: color		Tige florifère : couleur		Blütenstiel: Farbe		Tallo floral: color		
green		vert		grün		verde		Bremdream
yellow green		vert-jaune		gelbgrün		verde amarillento		2
orange red		rouge orangé		orangerot		rojo anaranjado		Rise and Shine
red		rouge		rot		rojo		Thunder Cloud
green tinged reddish or purple		vert teinté rougeâtre ou pourpre		grün meliert rötlich oder purpur		verde teñido de rojizo o púrpura		Blushing Turtle
purple		pourpre		purpur		púrpura		6
brownish purple		pourpre brunâtre		bräunlich purpur		púrpura amarronado		Midnightlyona
reddish brown		brun rougeâtre		rötlich braun		marrón rojizo		8
27.	QN	MG/MS/VG		(a)				
Inflorescence: peduncle length		Inflorescence : longueur du pédoncule		Blütenstand: Länge des Blütenstandstiels		Inflorescencia: longitud del pedúnculo		
short		court		kurz		corto		Rise and Shine
medium		moyen		mittel		medio		Blushing Turtle
long		long		lang		largo		Noorthava
28.	QN	MG/MS/VG		(a)				
Flower: length of pedicel		Fleur : longueur du pédicelle		Blüte: Länge des Blütenstiels		Flor: longitud del pedicelo		
short		court		kurz		corto		Blushing Turtle
medium		moyen		mittel		medio		Noorthava
long		long		lang		largo		Bremdream

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
29.	(*)	QN	VG	(+)	(a), (e)			
	Flower: attitude		Fleur : port		Blüte: Haltung	Flor: porte		
	upwards		vers le haut		aufwärts gerichtet	erguida		1
	slightly outwards		légèrement vers l'extérieur		leicht abstehend	ligeramente hacia afuera		2
	strongly outwards		fortement vers l'extérieur		stark abstehend	marcadamente hacia afuera		3
	downwards		vers le bas		abwärts gerichtet	hacia abajo		4
30.	(*)	QL	VG	(+)	(a), (e)			
	Flower: type		Fleur : type		Blüte: Typ	Flor: tipo		
	single		simple		einfach	simple		1
	semi-double		semi-double		halbgefüllt	semidoble		2
31.	(*)	QN	MG/MS/VG		(a), (e)			
	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	(+)	(a), (e)			
	<u>Excluding varieties with flower type: double: Flower: profile in cross section</u>		<u>À l'exclusion des variétés à type de fleur double : Fleur : profil en section transversale</u>		<u>Außer Sorten mit Blütentyp: gefüllt: Blüte: Profil im Querschnitt</u>	<u>Excluidas las variedades con tipo de flor: doble: Flor: perfil en sección transversal</u>		
	strongly concave		fortement concave		stark konkav	muy cóncavo		1
	moderately concave		moyennement concave		mäßig konkav	medianamente cóncavo		2
	weakly concave		légèrement concave		schwach konkav	ligeramente cóncavo		3
	flat		plat		flach	plano		4
	weakly convex		légèrement convexe		schwach 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	(+)	(a), (e), (f)			
	Petal: arrangement		Pétale : disposition		Blütenblatt: Anordnung	Pétalo: disposición		
	moderately separate		moyennement distincts		mäßig getrennt	moderadamente separados	1	
	weakly separate		légèrement distincts		schwach getrennt	ligeramente separados	2	
	touching		tangents		sich berührend	en contacto	3	
	weakly overlapping		se recouvrant légerement		schwach überlappend	ligeramente solapados	4	
	moderately overlapping		se recouvrant modérément		mäßig überlappend	moderadamente solapados	5	
34.	(*)	QN	VG	(+)	(a), (e), (f)			
	Petal: curvature		Pétale : courbure		Blütenblatt: Biegung	Pétalo: curvatura		
	moderately incurving		s'incurvant modérément		mäßig aufgebogen	moderadamente incurvado	1	
	weakly incurving		s'incurvant légèrement		schwach aufgebogen	ligeramente incurvado	2	
	straight		droit		gerade	recto	3	
	weakly reflexing		légèrement retombant		schwach zurückgebogen	ligeramente reflexo	4	
	moderately reflexing		modérément retombant		mäßig zurückgebogen	moderadamente reflexo	5	
35.	(*)	QN	MG/MS/VG	(a), (e), (f)				
	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	(a), (e), (f)				
	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

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
37.	(*)	QN	MG	(+)	(a), (e), (f)			
	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
38.	(*)	PQ	VG	(+)	(a), (e), (f)			
	Petal: shape of apex	Pétale : forme de l'extrémité	Blütenblatt: Form der Lappenspitze	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
	lacinate	laciniée	gefranst	laciniado				6
39.	(*)	PQ	VG	(+)	(a), (e), (f), (g)			
	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	(+)	(a), (e), (f), (g)			
	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	Randbereich	en la zona del borde				2
	distal quarter	quart distal	distales Viertel	en el cuarto distal				3
	distal half	moitié distale	distale Hälfte	en la mitad distal				4
	basal half	moitié basale	basale Hälfte	en la mitad basal				5
	basal quarter	quart basal	basales Viertel	en el cuarto basal				6
	at base	à la base	an der Basis	en la base				7
	transverse band	bande transversale	transversales Band	banda transversal				8
	throughout	partout	gleichmäßig	en la totalidad				9

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
41.	(*)	PQ	VG		(a), (e), (f), (g)			
	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-Farbkarke (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
42.		PQ	VG	(+)	(a), (e), (f), (g)			
	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		ganzflächig oder beinahe ganzflächig	liso o prácticamente liso		
	flushed		diffuse		verschwommen	difuso		
	speckled and striped		piquetée et striée		gefleckt und gestreift	en granos y rayas		
43.		PQ	VG	(+)	(a), (e), (f), (g)			
	Petal: distribution of tertiary color		Pétale : répartition de la couleur tertiaire		Blütenblatt: Verteilung der Tertiärfarbe	Pétalo: distribución del color terciario		
	none		nulle		keine	ausente		
	marginal zone		zone marginale		Randbereich	en la zona del borde		
	distal quarter		quart distal		distales Viertel	en el cuarto distal		
	basal quarter		quart basal		basales Viertel	en el cuarto basal		
	at base		à la base		an der Basis	en la base		
	transverse band		bande transversale		transversales Band	banda transversal		
	throughout		partout		gleichmäßig	en la totalidad		
44.		PQ	VG		(a), (e), (f), (g)			
	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-Farbkarke (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
45.		PQ	VG	(+)	(a), (e), (f), (g)			
	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		ganzflächig oder beinahe ganzflächig	liso o prácticamente liso		
	flushed		diffuse		verschwommen	difuso		
	speckled and striped		piquetée et striée		gefleckt und gestreift	en granos y rayas		

