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UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

*

LILAC

UPOV Code: SYRIN

Syringa L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by experts from China

to be considered by the

Technical Working Party for Ornamental Plants and Forest Trees
at its forty-fourth session, to be held in Fukuyama City, Hiroshima Prefecture, Japan,
from November 7 to 11, 2011

Alternative Names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Syringa L	Lilac	Lilas	Flieder	Lila

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 *Syringa* 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 2-year to 3-year old plants, capable of flowering and expressing all relevant characteristics of the variety during the first growing cycle.

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

9 plants.

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

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

3. Method of Examination

3.1 *Number of Growing Cycles*

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

3.2 *Testing Place*

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

3.3 *Conditions for Conducting the Examination*

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

3.3.3 Observation of color by eye

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

made with the plant part placed against a white background. The color chart and version used should be specified in the variety description.

3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 9 plants，which should be divided between three replicates

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

3.5 Additional Tests

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

4. Assessment of Distinctness, Uniformity and Stability

4.1 Distinctness

4.1.1 General Recommendations

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

4.1.2 Consistent Differences

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

4.1.3 Clear Differences

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

4.1.4 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 8 plants or parts taken from each of 8 plants and any other

observations made on all plants in the test, disregarding any off-type plants. In the case of observations of parts taken from single plants, the number of parts to be taken from each of the plants should be 3.

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 9 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 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) Leaf: type (characteristic 7)
(b) No segmentable simple leaf: shape (characteristic 9)
(c) Floret: anther color (characteristic 40)

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)-(g) 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: number of main stems**					
QL		one				Ivory Silk	1
		more than one				Wan Hua Zi	2
2.	**VG**	**Plant: growth habit**					
(+)							
PQ		upright					1
		upright to spreading					2
		spreading					3
3.	**VG**	**Plant: height**					
QN	**(c)**	short				Palibin	3
		medium				Excellens, Xiang Xue	5
		tall				Luo Lan Zi	7
4.	**VG**	**Plant: density of branches**					
(+)							
QN		sparse					3
		medium					5
		dense					7
5.	**VG**	**Plant: number of inflorescences**					
QN	**(a)**	few				Chang Tong Bai, Zi Yun	3
		medium				Luo Lan Zi	5
		many				Si Ji Lan	7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
6.	**VG**	**Shoot: color**					
PQ	**(a)**	light brown				Maiden's Blush	1
	(b)	grey brown				Ami Schott	2
		medium brown				Fantasy	3
		red brown				Agnes Smith	4
7. **(*)** **(+)**	**VG**	**Leaf: type**					
QL	**(a)**	simple					1
		compound					2
8. **(+)**		**Only varieties with leaf type: simple: margin: no segmentable leaf: shape**					
QN		no segmentable					1
		shallow segmentable					2
		deep segmentable					3
9. **(*)** **(+)**	**VG**	**Only varieties with leaf type: simple: margin: no segmentable leaf: shape**					
PQ	**(a)**	narrow ovate					1
		ovate					2
		compressed ovate					3
		narrow elliptic					4
		elliptic					5
		obovate					6

