

UPOV

TG/ HIBIS(proj.5)

ORIGINAL: English

DATE: 2010-08-16

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

DRAFT**ROSE OF SHARON**

UPOV Code: HIBIS_SYR

Hibiscus syriacus L.**GUIDELINES****FOR THE CONDUCT OF TESTS****FOR DISTINCTNESS, UNIFORMITY AND STABILITY***prepared by an expert from the Republic of Korea**to be considered by the*

*Technical Working Party for Ornamental Plants and Forest Trees
at its forty-third session, to be held in Cuernavaca, Morelos State, Mexico,
from September 20 to 24, 2010*

Alternative Names:^{*}

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Hibiscus syriacus</i> L.	Rose of Sharon, Shrub Althea	Hibiscus de Syrie	Hibiskus, Echter Roseneibisch	Alteia-Arbustiva, Hibisco Colunar, Hibisco da Siria, Rosa de Sharao

The purpose of these guidelines ("Test Guidelines") is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

ASSOCIATED DOCUMENTS

These Test Guidelines should be read in conjunction with the General Introduction and its associated TGP documents.

^{*} These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.]

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
1. SUBJECT OF THESE TEST GUIDELINES.....	3
2. MATERIAL REQUIRED	3
3. METHOD OF EXAMINATION.....	3
3.1 Number of Growing Cycles	3
3.2 Testing Place	3
3.3 Conditions for Conducting the Examination.....	3
3.4 Test Design	4
3.5 Additional Tests	4
4. ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY	4
4.1 Distinctness	4
4.2 Uniformity.....	5
4.3 Stability	5
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL.....	6
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS	7
6.1 Categories of Characteristics.....	7
6.2 States of Expression and Corresponding Notes.....	7
6.3 Types of Expression.....	8
6.4 Example Varieties	8
6.5 Legend.....	8
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTERES/MERKMALSTABELLE/TABLA DE CARACTERES.....	9
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS	17
8.1 Explanations covering several characteristics	17
8.2 Explanations for individual characteristics	17
9. LITERATURE	25
10. TECHNICAL QUESTIONNAIRE	26

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Hibiscus syriacus* of the family *Malvaceae*, as well as to hybrids between that species and other species of *Hibiscus 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. Plants should be of sufficient size and maturity to flower and show their other representative characteristics the first year.

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

8 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 8 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, all observations for the purposes of distinctness should be made on **8 plants** or parts taken from each of **8 plants**, 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 95% and an acceptance probability of at least 1% should be applied. In the case of a sample size of 8 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) Plant: growth habit (characteristic 1)
- (b) Leaf blade: variegation (characteristic 16)
- (c) Flower: type (characteristic 19)
- (d) Flower: eye zone (characteristic 24)
- (e) Petal: main color on inner side (eye zone excluded) (characteristic 32)

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

(+) See Explanations on the Table of Characteristics in Chapter 8.

