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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

LAVANDULA/LAVENDER *

UPOV Code(s): LAVAN

Lavandula L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by experts from the European Union
to be considered by the
Technical Working Party for Ornamental Plants and Forest Trees
at its fifty-fifth session, to be held virtually
from 2023-06-12 to 2023-06-16

Disclaimer: this document does not represent UPOV policies or guidance

Alternative names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Lavandula L.	Lavandula, Lavender	Lavande, Lavandin	Lavendel	Lavanda, Lavándula

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 *Lavandula* L.

2. Material Required

2.1 The competent authorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.

2.2 The material is to be supplied in the form of young plants or seeds.

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

- for vegetatively propagated varieties: 10 young plants
- for seed-propagated varieties: sufficient seeds to produce 20 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

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

3.1.2 The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test.

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 In the case of vegetatively propagated varieties, each test should be designed to result in a total of at least 10 plants.

3.4.2 In the case of seed-propagated varieties, each test should be designed to result in a total of at least 20 plants.

3.5 Additional Tests

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

4. Assessment of Distinctness, Uniformity and Stability

4.1 Distinctness

4.1.1 General Recommendations

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

4.1.2 Consistent Differences

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

4.1.3 Clear Differences

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

4.1.4 Number of Plants or Parts of Plants to be Examined

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 observation made on all plants in the test, disregarding any off-type plants.

In the case of self-pollinated seed-propagated varieties, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 15 plants or parts taken from each of 15 plants and any other observation 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 Table of Characteristics (see document TGP/9 “Examining Distinctness”, Section 4 “Observation of characteristics”):

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

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

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

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

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts

of plants (S). In most cases, “G” provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness.

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

4.2 Uniformity

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

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

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

4.2.4 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 20 plants, 1 off-type is allowed.

4.3 Stability

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

4.3.2 Where appropriate, or in cases of doubt, stability may be further examined by testing a new seed 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: type (characteristic 1)
(b) Plant: growth habit (characteristic 2)
(c) Plant: size (characteristic 3)
(d) Leaf: variegation (characteristic 7)
(e) Leaf: incisions of margin (characteristic 11)
(f) Infertile bracts: main color (characteristic 37) with the following groups:
Gr.1: white
Gr.2: green
Gr.3: pink
Gr.4: light purple
Gr.5: medium purple
Gr.6: dark purple
Gr.7: violet

(g) Corolla: main color (characteristic 42) with the following groups:
Gr.1: white
Gr.2: pink
Gr.3: purple
Gr.4: violet
Gr.5: 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 All relevant states of expression are presented in the characteristic.

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.

For certain characteristics, different example varieties are indicated, depending on the Plant type (characteristic 1).
(1) : example varieties for Plant type: without infertile bracts
(9) : example varieties for Plant type: with infertile bracts

6.5 Legend

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

1 Characteristic number

2 (*) Asterisked characteristic – see Chapter 6.1.2

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

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

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

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

7 Not applicable

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

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1. (*) QL VG		**(+)**				
	Plant: type					
	without infertile bracts				Twickel Purple (1)	1
	with infertile bracts				Marshwood (9)	9
2. (*) QN VG		**(+)**				
	Plant: growth habit	**Plante : port**	**Pflanze: Wuchsform**	**Planta: porte**		
	upright	dressé	aufrecht	erecto	3049EVERG (9), Meerlo (1)	1
	semi-upright				KLELV15115 (9), Twickel Purple (1)	2
	semi-upright to spreading				Munstead (1), TV 38 (9)	3
	spreading	étalé	gespreizt	extendido	Lavst103 (9), Pas1213797 (1)	4
3. (*) QN MG/MS/VG						
	Plant: size	**Plante : taille**	**Pflanze: Größe**	**Planta: tamaño**		
	very small	très petite	sehr klein	muy pequeña	Nana Alba (1)	1
	very small to small					2
	small	petite	klein	pequeña	LAAZ0009 (1), Purpleberry Ruffles (9)	3
	small to medium				FORLEV03 (1), KLELV15115 (9)	4
	medium	moyenne	mittel	mediana	LAAZ0006 (1), TV 38 (9)	5
	medium to large				DC000116LS (9)	6
	large	grande	groß	grande	FW Radiance (9), Ostinato (1)	7
	large to very large					8
	very large	très grande	sehr groß	muy grande	Marshwood (9)	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
4. (*)	**QN VG**	**(+)**				
	Plant: density					
	very sparse					1
	very sparse to sparse					2
	sparse				FLORLAVBL1 (1), LABZ0011 (9)	3
	sparse to medium				Ostinato (1), Twickel Purple (1)	4
	medium				3049EVERG (9), LAAZ0008 (1)	5
	medium to dense				Abrial (1), Purpleberry Ruffles (9)	6
	dense				LAAZ0009 (1), Lavsd014 (9)	7
	dense to very dense				Dolavimp (9), KLELV16122 (1)	8
	very dense				Felice pink (1), KLELV15115 (9)	9
5.	**QN VG**	**(a)**				
	Leaf: intensity of green color					
	very light				KLELV15115 (9)	1
	light				LAAZ0009 (1), Purpleberry Ruffles (9)	2
	medium				LAAZ0008 (1), LABZ0011 (9)	3
	dark				BKLVDVABL (1), EVERMLV19 (9)	4
	very dark					5
6.	**QN VG**	**(a)**				
	Leaf: intensity of grey tinge					
	very weak				TV 38 (9)	1
	weak				EVERMLV19 (9), KLELV16122 (1)	2
	medium				LAAZ0009 (1), LABZ0011 (9)	3
	strong				DC000116LS (9), LAAZ0008 (1)	4
	very strong					5

