



TG/LILAC(proj.4)

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**INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS**

Geneva




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-sixth session, to be held in Melbourne, Australia, from April 22 to 26, 2013*

Alternative Names:<sup>\*</sup>

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Syringa L.</i>	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.

<sup>\*</sup> 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](http://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.

3.3.2 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 Each test should be designed to result in a total of at least 9 plants.

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 5 plants or parts taken from each of 5 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, 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) Only varieties with leaf type: simple leaf: lobing: absent: Leaf: shape (characteristic 11)
- (b) Floret: type (characteristic 22)
- (c) Corolla lobe: main color of inner side (characteristic 32)
  - Gr.1: white
  - Gr.2: yellow
  - Gr.3: pink
  - Gr.4: purple
  - Gr.5: violet

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*

- (\*) Asterisk 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)-(b) 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
<b>1. VG</b>	<b>Plant: number of main stems</b>					
<b>QN</b>	one or two				Ivory Silk	1
	more than two				Wan Hua Zi	2
<b>2. VG</b>	<b><u>Only varieties with plant: number of main stems: more than two</u>; Plant: growth habit</b>					
<b>(+)</b>						
<b>QN</b>	upright					1
	upright to spreading					2
	spreading					3
<b>3. VG</b>	<b>Plant: height</b>					
<b>QN</b>	short				Palibin	3
	medium				Excellens, Xiang Xue	5
	tall				Luo Lan Zi	7
<b>4. VG</b>	<b><u>Only varieties with plant: number of main stems: more than two</u>; Plant: density of branches</b>					
<b>(+)</b>						
<b>QN</b>	sparse					3
	medium					5
	dense					7
<b>5. VG</b>	<b>Plant: number of inflorescences</b>					
<b>QN</b>	few				Chang Tong Bai, Zi Yun	3
	medium				Luo Lan Zi	5
	many				Si Ji Lan	7
<b>6. VG</b>	<b>Shoot: color</b>					
<b>(+)</b>						
<b>PQ</b>	light brown				Maiden's Blush	1
	grey brown				Ami Schott	2
	medium brown				Fantasy	3
	red brown				Agnes Smith	4
<b>7. VG</b>	<b>Leaf: type</b>					
<b>(*)</b>						
<b>(+)</b>						
<b>QL</b>	<b>(a)</b> simple					1
	compound					2
<b>8. VG</b>	<b>Simple leaf: lobing</b>					
<b>QL</b>	<b>(a)</b> absent					1
	present					9



	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>9.</b>	<b>VG</b>	<b>Simple leaf: depth of sinus</b>				
(+)						
<b>QN</b>	<b>(a)</b>	shallow				1
		medium				3
		deep				5
<b>10.</b>	<b>VG</b>	<b>Simple leaf: number of lobes</b>				
(+)						
<b>PQ</b>	<b>(a)</b>	two				1
		three				2
		more than three				3
<b>11.</b>	<b>VG</b>	<b><u>Only varieties with leaf type: simple leaf: lobing: absent:</u> Leaf: shape</b>				
(*)						
(+)						
<b>PQ</b>	<b>(a)</b>	narrow ovate				1
		ovate				2
		broad ovate				3
		narrow elliptic				4
		elliptic				5
		obovate				6
<b>12.</b>	<b>VG</b>	<b><u>Only varieties with leaf type: simple leaf: lobing: absent:</u> Leaf: shape of base</b>				
(+)						
<b>PQ</b>	<b>(a)</b>	cuneate				1
		truncate				2
		cordate				3
<b>13.</b>	<b>VG</b>	<b>Leaf blade: main color of upper side</b>				
(*)						
(+)						
<b>PQ</b>	<b>(a)</b>	yellow			Aurea, Lutens	1
		yellowish green			Beauty of Heaven	2
		light green				3
		medium green			Marengo, Martha	4
		dark green				5
<b>14.</b>	<b>VG</b>	<b>Leaf blade : secondary color of upper side</b>				
(*)						
(+)						
<b>PQ</b>	<b>(a)</b>	absent			Chantilly Lace	1
		white				2
		yellow			Golden Eclipse	3
		light green				4