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
46. (*)	QN	VG	(+)	(a), (e), (f)				
	Petal: conspicuousness of veins		Pétale : netteté des nervures		Blütenblatt: Ausprägung der Aderung	Pétalo: visibilidad de la nervadura		
	very weak		très faible		sehr schwach	muy poco visible		1
	weak		faible		schwach	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	(+)	(a), (e), (f)				
	Petal: distribution of conspicuous veins		Pétale : répartition des nervures nettes		Blütenblatt: Verteilung der ausgeprägten Adern	Pétalo: distribución de la parte visible de la nervadura		
	distal quarter		quart distal		distales Viertel	en el cuarto distal		1
	distal half		moitié distale		distale Hälfte	en la mitad distal		2
	distal three quarters		trois quarts distaux		distale Dreiviertel	en los tres cuartos distales		3
	middle part		partie médiane		Mittelteil	en la parte central		4
	basal three quarters		trois quarts basaux		basale Dreiviertel	en los tres cuartos basales		5
	basal half		moitié basale		basale Hälfte	en la mitad basal		6
	basal quarter		quart basal		basales Viertel	en el cuarto basal		7
	throughout		partout		gleichmäßig	en la totalidad		8
48. (*)	PQ	VG	(+)	(a), (e), (f)				
	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		hellrotpurpur	púrpura rojizo claro		5
	medium red purple		pourpre-rouge moyen		mittelrotpurpur	púrpura rojizo medio		6
	dark red purple		pourpre-rouge foncé		dunkelrotpurpur	púrpura rojizo oscuro	Catherine Deneuve	7
	light purple		pourpre clair		hellpurpur	púrpura claro		8
	medium purple		pourpre moyen		mittelpurpur	púrpura medio		9
	dark purple		pourpre foncé		dunkelpurpur	púrpura oscuro	Noorthava	10
	violet blue		bleu-violet		violettblau	azul violáceo		11
	blue		bleu		blau	azul		12
	blackish		noirâtre		schwarzlich	negruzco	Bremdream	13

8. Explanations on the Table of Characteristics

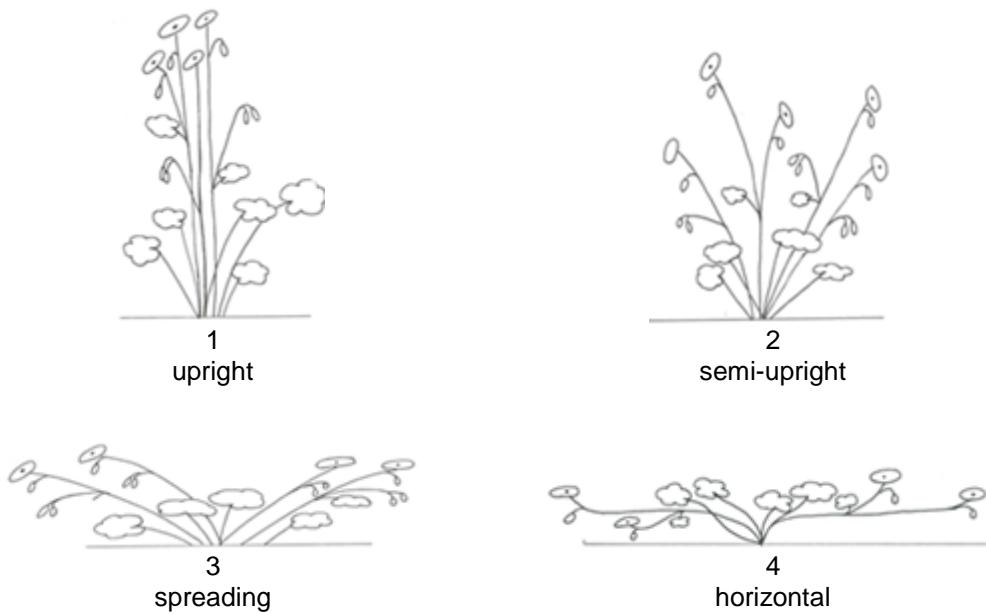
8.1 *Explanations covering several characteristics*

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

- (a) Observations should be made at the time of full flowering.
- (b) Observations on the leaf should be made on fully expanded leaves from the middle third of a flowering stem, excluding the inflorescence. The upper side of the leaf should always be observed unless otherwise stated.
- (c) When observing the color of the leaves 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.
- (d) 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.
- (e) Observations should be made on new fully open flowers.
- (f) In double flowered varieties to be observed on the outer whorl of petals.
- (g) All petals colors to be observed on the inner surface. The color of the veins are excluded from this observation. 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 area. 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

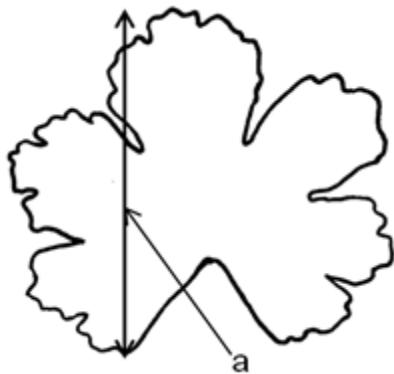
Ad. 1: Plant: habit



Ad. 4: Stem: internode length

To be observed in the mid third of the stem.