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
7.	**(*)**	**QL** **VG**	**(a)**				
		Leaf: variegation					
		absent				Felice pink (1), LABZ0011 (9)	1
		present				Meerlo (1)	9
8.	**(*)**	**QN** **MG/MS/VG**	**(a)**				
		Leaf: length					
		very short				Purpleberry Ruffles (9)	1
		very short to short				LAAZ0009 (1)	2
		short				3049EVERG (9)	3
		short to medium					4
		medium				LAAZ0008 (1), Lavsd014 (9)	5
		medium to long				RUYLAA1701 (1)	6
		long				LABZ0011 (9), LAVVAL (1)	7
		long to very long				KLELV16122 (1)	8
		very long					9
9.	**(*)**	**QN** **MG/MS/VG**	**(a)**				
		Leaf: width					
		very narrow				KLELV16122 (1), Purpleberry Ruffles (9)	1
		very narrow to narrow				LAVVAL (1)	2
		narrow				LAAZ0009 (1), Royal Purple (9)	3
		narrow to medium				Lavsd014 (9), RUYLAA1701 (1)	4
		medium				LABZ0011 (9), Momparler (1)	5
		medium to broad				Dolavimp (9), Meerlo (1)	6
		broad				LAAZ0008 (1)	7
		broad to very broad					8
		very broad					9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
10.		**QN MG/MS/VG**	**(a)**				
		Leaf : length/width ratio					
		very low					1
		low				3049EVERG (9), LAAZ0008 (1)	2
		medium				Purpleberry Ruffles (9)	3
		high				KLELV16122 (1)	4
		very high				LAVVAL (1)	5
11.	**(*)**	**QN VG**	**(+)**	**(a)**			
		Leaf: incisions of margin					
		absent or shallow				Felice pink (1), Purpleberry Ruffles (9)	1
		medium				Meerlo (1), Pure Harmony (9)	2
		deep					3
12.		**QN MG/MS/VG**	**(+)**	**(b)**			
		Flowering stem: length					
		very short				Purpleberry Ruffles (9)	1
		very short to short				BKLVDVABL (1), KLELV15115 (9)	2
		short				LABZ0011 (9), Munstead (1)	3
		short to medium				EVERMLV19 (9)	4
		medium				Abrial (1), Dolavimp (9)	5
		medium to long				RUYLAA1701 (1)	6
		long				Meerlo (1)	7
		long to very long				Ostinato (1)	8
		very long					9
13.		**QN MS/VG**	**(+)**	**(b)**			
		Flowering stem: thickness					
		very thin				Lady (1)	1
		thin				Meerlo (1), Purpleberry Ruffles (9)	2
		medium				LAAZ0008 (1), TV 38 (9)	3
		thick				DC000116LS (9), Ferréol (1)	4
		very thick				H 1116 (9), Ostinato (1)	5

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
14. (*)	**QN VG**	**(b)**				
	Flowering stem: intensity of green color					
	very light				Ostinato (1), Purpleberry Ruffles (9)	1
	light				Meerlo (1), TV 38 (9)	2
	medium				BKLVDVABL (1), LABZ0011 (9)	3
	dark				EVERMLV19 (9), LAAZ0008 (1)	4
	very dark					5
15.	**QN VG**	**(b)**				
	Only varieties with Plant type: without infertile bracts: Flowering stem: rigidity of basal part					
	very weak				Ostinato (1)	1
	weak				LAAZ0009 (1)	2
	medium				Meerlo (1)	3
	strong				LAAZ0008 (1)	4
	very strong				Ferréol (1)	5
16.	**QN VG**	**(b)**				
	Only varieties with Plant type: with infertile bracts: Flowering stem: pubescence					
	very sparse					1
	very sparse to sparse				BKLVSTFRS (9)	2
	sparse				TV 38 (9)	3
	sparse to medium					4
	medium				EVERMLV19 (9)	5
	medium to dense				LABZ0011 (9)	6
	dense				Marshwood (9)	7
	dense to very dense					8
	very dense					9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
17. (*) QL VG		**(+)**				
	Flowering stem: lateral branching above foliage					
	absent				Meerlo (1)	1
	present				Ostinato (1), Purpleberry Ruffles (9)	9
18. QN MG/MS/VG			**(b)**			
	Flowering stem: number of lateral branches above foliage					
	very few				Trio (1)	1
	very few to few				LABZ0011 (9)	2
	few				Ostinato (1), TV 38 (9)	3
	few to medium					4
	medium				EVERMLV19 (9), Felice purple (1)	5
	medium to many					6
	many				Niko (1), Purpleberry Ruffles (9)	7
	many to very many					8
	very many					9
19. (*) QN MG/MS/VG		**(+)**				
	Flowering stem: length of the longest lateral branch above foliage					
	very short				Ferréol (1)	1
	short				LABZ0011 (9), Ostinato (1)	2
	medium				Purpleberry Ruffles (9)	3
	long				Niko (1), TV 38 (9)	4
	very long				DC000020LS (9)	5
20. QL VG		**(+)**				
	Spike: arrangement of flowers					
	solitary					1
	clustered				LAAZ0009 (1)	2

