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UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

CLEMATIS *

UPOV Code: CLEMA

(*Clematis* L.)

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from Canada

to be considered by the
Enlarged Editorial Committee at its meeting
to be held in Geneva, Switzerland, on January 9, 2007

Alternative Names:*

Latin	*English*	*French*	*German*	*Spanish*
Clematis L.	Clematis	Clématite	Clematis, Waldrebe	Clemátide

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 *Clematis* L. of the family *Ranunculaceae*.

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 one-year old plants, not cut back, which have not previously flowered.

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

8 plants.

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

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

3. Method of Examination

3.1 Number of Growing Cycles

The minimum duration of tests should normally be a single growing cycle.

3.2 Testing Place

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 “Examining Distinctness”.

3.3 Conditions for Conducting the Examination

3.3.1 The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

3.3.2 Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within the tolerances set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background.

3.4 Test Design

Each test should be designed to result in a total of at least eight plants.

3.5 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, all observations should be made on eight plants or parts taken from each of eight plants.

3.6 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.

4.2 Uniformity

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

4.2.2 For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of eight plants, one off-type is allowed.

4.3 Stability

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

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

5. Grouping of Varieties and Organization of the Growing Trial

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

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

5.3 The following have been agreed as useful grouping characteristics:

(a) Plant: type (characteristic 1)
(b) Leaf: type (characteristic 6)
(c) Flower: type (characteristic 22)
(d) Flower: diameter (characteristic 23)
(e) Sepal: number of colors of upper side (characteristic 37)
(f) Sepal: main color of upper side (characteristic 38) with the following groups:
Gr. 1: white
Gr. 2: yellow
Gr. 3: pink
Gr. 4: red
Gr. 5: purple
Gr. 6: violet
Gr. 7: blue
Gr. 8: green

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction.

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

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.

6.3 Types of Expression

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudo-qualitative) is provided in the General Introduction.

6.4 Example Varieties

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic.

6.5 Legend

(*) Asterisked characteristic – see Chapter 6.1.2

QL: Qualitative characteristic – see Chapter 6.3
QN: Quantitative characteristic – see Chapter 6.3
PQ: Pseudo-qualitative characteristic – see Chapter 6.3

(a)–(e) See Explanations on the Table of Characteristics in Chapter 8.1

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

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

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. **(*)**	**Plant: type**	**Plante: type**	**Pflanze: Typ**	**Planta: tipo**		
QL	non-climbing	non grimpante	nicht kletternd	no trepadora	Evisix	1
	climbing	grimpante	kletternd	trepadora	Tetrarose	2
2. **(*)**	**Non-climbing varieties only: Plant: growth habit**	**Variétés non grimpantes seulement: Plante: port**	**Nur nicht kletternde Sorten: Pflanze: Wuchsform**	**Sólo variedades no trepadoras: Planta: porte**		
QN	upright	dressé	aufrecht	erecto	Alblo	1
	semi-upright	demi- dressé	halbaufrecht	semierecto		2
	prostrate	étalé	liegend	postrado	Joe, Pixie, Syrena	3
3. **(+)**	**Climbing varieties only: Plant: vigor**	**Variétés grimpantes seulement: Plante: vigueur**	**Nur kletternde Sorten: Pflanze: Wuchsstärke**	**Sólo variedades trepadoras: Planta: vigor**		
QN	weak	faible	gering	débil		3
	medium	moyenne	mittel	medio		5
	strong	forte	stark	fuerte		7
4.	**Young shoot: presence of pubescence**	**Jeune rameau: présence de pubescence**	**Jungtrieb: Vorhandensein von Behaarung**	**Tallo joven: presencia de pubescencia**		
QL	absent	absente	fehlend	ausente		1
	present	présente	vorhanden	presente		9
5.	**Young shoot: density of pubescence**	**Jeune rameau: densité de la pubescence**	**Jungtrieb: Dichte der Behaarung**	**Tallo joven: densidad de la pubescencia**		
QN	sparse	éparse	locker	laxa		3
	medium	moyenne	mittel	media		5
	dense	dense	dicht	densa		7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
6. **(*)** **(+)**	**(a)**	**Leaf: type**	**Feuille: type**	**Blatt: Typ**	**Hoja: tipo**		
QL		simple	simple	einfach	simple		1
		ternate	ternaire	dreizählig	ternada		2
		biternate	biternaire	doppelt dreizählig	biternada		3
		triternate	triternaire	dreifach dreizählig	triternada		4
		pinnate	penné	gefiedert	pinnada		5
		bipinnate	bipenné	doppelt gefiedert	bipinnada		6
		tripinnate	tripenné	dreifach gefiedert	tripinnada		7
7.	**(a)** **(b)**	**Leaf blade: length**	**Limbe: longueur**	**Blattspreite: Länge**	**Limbo: longitud**		
QN		short	court	kurz	corto		3
		medium	moyen	mittel	medio		5
		long	long	lang	largo		7
8.	**(a)** **(b)**	**Leaf blade: width**	**Limbe: largeur**	**Blattspreite: Breite**	**Limbo: anchura**		
QN		narrow	étroit	schmal	estrecho		3
		medium	moyen	mittel	medio		5
		broad	large	breit	ancho		7
9. **(*)** **(+)**	**(a)** **(b)**	**Leaf blade: shape**	**Limbe: forme**	**Blattspreite: Form**	**Limbo: forma**		
PQ		lanceolate	lancéolée	lanzettlich	lanceolada		1
		ovate	ovale	eiförmig	oval		2
		elliptic	elliptique	elliptisch	elíptica		3
		obovate	obovale	verkehrt eiförmig	oboval		4
		rhombic	losangique	rautenförmig	rómbica		5
		cordate	cordiforme	herzförmig	cordiforme		6

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
10. **(+)**	**(a)** **(b)**	**Leaf blade: shape of apex**	**Limbe: forme du sommet**	**Blattspreite: Form der Spitze**	**Limbo: forma del ápice**		
PQ		acuminate	acuminée	zugespitzt	acuminado		1
		acute	aigüe	spitz	agudo		2
		cuspidate	cuspidée	keilförmig	cuspidado		3
		rounded	arrondie	abgerundet	redondeado		4
11. **(+)**	**(a)** **(b)**	**Leaf blade: shape of base**	**Limbe: forme de la base**	**Blatt: Form der Basis**	**Limbo: forma de la base**		
PQ		acute	aigüe	spitz	aguda		1
		obtuse	obtuse	stumpf	obtusa		2
		rounded	arrondie	abgerundet	redondeada		3
		cordate	cordée	herzförmig	cordiforme		4
12. **(+)**	**(a)** **(b)**	**Leaf blade: margin**	**Limbe: bord**	**Blattspreite: Rand**	**Limbo: borde**		
PQ		entire	entier	ganzrandig	entero		1
		sinuate	sinué	gebuchtet	sinuoso		2
		crenate	crénelé	gekerbt	crenado		3
		dentate	dentelé	gezähnt	dentado		4
		serrate	crénelé dentelé	gesägt	serrado		5
13.	**(a)**	**Leaf blade: lobing**	**Limbe: découpure**	**Blattspreite: Lappung**	**Limbo: lobulado**		
QL		absent	absente	fehlend	ausente	General Sikorski	1
		present	présente	vorhanden	presente	Syrena, Tetrarose	9