Ad. 5: Leaf: length

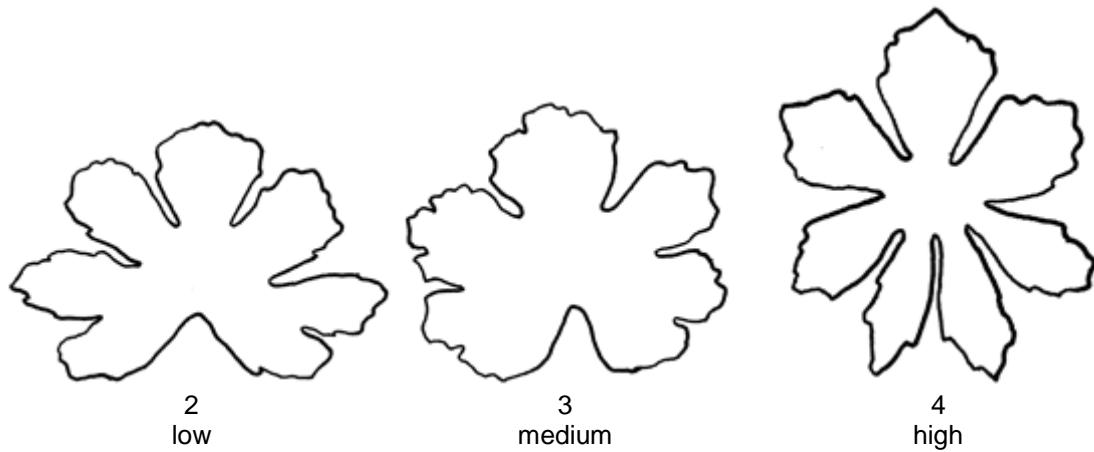


a = observe the leaf length from the lowest to highest point of the leaf

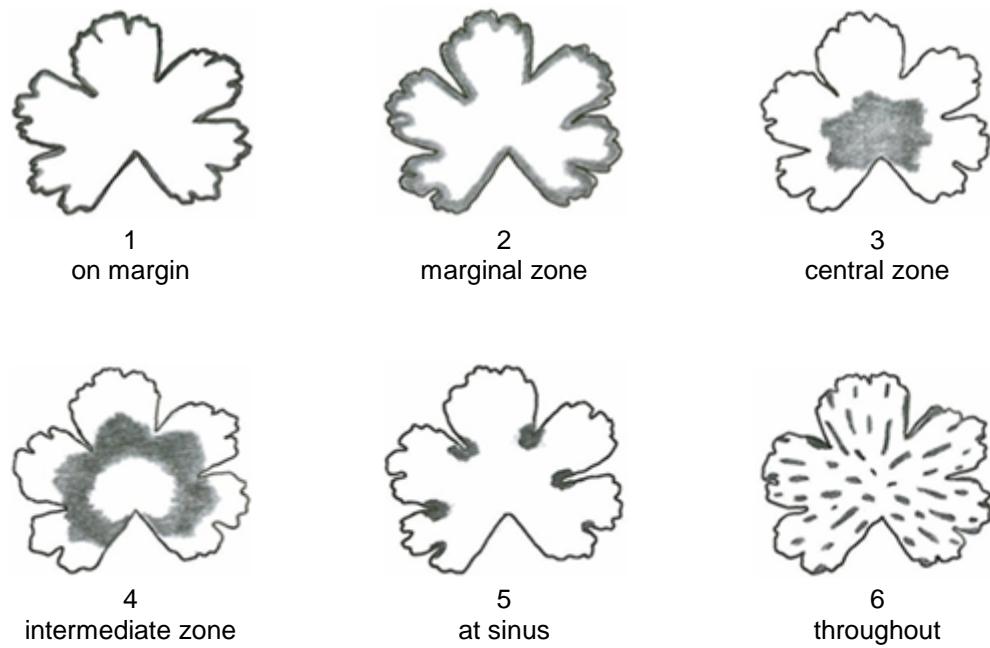
Ad. 6: Leaf: width

Observe at widest point.

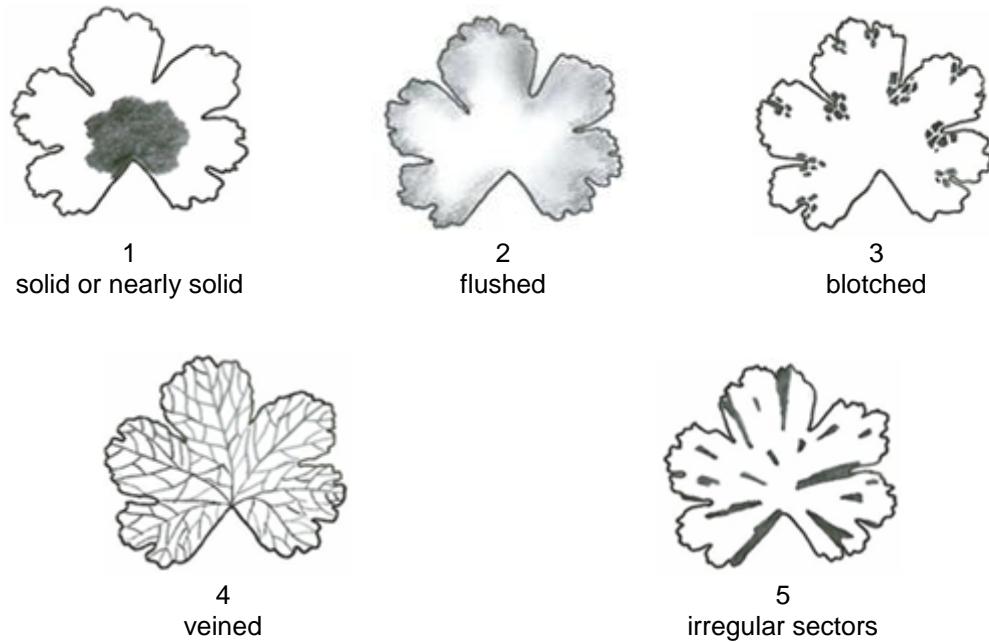
Ad. 7: Leaf: length/width ratio



Ad. 10: Leaf: distribution of secondary color



Ad. 11: Leaf: pattern of secondary color



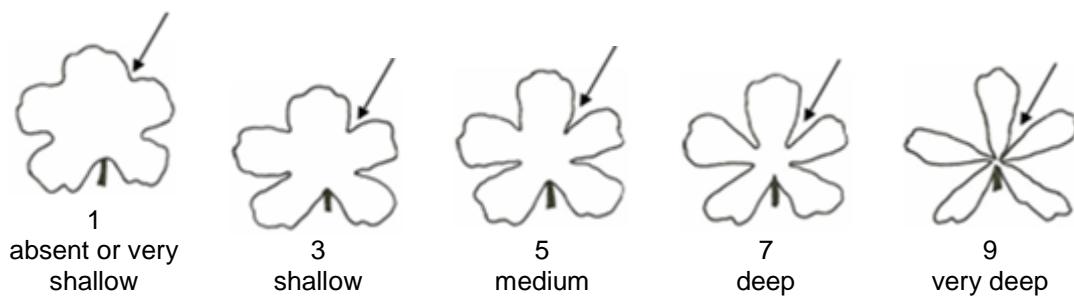
Ad. 13: Leaf: distribution of tertiary color