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
21. (*)	**QN MG/MS/VG**	**(+) (b)**				
	Spike: length from first whorl					
	very short					1
	very short to short				LAAZ0009 (1)	2
	short				LAAZ0008 (1), Purpleberry Ruffles (9)	3
	short to medium				BKLVDVABL (1), TV 38 (9)	4
	medium				3049EVERG (9), Ferréol (1)	5
	medium to long				Ostinato (1)	6
	long				Meerlo (1)	7
	long to very long					8
	very long				Niko (1)	9
22. (*)	**QN MG/MS/VG**	**(+) (b)**				
	Spike: width					
	very narrow				Niko (1)	1
	very narrow to narrow				BKLVDVABL (1)	2
	narrow				Hidcote Pink (1), TV 38 (9)	3
	narrow to medium				LAAZ0009 (1), Purpleberry Ruffles (9)	4
	medium				Marshwood (9), Meerlo (1)	5
	medium to broad				DC000116LS (9), LAAZ0008 (1)	6
	broad				Lavst103 (9)	7
	broad to very broad				Ostinato (1)	8
	very broad				Ferréol (1)	9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
23.	**(*)**	**QN MG/MS/VG**	**(+) (b)**				
		Only varieties with Plant type: without infertile bracts: Spike: length from second whorl					
		very short				LAAZ0009 (1)	1
		very short to short				LAAZ0008 (1)	2
		short				BKLVDVABL (1)	3
		short to medium				Ferréol (1)	4
		medium				RUYLAA1701 (1)	5
		medium to long				Ostinato (1)	6
		long				Meerlo (1)	7
		long to very long					8
		very long				Niko (1)	9
24.	**(*)**	**QN MG/MS/VG**	**(+) (b)**				
		Only varieties with Plant type: without infertile bracts: Spike: number of whorls					
		very few					1
		very few to few				LAAZ0009 (1)	2
		few				LAAZ0008 (1)	3
		few to medium					4
		medium				RUYLAA1701 (1)	5
		medium to many					6
		many					7
		many to very many					8
		very many				Niko (1)	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
25. (*)	**QN MG/MS**	**(b)**				
	Only varieties with Plant type:without infertile bracts: Spike: ratio length from second whorl / number of whorls					
	very low				KLELV16122 (1)	1
	very low to low					2
	low				LAAZ0008 (1)	3
	low to medium				BKLVDVABL (1)	4
	medium				Niko (1)	5
	medium to high				Meerlo (1)	6
	high				Ostinato (1)	7
	high to very high					8
	very high					9
26. (*)	**PQ VG**	**(+) (b)**				
	Spike: shape					
	narrow conic				Niko (1)	1
	medium conic				Abrial (1), LABZ0011 (9)	2
	truncate conic				Ferréol (1)	3
	cylindric				LAAZ0009 (1), Purpleberry Ruffles (9)	4
	fusiform				Meerlo (1)	5
	narrow trullate				TV 38 (9)	6
	conic and cylindric				Ostinato (1)	7
27.	**QN MG/VG**	**(+) (b)**				
	Spike: number of flowers					
	very few				LAAZ0009 (1)	1
	few				KLELV15115 (9), Meerlo (1)	2
	medium				LAAZ0008 (1), Purpleberry Ruffles (9)	3
	many				Ferréol (1), LABZ0011 (9)	4
	very many				DC000020LS (9), Niko (1)	5

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
28.		**QN MG/VG**	**(b)**				
		Only varieties with Plant type: without infertile bracts: Spike: number of flowers on apical whorl					
		very few				Niko (1)	1
		few				LAAZ0009 (1)	2
		medium				LAAZ0008 (1)	3
		many				Ostinato (1)	4
		very many				KLELV16122 (1)	5
29.		**QN MG/MS/VG**	**(+)** **(b)**				
		Spike: width of fertile bracts					
		very narrow					1
		very narrow to narrow				LAAZ0008 (1)	2
		narrow				LAAZ0009 (1)	3
		narrow to medium					4
		medium				Impress Purple (1), Purpleberry Ruffles (9)	5
		medium to broad				KLELV15115 (9)	6
		broad				DC000020LS (9)	7
		broad to very broad				LABZ0008 (9)	8
		very broad					9
30.	**(*)**	**PQ VG**	**(b)**				
		Only varieties with Plant type: with infertile bracts: Spike: main color of fertile bracts					
		white				Siver Ghost (9)	1
		green				Pippa White (9)	2
		violet				KLELV15115 (9)	3
		red purple				Purpleberry Ruffles (9)	4
		brown				Sidonie (9)	5
31.		**QL VG**	**(+)** **(b)**				
		Only varieties with Plant type: without infertile bracts: Spike: presence of bracteole					
		sometimes present				Munstead (1)	1
		always present				LAAZ0008 (1)	9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
32.		**QN VG**	**(+) (b)**				
		Only varieties with Plant type: without infertile bracts: Spike: length of bracteole					
		short				LAAZ0008 (1)	1
		medium				LAAZ0009 (1)	2
		long					3
33.		**QN MG/MS/VG**	**(+) (b)**				
		Infertile bracts: number					
		few					1
		few to medium				Lavst103 (9)	2
		medium				Lavsd014 (9)	3
		medium to many				Purpleberry Ruffles (9)	4
		many					5
34.	**(*)**	**QN MG/MS/VG**	**(+) (b)**				
		Infertile bracts: length					
		very short				EVERMLV19 (9)	1
		short				H 1116 (9)	2
		medium				LABZ0008 (9)	3
		long				KLELV15115 (9)	4
		very long				3049EVERG (9)	5
35.		**QN MG/MS/VG**	**(+) (b)**				
		Infertile bracts: width					
		very narrow				H 1116 (9)	1
		narrow				EVERMLV19 (9)	2
		medium				LABZ0008 (9)	3
		broad				Purpleberry Ruffles (9)	4
		very broad				3049EVERG (9)	5

