

UPOV

TG/108/4(proj.2)

ORIGINAL: English

DATE: 2008-04-29

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

DRAFT**Gladiolus**

UPOV Code: GLADI

Gladiolus L.**GUIDELINES****FOR THE CONDUCT OF TESTS****FOR DISTINCTNESS, UNIFORMITY AND STABILITY***prepared by experts from the Netherlands*

*to be considered by the
Technical Working Party for Ornamental Plants and Forest Trees
at its forty-first session, to be held in Wageningen, Netherlands, from June 9 to 13, 2008*

Alternative Names:*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
Gladiolus	Gladiolus			

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.]

TABLE OF CONTENTS

PAGE

1. SUBJECT OF THESE TEST GUIDELINES.....	3
2. MATERIAL REQUIRED	3
3. METHOD OF EXAMINATION.....	3
3.1 Number of Growing Cycles	3
3.2 Testing Place	3
3.3 Conditions for Conducting the Examination.....	3
3.4 Test Design	3
3.5 Number of Plants / Parts of Plants to be Examined.....	4
3.6 Additional Tests	4
4. ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY	4
4.1 Distinctness	4
4.2 Uniformity.....	4
4.3 Stability	5
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL.....	5
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS	5
6.1 Categories of Characteristics.....	5
6.2 States of Expression and Corresponding Notes.....	6
6.3 Types of Expression	6
6.4 Example Varieties	6
6.5 Legend.....	6
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES.....	7
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS	21
8.1 Explanations covering several characteristics	21
8.2 Explanations for individual characteristics	21
9. LITERATURE	22
10. TECHNICAL QUESTIONNAIRE	23

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Gladiolus* L. of the family *Iridaceae*.

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 corms of at least commercial flowering size.

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

30 corms.

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 25 plants.

3.5 *Number of Plants / Parts of Plants to be Examined*

Unless otherwise indicated, all observations on single plants should be made on 10 plants or parts taken from each of 10 plants and any other observations made on all plants in the test

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 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 25 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 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) Flower: largest width (characteristic 15)
- (b) Flower: main color (characteristic 16)

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)-(x) 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: height	Plante: hauteur	Pflanze: Höhe			
QN	very short	très basse	sehr niedrig			1
	short	basse	niedrig			3
	medium	moyenne	mittel			5
	tall	haute	hoch			7
	very tall	très haute	sehr hoch			9
2. (+)	Foliage: height	Feuillage: hauteur	Laub: Höhe			
QN	very short	très basse	sehr niedrig			1
	short	basse	niedrig			3
	medium	moyenne	mittel			5
	tall	haute	hoch			7
	very tall	très haute	sehr hoch			9
3.	Leaf: width of second last leaf	Feuille:	Blatt:			
QN	very narrow	très étroite	sehr schmal			1
	narrow	étroite	schmal			3
	medium	moyenne	mittel			5
	broad	large	breit			7
	very broad	très large	sehr breit			9
4.	Leaf: curvature					
QL	straight					1
	bended					2

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
5.	Spike: lateral branches	Épi: branches latérales	Ähre: Seitenzweige			
QL	absent	absentes	fehlend			1
	present	présentes	vorhanden			9
6. (*)	Spike: length of flowering part without peduncle	Épi:	Ähre:			
QN	very short	très court	sehr kurz			1
	short	court	kurz			3
	medium	moyen	mittel			5
	long	long	lang			7
	very long	très long	seht lang			9
7. (*)	Spike: number of flowers (buds included)	Épi: nombre de fleurs	Ähre: Anzahl Blüten			
QN	very few	très petit	sehr gering			1
	few	petit	gering			3
	medium	moyen	mittel			5
	many	grand	groß			7
	very many	très grand	sehr groß			9
8. (*)	Spike: number of flowers flowering simultaneously (when first flower is fading)	Épi: nombre de fleurs fleurissant en même temps (quand la première fleur fane)	Ähre: Anzahl gleichzeitig blühender Blüten (wenn die erste Blüte verwelkt)			
QN	very few	très petit	sehr gering			1
	few	petit	gering			3
	medium	moyen	mittel			5
	many	grand	groß			7
	very many	très grand	sehr groß			9