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>15.</b>	<b>VG</b>	<b>Flower bud: color</b>				
	<b>(+)</b>					
<b>PQ</b>	<b>(b)</b>	RHS Colour Chart (indicate reference number)				
<b>16.</b>	<b>VG</b>	<b>Inflorescence: attitude</b>				
	<b>(+)</b>					
<b>PQ</b>	<b>(b)</b>	upright			Prince Notger	1
		semi-upright			Marie Frances	2
		drooping			Nodding	3
<b>17.</b>	<b>VG/ (*) MG (+)</b>	<b>Inflorescence: length</b>				
<b>QN</b>	<b>(b)</b>	short			Si Ji Lan	3
		medium			Ethiopia, Xiang Xue	5
		long			S. chinensis	7
<b>18.</b>	<b>VG (*) (+)</b>	<b>Inflorescence: shape</b>				
<b>PQ</b>	<b>(b)</b>	conic			Chang Tong Bai, Erzherzog Johann	1
		conic to columniform				2
		columniform			Night	3
<b>19.</b>	<b>VG</b>	<b>Inflorescence: number of panicles</b>				
<b>QN</b>	<b>(b)</b>	few			AnneTighe	3
		medium			Andryusha Gromov	5
		many			Congo	7
<b>20.</b>	<b>VG (*) (+)</b>	<b>Inflorescence: density of florets</b>				
<b>QN</b>	<b>(b)</b>	very sparse				1
		sparse			Bretschneiden, Chang Tong Bai	3
		medium			Olive May Cummings	5
		dense			Buffon	7
		very dense			Dawn	9
<b>21.</b>	<b>VG</b>	<b>Inflorescence: fragrance</b>				
<b>QN</b>	<b>(b)</b>	absent or weak			Luo Lan Zi	1
		moderate			Chang Tong Bai	2
		strong			Xiang Xue	3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>22.</b>	<b>VG</b>	<b>Floret: type</b>				
(*)						
(+)						
<b>QL</b>	<b>(b)</b>	single			Chang Tong Bai, Edith Brown	1
		double			Blanche Sweet	2
<b>23.</b>	<b>VG/ MG</b>	<b>Floret: diameter of corolla</b>				
<b>QN</b>	<b>(b)</b>	small			Si Ji Lan	1
		medium			Wan Hua Zi	3
		large			Agincourt Beauty	5
<b>24.</b>	<b>VG/ MG</b>	<b><u>Only varieties with floret type: double:</u> Floret: number of corolla lobes</b>				
(*)						
(+)						
<b>QN</b>	<b>(b)</b>	few			Blanche Sweet	1
		medium			Fritz	3
		many			Leon Gambetta Luo Lan Zi	5
<b>25.</b>	<b>VG</b>	<b><u>Only varieties with floret type: double:</u> Floret: distance between whorls</b>				
(*)						
(+)						
<b>QN</b>	<b>(b)</b>	short			Jewel, Luo Lan Zi	1
		medium				2
		long			Anne Tighe	3
<b>26.</b>	<b>VG</b>	<b>Corolla lobe: attitude</b>				
(*)						
(+)						
<b>PQ</b>	<b>(b)</b>	semi-erect			Minuet	1
		horizontal			Excelro	2
		recurved			Fraser	3
<b>27.</b>	<b>VG</b>	<b>Corolla lobe: shape</b>				
(+)						
<b>PQ</b>	<b>(b)</b>	narrow elliptic				1
		elliptic				2
		obovate				3
<b>28.</b>	<b>VG</b>	<b>Corolla lobe: undulation</b>				
(*)						
(+)						
<b>QN</b>	<b>(b)</b>	absent or weak			Heather	1
		medium			EdithBrown, Wan Hua Zi	2
		strong			Alba Grandiflora	3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>29.</b>	<b>VG</b>	<b>Corolla lobe: incurving of margin</b>				
(*)						
(+)						
<b>QN</b>	<b>(b)</b>	absent or very weak			HeleneAgatheKeesen	1
		weak			Carley	2
		medium			Edith Braun, Frank Patterson	3
		strong			Bailebelle	4
<b>30.</b>	<b>VG</b>	<b><u>Only varieties with</u> corolla lobe: incurving of margin: absent or very weak: corolla lobe: shape of apex</b>				
(+)						
<b>PQ</b>	<b>(b)</b>	acuminate				1
		broad short acuminate				2
		acute				3
		rounded				4
		emarginate				5
<b>31.</b>	<b>VG</b>	<b>Corolla lobe: beak</b>				
(+)						
<b>QL</b>	<b>(b)</b>	absent			Wan Hua Zi	1
		present			Priscilla	9
<b>32.</b>	<b>VG</b>	<b>Corolla lobe: main color of inner side</b>				
(*)						
(+)						
<b>PQ</b>	<b>(b)</b>	RHS Colour Chart (indicate reference number)				
<b>33.</b>	<b>VG</b>	<b>Corolla lobe: secondary color of inner side</b>				
(+)						
<b>PQ</b>	<b>(b)</b>	RHS Colour Chart (indicate reference number)				
<b>34.</b>	<b>VG</b>	<b>Corolla tube: color of outer side</b>				
<b>PQ</b>	<b>(b)</b>	RHS Colour Chart (indicate reference number)				
<b>35.</b>	<b>VG</b>	<b>Floret: anther color</b>				
(*)						
<b>QL</b>	<b>(b)</b>	yellow			Audrey, Wan Hua Zi	1
		purple			Si Ji Lan	2

