



TG/SALVI(proj.5)
 ORIGINAL: English
 DATE: 2016-02-08

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

SALVIA

UPOV Code: SALVI

Salvia L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by (an) expert(s) from Japan

to be considered by the

*Technical Committee at its fifty-second session,
 to be held in Geneva from March 14 to 16, 2016*

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>Salvia</i> L.	Salvia, Sage	Sauge	Salbei, Salvie	Salvia

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.]

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
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.....	4
3.5 ADDITIONAL TESTS.....	4
4. ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY	4
4.1 DISTINCTNESS	4
4.2 UNIFORMITY	5
4.3 STABILITY.....	5
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL.....	5
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS	6
6.1 CATEGORIES OF CHARACTERISTICS	6
6.2 STATES OF EXPRESSION AND CORRESPONDING NOTES	7
6.3 TYPES OF EXPRESSION.....	7
6.4 EXAMPLE VARIETIES.....	7
6.5 LEGEND	8
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES	9
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS.....	17
8.1 EXPLANATIONS COVERING SEVERAL CHARACTERISTICS	17
8.2 EXPLANATIONS FOR INDIVIDUAL CHARACTERISTICS	17
9. LITERATURE	26
10. TECHNICAL QUESTIONNAIRE.....	27

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Salvia* L..

The characteristics in these Test Guidelines have been developed to distinguish between ornamental varieties. It may also be used to distinguish herbal types of varieties and additional characteristics and states of expression may be needed.

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 plants or seed.

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

vegetatively propagated varieties: 10 plants
seed-propagated varieties: a sufficient quantity of seed to produce 40 plants.

In the case of seed, the seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority. In cases where the seed is to be stored, the germination capacity should be as high as possible and should, be stated by the applicant.

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

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

3. Method of Examination

3.1 *Number of Growing Cycles*

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

3.2 *Testing Place*

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

3.3 *Conditions for Conducting the Examination*

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

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

3.4 *Test Design*

3.4.1 Vegetatively propagated varieties: each test should be designed to result in a total of at least 10 plants.

3.4.2 Seed-propagated varieties: each test should be designed to result in a total of at least 40 plants.

3.4.3 The design of the tests should be such that plants or parts of plants may be removed for measurement or counting without prejudice to the observations which must be made up to the end of the growing cycle.

3.5 *Additional Tests*

Additional tests, for examining relevant characteristics, may be established.

4. Assessment of Distinctness, Uniformity and Stability

4.1 *Distinctness*

4.1.1 General Recommendations

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

4.1.2 Consistent Differences

The differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

4.1.3 Clear Differences

Determining whether a difference between two varieties is clear depends on many factors, and should consider, in particular, the type of expression of the characteristic being examined, i.e. whether it is expressed in a qualitative, quantitative, or pseudo-qualitative manner. Therefore, it is important that users of these Test Guidelines are familiar with the recommendations contained in the General Introduction prior to making decisions regarding distinctness.

4.1.4 Number of Plants / Parts of Plants to be Examined

4.1.4.1 In the case of vegetatively propagated varieties, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 9 plants or parts taken from each of 9 plants and any other observations made on all plants in the test, disregarding any off-type plants.

4.1.4.2 In the case of seed-propagated varieties, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 20 plants or parts taken from each of 20 plants and any other observations made on all plants in the test, disregarding any off-type plants.

4.1.5 Method of Observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the second column of the Table of Characteristics (see document TGP/9 "Examining Distinctness", Section 4 "Observation of characteristics"):

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

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

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

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

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

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

4.2 *Uniformity*

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

4.2.2 For the assessment of uniformity of vegetatively propagated varieties, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 10 plants, 1 off-type is allowed.

4.2.3 For the assessment of uniformity of self-pollinated seed-propagated varieties, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 40 plants, 2 off-types are allowed.

4.2.4 For the assessment of uniformity of cross-pollinated seed-propagated varieties, the recommendations in the General Introduction for cross-pollinated varieties should be followed, as appropriate.

4.3 *Stability*

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

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

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: growth habit (characteristic 1)
- (b) Plant: height (characteristic 2)
- (c) Leaf blade: variegation (characteristic 15)
- (d) Inflorescence: number of florets per node (characteristic 25)
- (e) Corolla tube: main color of outer side (characteristic 37) with the following groups:
 - Gr. 1: white
 - Gr. 2: green
 - Gr. 3: yellow
 - Gr. 4: orange
 - Gr. 5: pink
 - Gr. 6: red
 - Gr. 7: purple
 - Gr. 8: violet
 - Gr. 9: blue
- (f) Lower lip: main color of inner side (characteristic 43) with the following groups:
 - Gr. 1: white
 - Gr. 2: green
 - Gr. 3: yellow
 - Gr. 4: orange
 - Gr. 5: pink
 - Gr. 6: red
 - Gr. 7: purple
 - Gr. 8: violet
 - Gr. 9: blue
- (g) Lower lip: secondary color of inner side (characteristic 44) with the following groups:
 - Gr. 1: none
 - Gr. 2: white
 - Gr. 3: green
 - Gr. 4: yellow
 - Gr. 5: orange
 - Gr. 6: pink
 - Gr. 7: red
 - Gr. 8: purple
 - Gr. 9: violet
 - Gr. 10: blue

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction and document TGP/9 "Examining Distinctness".