See Ad. 10

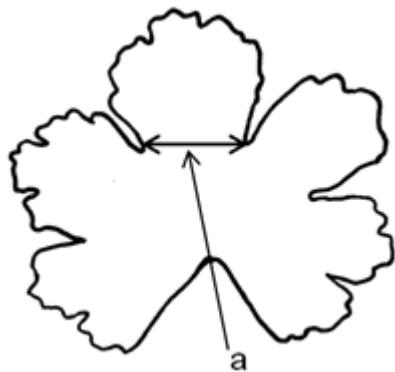
Ad. 14: Leaf: pattern of tertiary color

See Ad. 11

Ad. 18: Leaf: depth of sinus

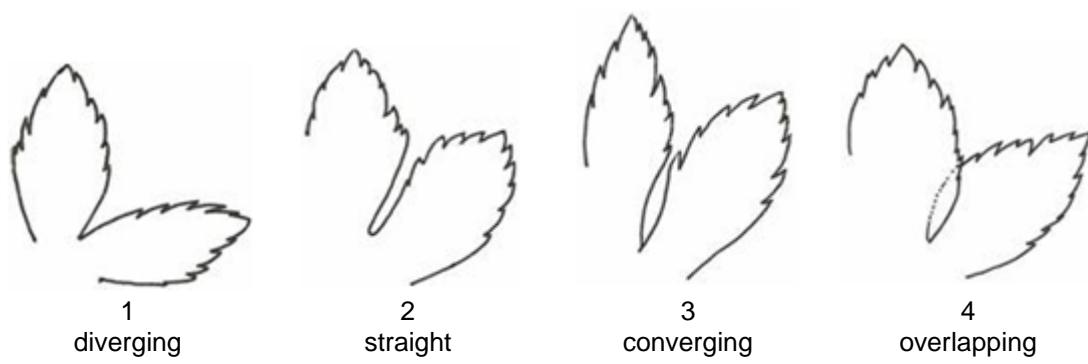


Ad. 19: Leaf: width of lobe

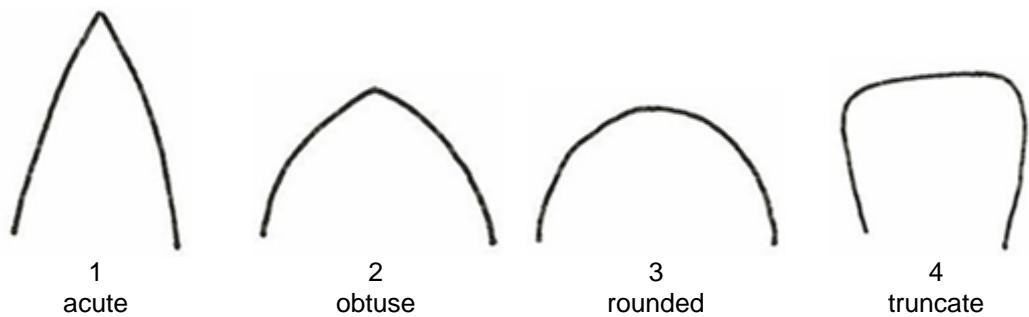


a = to be observed as the width of the lobe at the sinuses of the terminal lobe of the leaf