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
36.	**(*)**	**PQ VG**	**(+) (b)**				
		Infertile bracts: shape					
		linear				H 1116 (9)	1
		elliptic				Purpleberry Ruffles (9)	2
		oblong				Pukehou (9)	3
		oblanceolate				TV 38 (9)	4
		obovate				KLELV15115 (9)	5
		spatulate				Otto Quast (9)	6
		rhombic				EVERMLV19 (9)	7
37.	**(*)**	**PQ VG**	**(b)**				
		Infertile bracts: main color					
		RHS Colour Chart (indicate reference number)					
38.		**QN VG**	**(+) (b)**				
		Infertile bracts: undulation of margin					
		very weak					1
		weak				LABZ0011 (9)	2
		medium				Purpleberry Ruffles (9)	3
		strong				TV 38 (9)	4
		very strong				Lavst103 (9)	5
39.		**QN MG/MS/VG**	**(+)**				
		Pedicel: length					
		short				LAAZ0009 (1), Purpleberry Ruffles (9)	1
		medium					2
		long					3
40.	**(*)**	**PQ VG**	**(b)**				
		Calyx: color					
		greyish				EVERMLV19 (9)	1
		greenish				Azur (1), LABZ0008 (9)	2
		purplish				Purpleberry Ruffles (9)	3
		violet				LAAZ0008 (1)	4

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
41.		**QN VG**	**(b)**				
		Calyx: density of pubescence					
		very sparse					1
		sparse				IBPRU41016 (9), Meerlo (1)	2
		medium				LAAZ0008 (1), LABZ0011 (9)	3
		dense				KLELV15115 (9), LAAZ0009 (1)	4
		very dense				EVERMLV19 (9), Kerbeelight (1)	5
42.	**(*)**	**PQ VG**	**(c)**				
		Corolla: main color					
		RHS Colour chart (indicate reference number)					
43.		**PQ VG**	**(c)**				
		Corolla: secondary color					
		RHS Colour Chart (indicate reference number)					
44.		**QN MG/VG**	**(+)**				
		Time of beginning of flowering					
		very early					1
		very early to early					2
		early				Azur (1), LABZ0008 (9)	3
		early to medium				Meerlo (1)	4
		medium				Ferréol (1), Purpleberry Ruffles (9)	5
		medium to late				LABZ0011 (9), Niko (1)	6
		late				Abrial (1), FW Radiance (9)	7
		late to very late					8
		very late					9

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

Unless otherwise indicated all observations should be made when 80% of the spikes are flowering.

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

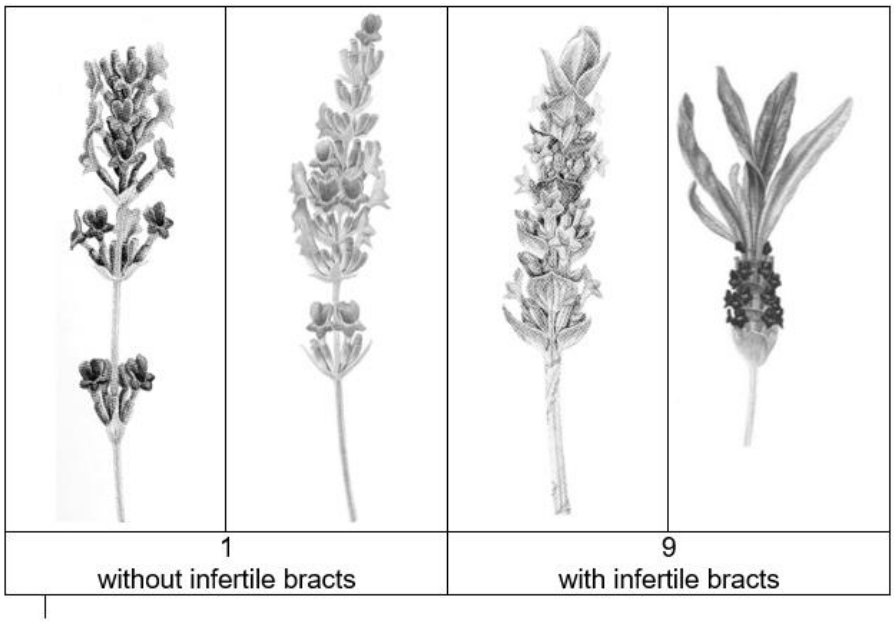
(a) Observations should be made on fully developed leaves from the middle third of the main flowering stem.