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14.	**(a)**	**<u>Lobed varieties only</u>: Leaf blade: number of lobes**	**<u>Variétés lobées seulement</u>: Limbe: nombre de lobes**	**<u>Nur gelappte Sorten</u>: Blattspreite: Anzahl Lappen**	**<u>Sólo variedades lobuladas</u>: Limbo: número de lóbulos**		
PQ		two	deux	zwei	dos		1
		three or four	trois ou quatre	drei oder vier	tres o cuatro		2
		more than four	plus de quatre	mehr als vier	más de cuatro		3
15. **(+)**	**(a)**	**<u>Lobed varieties only</u>: Leaf blade: depth of sinus between lobes**	**<u>Variétés lobées seulement</u>: Limbe: profondeur du sinus entre les lobes**	**<u>Nur gelappte Sorten</u>: Blattspreite: Tiefe der Buchten zwischen den Lappen**	**<u>Sólo variedades lobuladas</u>: Limbo: profundidad de los senos entre los lóbulos**		
QN		shallow	peu profond	flach	poco profunda		3
		medium	moyen	mittel	media		5
		deep	profond	tief	profunda		7
16.	**(a)** **(b)**	**Leaf blade: main color of upper side**	**Limbe: couleur principale de la face supérieure**	**Blattspreite: Hauptfarbe der Oberseite**	**Limbo: color principal del haz**		
PQ		yellow green	vert jaune	gelbgrün	verde amarillento	Duchess of Edinburgh	1
		light green	vert clair	hellgrün	verde claro	Burford White	2
		medium green	vert moyen	mittelgrün	verde medio	Lady Northcliffe	3
		dark green	vert foncé	dunkelgrün	verde oscuro	Bowl of Beauty	4
		blue green	vert bleu	blaugrün	verde azulado	My Angel	5
		grey green	vert gris	graugrün	verde grisáceo	Tibetan Mix	6
		bronze	bronze	bronze	bronce	Mayleen	7
17.	**(a)** **(b)**	**Leaf blade: variegation**	**Limbe: panachure**	**Blattspreite: Panaschierung**	**Limbo: variegación**		
QL		absent	absente	fehlend	ausente	Mrs George Jackman	1
		present	présente	vorhanden	presente	Gokanosho	9