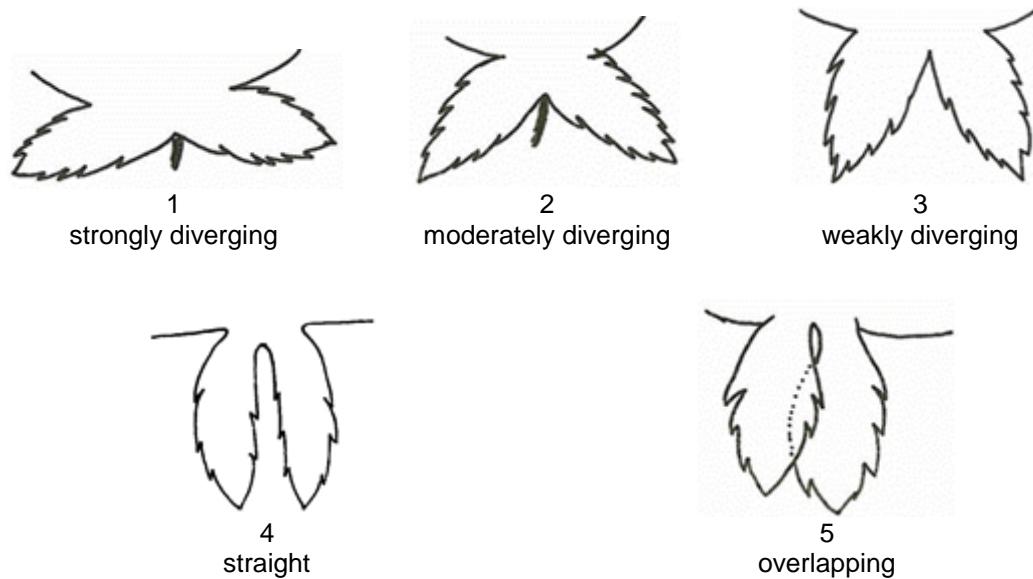
Ad. 20: Leaf: margins of lobe



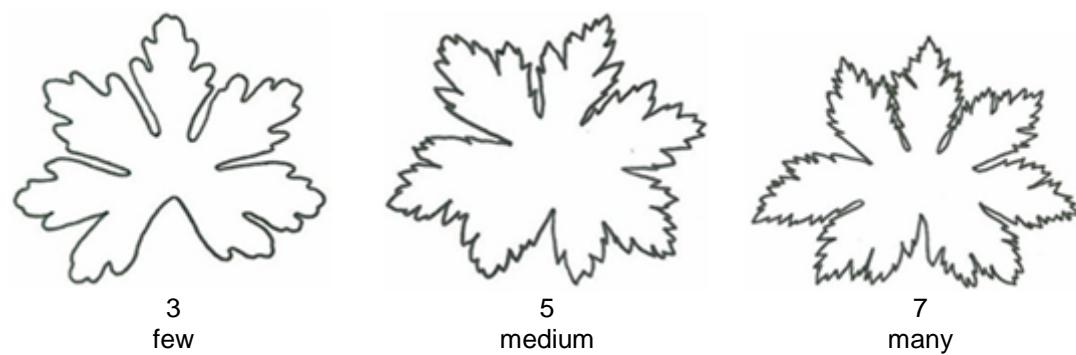
Ad. 21: Leaf: shape of lobe apex



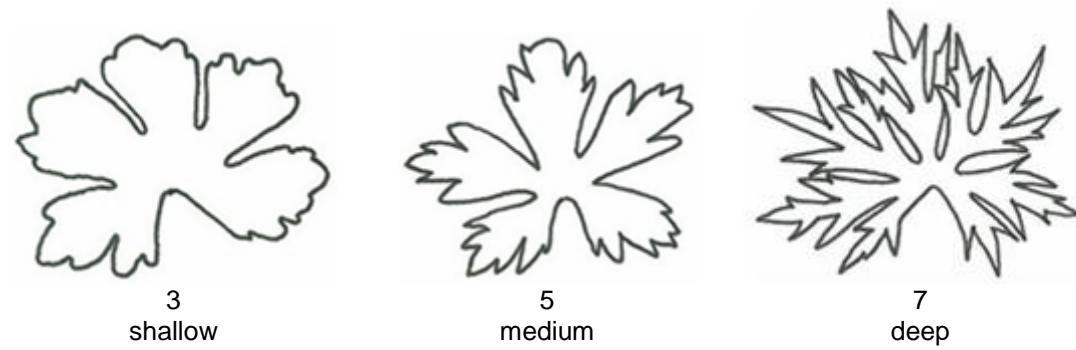
Ad. 22: Leaf: basal lobes



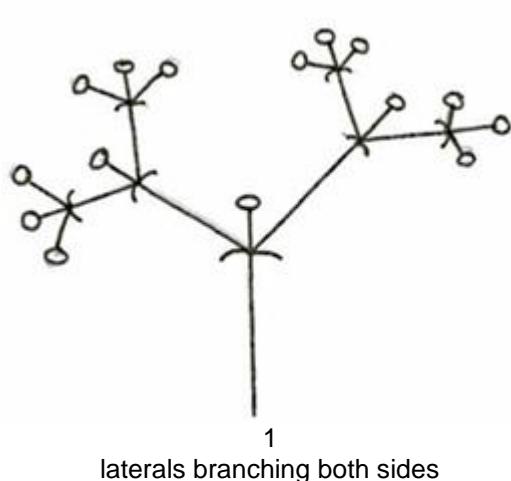
Ad. 23: Leaf: number of incisions of margin



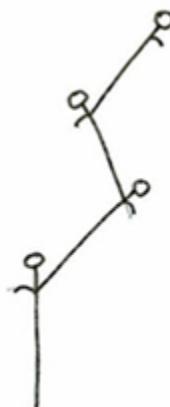
Ad. 24: Leaf: depth of incisions of margin



Ad. 25: Flowering stem: branching habit



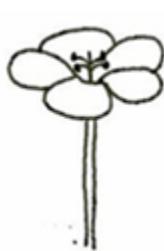
1 laterals branching both sides



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.

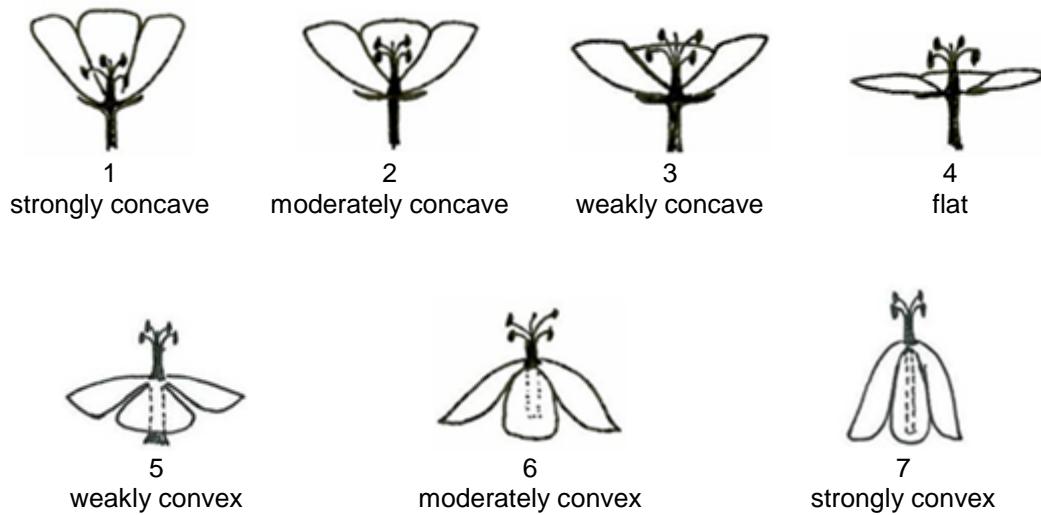


1 single

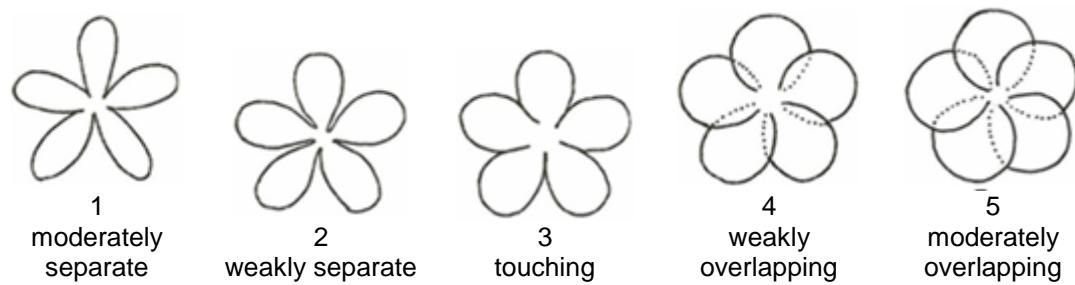


2 semi-double

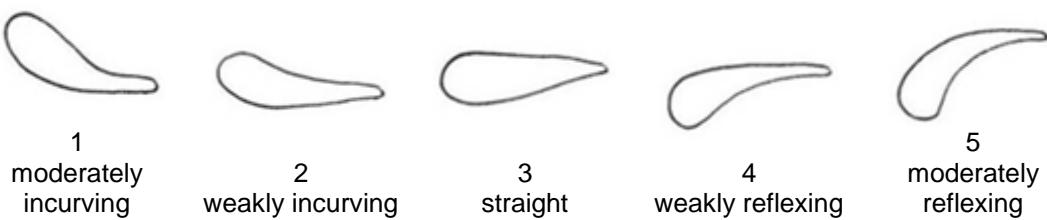
Ad. 32: Excluding varieties with flower type: double: Flower: profile in cross section