(b) Observations should be made on the main flowering stem.

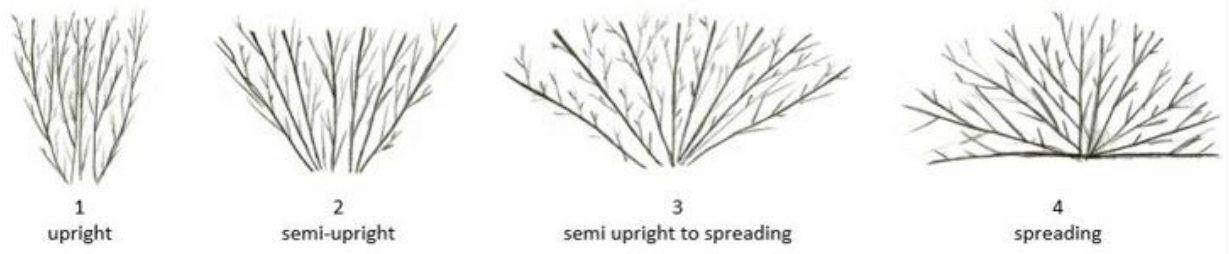
(c) The main color is the color with the largest surface area. In cases where the areas of the main and secondary color are too similar to reliably decide which color has the largest area, the darker color is considered to be the main color.

8.2 Explanations for individual characteristics

Ad. 1: Plant: type



Ad. 2: Plant: growth habit



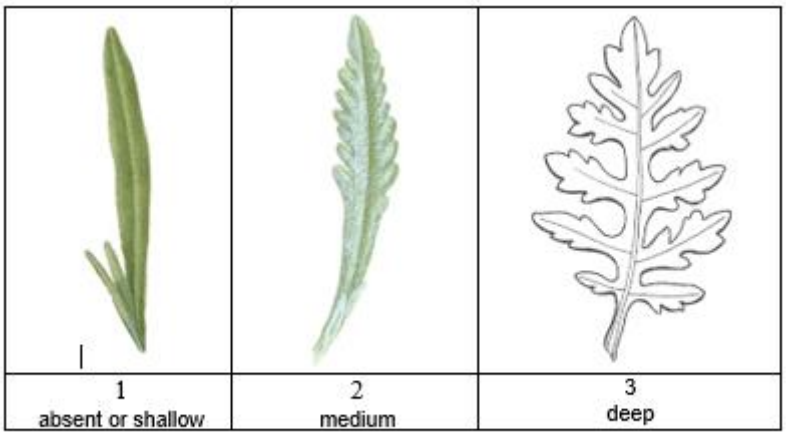
Ad. 4: Plant: density

3
sparse

5
medium

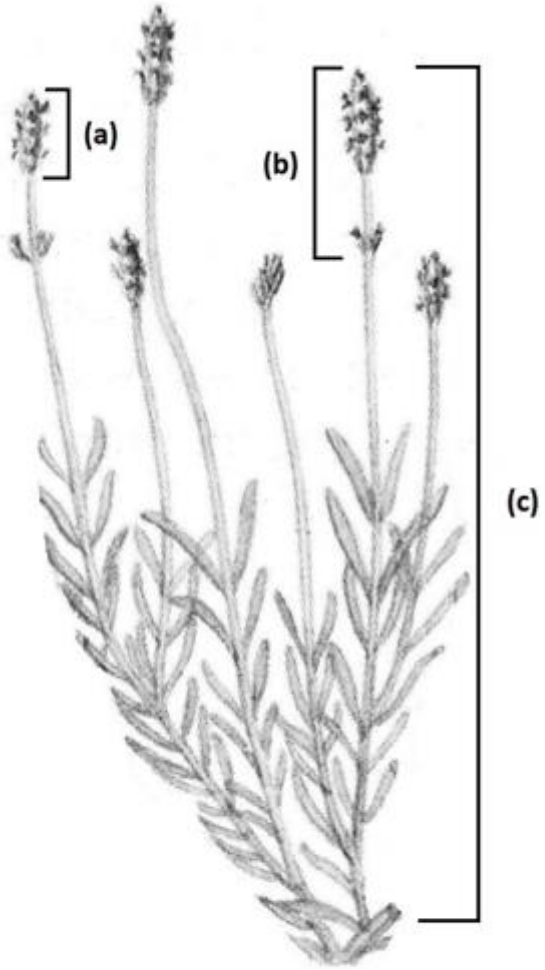
7
dense

Ad. 11: Leaf: incisions of margin



1	2	3
absent or shallow	medium	deep

Ad. 12: Flowering stem: length



(a) : Only varieties with Plant type: without infertile bracts: Spike: length from second whorl
(b) : Spike: length from first whorl
(c) : Flowering stem : length