6. Introduction to the Table of Characteristics

6.1 *Categories of Characteristics*

6.1.1 Standard Test Guidelines Characteristics

Standard Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which members of the Union can select those suitable for their particular circumstances.

6.1.2 Asterisked Characteristics

Asterisked characteristics (denoted by *) are those included in the Test Guidelines which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all members of the Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

6.2 *States of Expression and Corresponding Notes*

6.2.1 States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.

6.2.2 In the case of qualitative and pseudo-qualitative characteristics (see Chapter 6.3), all relevant states of expression are presented in the characteristic. However, in the case of quantitative characteristics with 5 or more states, an abbreviated scale may be used to minimize the size of the Table of Characteristics. For example, in the case of a quantitative characteristic with 9 states, the presentation of states of expression in the Test Guidelines may be abbreviated as follows:

State	Note
small	3
medium	5
large	7

However, it should be noted that all of the following 9 states of expression exist to describe varieties and should be used as appropriate:

State	Note
very small	1
very small to small	2
small	3
small to medium	4
medium	5
medium to large	6
large	7
large to very large	8
very large	9

6.2.3 Further explanation of the presentation of states of expression and notes is provided in document TGP/7 "Development of Test Guidelines".

6.3 *Types of Expression*

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

6.4 *Example Varieties*

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

6.5 *Legend*

(*) Asterisked characteristic – see Chapter 6.1.2

QL Qualitative characteristic – see Chapter 6.3

QN Quantitative characteristic – see Chapter 6.3

PQ Pseudo-qualitative characteristic – see Chapter 6.3

MG, MS, VG, VS – see Chapter 4.1.5

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

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

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

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1.	VG	Plant: growth habit	Plante : port	Pflanze: Wuchsform	Planta: porte		
(*)							
(+)							
PQ		upright	dressé	aufrecht	erguido	Yellow Majesty	1
		semi-upright	demi-dressé	halbaufrecht	semierguido	Sunsaruki	2
		spreading	étalé	breitwüchsig	extendido	Santa Barbara	3
		trailing	retombant	hängend	rastrero		4
2.	VG/ MS/ MG	Plant: height	Plante : hauteur	Pflanze: Höhe	Planta: altura		
(*)							
(+)							
QN		very short	très courte	sehr niedrig	muy baja	Haeumanarc	1
		short	courte	niedrig	baja	Hot Jazz	3
		medium	moyenne	mittel	media	Lady in Red	5
		tall	haute	hoch	alta		7
		very tall	très haute	sehr hoch	muy alta	Yellow Majesty	9
3.	VG/ MS/ MG	Plant: width	Plante : largeur	Pflanze: Breite	Planta: anchura		
QN		narrow	étroite	schmal	estrecha	Hot Jazz	3
		medium	moyenne	mittel	media	Lady in Red	5
		broad	large	breit	ancha	Santa Barbara	7
4.	VG	Plant: density of shoots	Plante : densité des rameaux	Pflanze: Dichte der Triebe	Planta: densidad de las ramas		
QN		sparse	faible	locker	laxa	Artemis	1
		medium	moyenne	mittel	media	Lady in Red	3
		dense	élevée	dicht	densa	Santa Barbara	5
5.	VG	Stem: anthocyanin coloration	Tige : pigmentation anthocyanique	Trieb: Anthocyan-färbung	Tallo: pigmentación antocianica		
QN	(a)	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil	West Texas Form	1
		weak	faible	gering	débil		2
		medium	moyenne	mittel	media	Lady in Red	3
		strong	forte	stark	fuerte		4
		very strong	très forte	sehr stark	muy fuerte	Caradonna	5