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
10. **(+)**		**Only varieties with leaf type: simple: margin: no segmentable leaf: shape of base**					
PQ	**(a)**	cuneate					1
		truncate					2
		cordate					3
11. **(+)**	**MS**	**Only varieties with leaf: type: simple: margin: segmentable leaf: number of lobes**					
PQ	**(a)**	two					1
		miltifid					2
12.	**VG**	**Leaf: variegation**					
QL	**(a)**	absent				Karpow, Konstanty, Luo Lan Zi	1
		present				Aucubaefolia, ChantillyLace	9
13.	**VG**	**Leaf: main color**					
PQ	**(a)**	yellow					1
	(b)	yellowish green					2
		light green					3
		medium green					4
		dark green					5
14.	**VG**	**Leaf: secondary color**					
PQ		absent					1
		white				ChantillyLace	2
		yellow					3
		light green				Golden Eclipse	4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
15.	**VS**	**Flower bud: size**					
QN	**(a)**	small					3
		medium					5
		large					7
16.	**VG**	**Flower bud: shape**					
(+)							
PQ		very elongated ovate					1
		elongated ovate					2
		ovate					3
		compressed ovate					4
17.	**VG**	**Flower bud: color**					
PQ	**(a)**	white					1
	(b)	light yellow					2
		pink					3
		purple				Bailebelle	4
18.	**VG**	**Inflorescence: attitude**					
(+)							
QL	**(a)**	straight				Prince Notger	1
		pendulous				Nodding	2
19.	**VG/**	**Inflorescence:**					
(*)	**MG**	**length**					
QN	**(a)**	short				Si Ji Lan	3
	(d)	medium				Ethiopia, Xiang Xue	5
		long					7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
20. **(*)** **(+)**	**VG**	**Inflorescence: shape**					
PQ	**(a)**	conic				Chang Tong Bai, ErzherzogJohann	1
		conic to columniform					2
		columniform				Night	3
21.		**Inflorescence: number of panicles**					
QN		one to two					1
		three to five					2
		more than five					3
22. **(*)** **(+)**	**VG**	**Inflorescence: density of florets**					
QN	**(a)** **(e)**	sparse				Bretschneiden, Chang Tong Bai	3
		medium				Olive May Cummings	5
		dense				Buffon	7
		very dense				Dawn	9
23.	**VG/ MG**	**Floret: diameter of corolla**					
QN	**(a)** **(f)**	small				Si Ji Lan	3
		medium				Wan Hua Zi	5
		large				Agincourt Beauty	7
24. **(*)** **(+)**	**VG**	**Floret: type**					
QL		single				Blanche Sweet, Chang Tong Bai	1
		double					2

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
25. **(*)** **(+)**	**MS**	**Only varieties with floret type: double:** **Corolla lobe: number**					
QN		few				Blanche Sweet	1
		medium				Fritz	2
		many				Leon Gambetta Luo Lan Zi	3
26. **(*)**	**MG**	**Only varieties with floret type: double:Corolla lobe: whorls of lobe**					
QN		two					1
		three				Jewel, Luo Lan Zi	2
		more				Chun Ge	3
27. **(+)**	**VG**	**Only varieties with double flowers:** **Corolla lobe: distance between whorls**					
PQ		not obvious				Jewel, Luo Lan Zi	1
		slightly obvious					2
		clearly obvious				AnneTighe	3
28. **(*)** **(+)**	**VG**	**Corolla lobe: attitude**					
PQ		erect				Minuet	1
		horizontal				Excelro	2
		recurved				Fraser	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
29. **(+)**	**VG**	**Corolla lobe: shape**					
PQ	**(g)**	narrow elliptic					1
		medium elliptic					2
		broad elliptic					3
		long obovate					4
		obovate					5
30. **(+)**	**VG**	**Corolla lobe: shape of apex**					
PQ	**(a)**	acuminate					1
	(g)	acute					2
		cuspidate					3
		obtuse					4
		emarginate					5
31. **(+)**	**VG**	**Corolla lobe: beak**					
QL	**(g)**	absent				Wan Hua Zi	1
		present				Priscilla	9
32. **(*)** **(+)**	**VG**	**Corolla lobe: margin**					
QN	**(g)**	flat				Heather	1
		undulate				Wan Hua Zi	2
		spathulate				Alba Grandiflora	3
33. **(*)** **(+)**	**VG**	**Corolla lobe: incurve length of margin**					
QN		apex-middle incurved				Edith Braun, Frank Patterson	1
		full margin incurved				Bailebelle	2

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34.	**VG**	**Corolla tube: color of outer side:**					
PQ	**(b)**	RHS Colour Chart (indicate reference number)					
35.	**VG**	**Corolla lobe: number of colors**					
PQ		one				Miss Ellen Willmott	1
		two				Sensation	2
		more than two					3
36.	**VG**	**Corolla lobe: main color of inner side**					
PQ	**(b)**	RHS Colour Chart (indicate reference number)					
37.	**VG**	**Corolla lobe: secondary color of inner side**					
PQ	**(b)**	RHS Colour Chart (indicate reference number)					
38.	**VG**	**Stamen: length compared to length of corolla tube**					
QN		shorter					1
		same length					2
		longer					3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
39.	**VG**	**Floret: color of throat-lobe**					
PQ	**(b)**	yellow-white					1
		pink-white					2
		red-white					3
		blue-white					4
		white-pink					5
		red-pink					6
		purple-pink					7
		blue-pink					8
		blue-purple					9
40. **(*)**	**VG**	**Floret: anther color**					
PQ		yellow					1
		purple				Si Ji Lan	2
41.	**VG**	**Flower: time of beginning of flowering**					
QN		early				Chang Tong Bai	3
		medium				Leonore	5
		late				Ivory Silk	7

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

The optimum stage of development for the assessment of each flowering characteristic is 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) Flower: observations on inflorescence and floret in middle-upper part of canopy in blooming season and 3-4 plants as replicates. Shoot: observations on shoot of current year and 3-4 shoots as replicates. Leaf: observations on middle part of shoot.