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota	
<b>36.</b>	<b>VG</b>	<b>Flower: time of beginning of flowering</b>					
<b>(+)</b>							
<b>QN</b>	early				Chang Tong Bai	3	
	medium				Leonore	5	
	late				Ivory Silk	7	
<b>37.</b>	<b>VG</b>	<b>Flower: number of blooming season</b>					
<b>QN</b>	one				Luo Lan Zi	1	
	two				Si Ji Lan	2	
	more than two					3	

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

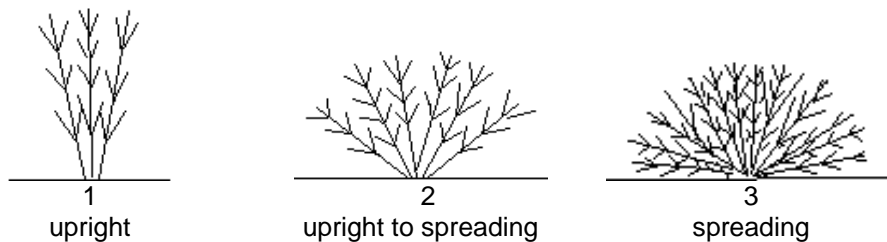
Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

(a) All observations on the leaf blade should be made on leaves from the middle part of the shoot on the current year's growth.

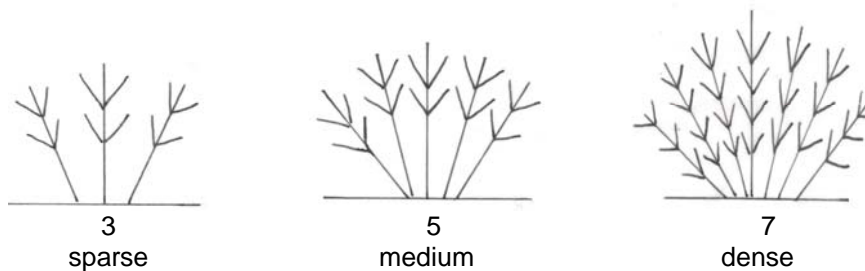
(b) All observations on the inflorescence should be made on inflorescences from the middle to upper part of the canopy during blooming season. All observations on the floret should be made on florets from the middle part of panicle. All observations on the corolla lobe of double flowers should be made on the lobes of second whorl from the top of the floret.

8.2 *Explanations for individual characteristics*

Ad. 2: Only varieties with plant: number of main stems: more than two: Plant: growth habit



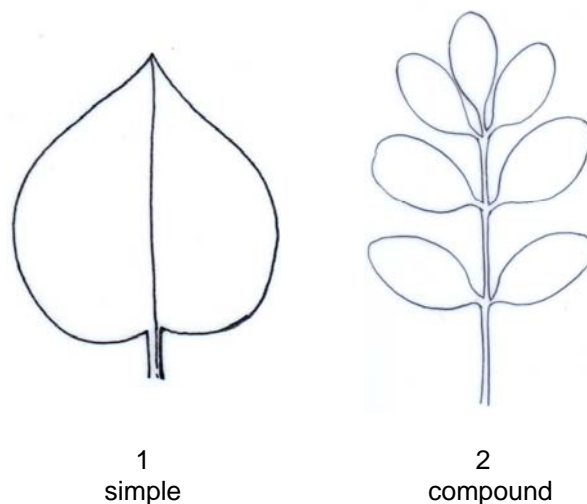
Ad. 4: Only varieties with plant: number of main stems: more than two: Plant: density of branches



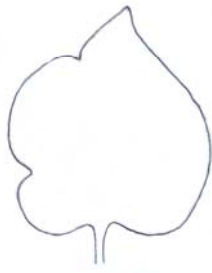
| Ad. 6: Shoot: color

Observation is made on one-year old shoot.