6.	VG	Stem: pubescence	Tige : pilosité	Haupttrieb: Behaarung	Tallo: pubescencia		
QN	(a)	absent or very sparse	absente ou très peu dense	fehlend oder sehr gering	ausente o muy escasa	Hot Jazz	1
		sparse	peu dense	gering	escasa		2
		medium	moyenne	mittel	media		3
		dense	dense	dicht	densa		4
		very dense	très dense	sehr dicht	muy densa	Santa Barbara	5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
7.	VG	Leaf: type	Feuille : type	Blatt: Typ	Hoja: tipo		
(+)							
QL	(a)	simple	simple	einfach	simple		1
		compound	composée	zusammengesetzt	compuesta		2
8.	VG/ MS/ MG	Petiole: length	Pétiole : longueur	Blattstiel: Länge	Pecíolo: longitud		
(+)							
QN	(a)	absent or very short	absent ou très court	fehlend oder sehr kurz	ausente o muy corta		1
		short	court	kurz	corta	Sunsaruki	3
		medium	moyen	mittel	media		5
		long	long	lang	larga	Yellow Majesty	7
9.	VG/ MS/ MG	Leaf blade: length	Limbe : longueur	Blattspreite: Länge	Limbo: longitud		
(*)							
(+)							
QN	(a)	short	court	kurz	corto	Sunsaruki	3
		medium	moyen	mittel	medio	Lady in Red	5
		long	long	lang	largo	Yellow Majesty	7
10.	VG/ MS/ MG	Leaf blade: width	Limbe : largeur	Blattspreite: Breite	Limbo: anchura		
(*)							
(+)							
QN	(a)	narrow	étroit	schmal	estrecha	Sunsaruki	3
		medium	moyen	mittel	media	Lady in Red	5
		broad	large	breit	ancha	Yellow Majesty	7
11.	VG/ MS/ MG	Leaf blade: ratio length/width	Limbe : rapport longueur/largeur	Blattspreite: Verhältnis Länge/Breite	Limbo: relación longitud/anchura		
(*)							
(+)							
QN	(a)	low	bas	klein	baja		3
		medium	moyen	mittel	media		5
		high	élevé	groß	alta	Santa Barbara	7
		very high	très élevé	sehr groß	muy alta	West Texas Form	9
12.	VG	Leaf blade: position of broadest part	Limbe : position de la partie la plus large	Blattspreite: Position der breitesten Stelle	Limbo: posición de la parte más ancha		
(+)							
QN	(a)	strongly towards base	fortement vers la base	stark zur Basis hin	marcadamente hacia la base		1
		moderately towards base	modérément vers la base	mäßig zur Basis hin	moderadamente hacia la base		2
		at middle	au milieu	in der Mitte	en la mitad		3
		moderately towards apex	modérément vers le sommet	mäßig zur Spitze hin	moderadamente hacia el ápice		4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
13.	VG	Leaf blade: shape of base	Limbe : forme de la base	Blattspreite: Form der Basis	Limbo: forma de la base		
(+)							
PQ	(a)	acute	aiguë	spitz	aguda		1
		obtuse	obtuse	stumpf	obtusa		2
		rounded	arrondie	abgerundet	redondeada		3
		truncate	tronquée	gerade	truncada		4
		cordate	cordiforme	herzförmig	cordiforme		5
14.	VG	Leaf blade: shape of apex	Limbe : forme du sommet	Blattspreite: Form der Spitze	Limbo: forma del ápice		
(+)							
PQ	(a)	acuminate	acuminée	zugespitzt	acuminado		1
		acute	aigue	spitz	agudo		2
		obtuse	obtuse	stumpf	obtusos		3
		rounded	arrondie	abgerundet	redondeado		4
15.	VG	Leaf blade: variegation	Limbe : panachure	Blattspreite: Panaschierung	Limbo: variegación		
(*)							
QL	(a)	absent	absente	fehlend	ausente	Hot Jazz	1
		present	présente	vorhanden	presente	Dancing Flame	9
16.	VG	Leaf blade: main color	Limbe : couleur principale	Blattspreite: Hauptfarbe	Limbo: color principal		
PQ	(a)	white	blanc	weiß	blanco		1
	(b)	yellowish white	blanc jaunâtre	gelblichweiß	blanco amarillento		2
		yellow	jaune	gelb	amarillo	Dancing Flame	3
		yellow green	vert-jaune	gelbgrün	verde amarillo	Golden Delicious	4
		light green	vert clair	hellgrün	verde claro		5
		medium green	vert moyen	mittelgrün	verde medio	Lady in Red	6
		dark green	vert foncé	dunkelgrün	verde oscuro	Hot Jazz	7
		grey green	vert-gris	graugrün	verde grisáceo		8
		purplish green	vert violacé	purpurgrün	verde purpúreo		9
		purple	pourpre	purpurn	púrpura		10