Ad. 13: Flowering stem: thickness

Observation should be made at middle third of the stem, excluding the spike

Ad. 17: Flowering stem: lateral branching above foliage

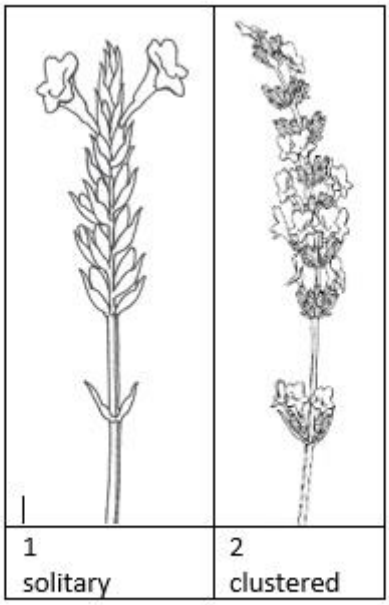
	
1 absent	9 present

Ad. 19: Flowering stem: length of the longest lateral branch above foliage

	 		 	
1 very short	2 short	3 medium	4 long	5 very long

Observation should be made including the spike.

Ad. 20: Spike: arrangement of flowers

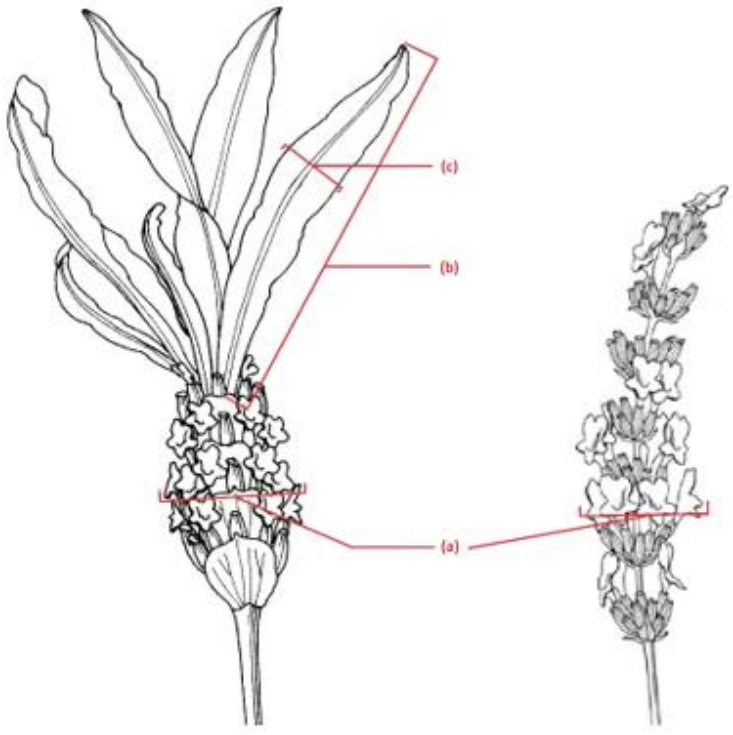


Ad. 21: Spike: length from first whorl

See Ad.12, (b)

Ad. 22: Spike: width

See letter (a).
Observations should be made at full flowering, on the widest point of the spike (including corolla).



(a) Spike: width
(b) Infertile bracts: length
(c) Infertile bracts: width

Ad. 23: Only varieties with Plant type: without infertile bracts: Spike: length from second whorl

See Ad 12, (a)

Ad. 24: Only varieties with Plant type: without infertile bracts: Spike: number of whorls

Exclude first whorl.

Ad. 26: Spike: shape

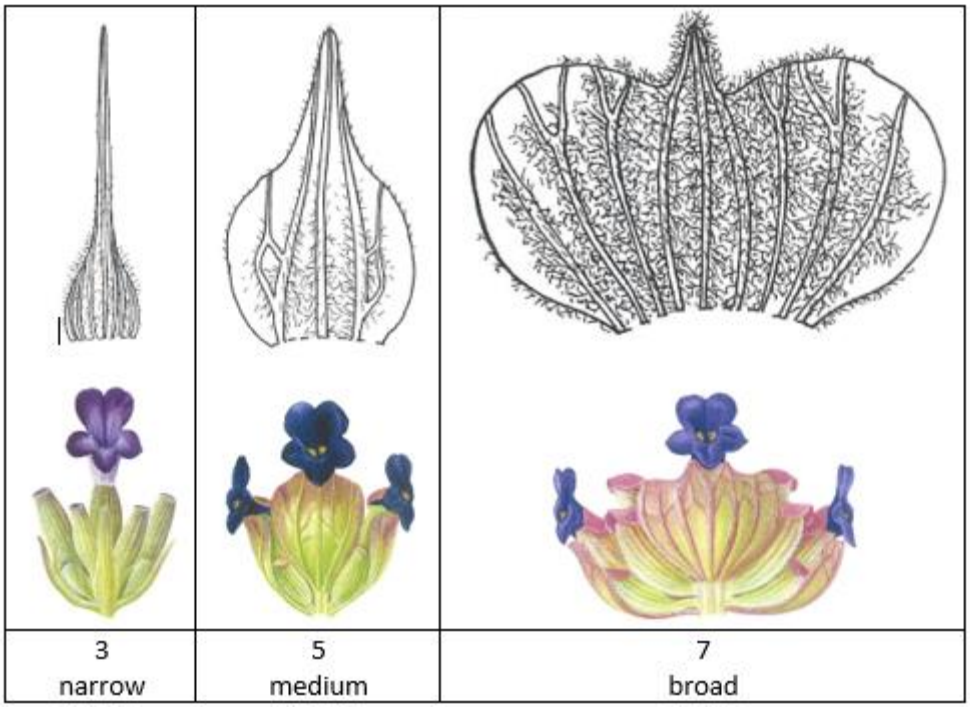
1	2	3	4	5	6
narrow conic	medium conic	truncate conic	cylindric	fusiform	narrow trullate