Ad. 7: Leaf: type



Ad. 9: Simple leaf: depth of sinus



1  
shallow



3  
medium



5  
deep

Ad. 10: Simple leaf: number of lobes



1  
two





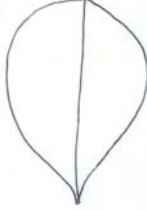



2  
three

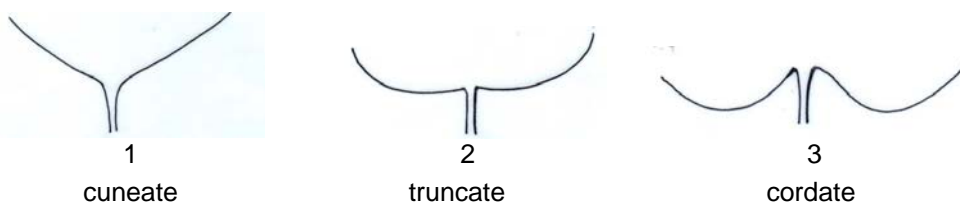


3  
more than three

Ad.11: Only varieties with leaf type: simple leaf: lobing: absent: Leaf: shape

	Broadest part		
	Below middle	At middle	Above middle
Narrow	 1 narrow ovate	 4 narrow elliptic	
Normal	 2 ovate	 5 elliptic	 6 obovate
Compressed	 3 broad ovate		

Ad. 12: Only varieties with leaf type: simple leaf: lobing: absent: Leaf: shape of base



Ad. 13: Leaf blade: main color of upper side

The main color is the color with the largest surface area. In cases where the area 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.

Ad. 14: Leaf blade: secondary color of upper side

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



Ad. 15: Flower bud: color

Observation on the flower bud should be made before the florets open.

Ad. 16: Inflorescence: attitude



1  
upright



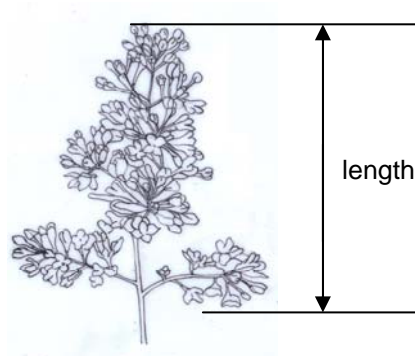
2  
semi-upright



3  
drooping

Ad. 17: Inflorescence: length

The natural length of an inflorescence should be measured from the bottom to the top when the inflorescence is in full bloom.



Ad. 18: Inflorescence: shape



1  
conic



2  
conic to columniform



3  
columniform

Ad. 20: Inflorescence: density of florets

very sparse: very large gap between florets  
sparse: large gap between florets  
medium: non-obvious gap between florets  
dense: florets touching  
very dense: florets overlapping.