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
18.	**(a) (b)**	**Leaf blade: rugosity of upper surface**	**Limbe: rugosité de la surface supérieure**	**Blattspreite: Blasigkeit der Oberfläche**	**Limbo: rugosidad del haz**		
QN		absent or weak	absente ou faible	fehlend oder gering	ausente o débil		1
		moderate	modérée	mäßig	moderada		2
		strong	forte	stark	fuerte		3
19. (*)	**(c)**	**Flowers: arrangement**	**Fleurs : disposition**	**Blüten: Anordnung**	**Flores: disposición**		
QL		solitary	isolées	einzeln	aislada	Black Prince, Evisix, Kugotia	1
		clustered	groupées	in Büscheln	en racimos	Apple Blossom	2
20. (+)	**(c)**	**Flower: length of pedicel**	**Fleur : longueur du pédoncule**	**Anzahl: Länge des Stiels**	**Flor: longitud del pedicelo**		
QN		short	court	kurz	corto		3
		medium	moyen	mittel	medio		5
		long	long	lang	largo		7
21. (+)	**(c)**	**Flower: orientation (irrespective of pedicel)**	**Fleur: orientation (indépendamment du pédoncule)**	**Blüte: Orientierung (ungeachtet des Blütenstiels)**	**Flor: orientación (independientemente del pedicelo)**		
QN		upwards	dressée	aufwärts	hacia arriba	Duchess of Albany	1
		outwards	horizontale	horizontal	hacia afuera		2
		downwards	retombante	abwärts	hacia abajo	Evisix	3
22. (*) (+)	**(c)**	**Flower: type**	**Fleur: type**	**Blüte: Typ**	**Flor: tipo**		
QL		single	simple	einfach	simple	Nelly Moser, Perle d'Azur	1
		semi-double	semi-double	halbgefüllt	semidoble	Caroline Lloyd, Marjorie	2
		double	double	gefüllt	doble	Kiri Te Kanawa, Multi Blue	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
23. **(*)**	**(c)**	**Flower: diameter**	**Fleur: diamètre**	**Blüte: Durchmesser**	**Flor: diámetro**		
QN		very small	très petit	sehr klein	muy pequeño	Marjorie	1
		small	petit	klein	pequeño	Little Nell	3
		medium	moyen	mittel	medio	Perle d'Azur	5
		large	grand	groß	grande	Evista	7
		very large	très grand	sehr groß	muy grande	Fairy Queen, Kacper	9
24. **(*)** **(+)**	**(c)** **(d)**	**Single and semi-double varieties only: Flower: shape**	**Variétés simples et semi-doubles seulement: Fleur: forme**	**Nur einfache und halbgefüllte Sorten: Blüte: Form**	**Sólo variedades simples y semidobles: Flor: forma**		
PQ		tubular	tubulaire	röhrenförmig	tubular	Davidianna, Wyevale	1
		campanulate	campanulée	glockenförmig	acampanada	Étoile Rose	2
		urceolate	urcéolée	urnenförmig	urceolada	Phil Mason	3
		rotate	arrondie	radförmig	rotácea	Lady Northcliffe, Nelly Moser	4
25. **(+)**	**(c)**	**Varieties with rotate flowers only: Flower: cross section in lateral view**	**Variétés à fleurs arrondies seulement: Fleur: vue latérale de la section transversale**	**Nur Sorten mit radförmigen Blüten: Blüte: Querschnitt in der Seitenansicht**	**Sólo variedades con flores rotáceas: Flor: sección transversal en perspectiva lateral**		
QN		concave	concave	konkav	cóncava		1
		flat	plate	flach	plana	Henryi	2
		convex	convexe	konvex	convexa		3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
26. **(*)**	**(c)** **(d)** **(e)** **(f)**	**<u>Single and semi-double varieties only</u>: Flower: number of sepals (excluding petaloid staminodes)**	**<u>Variétés simples et semi-doubles seulement</u> : Fleur : nombre de sépales (à l'exclusion des staminodes pétaloïdes)**	**<u>Nur einfache und halbgefüllte Sorten</u>: Blüte: Anzahl Kelchblätter (ohne petaloide Staminodien)**	**<u>Sólo variedades simples y semidobles:</u> Flor: número de sépalos (excluidos los estaminodios petaloides)**		
PQ		only four	seulement quatre	nur vier	sólo cuatro	Bill MacKenzie, Perle d'Azur, Tetrarose	1
		four to six	quatre à six	vier bis sechs	de cuatro a seis	Gipsy Queen, Prince Charles	2
		only six	seulement six	nur sechs	sólo seis	Empress of India, Frau Mikiko, Ville de Lyon	3
		six to eight	six à huit	sechs bis acht	de seis a ocho	Dawn, Fireworks, Haku Ookan	4
		only eight	seulement huit	nur acht	sólo ocho	Midnight, Sandra Denny	5
		more than eight	plus de huit	mehr als acht	más de ocho	Mrs George Jackman	6
27. **(+)**	**(c)** **(d)** **(e)**	**<u>Varieties with rotate flowers only:</u> Flower: arrangement of sepals**	**<u>Variétés à fleurs arrondies seulement</u>: Fleur: disposition des sépales**	**<u>Nur Sorten mit radförmigen Blüten</u>: Blüte: Anordnung der Kelchblätter**	**<u>Sólo variedades con flores rotáceas:</u> Flor: disposición de los pétalos**		
QN		free	ouverts	freistehend	libre	Black Prince	1
		touching	tangents	sich berührend	en contacto	Iubileinyi-70	2
		overlapping	chevauchants	überlappend	solapada	Horn of Plenty, Ivan Olssen	3
28.	**(c)**	**Flower: fragrance**	**Fleur: parfum**	**Blüte: Duft**	**Flor: fragancia**		
QN		absent	absent	fehlend	ausente	Comtesse de Bouchard, Evijohill	1
		weakly present	faiblement présent	schwach vorhanden	débilmente presente	Freckles, Primrose Star	2
		strongly present	fortement présent	stark vorhanden	fuertemente presente	Fair Rosamond, Mayleen	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
29.	**(c) (d) (e)**	**Sepal: length**	**Sépale: longueur**	**Kelchblatt: Länge**	**Sépalo: longitud**		
QN		short	court	kurz	corto		3
		medium	moyen	mittel	medio		5
		long	long	lang	largo		7
30.	**(c) (d) (e)**	**Sepal: width**	**Sépale: largeur**	**Kelchblatt: Breite**	**Sépalo: anchura**		
QN		narrow	étroit	schmal	estrecho		3
		medium	moyen	mittel	medio		5
		broad	large	breit	ancho		7
31. (*)	**(c) (d) (e)**	**Sepal: shape**	**Sépale: forme**	**Kelchblatt: Form**	**Sépalo: forma**		
PQ		ovate	ovale	eiförmig	oval	Scartho Gem	1
		lanceolate	lancéolé	lanzettlich	lanceolado		1
		elliptic	elliptique	elliptisch	elíptico	Daniel Deronda	3
		rhombic	losangique	rautenförmig	rómbico	Iubileinyi-70	4
		obovate	obovale	verkehrt eiförmig	oboval	Prince Charles	5
		spatulate	spatulé	spatelförmig	espatulado	Teshio	6
32. (+)	**(c) (d) (e)**	**Sepal: shape in cross section**	**Sépale: forme en section transversale**	**Kelchblatt: Form im Querschnitt**	**Sépalo: forma en sección transversal**		
QN		concave	concave	konkav	cóncavo		1
		flat	plat	flach	plano		2
		convex	convexe	konvex	convexo		3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
33. **(+)**	**(c)** **(d)** **(e)**	**<u>Varieties with rotate flowers only</u>: Sepal: curvature in longitudinal section**	**<u>Variétés à fleurs arrondies seulement</u>: Sépale: courbure en section longitudinale**	**<u>Nur Sorten mit radförmigen Blüten</u>: Kelchblatt: Biegung im Längsschnitt**	**<u>Sólo variedades con flores rotáceas</u>: Sépalo: curvatura en sección longitudinal**		
QN		strongly incurved	fortement incurvée	stark aufgebogen	fuertemente curvado hacia arriba		1
		moderately incurved	modérément incurvée	mittel aufgebogen	moderadamente curvado hacia arriba		3
		flat	plate	flach	plano		5
		moderately reflexed	modérément réfléchie	mittel zurückgebogen	moderadamente reflexo		7
		strongly reflexed	fortement réfléchie	stark zurückgebogen	fuertemente reflexo		9
34. **(+)**	**(c)** **(d)** **(e)**	**<u>Varieties with non-rotate flowers only</u>: Sepal: reflexing of apex**	**<u>Variétés à fleurs non arrondies seulement</u>: Sépale: courbure du sommet**	**<u>Nur Sorten mit radförmigen Blüten</u>: Kelchblatt: Zurückbiegung der Spitze**	**<u>Sólo variedades con flores no rotáceas</u>: Sépalo: curvatura del ápice**		
QN		absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Henryi	1
		weak	faible	gering	débil		3
		medium	moyenne	mittel	media		5
		strong	forte	stark	fuerte	Pagoda	7
		very strong	très forte	sehr stark	muy fuerte		9
35.	**(c)** **(d)** **(e)**	**Sepal: shape of apex**	**Sépale: forme du sommet**	**Kelchblatt: Form der Spitze**	**Sépalo: forma del ápice**		
PQ		acuminate	acuminée	zugespitzt	acuminado	Belle of Woking	1
		acute	aigüe	spitz	agudo	Helios	2
		cuspidate	cuspidée	keilförmig	cuspidado	Mrs Cholmondeley	3
		obtuse	obtuse	stumpf	obtuso	Starlight	4
		retuse	échancrée	eingedrückt	retuso	Tetrarose	5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
36. **(+)**	**(c)** **(d)** **(e)**	**Sepal: shape of base**	**Sépale: forme de la base**	**Kelchblatt: Form der Basis**	**Sépalo: forma de la base**		
PQ		type 1	type 1	Typ 1	tipo 1		1
		type 2	type 2	Typ 2	tipo 2		2
		type 3	type 3	Typ 3	tipo 3		3
37. **(*)**	**(c)** **(d)** **(e)**	**Sepal: number of colors of upper side**	**Sépale: nombre de couleurs sur la face supérieure**	**Kelchblatt: Anzahl Farben der Oberseite**	**Sépalo: número de colores de la cara superior**		
QL		one	une	eine	uno	Lady Northcliffe	1
		more than one	plusieurs	mehr als eine	más de uno	Evione, Nelly Moser	2
38. **(*)**	**(c)** **(d)** **(e)**	**Sepal: main color of upper side**	**Sépale: couleur principale de la face supérieure**	**Kelchblatt: Hauptfarbe der Oberseite**	**Sépalo: color principal de la cara superior**		
PQ		RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
39. **(*)**	**(c)** **(d)** **(e)**	**<u>Varieties with one color only</u>: Sepal: color distribution of upper side**	**<u>Variétés à une couleur seulement</u>: Sépale: répartition des couleurs de la face supérieure**	**<u>Nur Sorten mit einer Farbe</u>: Kelchblatt: Verteilung der Farbe der Oberseite**	**<u>Sólo variedades con un color</u>: Sépalo: distribución del color en la cara superior**		
QN		lighter towards middle	plus claire vers le milieu	heller zur Mitte	más claro hacia el medio	Ville de Lyon	1
		even	régulière	gleichmäßig	uniforme	Lady Northcliffe	2
		lighter towards margins	plus claire vers les bords	heller zu den Rändern	más claro hacia los bordes	Evione	3
40. **(*)**	**(c)** **(d)** **(e)**	**<u>Varieties with more than one color only</u>: Sepal: secondary color of upper side**	**<u>Variétés avec plusieurs couleurs seulement</u>: Sépale: couleur secondaire de la face supérieure**	**<u>Nur Sorten mit mehr als einer Farbe</u>: Kelchblatt: Sekundärfarbe der Oberseite**	**<u>Sólo variedades con más de un color</u>: Sépalo: color secundario de la cara superior**		
PQ		RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
41. **(*)** **(+)**	**(c)** **(d)** **(e)**	**Varieties with more than one color only: Sepal: distribution of secondary color on upper side**	**Variétés à plusieurs couleurs seulement: Sépale: répartition de la couleur secondaire sur la face supérieure**	**Nur Sorten mit mehr als einer Farbe: Kelchblatt: Verteilung der Sekundärfarbe an der Oberseite**	**Sólo variedades con más de un color: Sépalo: distribución del color secundario en la cara superior**		
PQ		edged	bordée	am Rand	ribeteado	Little Nell	1
		central bar	barre centrale	Mittelstreifen	raya central	Nelly Moser	2
		speckled	tachetée	gefleckt	manchado	Freckles	3
		along veins	le long des nervures	entlang der Adern	a lo largo de los nervios	Pagoda, Tango	4
42. **(*)**	**(c)** **(d)** **(e)**	**Sepal: main color of lower side**	**Sépale: couleur principale de la face inférieure**	**Kelchblatt: Hauptfarbe der Unterseite**	**Sépalo: color principal de la cara inferior**		
PQ		RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
43. **(*)**	**(c)** **(d)** **(e)**	**Varieties with more than one color only: Sepal: secondary color of lower side**	**Variétés à plusieurs couleurs seulement: Sépale: couleur secondaire de la face inférieure**	**Nur Sorten mit mehr als einer Farbe: Kelchblatt: Sekundärfarbe der Unterseite**	**Sólo variedades con más de un color: Sépalo: color secundario de la cara inferior**		
PQ		RHS Colour Chart (indicate reference number)	Code RHS de couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
44. **(*)**	**(c)** **(d)** **(e)**	**Sepal: undulation of margin**	**Sépale: ondulation du bord**	**Kelchblatt: Randwellung**	**Sépalo: ondulación del borde**		
QN		absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Barbara Jackman, Henryi	1
		weak	faible	gering	débil	Horn of Plenty	3
		medium	moyenne	mittel	media	Belle Nantaise, Corona	5
		strong	forte	stark	fuerte	Evirin, Lord Nevill	7
		very strong	très forte	sehr stark	muy fuerte	Katharina, The First Lady	9