State 7: Both conic and cylindric shapes are observed on each plant, in the same proportion.

Ad. 27: Spike: number of flowers

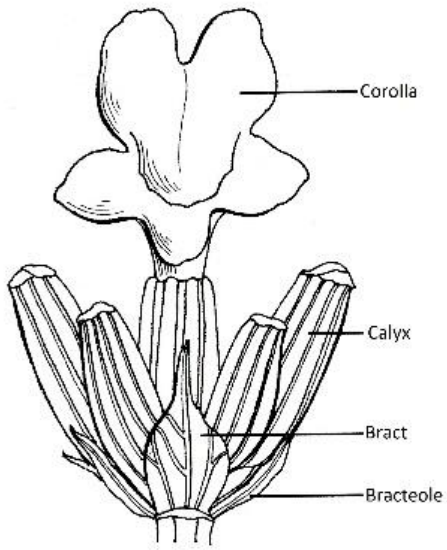
1	3	5
very few	medium	very many

Ad. 29: Spike: width of fertile bracts



Observations should be made on the broadest part of the bract, before drying out.

Ad. 31: Only varieties with Plant type: without infertile bracts: Spike: presence of bracteole



Ad. 32: Only varieties with Plant type: without infertile bracts: Spike: length of bracteole

		
1 short	2 medium	3 long

WILL BE IMPROVED FOR TWO

Ad. 33: Infertile bracts: number

		
1 few	3 medium	5 many

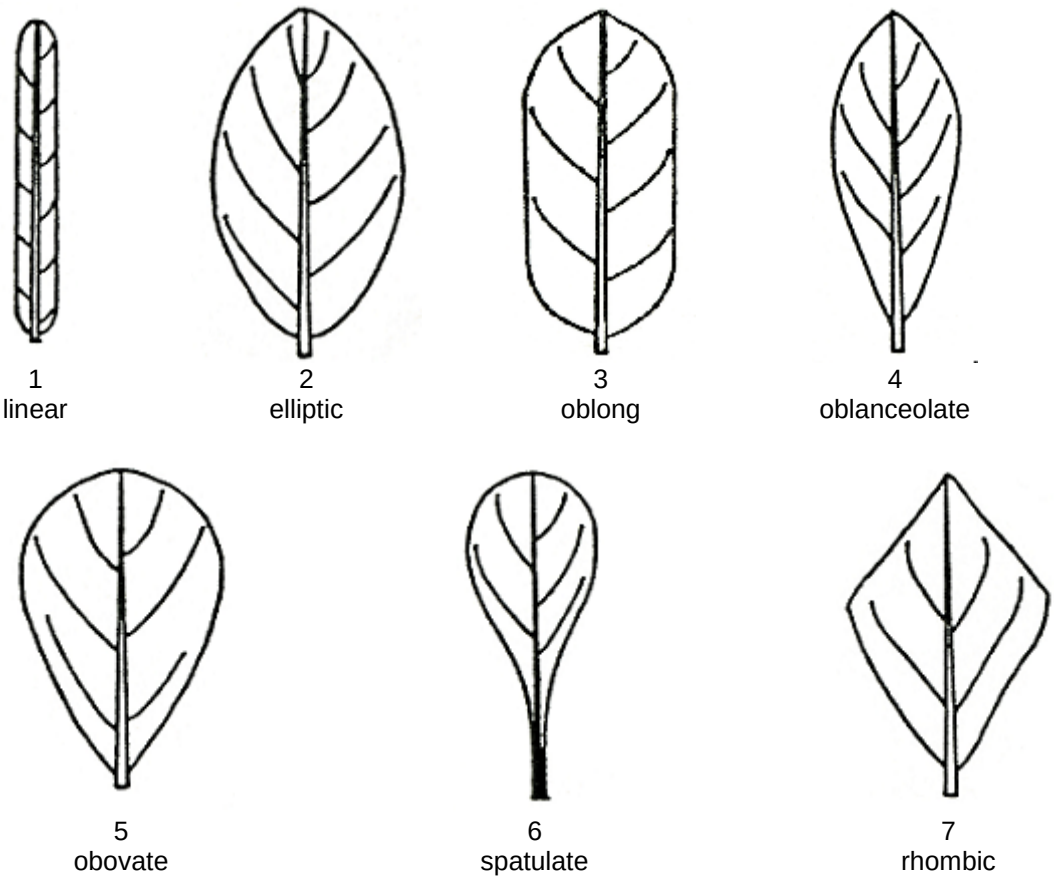
Ad. 34: Infertile bracts: length

See Ad. 22, (b)

Ad. 35: Infertile bracts: width

See Ad. 22, (c)

Ad. 36: Infertile bracts: shape



1
linear

2
elliptic

3
oblong

4
oblanceolate

5
obovate

6
spatulate

7
rhombic

Ad. 38: Infertile bracts: undulation of margin

1 very weak	3 medium	5 very strong

Ad. 39: Pedicel: length

		
1 short	2 medium	3 long

Ad. 44: Time of beginning of flowering

The beginning of flowering is reached when 20% of the plants have open flowers.