1  
very sparse



3  
sparse



5  
medium

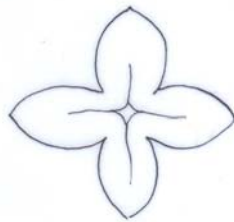


7  
dense

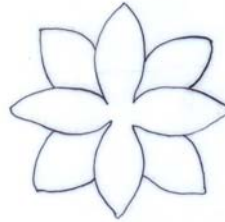


9  
very dense

Ad. 22: Floret: type

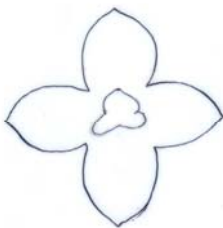


1  
single

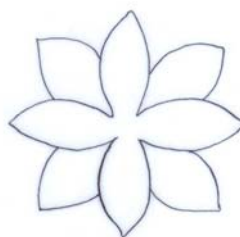


2  
double

Ad. 24: Only varieties with floret type: double: Floret: number of corolla lobes



1  
few

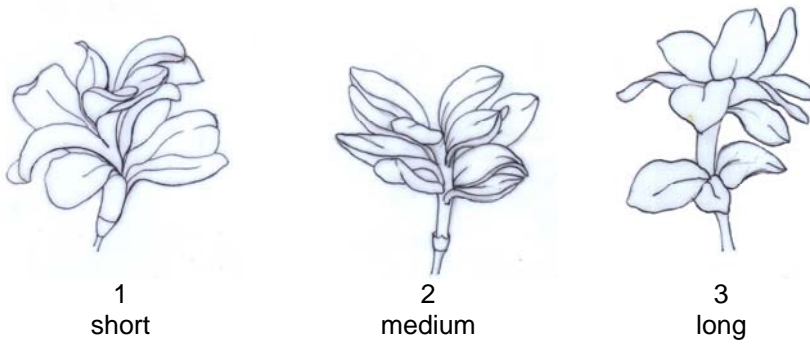


3  
medium



5  
many

Ad. 25: Only varieties with floret type: double: Floret: distance between whorls



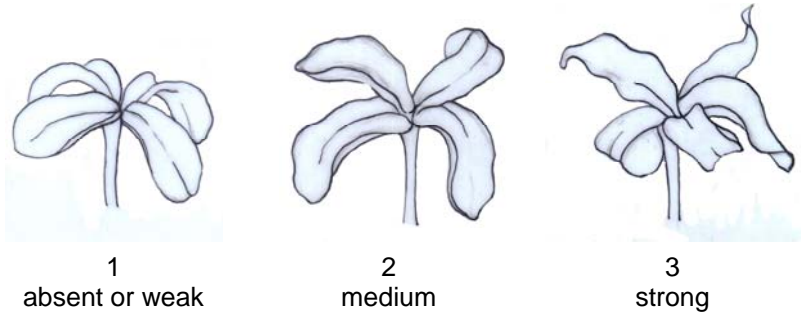
Ad. 26: Corolla lobe: attitude



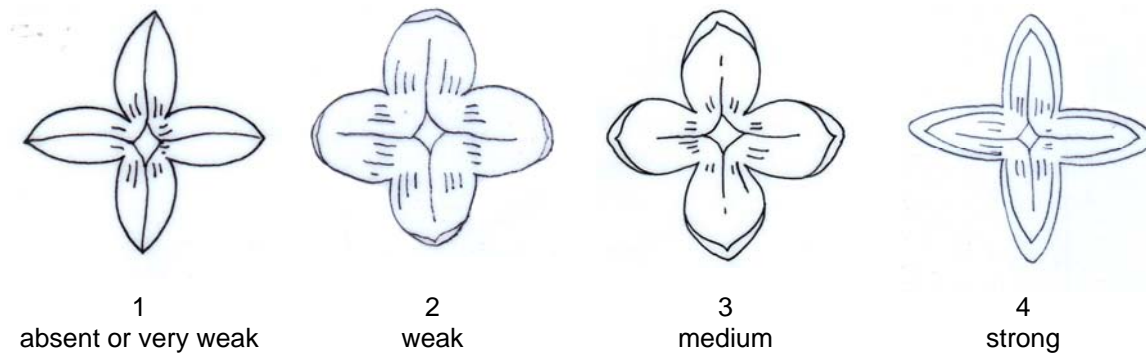
Ad. 27: Corolla lobe: shape

	Broadest part	
	At middle	Above middle
Narrow	<p>1 narrow elliptic</p>	
Normal	<p>2 elliptic</p>	<p>3 obovate</p>

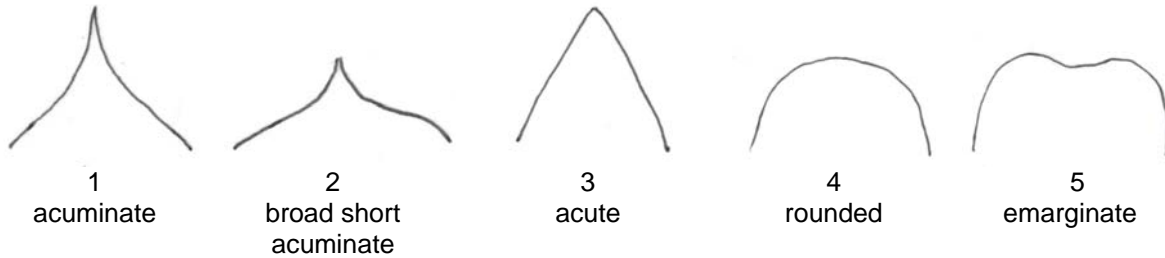
Ad. 28: Corolla lobe: undulation



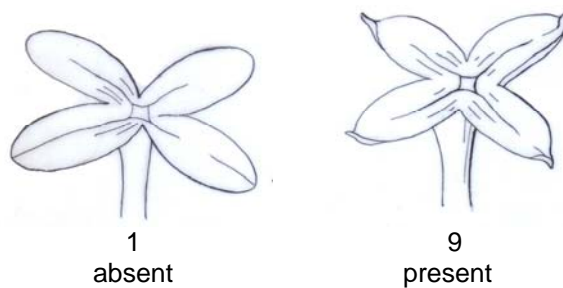
Ad. 29 Corolla lobe: incurving of margin