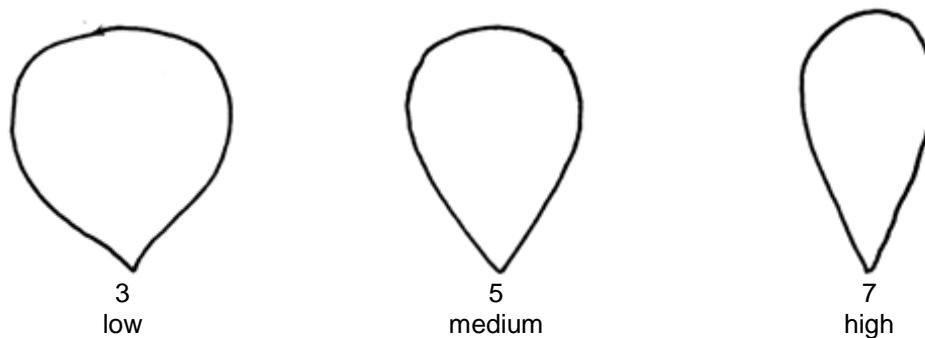
Ad. 33: Petal: arrangement



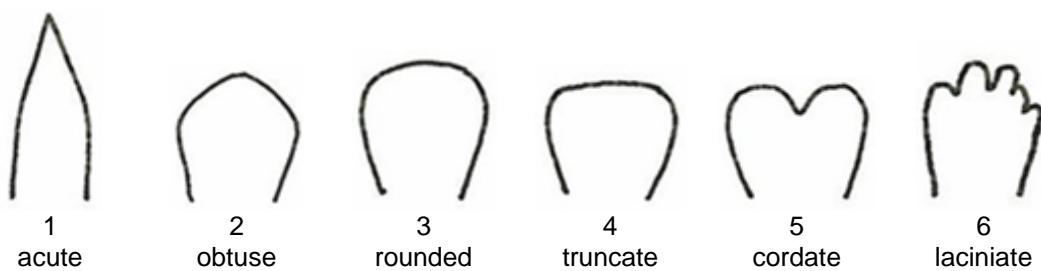
Ad. 34: Petal: curvature



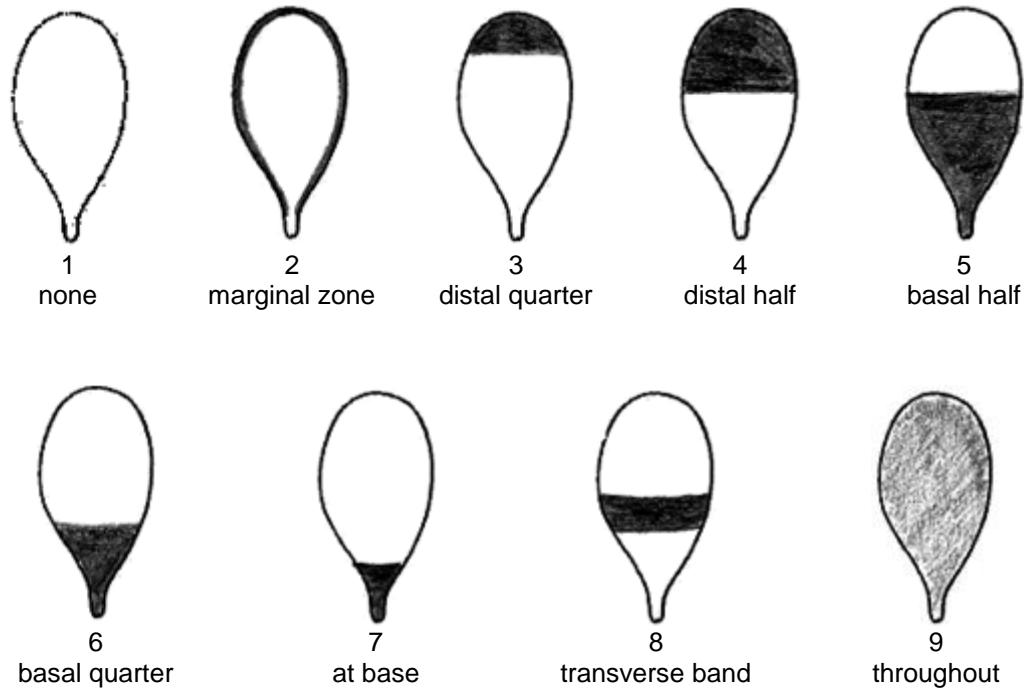
Ad. 37: Petal: length/width ratio



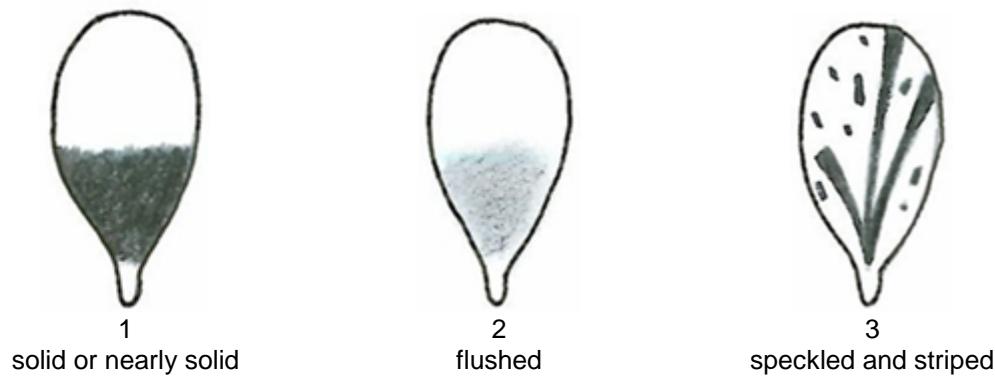
Ad. 38: Petal: shape of apex



Ad. 40: Petal: distribution of secondary color



Ad. 42: Petal: pattern of secondary color



Ad. 43: Petal: distribution of tertiary color

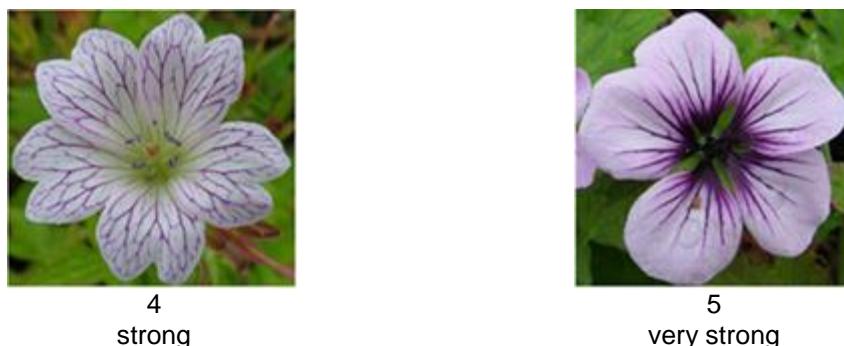
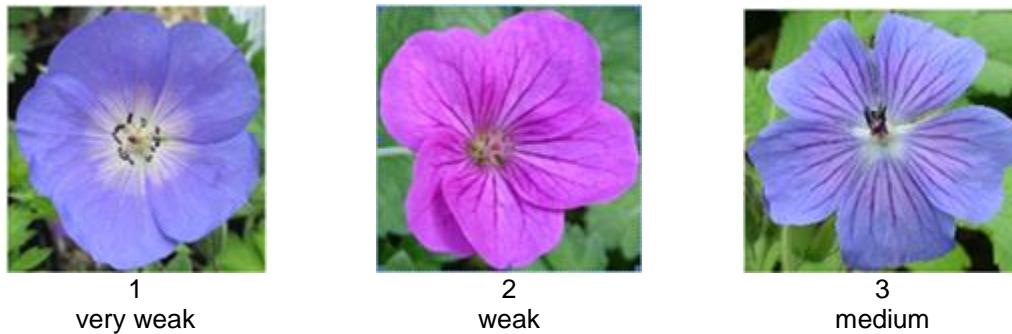
See Ad. 40

Ad. 45: Petal: pattern of tertiary color

See Ad. 42

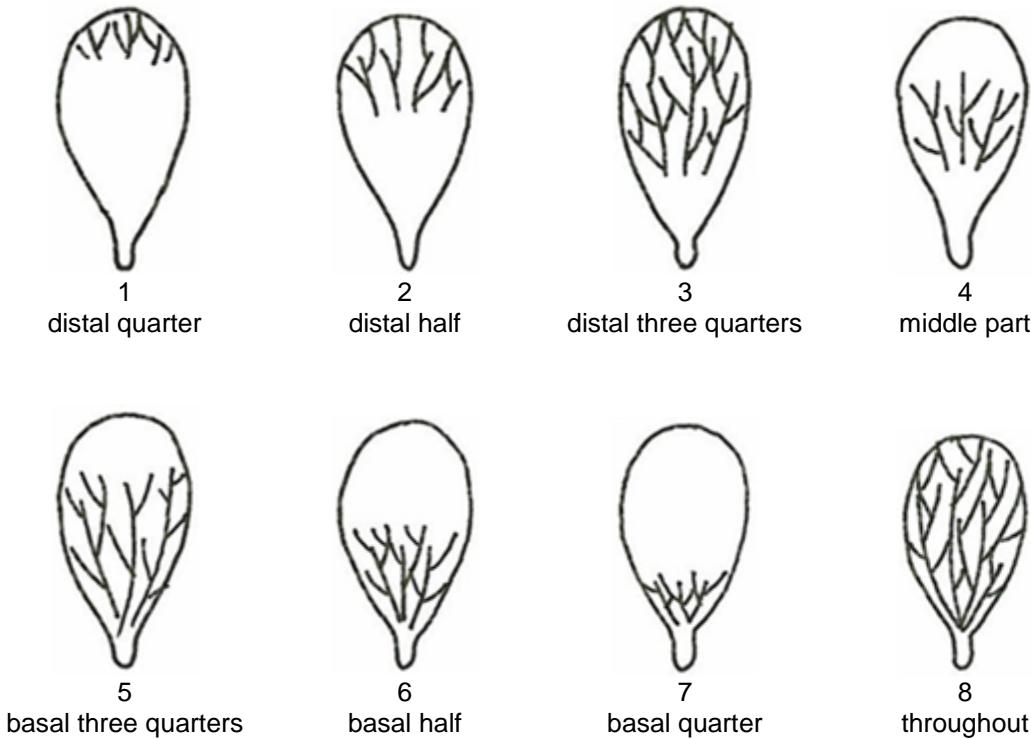
Ad. 46: Petal: conspicuousness of veins

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.



Ad. 47: Petal: distribution of conspicuous veins

Only observe this characteristic when Characteristic 46 is observed to be weak or higher, and only to apply to the conspicuous part of the vein.



Ad. 48: Petal: color of veins

Only observe this characteristic when Characteristic 46 is observed to be weak or higher, and only to apply to the conspicuous part of the vein.

9. Literature

Bath, T., Jones, J., 1994: The Gardener's Guide to Growing Hardy Geraniums. David and Charles. Newton Abbot, Devon, United Kingdom.

Bendtsen, B. H., 2005: Gardening with Hardy Geraniums. Timber Press. Portland, Oregon, USA.

Hibberd, D., 2003: RHS Wisley Handbook Hardy Geraniums. Octopus Publishing Group. London, United Kingdom.