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
9.	Spike: length of internodes					
(+)						
QN	very short	très court	sehr kurz			1
	short	court	kurz			3
	medium	moyen	mittel			5
	long	long	lang			7
	very long	très long	seht lang			9
10.	Spike: arrangement of flowers	Épi: disposition des fleurs	Ähre: Anordnung der Blüten			
(*)						
QL	one row	un rang	in einer Reihe			1
	zigzag	en zigzag	im Zickzack			2
	two rows	deux rangs	in zwei Reihen			3
	irregular	irrégulier	unregelmäßig			4
11.	Scape: shape of top					
QL	acute					1
	obtuse					2
12.	Scape: anthocyanin coloration	Bractée: pigmentation anthocyanique	Hochblatt: Anthocyanfärbung			
QN	absent or very weak	absente ou très faible	fehlend oder sehr gering			1
	weak	faible	gering			3
	medium	moyenne	mittel			5
	strong	forte	stark			7
	very strong	très forte	sehr stark			9

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
13. (*)	Flower: shape in front view		Fleur:		Blüte	
QL	triangular	triangulaire	dreieckig			1
	star-shaped	en étoile	sternförmig			2
	round	ronde	rund			3
14. (*)	Flower: attitude					
QL	upright					1
	horizontal					2
	drooping					3
15. (*)	Flower: largest width					
QN	very small					1
	small					3
	medium					5
	large					7
	very large					9
16. (*)	Flower: main color					
PQ	RHS Colour Chart (indicate reference number)					
17.	Corolla: undulation of margin					
QN	absent or very weak					1
	weak					3
	medium					5
	strong					7
	very strong					9

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
18. (*)	Corolla: number of colors					
QL	one					1
	more than one					2
19.	(Only varieties with one color): Corolla: distribution of color					
QL	even					1
	lighter towards the top					2
	lighter towards the base					3
20.	Corolla: shape of outer segments	corolle: forme de segment extérieur				
QN	ovate	ovoïde				3
	elliptic	elliptique				5
	obovate	obovoïde				7
21. (*)	<u>Only varieties with more than one color:</u> Inner segments: color pattern on inner side					
QL	striped					1
	maculate					2
	striped and maculate					3
	edged					4
22. (*)	<u>Only varieties with more than one color:</u> Inner segments: stripe					
QL	absent					1
	present					9

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
23.	<u>Only varieties with more than one color:</u> Inner segments: length of stripe					
QN	very short					1
	short					3
	medium					5
	long					7
	very long					9
24.	<u>Only varieties with more than one color:</u> Inner segments: width of stripe					
QN	very narrow					1
	narrow					3
	medium					5
	wide					7
	very wide					9
25. (*)	<u>Only varieties with more than one color:</u> Inner segments: color of stripe					
PQ	white					1
	cream					2
	yellow					3
	orange					4
	pink					5
	red					6
	purple red					7
	violet blue					8
	dark purple					9

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
26. (*)	<u>Only varieties with more than one color:</u> Inner segments: macule					
QL	absent					1
	present					9
27.	<u>Only varieties with more than one color:</u> Inner segments: central position of macule					
QL	absent					1
	present					9
28.	<u>Only varieties with more than one color:</u> Inner segments: size of macule compared to size of inner segments					
QN	very small					1
	small					3
	medium					5
	large					7
	very large					9
29. (*)	<u>Only varieties with more than one color:</u> Inner segments: shape of macule					
PQ	type 1					1
	type 2					2
	type 3					3
	type 4					4
	type 5					5

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
30. (*)	<u>Only varieties with more than one color:</u> Inner segments: main color of macule					
PQ	RHS Colour Chart (indicate reference number)					
31.	<u>Only varieties with more than one color:</u> Inner segments: secondary color of macule					
		Bractée: couleur principale de la face supérieure	Deckblatt: Hauptfarbe der Oberseite			
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)			
32.	<u>Only varieties with more than one color:</u> Inner segments: appearance of borderline of macule					
QL	regular					1
	irregular					2
33. (*)	<u>Only varieties with more than one color:</u> Inner segments: presence of inner color on margin					
QL	absent					1
	present					9
34.	<u>Only varieties with more than one color:</u> Inner segments: width of different color on margin					
QN	narrow					3
	medium					5
	broad					7