(b) Color: identify depending on RHS color chart.

(c) Plant height (Characteristic 3): the height from ground surface (rootneck) to canopy top. Small: less than 120 cm, medium 120-160 cm, tall: more than 160 cm.

(d) Inflorescence length (Characteristic 19): small: less than 10 cm, medium 10-20 cm, tall: more than 20 cm.

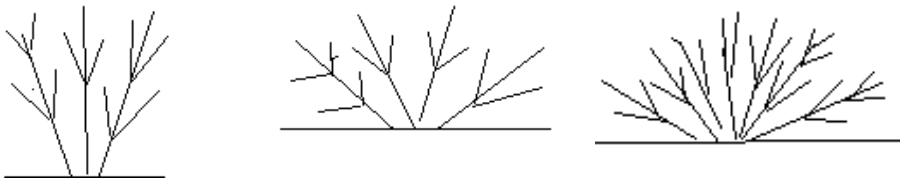
(e) Inflorescence: density of floret (Characteristic 22): sparse: large gap between florets, medium: unobvious gap between florets, dense: close touched florets, very dense: piled up florets.

(f) Floret: diameter of corolla (Characteristic 24): small: less than 0.5 cm, medium 0.5-1.0 cm, tall: more than 1.0 cm.

(g) All observation on double flowers should be on the lobes of the second whorl.

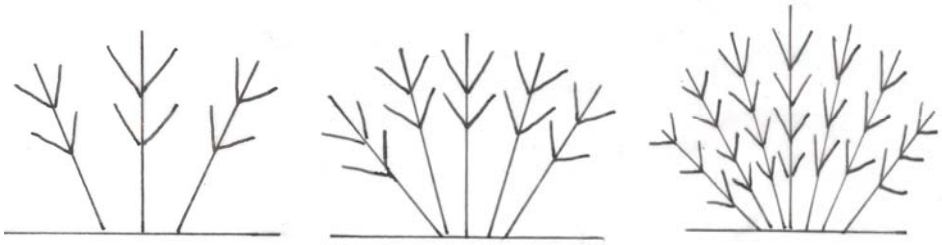
8.2 Explanations for individual characteristics

Ad. 2 Plant: growth habit



1 upright | 2 upright to spreading | 3 spreading

Ad. 4 Plant: density of branches

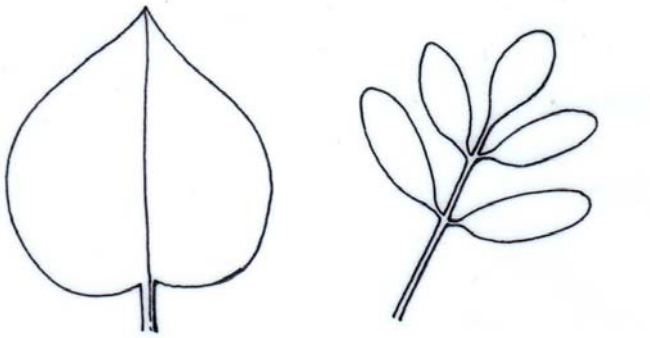


3
sparse

5
medium

7
dense

Ad.7 Leaf: type



1
simple

2
compound

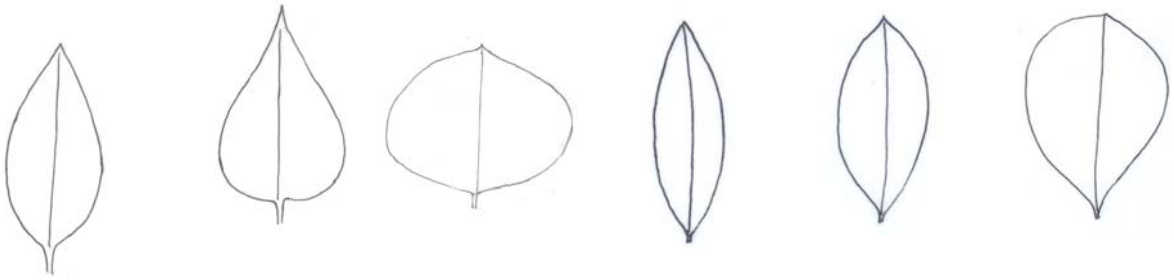
Ad.8 Only varieties with leaf type: simple leaf: margin: no segmentable leaf: shape