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
17.	VG	Leaf blade: secondary color	Limbe : couleur secondaire	Blattspreite: Sekundärfarbe	Limbo: color secundario		
PQ	(a)	white	blanc	weiß	blanco		1
	(b)	yellowish white	blanc jaunâtre	gelblichweiß	blanco amarillento		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
		purplish green	vert violacé	purpurgrün	verde purpúreo		9
		purple	pourpre	purpurn	púrpura		10
18.	VG (+)	Leaf blade: distribution of secondary color	Limbe : répartition de la couleur secondaire	Blattspreite: Verteilung der Sekundärfarbe	Limbo: distribución del color secundario		
PQ	(a)	marginal zone	zone marginale	in der Randzone	en la zona del borde	Caramba	1
		central zone	zone centrale	in der Mittelzone	en la zona central		2
		throughout	partout	überall	en toda la superficie	Dancing Flame	3
19.	VG	Leaf blade: pubescence	Limbe : pubescence	Blattspreite: Behaarung	Limbo: pubescencia		
QN	(a)	absent or very sparse	nulle ou très épars	fehlend oder sehr gering	ausente o muy laxa	Hot Jazz	1
		sparse	épars	gering	laxa		2
		medium	moyenne	mittel	media		3
		dense	dense	dicht	densa		4
		very dense	très dense	sehr dicht	muy densa	Artemis	5
20.	VG (+)	Leaf blade: rugosity	Limbe : rugosité	Blattspreite: Blasigkeit	Limbo: rugosidad		
QN	(a)	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil		1
		weak	faible	gering	débil	Lady in Red	2
		medium	moyenne	mittel	media		3
		strong	forte	stark	fuerte		4
		very strong	très forte	sehr stark	muy fuerte	Omaha Gold	5
21. (*) (+)	VG	Leaf blade: incisions of margin	Limbe : incisions du bord	Blattspreite: Randeinschnitte	Limbo: incisiones del borde		
QN	(a)	absent or very shallow	absentes ou très faibles	fehlend oder sehr flach	ausentes o muy poco profundas		1
		shallow	faibles	flach	poco profundas		2
		medium	moyennes	mittel	medias	Hot Jazz	3
		deep	fortes	tief	profundas		4
		very deep	très fortes	sehr tief	muy profundas		5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
22.	VG	Leaf blade: undulation of margin	Limbe : ondulation du bord	Blattspreite: Randwellung	Limbo: ondulación del borde		
(+)							
QN	(a)	absent or weak	absente ou faible	fehlend oder gering	ausente o débil		1
		medium	moyenne	mittel	media		2
		strong	forte	stark	fuerte		3
23.	VG/	Inflorescence: length	Inflorescence : longueur	Blütenstand: Länge	Inflorescencia: longitud		
(*)	MS/						
(+)	MG						
QN	(c)	short	courte	kurz	corta		3
		medium	moyenne	mittel	media	Lady in Red	5
		long	longue	lang	larga	Santa Barbara	7
24.	VG/	Inflorescence: length of internode	Inflorescence : longueur de l'entre-nœud	Blütenstand: Internodienlänge	Inflorescencia: longitud del entrenudo		
(*)	MS/						
(+)	MG						
QN	(c)	short	court	kurz	corto	Heatwave Glimmer, Hot Jazz	3
		medium	moyen	mittel	medio	Insalgosca	5
		long	long	lang	largo	Wendys Wish	7
25.	VG	Inflorescence: number of florets per node	Inflorescence : nombre de fleurons par nœud	Blütenstand: Anzahl Blüten je Nodium	Inflorescencia: número de flósculos por nudo		
(*)							
(+)							
QN	(c)	few	petit	gering	bajo	Hot Lips	1
		medium	moyen	mittel	medio		2
		many	grand	groß	alto	Yellow Majesty	3
26.	VG	Inflorescence: number of lateral branches	Inflorescence : nombre de rameaux latéraux	Blütenstand: Anzahl Seitenzweige	Inflorescencia: número de ramas laterales		
QN	(c)	absent or very few	nul ou très petit	fehlend oder sehr gering	ninguna o muy pocas	Insalgosca	1
		few	petit	gering	pocas	Wendys Wish	2
		medium	moyen	mittel	medio	Haeumanarc	3
		many	grand	groß	abundantes	Blaukönigin	4
		very many	très grand	sehr groß	muy abundantes	Schneehügel	5
27.	VG	Inflorescence: attitude of tip	Inflorescence : port du sommet	Blütenstand: Haltung der Spitze	Inflorescencia: porte del ápice		
(+)							
QN	(c)	erect	dressé	aufgerichtet	erecto	Caradonna, Yellow Majesty	1
		semi-erect	demi-dressé	halbaufgerichtet	semierecto	Haeumanarc	2
		outwards	perpendiculaire	abstehend	orientado hacia el exterior		3
		semi-downwards	demi-retombant	halb abwärts gerichtet	semiorientado hacia abajo	Insalgosca	4
		downwards	retombant	abwärts gerichtet	orientado hacia abajo	Wendys Wish	5