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
35.	<u>Only varieties with more than one color:</u> Inner segments: appearance of margin					
QL	regular					1
	irregular					2
36. (*)	<u>Only varieties with more than one color:</u> Inner segments: color of margin	Bractée: couleur principale de la face inférieure	Deckblatt: Hauptfarbe der Unterseite			
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)			
37.	<u>Only varieties with triangular flowers:</u> Flower: Median inner segment: attitude	(Variétés à fleurs triangulaires seulement) Segment intérieur médian du périanthe: port	Nur Sorten mit dreieckigen Blüten: Mittleres Innensegment der Blütenhülle: Stellung			
QL	semi-erect	demi-dressé	halbaufrecht			1
	horizontal	horizontal	waagerecht			2
38. VS	<u>Only varieties with triangular flowers:</u> Flower: Median inner segment: attitude of tip	(Variétés à fleurs triangulaires seulement) Segment intérieur médian du périanthe: profondeur de l'échancrure	Nur Sorten mit dreieckigen Blüten: Blume: Mittleres Innensegment der Blütenhülle: Haltung der Spitze			
PQ	hooded	incurvé	haubenartig			1
	straight	droit	gerade			2
	reflexed	récurvé	zurückgebogen			3
	strongly reflexed	fortement récurvé	stark zurückgebogen			4

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
39.	Flower: tube: length	Fleur: Tube: longueur	Blume: Röhre: Länge			
QN	short	courte	kurz			3
	medium	moyenne	mittel			5
	long	longue	lang			7
40.	Flower: tube: number of small spots on inner side of upper part	Fleur: Tube: nombre de petites taches sur la face interne de la partie supérieure	Blume: Röhre: Anzahl der kleinen Punkte auf der Innenseite des oberen Teiles			
QN	absent or very few	nul ou très petit	fehlend oder sehr gering			1
	few	petit	gering			3
	medium	moyen	mittel			5
	many	grand	groß			7
	very many	très grand	sehr groß			9
41.	Flower: tube: distribution of small spots on inner side of upper part	Fleur: Tube: distribution des petites taches sur la face interne de la partie supérieure	Blume: Röhre: Verteilung der kleinen Punkte auf der Innenseite des oberen Teiles			
QN	irregular	irrégulière	unregelmäßig			1
	in an interrupted band	en une zone interrompue	in einer unterbrochenen Zone			2
	in an uninterrupted band	en une zone sans interruption	in einer nicht unterbrochenen Zone			3
42.	VS Flower: throat: spot on outer side transition into the segments	Fleur: Gorge: tache sur la face externe à la transition vers les segments	Blume: Schlund: Fleck auf der Außenseite am Übergang zu den Segmenten			
QL	absent	absente	fehlend			1
	present	présente	vorhanden			9

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
43.	Flower: throat: color of spot on outer side at transition into segments	Fleur: Gorge: couleur de la tache sur la face externe à la transition into segments	Blume: Schlund: Farbe des Fleckes auf der Außenseite am Übergang zu den Segmenten			
PQ	orange	orange	orange			1
	pink	rose	rosa			2
	red	rouge	rot			3
	dark red	rouge foncé	dunkelrot			4
	violet	violette	violett			5
44.	Flower: filament: main color	Fleur: Filament: couleur principale	Blume: Staubfaden: Hauptfarbe			
PQ	white	blanc	weiß			1
	light yellow	jaune clair	hellgelb			2
	light pink	rose clair	hellrosa			3
	pink	rose	rosa			4
	light red	rouge clair	hellrot			5
45.	Flower: filament: small spots at base	Fleur: Filet: petites taches sur la base	Blume: Staubfaden: kleine Punkte an der Basis			
QL	absent	absentes	fehlend			1
	present	présentes	vorhanden			9
46.	Flower: filament: color at top compared to main color	Fleur: Filet: couleur au sommet par rapport à la couleur principale	Blume: Staubfaden: Farbe an der Spitze im Vergleich zur Hauptfarbe			
QL	identical	de même couleur	gleichfarbig			1
	darker	plus foncée	dunkler			2