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
45.	**(c) (d) (e)**	**Sepal: twisting along longitudinal axis**	**Sépale: torsion autour de l'axe longitudinal**	**Kelchblatt: Verdrehung entlang der Längsachse**	**Sépalo: torsión a lo largo del eje longitudinal**		
QL		absent	absente	fehlend	ausente	Nelly Moser	1
		present	présente	vorhanden	presente	Evisix	9
46.	**(c) (d) (e)**	**<u>Varieties with twisting along longitudinal axis only</u>: Sepal: degree of twisting**	**<u>Variétés avec torsion autour de l'axe longitudinal seulement</u>: Sépale: degré de torsion**	**<u>Nur Sorten mit Verdrehung entlang der Längsachse</u>: Kelchblatt: Grad der Verdrehung**	**<u>Sólo variedades con torsión a lo largo del eje longitudinal</u>: Sépalo: grado de torsión**		
QN		weak	faible	gering	débil		3
		medium	moyen	mittel	medio		5
		strong	fort	stark	fuerte		7
47.	**(c) (f)**	**Presence of petaloid staminodes**	**Présence de staminodes pétaloïdes**	**Vorhandensein von petaloiden Staminodien**	**Presencia de estaminodios petaloides**		
QL		absent	absents	fehlend	ausentes	Bill MacKenzie, Ville de Lyon	1
		present	présents	vorhanden	presentes	Lemon Bells, Sieboldii	9
48.	**(c) (f)**	**Petaloid staminodes: number**	**Staminodes pétaloïdes : nombre**	**Petaloide Staminodien: Anzahl**	**Estaminodios petaloides: número**		
QN		few	faible	gering	bajo		3
		medium	moyen	mittel	medio		5
		many	élevé	groß	alto	Sieboldii	7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
49.	**(c) (f)**	**Petaloid staminodes: main color of upper side**	**Staminodes pétaloïdes : couleur principale de la face supérieure**	**Petaloide Staminodien: Hauptfarbe der Oberseite**	**Estaminodios petaloides: color principal de la cara superior**		
PQ		greenish white	blanc-verdâtre	grünlichweiß	blanco verdoso	Plena	1
		green	verte	grün	verde		2
		yellow	jaune	gelb	amarillo		3
		orange	orange	orange	naranja		4
		pink	rose	rosa	rosa		5
		red	rouge	rot	rojo		6
		purple	pourpre	purpurn	púrpura	Sieboldii	7
		violet	violette	violett	violeta		8
50.	**(c)**	**Filament: color**	**Filament: couleur**	**Staubfaden: Farbe**	**Filamento: color**		
PQ		white	blanc	weiß	blanco	Poulala	1
		cream	crème	cremefarben	crema	Jan Pawell II	2
		yellow	jaune	gelb	amarillo		3
		greenish yellow	jaune-verdâtre	grünlichgelb	amarillo verdoso	Little Nell, Minuet	4
		green	vert	grün	verde	Pagoda	5
		pink	rose	rosa	rosa	Evione	6
		red	rouge	rot	rojo	Richard Pennell	7
		purple	pourpre	purpurn	púrpura	Tibetan Max	8
		brown purple	pourpre marron	braunpurpurn	púrpura marrón	Helios	9
		light violet	pourpre clair	hellviolett	violeta claro		10
		medium violet	violet moyen	mittelviolett	violeta medio	Shikoo	11
		brown	brun	braun	marrón		12

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
51.	**(c)**	**Anther: color**	**Anthères: couleur**	**Anthere: Farbe**	**Antera: color**		
PQ		white	blanches	weiß	blanco	Pink Minnie	1
		yellow green					2
		cream	crème	cremefarben	crema	Gravetye Beauty, Pixie	3
		yellow	jaunes	gelb	amarillo	Evifive, Lasurstern	4
		pink	roses	rosa	rosa		5
		red	rouges	rot	rojo	Evirin, Fireworks	6
		reddish purple	pourpre-rougeâtre	rötlichpurpurn	púrpura rojizo	Fair Rosamond, Marcel Moser	7
		purple	pourpres	purpurn	púrpura	Fantaziia, Ilka	8
		violet	violettes	violett	violeta		9
		brown	brunes	braun	marrón	Mrs Cholmondeley	10
52.	**(c)**	**Stigma: color**	**Stigmates: couleur**	**Narbe: Farbe**	**Estigma: color**		
PQ		white	blancs	weiß	blanco		1
		yellow	jaunes	gelb	amarillo		2
		pink	roses	rosa	rosa		3
		red	rouges	rot	rojo		4
		purple	pourpres	purpurn	púrpura		5
		brown	bruns	braun	marrón		6
53.		**Style: color**	**Style: couleur**	**Griffel: Farbe**	**Estilo: color**		
PQ		white	blanc	weiß	blanco		1
		yellow green					2
		yellow	jaune	gelb	amarillo		3
		pink	rose	rosa	rosa		4
		purple	pourpre	purpurn	púrpura		5