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
28. VG	Bract: persistence	Bractée : persistance	Deckblatt: Anhaften	Bráctea: persistencia		
(+)						
QN	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil		1
	weak	faible	gering	débil	Insalgosca	2
	medium	moyenne	mittel	media	Wendys Wish	3
	strong	forte	stark	fuerte		4
	very strong	très forte	sehr stark	muy fuerte	Haeumanarc	5
29. VG/ MG/ MS	Bract: length	Bractée : longueur	Deckblatt: Länge	Bráctea: longitud		
(+)						
QN	very short	très courte	sehr kurz	muy corta		1
	short	courte	kurz	corta	Haeumanarc	2
	medium	moyenne	mittel	media	Insalgosca	3
	long	longue	lang	larga		4
	very long	très longue	sehr lang	muy larga		5
30. VG	Bract: main color of outer side	Bractée : couleur principale de la face externe	Deckblatt: Hauptfarbe der Außenseite	Bráctea: color principal de la cara externa		
(*)						
(+)						
PQ	(b) 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)		
31. VG	Calyx: length	Calice : longueur	Kelch: Länge	Cáliz: longitud		
(*)						
(+)						
QN	short	court	kurz	corto		1
	medium	moyen	mittel	medio		3
	long	long	lang	largo		5
32. VG	Calyx: main color of outer side	Calice : couleur principale de la face externe	Kelch: Hauptfarbe der Außenseite	Cáliz: color principal de la cara externa		
(*)						
PQ	(b) 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)		
33. VG	Calyx: pubescence on outer side	Calice : pubescence de la face externe	Kelch: Behaarung an der Außenseite	Cáliz: pubescencia en la cara externa		
QN	absent or very sparse	nulle ou très éparse	fehlend oder sehr gering	ausente o muy laxa	Lady in Red	1
	sparse	éparse	gering	laxa		2
	medium	moyenne	mittel	media		3
	dense	dense	dicht	densa		4
	very dense	très dense	sehr dicht	muy densa	Santa Barbara	5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34.	VG/ (*) (+)	Corolla: length	Corolle : longueur	Krone: Länge	Corola: longitud		
QN	(d)	very short	très courte	sehr kurz	muy corta	Haeumanarc	1
		short	courte	kurz	corta	Mainacht	3
		medium	moyenne	mittel	media	Heatwave Glimmer	5
		long	longue	lang	larga	Hot Jazz, Yellow Majesty	7
		very long	très longue	sehr lang	muy larga	Wendys Wish	9
35.	VG/ (*) (+)	Corolla: height	Corolle : hauteur	Krone: Höhe	Corola: altura		
QN	(d)	short	petite	niedrig	corta	Mainacht	3
		medium	moyenne	mittel	media	Wendys Wish	5
		tall	grande	hoch	alta		7
36.	VG/ (*) (+)	Corolla tube: length	Tube de la corolle : longueur	Kronröhre: Länge	Tubo de la corola: longitud		
QN	(d)	short	court	kurz	corto		1
		medium	moyen	mittel	medio	Lady in Red	3
		long	long	lang	largo	Hot Jazz	5
37.	VG (*)	Corolla tube: main color of outer side	Tube de la corolle : couleur principale de la face externe	Kronröhre: Hauptfarbe der Außenseite	Tubo de la corola: color principal de la cara externa		
PQ	(b) (d)	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)		
38.	VG (*)	Upper lip: main color of outer side	Labelle supérieur : couleur principale de la face externe	Oberlippe: Hauptfarbe der Außenseite	Labio superior: color principal de la cara externa		
PQ	(b) (d)	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.	VG	Upper lip: secondary color of outer side	Labelle supérieur : couleur secondaire de la face externe	Oberlippe: Sekundärfarbe der Außenseite	Labio superior: color secundario de la cara externa		