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
47.	Flower: anther: color of connective	Fleur: Anthère: couleur du connectif	Blume: Staubblatt: Farbe des Konnektivs			
PQ	white	blanc	weiß			1
	yellow white	blanc jaune	gelb weiß			2
	light yellow	jaune clair	hellgelb			3
	pink	rose	rosa			4
48.	Flower: anther: color of stomium	Fleur: Anthère: couleur de la fente de déhiscence	Blume: Staubblatt: Farbe des Stomiums			
PQ	white	blanche	weiß			1
	yellow	jaune	gelb			2
	orange	orange	orange			3
	red	rouge	rot			4
	pink purple	pourpre rose	rosapurpur			5
	blue purple	pourpre bleu	blaupurpur			6
49.	Flower: style: main color	Fleur: Style: couleur principale	Blume: Griffel: Hauptfarbe			
PQ	white	blanc	weiß			1
	yellow	jaune	gelb			2
	yellow pink	rose jaune	gelbrosa			3
	red	rouge	rot			4
	violet	violet	violett			5

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
50.	Flower: style: color of base	Fleur: Style: couleur de la base	Blume: Griffel: Farbe der Basis			
PQ	white	blanche	weiß			1
	yellow green	vert jaune	gelbgrün			2
	yellow white	blanc jaune	gelbweiß			3
	pink	rose	rosa			4
51.	Flower: style: color of branches	Fleur: Style: couleur des branches	Blume: Griffel: Farbe der Verzweigungen			
PQ	white	blanches	weiß			1
	light yellow	jaune clair	hellgelb			2
	light pink	rose clair	hellrosa			3
	pink	roses	rosa			4
	red	rouges	rot			5
	violet	violettes	violett			6
52.	Corm: color of skin	Corme: couleur de la peau	Knolle: Farbe der Haut			
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)			
53.	Corm: color of flesh (in cross-section)	Corme: Couleur de la chair (en section transversale)	Knolle: Farbe des Fleisches (im Querschnitt)			
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)			

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
54.	Time of beginning of flowering	Époque de début de la floraison	Zeitpunkt des Blühbeginns			
QN	very early	très précoce	sehr früh			1
	early	précoce	früh			3
	medium	moyenne	mittel			5
	late	tardive	spät			7
	very late	très tardive	sehr spät			9

8. Explanations on the Table of Characteristics

All characteristics are observed when the first flower on the spike starts to fade.

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)

8.2 *Explanations for individual characteristics*

(to be completed)

9. Literature

(to be completed)

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	Gladiolus L.	
1.2 Common name	Gladiolus	
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) totally unknown cross	[]

4.1.2 Mutation []
(please state parent variety)

4.1.3 Discovery []
(please state where, when and how developed)

4.1.4 Other []
(please provide details)

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) cuttings	[]
(b) <i>in vitro</i> propagation	[]
(c) other (state method)	[]

4.2.2 Seed []

4.2.3 Other []
(please provide details)

Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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 Flower: largest width (15)		
very small		1 []
small		3 []
medium		5 []
large		7 []
very large		9 []
5.2(i) Flower: main color (16)		
RHS Colour Chart (indicate reference number)		
5.2(ii) Flower: main color (16)		
white		1 []
yellow		2 []
orange		3 []
pink orange		4 []
pink		5 []
red		6 []
purple		7 []
red purple		8 []
blue		9 []
green		10 []

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

6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
Example	[e.g. Flower color]	[e.g. orange]	[e.g. orange red]

to be completed

--

--

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 7.4 Main use (a) garden plant ☐ (b) pot plant ☐ (c) cut-flower ☐ (d) other ☐ (please provide details) 7.5 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.		

Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

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

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

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

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

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

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

.....

9.3 Has the plant material to be examined been tested for the presence of virus or other pathogens?

Yes []

(please provide details as specified by the Authority)

No []

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]