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

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1 Botanical name	<input type="text"/>	
1.2 Common name	<input type="text"/>	
2. Applicant		
Name	<input type="text"/>	
Address	<input type="text"/>	
Telephone No.	<input type="text"/>	
Fax No.	<input type="text"/>	
E-mail address	<input type="text"/>	
Breeder (if different from applicant)	<input type="text"/>	
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)	<input type="text"/>	
Breeder's reference	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
#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 Discovery and development (please state where and when discovered and how developed)		
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>		
4.1.3 Mutation (please state parent variety)	[]	
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>		
4.1.4 Other (Please provide details)	[]	
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>		

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

4.2.1 Seed-propagated varieties

- (a) Self-pollination []
- (b) Cross-pollination []
- (i) Synthetic variety []
- (ii) Population []
- (c) Hybrid []
- (d) Other (please provide details) []

4.2.2 Vegetative propagation

- (a) Cuttings []
- (b) *In vitro* propagation []
- (c) Other (state method) []

4.2.3 Other
(Please provide details)

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:																																																																																	
<p>5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Characteristics</th> <th style="width: 33%;">Example Varieties</th> <th style="width: 33%;">Note</th> </tr> </thead> <tbody> <tr> <td>5.1 Plant: habit (1)</td> <td></td> <td></td> </tr> <tr> <td>upright</td> <td></td> <td style="text-align: right;">1 []</td> </tr> <tr> <td>semi-upright</td> <td>Midnightlyona</td> <td style="text-align: right;">2 []</td> </tr> <tr> <td>spreading</td> <td>Gerwat</td> <td style="text-align: right;">3 []</td> </tr> <tr> <td>horizontal</td> <td>Noorthava</td> <td style="text-align: right;">4 []</td> </tr> <tr> <td>5.2 Plant: height (3)</td> <td></td> <td></td> </tr> <tr> <td>very short</td> <td>Thunder Cloud</td> <td style="text-align: right;">1 []</td> </tr> <tr> <td>very short to short</td> <td></td> <td style="text-align: right;">2 []</td> </tr> <tr> <td>short</td> <td>Noorthava</td> <td style="text-align: right;">3 []</td> </tr> <tr> <td>short to medium</td> <td></td> <td style="text-align: right;">4 []</td> </tr> <tr> <td>medium</td> <td>Catherine Deneuve</td> <td style="text-align: right;">5 []</td> </tr> <tr> <td>medium to tall</td> <td></td> <td style="text-align: right;">6 []</td> </tr> <tr> <td>tall</td> <td>Samobor</td> <td style="text-align: right;">7 []</td> </tr> <tr> <td>tall to very tall</td> <td></td> <td style="text-align: right;">8 []</td> </tr> <tr> <td>very tall</td> <td></td> <td style="text-align: right;">9 []</td> </tr> <tr> <td>5.3(i) Leaf: main color (8)</td> <td>RHS Colour Chart (indicate reference number)</td> <td></td> </tr> <tr> <td>5.3(ii) Leaf: main color (8)</td> <td></td> <td></td> </tr> <tr> <td>whitish</td> <td>Springtime</td> <td style="text-align: right;">1 []</td> </tr> <tr> <td>yellow</td> <td>Blogold</td> <td style="text-align: right;">2 []</td> </tr> <tr> <td>yellow green</td> <td>Ann Folkard</td> <td style="text-align: right;">3 []</td> </tr> <tr> <td>green</td> <td>Catherine Deneuve</td> <td style="text-align: right;">4 []</td> </tr> <tr> <td>green tinged brownish or purple</td> <td></td> <td style="text-align: right;">5 []</td> </tr> <tr> <td>reddish brown</td> <td></td> <td style="text-align: right;">6 []</td> </tr> <tr> <td>brownish</td> <td>Espresso</td> <td style="text-align: right;">7 []</td> </tr> <tr> <td>brownish purple</td> <td>Midnight Reiter</td> <td style="text-align: right;">8 []</td> </tr> <tr> <td>purple</td> <td></td> <td style="text-align: right;">9 []</td> </tr> </tbody> </table>			Characteristics	Example Varieties	Note	5.1 Plant: habit (1)			upright		1 []	semi-upright	Midnightlyona	2 []	spreading	Gerwat	3 []	horizontal	Noorthava	4 []	5.2 Plant: height (3)			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) Leaf: main color (8)	RHS Colour Chart (indicate reference number)		5.3(ii) Leaf: main color (8)			whitish	Springtime	1 []	yellow	Blogold	2 []	yellow green	Ann Folkard	3 []	green	Catherine Deneuve	4 []	green tinged brownish or purple		5 []	reddish brown		6 []	brownish	Espresso	7 []	brownish purple	Midnight Reiter	8 []	purple		9 []
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Characteristics		Example Varieties	Note
5.4	Leaf: secondary color		
(9)			
none			1 []
whitish	Jester's Jacket		2 []
yellow	Spring Fling		3 []
yellow green	Margaret Wilson		4 []
light green	Noorthava		5 []
medium green			6 []
dark green			7 []
grey green			8 []
pink			9 []
red			10 []
reddish brown	Katherine Adele		11 []
brownish	Samobor		12 []
brownish purple			13 []
purple			14 []
5.5	Leaf: distribution of secondary color		
(10)			
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	Flower: attitude		
(29)			
upwards			1 []
slightly outwards	Gerwat		2 []
strongly outwards	Midnightlyona		3 []
downwards			4 []
5.7	Flower: type		
(30)			
single	Gerwat		1 []
double	Gernic		2 []

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		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	Noortijras	4 []
orange red	Noortijcor	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:
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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>Flower: type</i>	<i>single</i>	<i>double</i>
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	<input type="checkbox"/>	No	<input type="checkbox"/>
(If yes, please provide details)			
7.2 Are there any special conditions for growing the variety or conducting the examination?			
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
(If yes, please provide details)			
7.3 Other information			
<p>A representative color photograph of the variety displaying its main distinguishing feature(s), should accompany the Technical Questionnaire. The photograph will provide a visual illustration of the candidate variety which supplements the information provided in the Technical Questionnaire.</p> <p>The key points to consider when taking a photograph of the candidate variety are:</p> <ul style="list-style-type: none">• 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)" <p>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/).</p> <p>[The link provided may be deleted by members of the Union when developing authorities' own test guidelines.]</p>			

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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8. Authorization for release

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

Yes [] No []

- (b) Has such authorization been obtained?

Yes [] No []

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

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

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

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

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

Please provide details for where you have indicated "yes".

.....

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

Applicant's name

Signature

 Date

[End of document]