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
54. (*)	**Habit of flowering**	**Floraison**	**Blühverhalten**	**Tipo de floración**		
QL	only on previous year's growth	seulement l'année qui précède l'année de croissance	nur am Vorjahrestriebs	sólo en la parte de la planta que creció el año anterior	Elizabeth	1
	on both previous year's and current year's growth	tant l'année de croissance que celle qui la précède	sowohl am Vorjahres- als auch am Jahrestrieb	en la parte de la planta que creció el año anterior y el año en curso	Haku Ookan, Kacper, Nelly Moser	2
	only on current year's growth	seulement l'année de croissance en cours	nur am Jahrestrieb	sólo en la parte de la planta que creció en el año en curso	Jackmanii	3
55. (*)	**Time of beginning of flowering**	**Début de floraison**	**Zeitpunkt des Blühbeginns**	**Época del comienzo de la floración**		
QN	early	précoce	früh	temprana	Apple Blossom, Elizabeth	3
	medium	moyenne	mittel	media	Henryi, Titania	5
	late	tardive	spät	tardía	Jackmanii, Jan Pawel II	7

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

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

(a) All observations on the leaf should be made on mature leaves taken from the middle third of the current season's shoots.

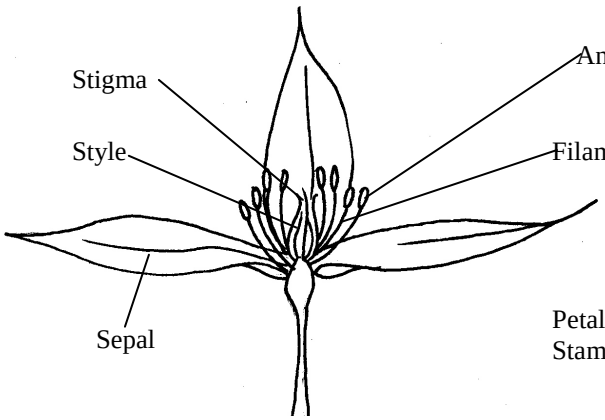
(b) For varieties with compound leaves, the leaf blade observations should be made on the basal leaflet of the first order.

(c) All observations on the flower should be made during the first flowering period of the season.

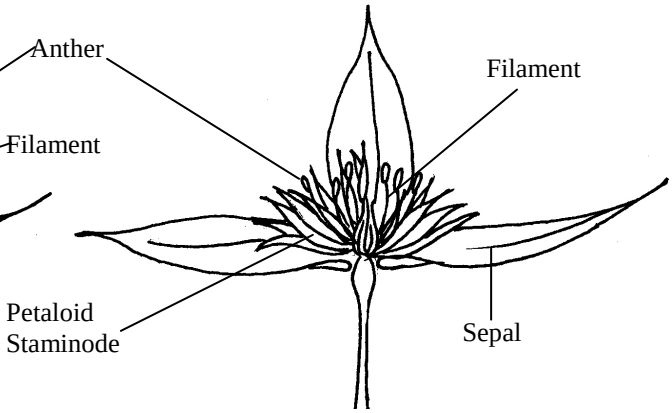
(d) The flowers of *Clematis* have no petals. However, the sepals are petal-like, as shown below. In some literature they are referred to as tepals, which is a term used when distinction between sepals and petals is not clear.

(e) For varieties with semi-double or double flowers, all observations on the sepals should be made on the first complete whorl of outer sepals.

(f) Staminodes are sterile non-functional and often antherless stamens. They are sometimes petal-like (petaloid) in form and color. Non-petaloid staminodes should be recorded in the same way as stamens.



Clematis flower with stamens



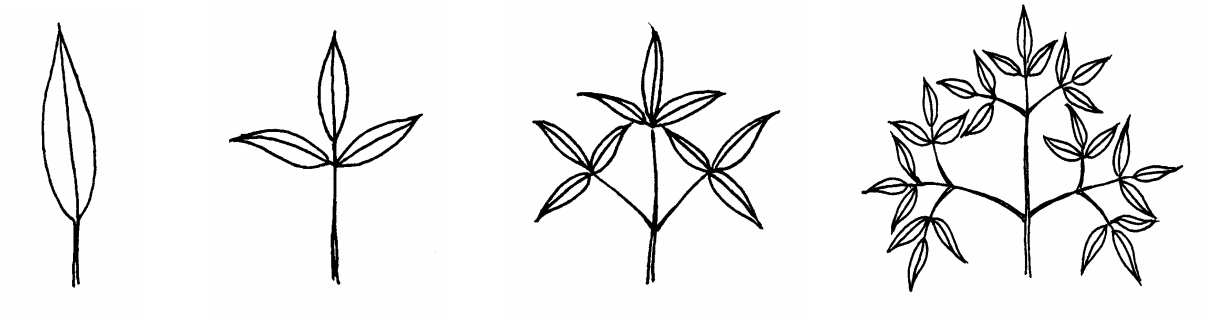
Clematis flower with stamens and petaloid staminodes

8.2 Explanations for individual characteristics

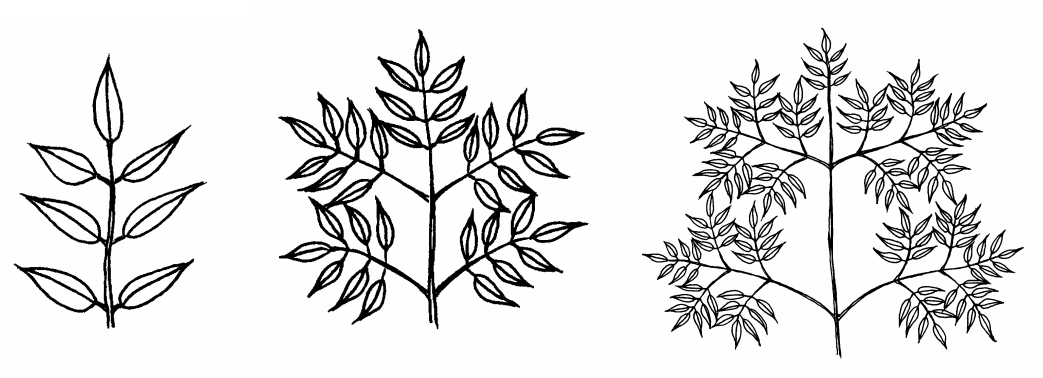
Ad. 3

The plant vigor should be considered as the overall abundance of vegetative growth.