PQ	(b) (d)	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.	VG	Upper lip: pubescence on outer side	Labelle supérieur : pubescence de la face externe	Oberlippe: Behaarung an der Außenseite	Labio superior: pubescencia en la cara externa		
QN	(d)	absent or very sparse	nulle ou très éparse	fehlend oder sehr gering	ausente o muy laxa		1
		sparse	éparse	gering	laxa	Hot Jazz	2
		medium	moyenne	mittel	media		3
		dense	dense	dicht	densa		4
		very dense	très dense	sehr dicht	muy densa	Santa Barbara	5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
41.	VG/	Lower lip: width	Labelle inférieur : largeur	Unterlippe: Breite	Labio inferior: anchura		
(*)	MS/						
(+)	MG						
QN	(d)	narrow	petite	schmal	estrecho	Haeumanarc	1
		medium	moyenne	mittel	medio	Dansalfun 1, Lady in Red	3
		broad	grande	breit	ancho	Heatwave Blast	5
42.	VG	Lower lip: attitude relative to corolla tube	Labelle inférieur : port par rapport au tube de la corolle	Unterlippe: Haltung im Verhältnis zur Kronröhre	Labio inferior: porte en relación con el tubo de la corola		
(+)							
QN	(d)	parallel	parallèle	parallel	paralelo		1
		moderately downwards	modérément retombant	mäßig abwärts gerichtet	moderadamente orientado hacia abajo		2
		strongly downwards	fortement retombant	stark abwärts gerichtet	muy orientado hacia abajo		3
		moderately reflexed	modérément réfléchi	mäßig zurückgebogen	moderadamente reflexo		4
		strongly reflexed	fortement réfléchi	stark zurückgebogen	muy reflexo		5
43.	VG	Lower lip: main color of inner side	Labelle inférieure : couleur principale de la face interne	Unterlippe: Hauptfarbe der Innenseite	Labio inferior: color principal de la cara interna		
(*)							
PQ	(b)	RHS Colour Chart	Code RHS des	RHS-Farbkarte	Carta de colores RHS		
	(d)	(indicate reference number)	couleurs (indiquer le numéro de référence)	(Nummer angeben)	(indíquese el número de referencia)		
44.	VG	Lower lip: secondary color of inner side	Labelle inférieur : couleur secondaire de la face interne	Unterlippe: Sekundärfarbe der Innenseite	Labio inferior: color secundario de la cara interna		
(*)							
PQ	(b)	RHS Colour Chart	Code RHS des	RHS-Farbkarte	Carta de colores RHS		
	(d)	(indicate reference number)	couleurs (indiquer le numéro de référence)	(Nummer angeben)	(indíquese el número de referencia)		
45.	VG	Lower lip: distribution of secondary color of inner side	Labelle inférieur : distribution de la couleur secondaire de la face interne	Unterlippe: Verteilung der Sekundärfarbe der Innenseite	Labio inferior: distribución del color secundario en la cara interna		
(*)							
(+)							
PQ	(b)	at base	à la base	an der Basis	en la base		1
	(d)	basal third	tiers basal	im basalen Drittel	en el tercio basal	Hot Lips	2
		central zone	zone centrale	in der Mittelzone	en la zona central		3
		at margin	en bordure	am Rand	en el borde		4
		throughout	partout	überall	en toda la superficie	Pinafore Purplestream	5
46.	VG	Lower lip: undulation of margin	Labelle inférieur : ondulation du bord	Unterlippe: Randwellung	Labio inferior: ondulación del borde		
(+)							
QN	(d)	absent or weak	nulle ou faible	fehlend oder gering	ausente o débil		1
		medium	moyenne	mittel	media		2
		strong	forte	stark	fuerte		3