9. Literature

Armitage, A.M., 1989: “Herbaceous Perennial Plants”. Varsity Press, Inc., Athens, Georgia.
De Wolf, Gordon P., 1955: “Notes on Cultivated Labiates”. 5. Lavandula B… 3: 47-57.
McLeod J.A., 1989: “Lavander, Sweet Lavender”. Kangaroo Press, reprinted in 1991.
McNaughton, V.J., 1994: “The Essential Lavender”, Penguin Books.
McNaughton, V. J., 2000: “Lavender: The Grower’s Guide” Bloomings Books, Melbourne.
Tucker, Arthur O., 1981: “The Correct Name of Lavandin and its Cultivars (Labiatae)”, Baileya 21: 131 – 133.
Tucker, Arthur O. and Hensen, Karel, J.W., 1985: “The Cultivars of Lavender and Lavandin (Labiatae)”, Baileya 22: 168 – 177.
Upson, Tim and Andrews, Susyn, 2004, “The Genus Lavandula”, Royal Botanic Garden, Kew.”

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	*Lavandula* L.
1.2	Common name	Lavandula, Lavender
1.3	Species : indicate species	

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 variety)

(……..……..…) x (……..……..…)

female parent male parent

(b) partially known cross [ ]

(please state known parent variety(ies))

(……..……..…) x (……..……..…)

female parent male parent

(c) unknown cross [ ]

4.1.2 Mutation [ ]
(please state parent variety)

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

4.1.4 Other [ ]
(Please provide details)

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

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

4.2 Method of propagating the variety

4.2.1 Seed-propagated varieties

4.2.2 Vegetative propagation

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

4.2.3 Other [ ]
(Please provide details)

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

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**		
	without infertile bracts	Twickel Purple (1)	1 [ ]
	with infertile bracts	Marshwood (9)	9 [ ]
5.2 (2)	**Plant: growth habit**		
	upright	3049EVERG (9), Meerlo (1)	1 [ ]
	semi-upright	KLELV15115 (9), Twickel Purple (1)	2 [ ]
	semi-upright to spreading	Munstead (1), TV 38 (9)	3 [ ]
	spreading	Lavst103 (9), Pas1213797 (1)	4 [ ]
5.3 (3)	**Plant: size**		
	very small	Nana Alba (1)	1 [ ]
	very small to small		2 [ ]
	small	LAAZ0009 (1), Purpleberry Ruffles (9)	3 [ ]
	small to medium	FORLEV03 (1), KLELV15115 (9)	4 [ ]
	medium	LAAZ0006 (1), TV 38 (9)	5 [ ]
	medium to large	DC000116LS (9)	6 [ ]
	large	FW Radiance (9), Ostinato (1)	7 [ ]
	large to very large		8 [ ]
	very large	Marshwood (9)	9 [ ]
5.4 (7)	**Leaf: variegation**		
	absent	Felice pink (1), LABZ0011 (9)	1 [ ]
	present	Meerlo (1)	9 [ ]
5.5 (11)	**Leaf: incisions of margin**		
	absent or shallow	Felice pink (1), Purpleberry Ruffles (9)	1 [ ]
	medium	Meerlo (1), Pure Harmony (9)	2 [ ]
	deep		3 [ ]

	Characteristics	Example Varieties	Note
5.6(i) (37)	**Infertile bracts: main color**		
	RHS Colour Chart (indicate reference number)		
5.6(ii) (37)	**Infertile bracts: main color**		
	white		1 [ ]
	green		2 [ ]
	pink		3 [ ]
	light purple		4 [ ]
	medium purple		5 [ ]
	dark purple		6 [ ]
	violet		7 [ ]
	other (please specify)		[ ]
5.7(i) (42)	**Corolla: main color**		
	RHS Colour chart (indicate reference number)		
5.7(ii) (42)	**Corolla: main color**		
	white		1 [ ]
	pink		2 [ ]
	purple		3 [ ]
	violet		4 [ ]
	blue		5 [ ]
	other (please specify)		[ ]

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	*Plant: size*	*very 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 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.]

- Is the variety intended to be grown
  - in greenhouse [ ]
  - outdoor [ ]

- Main use: (precise)
  garden plant [ ]
  pot plant [ ]
  dried flowers [ ]
  essential oil [ ]
  others (specify) [ ]
  ……..……

- Resistance to pests and diseases ……..……

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

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

8. Authorization for release

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

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

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

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

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

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

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

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

.....

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

Applicant’s name

Signature Date

[End of document]