Ad. 6: Leaf: type

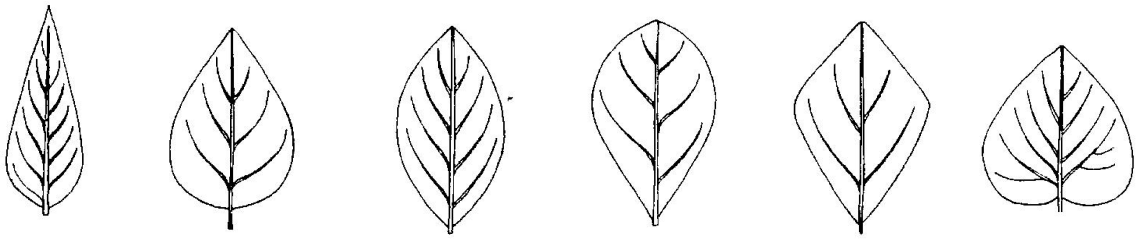


1 simple | 2 ternate | 3 biternate | 4 triternate



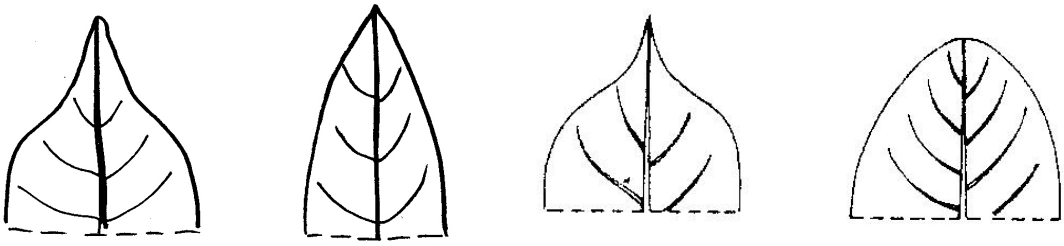
5 pinnate | 6 bipinnate | 7 tripinnate

Ad. 9: Leaf: shape



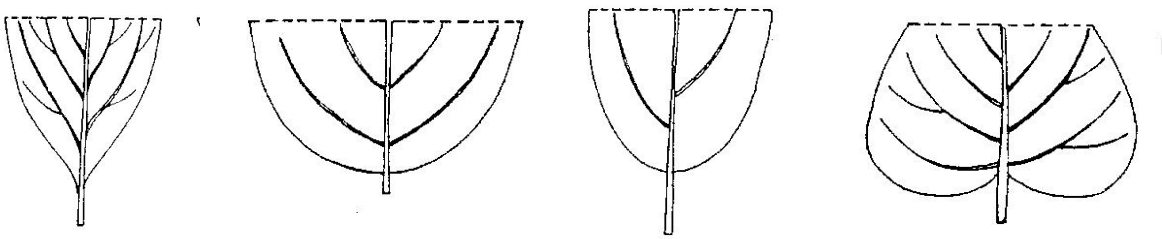
1	2	3	4	5	6
lanceolate	ovate	elliptic	obovate	rhombic	cordate

Ad. 10: Leaf blade: shape of apex



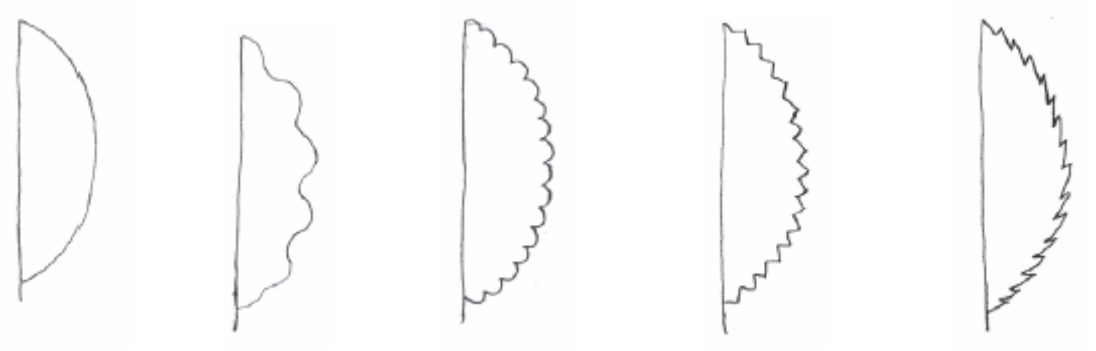
1	2	3	4
acuminate	acute	cuspidate	rounded

Ad.11: Leaf blade: shape of base



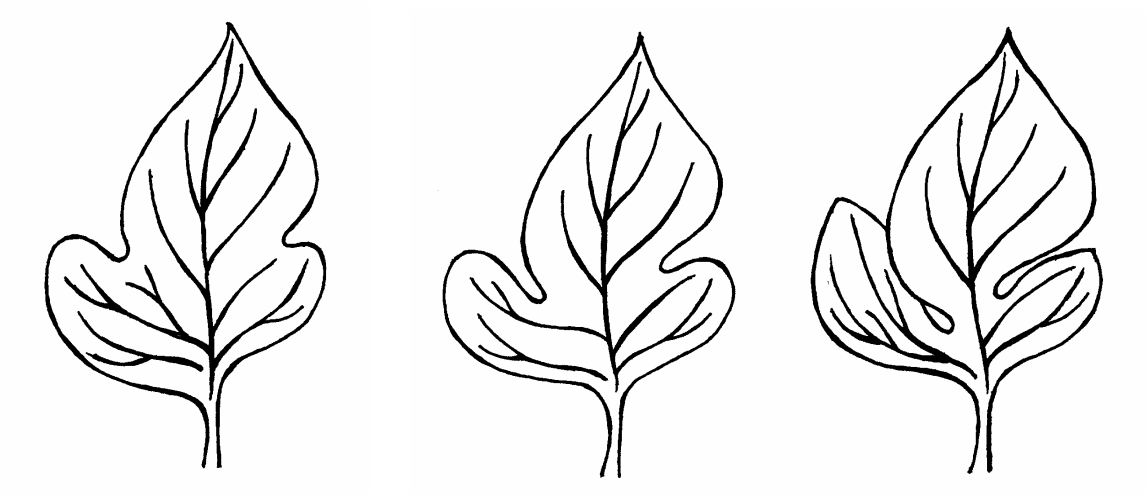
1	2	3	4
acute	obtuse	rounded	cordate

Ad. 12: Leaf blade: margin



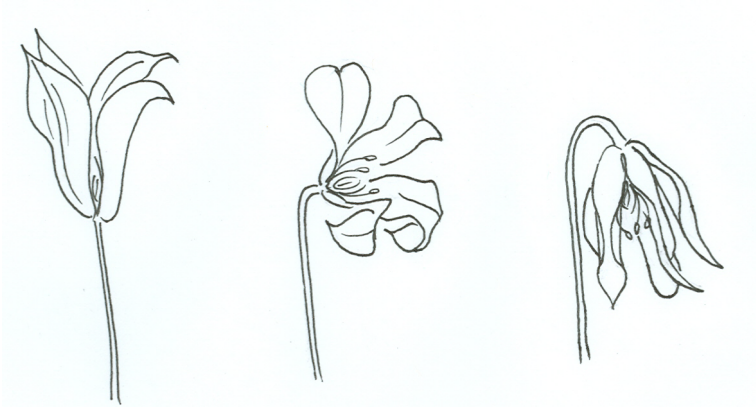
1	2	3	4	5
entire	sinuate	crenate	dentate	serrate