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

Unless otherwise indicated, characteristics should be examined at the time of full flowering.

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

- (a) Observations on the stem and leaf should be made on the middle third of a flowering stem, excluding the inflorescence. Observations of the leaf blade should be made on the upper side.
- (b) The main color is the color with the largest surface area. The secondary color is the color with the second largest surface area. In cases where the areas of the main and secondary color are too similar to reliably decide which color has the largest area, the darker color is considered to be the main color.
- (c) Observations on the inflorescence should be made before the lowest flower in the inflorescence fades.
- (d) Observations on the corolla should be made on fresh fully open flowers.

8.2 *Explanations for individual characteristics*

Ad. 1: Plant: growth habit



2
semi-upright



3
spreading



4
trailing

Ad. 2: Plant: height

Plant height should be observed from the surface of the growing medium to the top of the plant, including inflorescence.

Ad. 7: Leaf: type



1
simple

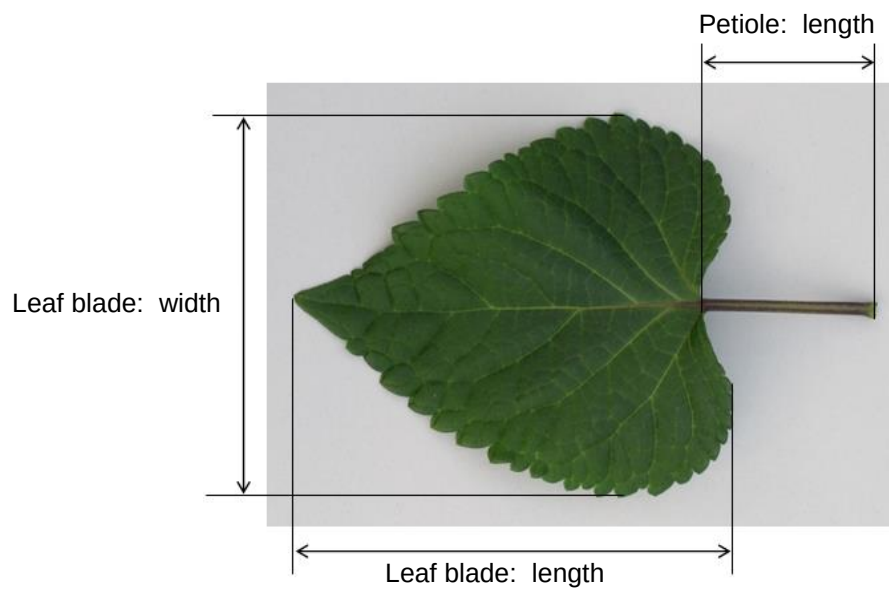


2
compound

Ad. 8: Petiole: length

Ad. 9: Leaf blade: length

Ad. 10: Leaf blade: width



Ad. 11: Leaf blade: ratio length/width



3
low



5
medium



7
high

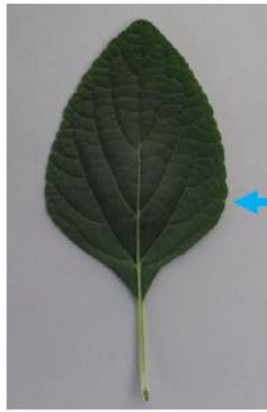


9
very high

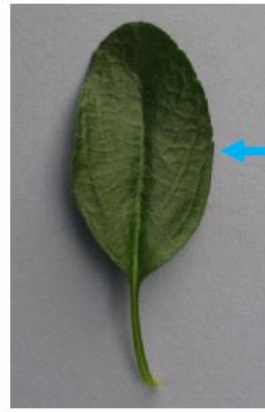
Ad. 12: Leaf blade: position of broadest part



1
strongly towards base



2
moderately towards base



3
at middle

Ad. 13: Leaf blade: shape of base



1
acute



2
obtuse



3
rounded



4
truncate



5
cordate

Ad. 14: Leaf blade: shape of apex



1
acuminate



2
acute



3
obtuse



4
rounded

Ad. 18: Leaf blade: distribution of secondary color



1
marginal zone



3
throughout

Ad. 20: Leaf blade: rugosity



1
absent or very weak



2
weak



3
medium



5
very strong

Ad. 21: Leaf blade: incisions of margin



1
absent or very shallow



2
shallow

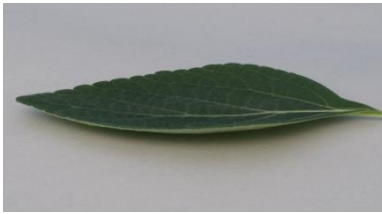


3
medium



4
deep

Ad. 22: Leaf blade: undulation of margin



1
absent or weak



3
strong

Ad. 23: Inflorescence: length

The natural length of inflorescence should be observed.



Inflorescence: length

Ad. 24: Inflorescence: length of internode

The internode should be observed on the middle third of an inflorescence.

Ad. 25: Inflorescence: number of florets per node

The number of florets should be observed on a node from the middle third of an inflorescence.



1
few



2
medium



3
many

Ad. 27: Inflorescence: attitude of tip



1
erect



2
semi-erect

Ad. 28: Bract: persistence

Bract persistence is observed as the stage of flowering when the bract comes off the inflorescence. Varieties with stronger bract persistence will retain the bracts for longer during the flowering of an inflorescence. Varieties with weaker bract persistence will lose the bracts at an early stage of flowering.

Ad. 29: Bract: length

Bract length should be observed on the lowest bract still remaining in the inflorescence.

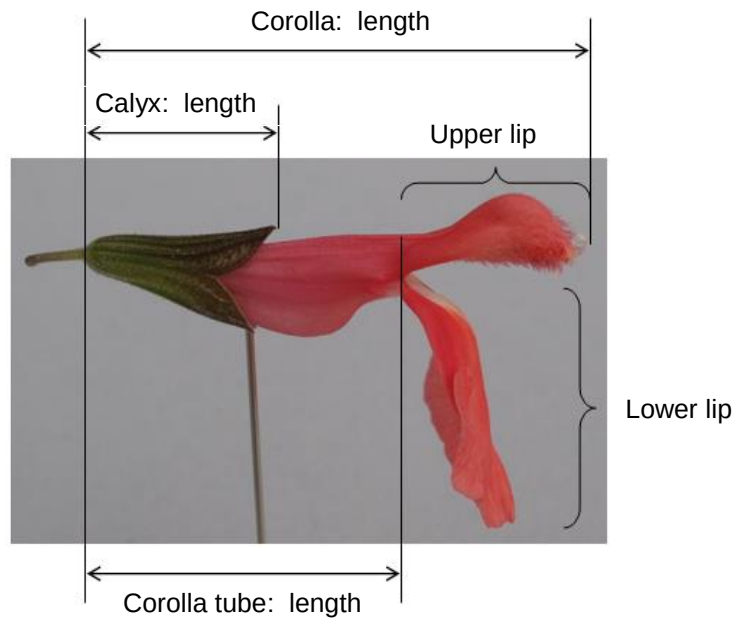
Ad. 30: Bract: main color of outer side

Observation should be made on a bract towards the tip of the inflorescence.