Ad. 30: Only varieties with corolla lobe: incurving of margin absent or very weak: Corolla lobe: shape of apex



Ad. 31: Corolla lobe: beak



Ad. 32: Corolla lobe: main color of inner side

The main color is determined as the color with the largest surface area present on the inner side of a lobe. If the area of the colors is nearly equal, the darker color is the main color.

Ad. 33: Corolla lobe: secondary color of inner side

The secondary color (if present) is the color with the second largest surface area. If the area of the colors is nearly equal, the lighter color is the secondary color.

Ad. 36: Flower: time of beginning of flowering

The beginning of flowering is determined when 5% of flower buds on all trail plants have opened.

9. Literature

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

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

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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	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	<input type="text"/>
1.2	Common name	<input type="text" value="Lilac"/>
1.3	Species	<input type="text" value="Syringa"/>

2. Applicant

Name	<input type="text"/>
Address	<input type="text"/>
Telephone No.	<input type="text"/>
Fax No.	<input type="text"/>
E-mail address	<input type="text"/>
Breeder (if different from applicant)	<input type="text"/>

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	<input type="text"/>
Breeder's reference	<input type="text"/>

#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)

.....

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



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	
<b>5.1 Plant: number of inflorescences (5)</b>			
few	Chang Tong Bai, Zi Yun	3[ ]	
medium	Luo Lan Zi	5[ ]	
many	Si Ji Lan	7[ ]	
<b>5.2 <u>Only varieties with leaf type: simple leaf: lobing: absent:</u> Leaf: shape (11)</b>			
narrow ovate		1[ ]	
ovate		2[ ]	
broad ovate		3[ ]	
narrow elliptic		4[ ]	
elliptic		5[ ]	
obovate		6[ ]	
<b>5.3 Inflorescence: length (17)</b>			
very short		1[ ]	
very short to short		2[ ]	
short	Si Ji Lan	3[ ]	
short to medium		4[ ]	
medium	Ethiopia, Xiang Xue	5[ ]	
medium to long		6[ ]	
long	S. chinensis	7[ ]	
long to very long		8[ ]	
very long		9[ ]	
<b>5.4 Inflorescence: shape (18)</b>			
conic	Chang Tong Bai, Erzherzog Johann	1[ ]	
conic to columniform		2[ ]	
columniform	Night	3[ ]	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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Characteristics	Example Varieties	Note
<b>5.5 Inflorescence: density of florets (20)</b>		
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[ ]
<b>5.6 Floret: type (22)</b>		
single	Chang Tong Bai, Edith Brown	1[ ]
double	Blanche Sweet	2[ ]
<b>5.7 Corolla lobe: incurving of margin (29)</b>		
absent or very weak	HeleneAgatheKeesen	1[ ]
weak	Carley	2[ ]
medium	Edith Braun, Frank Patterson	3[ ]
strong	Bailebelle	4[ ]
<b>5.8 Corolla lobe: main color of inner side (32)</b>		
white		1[ ]
yellow		3[ ]
pink		5[ ]
purple		7[ ]
violet		9[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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Characteristics	Example Varieties	Note
<b>5.9</b> <b>(33)</b> <b>Corolla lobe: secondary color of inner side</b>		
white		1[ ]
yellow		3[ ]
pink		5[ ]
purple		7[ ]
violet		9[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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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 <b>similar</b> variety(ies)	Describe the expression of the characteristic(s) for the characteristic(s) for <b>your</b> candidate variety
<i>Example</i>	<i>Corolla lobe: main color of inner side</i>	<i>purple</i>	<i>pink</i>

Comments:

#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 **image** of the variety should accompany the Technical Questionnaire.

8. Authorization for release

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

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

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

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

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

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

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

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

Please provide details for where you have indicated "yes".

.....

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

Applicant's name

Signature  Date

[Annex follows]

ANNEX

Comments by the Subgroup

## Comments from Canada and my responses

General comment: In Canada we have started seeing some new Syringa hybrids which are repeat blooming (Ex. Bloomerang). **We think this would be a good characteristic to add.** It might even be a good grouping characteristic.