Ad. 15: Lobed varieties only: Leaf blade: depth of sinus between lobes



3	5	7
shallow	medium	deep

Ad. 21: Flower: orientation (irrespective of pedicel)

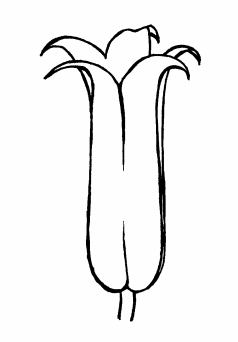


1	2	3
upwards	outwards	downwards

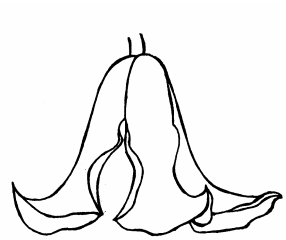
Ad. 22: Flower: type

Single:	Flower which has one complete whorl of sepals
Semi-double:	Flower which has one complete whorl of sepals plus one or two whorls that may be complete or incomplete
Double:	Flower which has more than three whorls of sepals

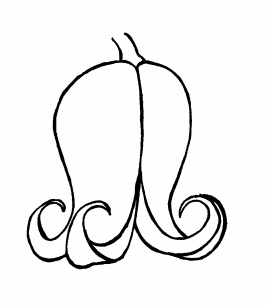
Ad. 24: Single and semi-double varieties only: Flower: shape



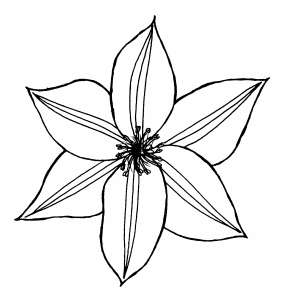
1
tubular



2
campanulate

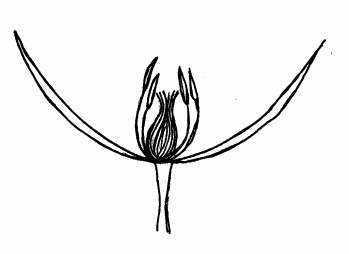


3
urceolate

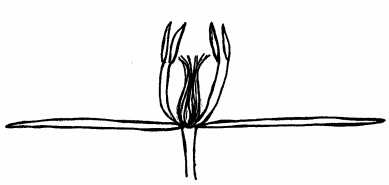


4
rotate

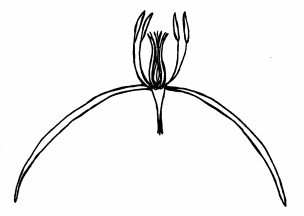
Ad. 25: Varieties with rotate flowers only: Flower: cross section in lateral view



1
concave

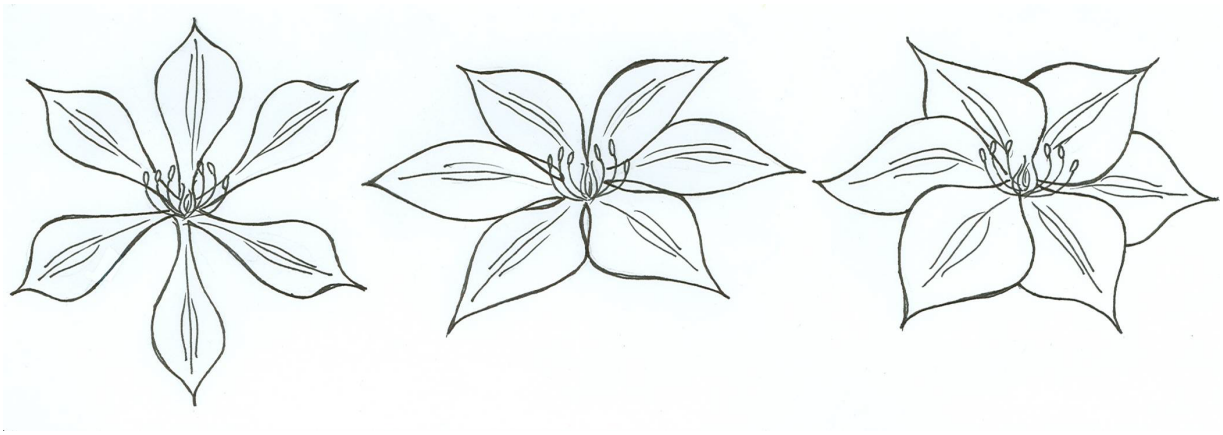


2
flat



3
convex

Ad. 27: Varieties with rotate flowers only: Flower: arrangement of sepals

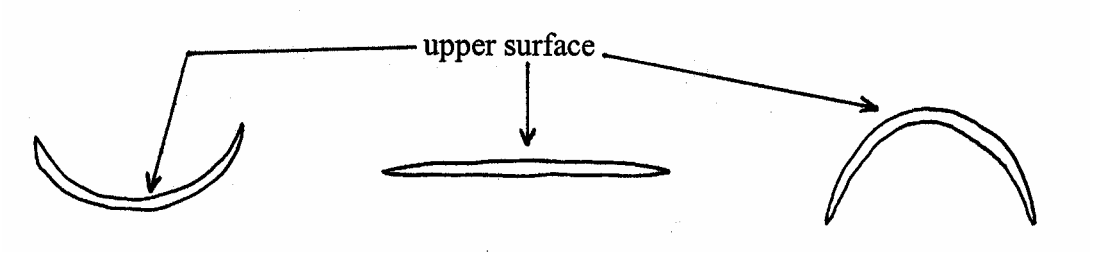


1
free

2
touching

3
overlapping

Ad. 32: Sepal: shape in cross section

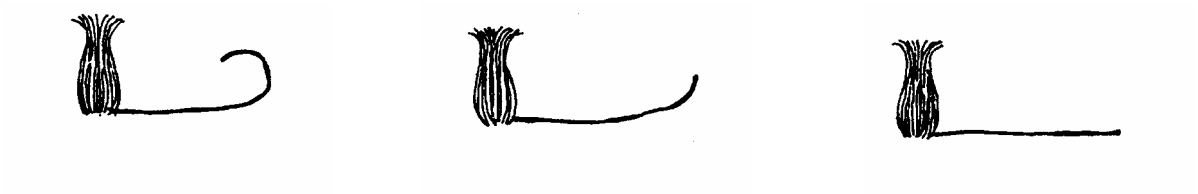


1
concave

2
flat

3
convex

Ad. 33: Varieties with rotate flowers only: Sepal: curvature in longitudinal section