Ad. 31: Calyx: length

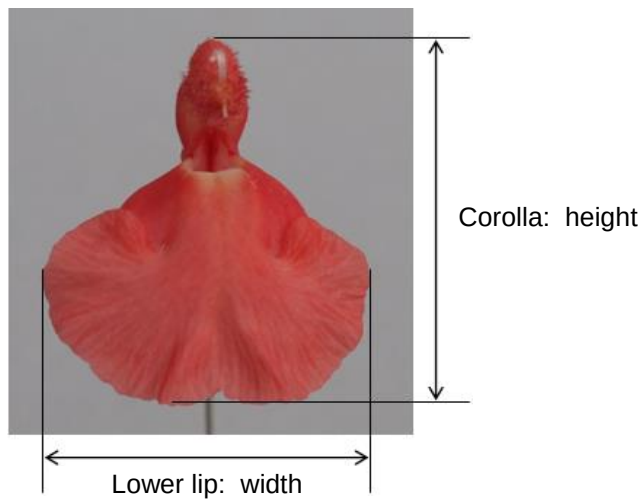
Ad. 34: Corolla: length

Ad. 36: Corolla tube: length



Ad. 35: Corolla: height

Ad. 41: Lower lip: width



Ad. 42: Lower lip: attitude relative to corolla tube



1
parallel



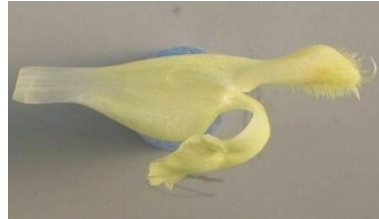
2
moderately downwards



3
strongly downwards



4
moderately reflexed



5
strongly reflexed

Ad. 45: Lower lip: distribution of secondary color of inner side



1
at base



2
basal third



3
central zone



4
at margin



5
throughout

Ad. 46: Lower lip: undulation of margin



1
absent or weak



2
medium



3
strong

9. Literature

Clebsch, B., 2008: The New Book of Salvias: Sages for Every Garden. Timber Press, Inc. Oregon, USA, 344 pp.

Froissart, C., 2008: La Connaissance des Sauges. Edisud. Aix-en-Provence, Fr, 320 pp.

Nishikawa, A., 2001: Salvia. NHK Publishing. Tokyo, JP, 127 pp.

Tsukamoto, Y., 1994: The Grand Dictionary of Horticulture, Compact version. Shogakukan. Tokyo, JP, pp.1085-1089

Yeo, C., 1995: Salvias. Pleasant View Nursery. Newton Abbot, Devon, GB, 52 pp.

Yeo, C., 1997: Salvias II. Pleasant View Nursery. Newton Abbot, Devon, GB

10. Technical Questionnaire

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

	Application date: (not to be filled in by the applicant)
--	---

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

1. Subject of the Technical Questionnaire	
1.1 Botanical name	Salvia L.
1.2 Common name	Salvia
1.3 Species (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)

(.....) x (.....)
female parent male parent

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

(.....) x (.....)
female parent male parent

- (c) unknown cross []

4.1.2 Mutation []
(please state parent variety)

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

4.1.4 Other []
(please provide details)

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

4.2 Method of propagating the variety

4.2.1 Seed-propagated varieties

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

4.2.2 Vegetative propagation

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

4.2.3 Other []
(please provide details)

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

5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).

	Characteristics	Example Varieties	Note
5.1 (1)	Plant: growth habit		
	upright	Yellow Majesty	1[]
	semi-upright	Sunsaruki	2[]
	spreading	Santa Barbara	3[]
	trailing		4[]
5.2 (2)	Plant: height		
	very short	Haeumanarc	1[]
	very short to short		2[]
	short	Hot Jazz	3[]
	short to medium		4[]
	medium	Lady in Red	5[]
	medium to tall		6[]
	tall		7[]
	tall to very tall		8[]
	very tall	Yellow Majesty	9[]
5.3 (15)	Leaf blade: variegation		
	absent	Hot Jazz	1[]
	present	Dancing Flame	9[]
5.4 (25)	Inflorescence: number of florets per node		
	few	Hot Lips	1[]
	medium		2[]
	many	Yellow Majesty	3[]
5.5 (i) (37)	Corolla tube: main color of outer side		
	RHS Colour Chart (indicate reference number)		

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

Characteristics	Example Varieties	Note
5.5 (ii) Corolla tube: main color of outer side (37)		
white		1[]
green		2[]
yellow		3[]
orange		4[]
pink		5[]
red		6[]
purple		7[]
violet		8[]
blue		9[]
5.6 (i) Lower lip: main color of inner side (43)		
RHS Colour Chart (indicate reference number)		
5.6 (ii) Lower lip: main color of inner side (43)		
white		1[]
green		2[]
yellow		3[]
orange		4[]
pink		5[]
red		6[]
purple		7[]
violet		8[]
blue		9[]
5.7 (i) Lower lip: secondary color of inner side (44)		
RHS Colour Chart (indicate reference number)		

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

Characteristics	Example Varieties	Note
5.7 (ii) Lower lip: secondary color of inner side (44)		
none		1[]
white		2[]
green		3[]
yellow		4[]
orange		5[]
pink		6[]
red		7[]
purple		8[]
violet		9[]
blue		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
<i>Example</i>	<i>Plant: growth habit</i>	<i>upright</i>	<i>semi-upright</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 [] 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) culinary []

(d) medical []

(e) other []

(please provide details)

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

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

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

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

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

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".

.....

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]