---number of blooming is a valuable characteristic and it was ever included in first edition (2010-8-5). **I attend to renewedly add it in current edition.** However, it is not very appropriate to be a grouping characteristic because the quantity of varieties with repeated blooming is much less. Therefore, it is not very effective to group the varieties for the most of varieties with one blooming season.

4.2.2	I think we must always allow 1 off type?	Accepted
5.3 (a)	Spelling of lobing	Accepted
Characteristic 1	This was <b>QL</b> in a previous draft, is there a reason it was changed?	<b>To be discussed</b>
Char. 6	Suggest renaming this characteristic as either ' <b>One-year old branch</b> ' or ' <b>One-year old shoot</b> '. You could then eliminate the Ad. explanation.	<b>To be discussed</b>
Char. 8	Spelling of lobing	Accepted
Char. 10	You questioned why not <b>QN</b> ? My understanding is that it is PQ because with the addition of lobes you change the shape in more than one direction.	<b>Still difficult to understand</b>
Char. 11	Spelling of lobing. Based on the illustration for state 5 I think 'circular' might be better than ' <b>compressed ovate</b> '.	Accepted I notice that 'compressed' tends to be annulled in current revision of TGP14. To be exactly, state 5 should be <b>broad ovate</b> (broadest part towards base, not at middle). And state 5 should be moved to the left column.
Char. 21	Suggest moving after characteristic 36	Not accepted. Other TG are referred and fragrance is not arranged in the latter part, <i>Nemesia</i> for example.
Char. 22	Keep characteristic but move after 23	Accepted
Char. 30	Remove the text 'Only varieties with corolla lobe; incurving of margin: present'. The illustration in Ad. 30 for absent shows no incurving of the margin. Are beaks never present unless there is incurving of the margin?	Accepted. In most cases, beaks present in those petals with incurving of the margin. Herein, we only focus on the beak at the tip of corolla lobe in spite of margin.
Char. 35	Reword characteristic to read 'Anther: color'	Not accepted. There is not other characteristics on anther besides color, it is not necessary to specify 'Anther'
8.1 (b)	A few rewording suggestions: 'All observations on the inflorescence should be conducted on inflorescences from the middle to upper part of the canopy during blooming season.	Accepted



	All observations on the floret should be conducted on florets from the middle part of the panicle. All observations on the corolla lobe of double flowers should be made on the lobes of the second whorl from the top of the floret.'	
Ad. 2	The illustration for states 2 and 3 could be improved. 3 looks more dense than 2 but not more spreading.	Accepted
Ad. 6	Suggest removing with rewording of characteristic.	To be discussed
Ad. 12	Spelling of lobing	Accepted
Ad. 15	'Observation on flower bud should be conducted before florets open.'	Accepted
Ad. 20	We find the written explanation not necessary and would remove it. The illustrations are very good at demonstrating the characteristic. The wording creates a bit of confusion as to whether you wish to describe the density of the florets or the arrangement of the florets.	To be discussed
Ad. 30	Illustration for state 1 shows no incurving of the margin. See comments above.	See revision above.
Ad. 36	This explanation should be reworded. I was unsure exactly what you were trying to indicate. Do you wish to say when 5% of buds on every plant have opened? Or when 5% of plants have opened buds? The wording right now is a little confusing. Spelling of trial.	Accepted
Ad. 26	State 1 should read 'semi-erect'	Accepted
TQ 5.2	'Only varieties with leaf type: simple and lobing: absent: leaf: shape'	Accepted

## Comments from Germany and my responses

BUNDESSORTENAMT

29.01.2013

### Comments on TG/LILAC(proj.3), 2012-11-14

Page	Comment	Response
General	I agree to the comments of Ashley (send December 2012) and only make more comments when necessary.	To be discussed
Cover page	update the date and place of the TWO: <i>Technical Working Party for Ornamental Plants and Forest Trees</i>	Accepted