1
no segmentable

2
shallow segmentable

3
deep segmentable

Ad.9 Only varieties with leaf type: simple: margin: no segmentable leaf: shape

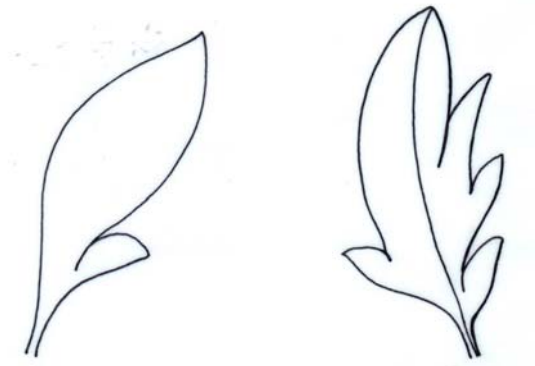


1	2	3	4	5	6
narrow ovate	ovate	compressed ovate	narrow elliptic	elliptic	obovate

Ad.10 Only varieties with leaf type: simple: margin: no segmentable leaf: shape of base

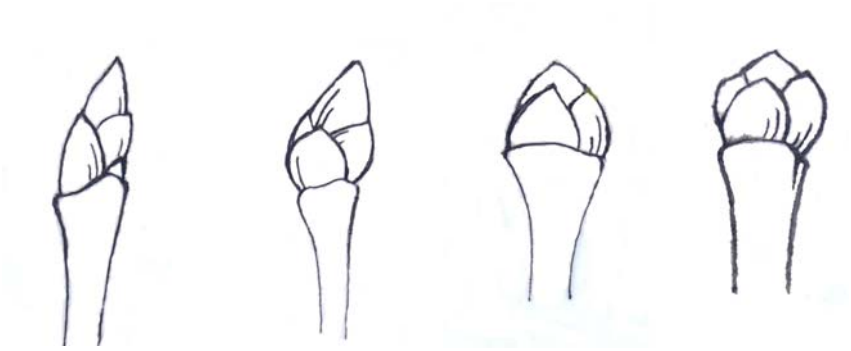
1	2	3
cuneate	truncate	cordate

Ad.11 Only varieties with leaf: type: simple: margin: segmentable leaf: number of lobes



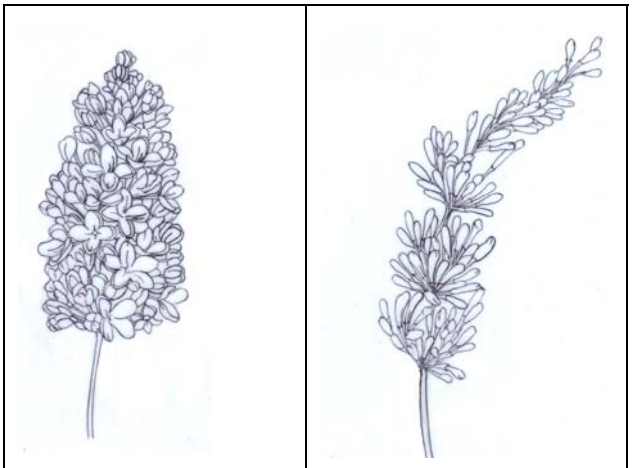
1	2
two	miltifid

Ad.16 Flower bud: shape:



1	2	3	4
very elongated ovate	elongated ovate	ovate	compressed ovate

Ad.18 Inflorescence: attitude:

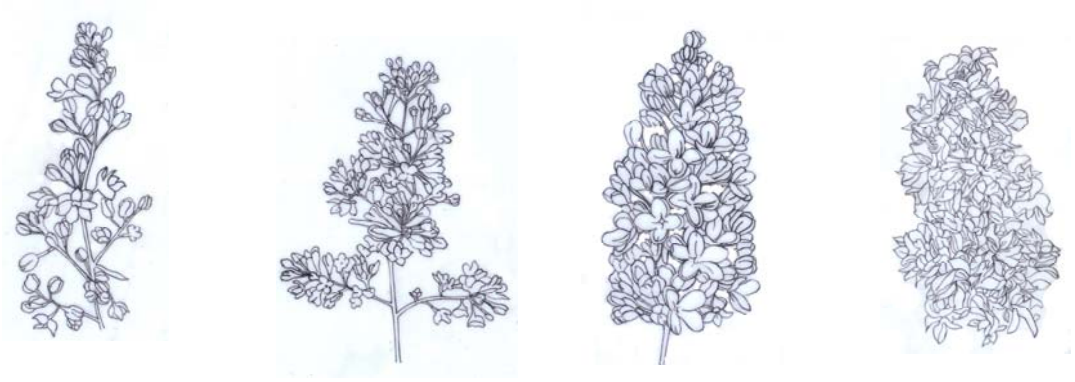


1	2
straight	pendulous

Ad.20 Inflorescence: shape

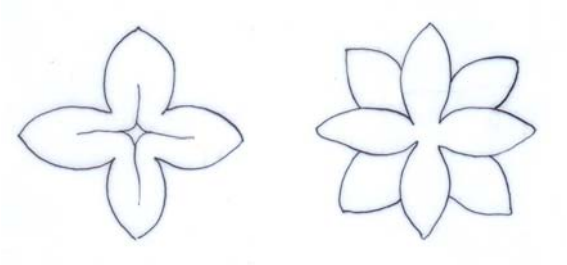
1	2	3
conic	conic to columniform	columniform

Ad.22 Inflorescence: density of florets



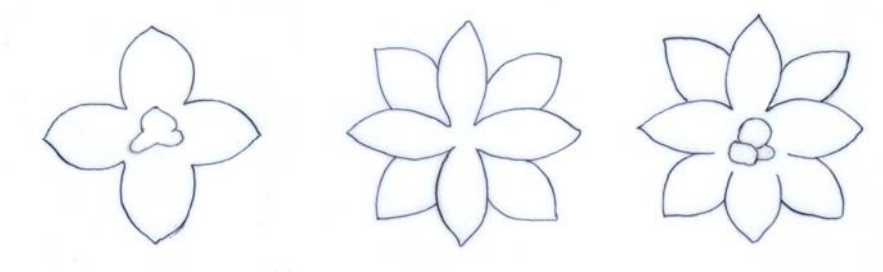
3	5	7	9
sparse	medium	dense	very dense

Ad. 24 Floret: type



1	2
single	double

Ad.25 Only varieties with floret type: double: corolla lobe: number

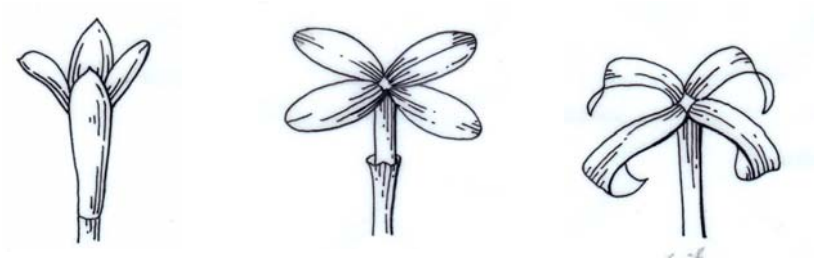


1	2	3
few	medium	many

Ad.27 Only varieties with double flowers: Corolla lobe: distance between whorls

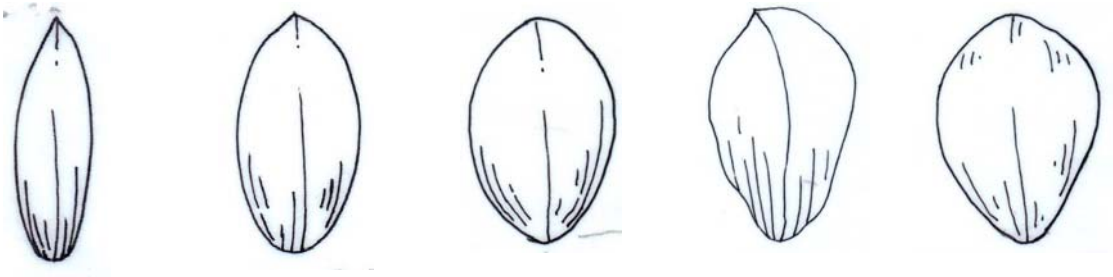
1	2	3
not obvious	slightly obvious	clearly obvious