1
strongly incurved

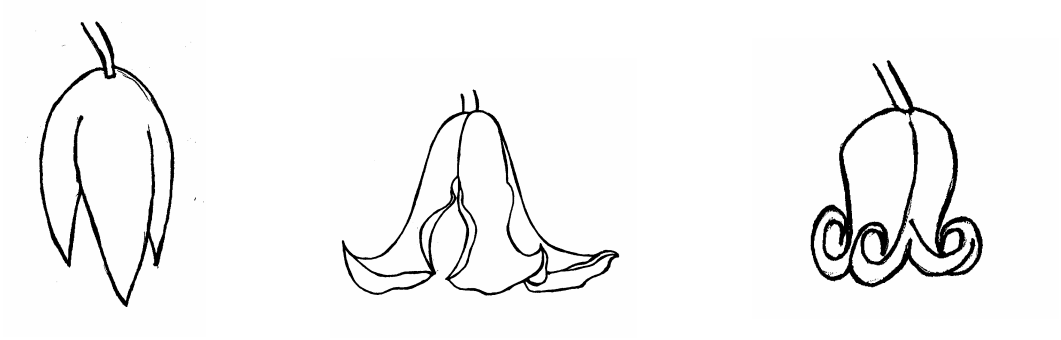
3
moderately incurved

5
flat

7
moderately reflexed

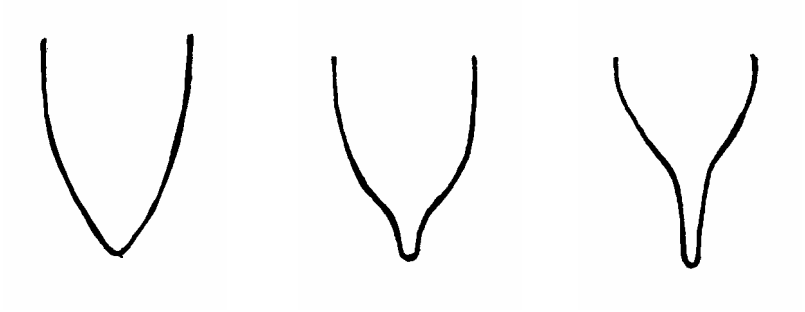
9
strongly reflexed

Ad. 34:Varieties with non -rotate flowers only: Sepal: reflexing of apex



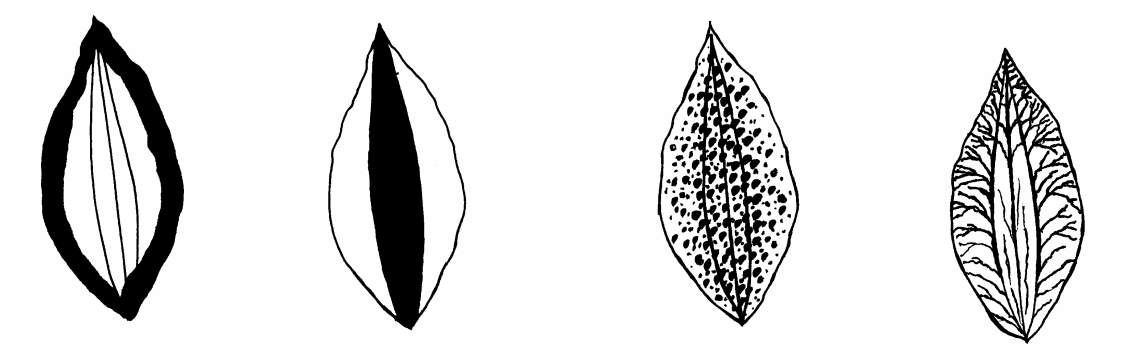
1	5	9
absent or very weak	medium	very strong

Ad. 36: Sepal: shape of base



type 1	type 2	type 3

Ad. 41: Varieties with more than one color only: Sepal: distribution of secondary color on upper side



1	2	3	4
edged	central bar	speckled	along veins

9. Literature

Buczacki, S., 1998: Powojniki, ELIPSA, Warszawa, PL.

Evison, R., 1998: The Gardener's Guide to Growing Clematis, David & Charles Publishers, Devon, GB.

Grey-Wilson, C., 2000: Clematis – the Genus, B.T. Batsford Ltd., London, GB.

Huxley, A. (ed.), Griffiths, M. (ed.), Levy, M. (ed.) 1999: The Royal Horticultural Society Dictionary of Gardening, McMillan Reference Ltd., London (Volume I, pp. 641-651), GB.

Johnson, M., 2001: The Genus Clematis, Magnus Johnsons Plantskola AB, Södertälje, SE.

Krüssmann, G. 1984: Manual of Cultivated Broad-Leaved Trees & Shrubs, Timber Press, Beaverton, Oregon (Volume I, pp. 339-353), US.

Sekowski, B., 1978: Powojniki, PWRiL, Warszawa, PL.

Toomey, M. and Leeds, E., 2001: An illustrated encyclopedia of Clematis, Timber Press, Portland, Oregon, US.

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 Latin Name	*Clematis* L.
1.2 Common Name	Clematis
Species/Group (please complete)	

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)
(b) partially known cross [ ]
(please state known parent variety(ies))
(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)

4.2 Method of propagating the variety

(a) cuttings [ ]

(b) *in vitro* propagation [ ]

(c) seed [ ]

(d) other (specify method) [ ]

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: type**		
	non-climbing	Evisix	1[ ]
	climbing	Tetrarose	2[ ]
5.2 (6)	**Leaf: type**		
	simple		1[ ]
	ternate	Hainton Ruby, Sylvia Denny	2[ ]
	biternate	Frances Rivis	3[ ]
	triternate		4[ ]
	pinnate	Golden Harvest, Vanessa	5[ ]
	bipinnate		6[ ]
	tripinnate		7[ ]
5.3 (22)	**Flower: type**		
	single	Nelly Moser, Perle d'Azur	1[ ]
	semi-double	Caroline Lloyd, Marjorie	2[ ]
	double	Kiri Te Kanawa, Multi Blue	3[ ]
5.4 (23)	**Flower: diameter**		
	very small	Marjorie	1[ ]
	small	Little Nell	3[ ]
	medium	Perle d'Azur	5[ ]
	large	Evista	7[ ]
	very large	Fairy Queen, Kacper	9[ ]

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

	Characteristics	Example Varieties	Note
5.6 (37)	**Sepal: number of colors of upper side**		
	one	Lady Northcliffe	1[ ]
	more than one	Evione, Nelly Moser	2[ ]
5.7i (38)	**Sepal: main color of upper side**		
	RHS Colour Chart (indicate reference number)		
	……		
5.7ii (38)	**Sepal: main color of upper side**		
	white		1[ ]
	yellow		2[ ]
	pink		3[ ]
	red		4[ ]
	purple		5[ ]
	violet		6[ ]
	blue		7[ ]
	green		8[ ]

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

6. Similar varieties and differences from these varieties

Please use the table, and space provided for comments, below 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	*Flower: diameter*	*small*	*medium*

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 should accompany the Technical Questionnaire.

8. Authorization for release

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

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

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

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

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

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

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

(a) Microorganisms (e.g. virus, bacteria, phytoplasma) Yes [ ] No [ ]

(b) Chemical treatment (e.g. growth retardant, pesticide) Yes [ ] No [ ]

(c) Tissue culture Yes [ ] No [ ]

(d) Other factors Yes [ ] No [ ]

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

……

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

Applicant’s name

Signature Date

[End of document]