	<i>at its forty-sixth session, to be held in Melbourne, Australia, from April 22 to 26, 2013</i>	
page 5, 5.3 (d)	In my view time of beginning of flowering is not a good grouping characteristic. We should discuss this.	Accepted. It is useful to distinguish varieties with elliptic leaves from ones with ovate leaves. In most cases, 'Leaf type: simple and lobing absent: leaf: shape (characteristic 11)' plays the same role.
page 7	6.5 it should read: (a)-(b) See Explanations on the Table of Characteristics in Chapter 8.1	Accepted
	<b>Table of Characteristics</b>	
General	All headings should be underlined: <u>Only varieties with plant: number of stems: more than two: plant: density of branches</u>	Accepted
Char. 20	Please add state 1 very sparse	Accepted
Char. 21	It should read Inflorescence: fragrance	Accepted.
Char. 22	Is it possible to observe 9 different states on such a small organ?	Accepted.
Char 24	Is it possible to observe 9 different states?	Accepted.
Char 30	Proposal to delete	Not accepted. This is distinctive characteristic for some varieties within the section of <i>S. vulgares</i> , and section of <i>S. villosae</i> .
Char 36	Please delete the (*). I think this char. is largely influenced by the environment and the age of the plants.	Accepted.
	<b>Explanations on the Table of Characteristics</b>	
General	Please replace "should be conducted" by "should be made".	Accepted.
Ad. 13	New wording according to TGP 14: The main color is the color with the largest surface area. In cases where the area 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.	Accepted.
Ad. 14	New wording: The secondary (if present) color is the color with the	Accepted.

	second largest surface area. In cases where the area of the main and secondary color are too similar to reliably decide which color has the largest area, the lighter color is considered to be the secondary color.	
Ad. 15	It should read: Observation on the flower bud should be made before the florets open.	Accepted.
Ad. 30	The diagram for state (1) shows a flower without incurving. This does not match the heading: Only varieties with corolla lobe: incurving of margin present. Replace the diagram or check whether the char. is really necessary. My proposal is to delete it.	Partly accepted. It is very beautiful if a variety has a beak and the breeder will keep this variety. This is distinctive characteristic for some varieties from section of <i>S. vulgares</i> and <i>S. villosae</i> . Herein, 'Only varieties with corolla lobe: incurving of margin present' is deleted to simplify the precondition and emphasize 'the beak' regardless incurving or not.
	<b>Technical Questionnaire</b>	
1	Should read like this:	Not accepted. I made reference to other TG and find no '1.1 Genus' and title number is different with the indicated
1. Subject of the Technical Questionnaire		
1.1 Genus		
1.1.1 Botanical name	<input type="text" value="Syringa L."/>	[ ]
1.1.2 Common name	<input type="text" value="Lilac"/>	[ ]
1.2 Species (please complete)		
1.2.1 Botanical name	<input type="text"/>	[ ]
1.1.2 Common name	<input type="text"/>	[ ]

5.10	In my view time of beginning of flowering is not a good TQ characteristic. We should discuss this.	Accepted

### Comments from Poland and my responses

4.2.2	1 off type should be allowed in sample size of 9 plants	Accepted
Char. 3	Is it possible to assess height of plants in different stages of growth? To delete this Char. or preferably to read 'Plant: vigour'	Not accepted. This is a reasonable comment. It could be presented in mature plant. But for young plant, the height could be used to describe the varieties from different sections for the difference in branching angle and the length of shoot in most cases. In another words, height results from branching angle and the length of shoot. However, vigour is not enough to distinguish the varieties, because those varieties with short height are also vigorous.
Char. 9	To have notes 3-5-7	Not accepted. I supposed there are not many intermediate states.
Char. 10	To be indicated as QN	To be discussed

### Potential revision to be discussed:

1. Move Char.31 (Corolla lobe: undulation) before Char.28 (Corolla lobe: incurving of margin), because 'Corolla lobe: undulation' is more macroscopic and intuitive and is much easier to be found than 'Corolla lobe: incurving of margin'.
2. Should Char.9 be 'Only varieties with leaf type: simple leaf: lobing: present: depth of sinus'?  
Should Char.10 be 'Only varieties with leaf type: simple leaf: lobing: present: number of lobes'?
3. Char. 6 can be deleted. It is correlated to floret color to some extent, but not very effective to distinguish varieties.
4. Should add a Char. for simple floret type as 'Only varieties with floret type: simple: floret: number of corolla lobes' to read 'four (1)', 'five (2)', more than five (3)? Meanwhile, should specify this char. can be used when the quantity of florets with numerous corolla lobes accounts for more than 10% of total

florets in a whole plant (Fig. 1). In most cases, only several florets (less than 5-10% of total florets in one plant) have numerous corolla lobes in one plant (Fig.2 and 3). From breeding, we expect a variety having plenty of florets (more than 10% of total florets in one plants) with numerous corolla lobes.



Fig. 1



Fig.2



Fig.3

[End of document]