Ad.28 Corolla lobe: attitude



1	2	3
erect	horizontal	recurved

Ad.29 Corolla lobe: shape

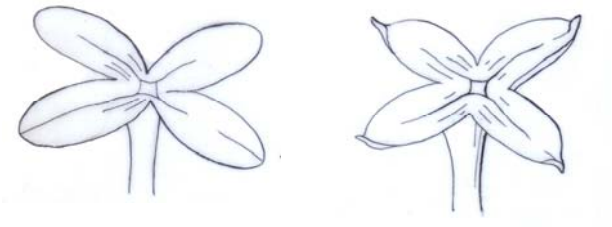


1	2	3	4	5
narrow elliptic	medium elliptic	broad elliptic	long obovate	obovate

Ad.30 Corolla lobe: shape of apex

1	2	3	4	5
acuminate	acute	cuspidate	obtuse	emarginate

Ad.31 Corolla lobe: beak



1	9
absent	present

Ad.32 Corolla lobe: margin

1	2	3
flat	undulate	spathulate

Ad.33 Corolla lobe: incurve length of margin

1	2
apex-middle incurved	full margin incurved

9. Literature

Jone, FR., Fiala, L., 1988: Lilacs- The Genus *Syringa*. Timber Press, Inc. Oregon, US

Harris, J. F., Woolf Harris, M., 1994: Plant identification terminology: An Illustrated Glossary. Spring Lake Publishing. Payson, Arizona, US

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)

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

1. Subject of the Technical Questionnaire

1.1 Botanical name	*Syringa* L.
1.2 Common name	Lilac

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

(a) 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)

[#] 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 Vegetative propagation

(a) cuttings [ ]

(b) *in vitro* propagation [ ]

(c) other (state method) [ ]

4.2.2 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 (2)	**Plant: growth habit**		
	upright		1[ ]
	upright to spreading		2[ ]
	spreading		3[ ]
5.2 (19)	**Inflorescence: length**		
	short	Si Ji Lan	3[ ]
	medium	Ethiopia, Xiang Xue	5[ ]
	long		7[ ]
5.3 (20)	**Inflorescence: shape**		
	conic	Chang Tong Bai, ErzherzogJohann	1[ ]
	conic to columniform		2[ ]
	columniform	Night	3[ ]
5.4 (22)	**Inflorescence: density of florets**		
	very sparse		1[ ]
	very sparse to sparse		2[ ]
	sparse	Bretschneiden Chang Tong Bai,	3[ ]
	sparse to medium		4[ ]
	medium	Olive May Cummings	5[ ]
	medium to dense		6[ ]
	dense	Buffon	7[ ]
	dense to very dense		8[ ]
	very dense	Dawn	9[ ]

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

	Characteristics	Example Varieties	Note
5.5 (24)	**Floret: type**		
	single	Chang Tong Bai, Blanche Sweet	1[ ]
	double		2[ ]
5.6 (32)	**Corolla lobe: margin**		
	flat	Heather	1[ ]
	undulate	Wan Hua Zi	2[ ]
	spathulate	Alba Grandiflora	3[ ]
5.7 (35)	**Corolla lobe: number of colors**		
	one		1[ ]
	two	Miss Ellen Willmott	2[ ]
	more than two	Sensation	3[ ]
5.8 (36)	**Corolla lobe: main color of inner side**		
	RHS Colour Chart (indicate reference number)		
5.9 (37)	**Corolla lobe: secondary color of inner side**		
	RHS Colour Chart (indicate reference number)		

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

	Characteristics	Example Varieties	Note
5.10 (41)	**Flower: time of beginning of flowering**		
	very early		1[ ]
	very early to early		2[ ]
	early	Chang Tong Bai	3[ ]
	early to medium		4[ ]
	medium	Leonore	5[ ]
	medium to late		6[ ]
	late	Ivory Silk	7[ ]
	late to very late		8[ ]
	very late		9[ ]

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. pink]*	*[e.g. light pink]*

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

7.3.1 Main use

(a) garden plant [ ]
(b) pot plant [ ]
(c) cut-flower [ ]
(d) other [ ]
(please provide details)

7.3.2 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]