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

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1.	Plant: growth habit					
(*)						
(+)						
PQ	upright				Jeonyeongnol	1
	semi upright				Shichisai	2
	spreading				Yeonmin	3
	drooping				Jina	4
2.	Plant: height					
(*)						
QN	short				Antong	3
	medium				Paektanshim	5
	tall				Shichisai	7
3.	Plant: density of branching					
QN	sparse				Yeonmin	3
	medium				Shichisai	5
	dense				Antong, Sukim	7
4.	Current year branch: color on middle part					
(+)						
PQ	greenish				Byunghwa	1
	brownish				Shichisai, Chilbo	2
	purplish				Samchulli	3
5.	Current year branch: pubescence					
QN	absent or sparse					1
	medium					2
	dense				Antong	3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
6.	Petiole: length					
QN	(a) short					3
	medium					5
	long					7
7. (*)	Leaf blade: length					
QN	(a) short				Antong	3
	medium				Chilbo	5
	long				Shichisai	7
8. (*)	Leaf blade: width					
QN	(a) narrow				Chilbo	3
	medium					5
	broad				Shichisai	7
9. (+)	Leaf blade: ratio length/width					
QN	(a) compressed(x)	small	1.04-1.51		Happykim	1
	medium	medium	1.52-1.98		Paektanshim	2
	elongated	large	1.99-2.45		Chilbo	3
10. (+)	Leaf blade: shape of base					
PQ	(a) acute				Yeonmin	1
	obtuse				Gwangmyeong	2
	round				Shichisai	3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
11.	Leaf blade: intensity of green color					
QN	(a) light					3
	medium					5
	dark				Chilbo	7
12.	Leaf blade: glossiness					
QN	(a) weak					1
	medium					2
	strong					3
13.	Leaf blade: incisions of margin					
(+)						
QN	(a) few				Chilbo	3
	medium				Paektanshim	5
	many					7
14.	Leaf blade: depth of lobing					
(*)						
(+)						
QN	(a) absent or very shallow				Asadal	1
	shallow				Jeonyeongnol	3
	medium				Gwangmyeong	5
	deep				Sukim	7
15.	Leaf blade: undulation					
(+)						
QN	(a) absent or weak				Antong	1
	medium					2
	strong				Gwangmyeong	3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
16.	Leaf blade: variegation					
(*)						
(+)						
QL	(a) absent				Asadal	1
	present				Purpureus	9
17.	Leaf blade: type of variegation	Delete				
(+)						
PQ	(a) regular or slightly irregular					1
	moderately irregular					2
	strongly irregular					3
18.	Leaf blade: color of variegation	Delete				
(+)						
PQ	(a) white					1
	white and yellow					2
	yellow					3
	yellow and green					4
19.	Flower: type					
(*)						
(+)						
QN	(b) single				Asadal	1
	semi double				Aka-hanakasa	2
	double				Lucy	3
20.	<u>Only varieties with semi-double and double flowers:</u>					
	Flower: number of petaloids					
QN	few			27	Lady Stanley	3
	medium			54	Aka-hanagasa	5
	many			79	Pompon Rouge	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
21.	Flower: attitude of outermost petals					
(+)						
QN	(b) strongly ascending				Hwarang	1
	moderately ascending				Sooni	2
	horizontal				Samchulli	3
	moderately recurved					4
	strongly recurved					5
22.	<u>Only varieties with single and semi-double flowers:</u> Flower: arrangement of outermost petals					
(+)						
QN	(b) free				Antong	1
	touching or slightly overlapping				Lady Stanley	2
	strongly overlapping				Jongmoo, Yousoon	3
23.	Flower: diameter					
QN	(b) small				Asadal	3
	medium				Chilbo	5
	large				Shichisai	7
24.	Flower: eye zone					
(*)						
(+)						
QL	(b) absent				Paedal	1
	present				Paektanshim	9
25.	Petal: size of eye zone relative to petal (extensions excluded)					
(+)						
QN	(b) small				Samchulli	3
	medium				Chilbo	5
	large				Sooni	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
26.	Eye zone: length of extensions					
(+)						
QN	(b) absent or very short				Samchulli	1
	short				Antong	2
	medium				Shichisai	3
	long				Chilbo	4
27.	Eye zone: main color					
PQ	(b) RHS Colour Chart (indicate reference number)					
28.	Petal: length					
QN	(b) short				Asadal	3
	medium				Chilbo	5
	long				Shichisai	7
29.	Petal: width					
QN	(b) narrow				Asadal	3
	medium				Chilbo	5
	broad				Shichisai	7
30.	Petal: shape					
(+)						
PQ	(b) type1				Antong	1
	type2					2
	type3				Chilbo	3
31.	Petal : number of colors (eye zone excluded)					
(*)						
PQ	(b) one				Antong	1
	two				Asadal	2
	more than two					3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
32.	Petal: main color on inner side (eye zone excluded)					
(+)	RHS Colour Chart					
PQ (b)	(indicate reference number)					
33.	Petal: secondary color on inner side (eye zone excluded)					
(+)	RHS Colour Chart					
PQ (b)	(indicate reference number)					
34.	Petal: distribution of secondary color (eye zone excluded)					
(+)						
PQ (b)	Blotched on marginal zone (asadal type)				Lady Stanley, Asadal	1
	Margined distal half				Seonnyo	2
	Shaded throughout					3
35.	Petal: incisions					
(+)						
QN (b)	absent or weak				Yeonmin	1
	medium				Yousoon	2
	strong				Saeachim	3
36.	Petal: undulation					
(+)						
QN (b)	absent or very weak					1
	weak				Sooni	3
	medium				Dudungsil	5
	strong				Hayypkim	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
37.	<u>Excluding varieties with flower type: double:</u>	<u>Only varieties with single and semi- double flowers:</u>				
(+)	<u>Staminal column: length</u>					
QN	(b) short				Asadal	3
	medium				Chilbo	5
	long				Shichisai, Sukim	7
38.	<u>Time of beginning of flowering</u>					
(+)						
QN	very early				Hwarang	1
	early				Ardens	3
	medium				Pulcherrima	5
	late				Lucy, Lady Stanley	7
	very late				Pyonghwa	9

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

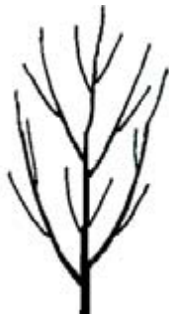
Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

(a) Observations on the leaves should be made on fully developed leaves in the middle third of the current year branch.

(b) Observations on the flower and flower parts should be made on a fully opened flower of the current year branch.

8.2 *Explanations for individual characteristics*

Ad. 1: Plant: growth habit



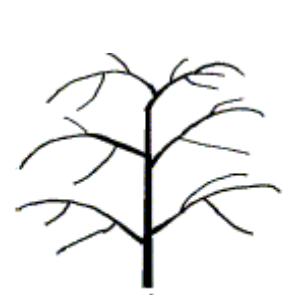
1
upright



2
semi upright



3
spreading



4
drooping

Ad. 4: Current year branch: color on middle part

The color of the current year branch should be observed one month after the first flower has fully opened.



1
greenish



2
brownish



3
purplish

Ad. 9: Leaf blade: ratio length/width



1
small



2
medium



3
large

Ad. 10: Leaf blade: shape of base



1
acute



2
obtuse



3
round

Ad. 13: Leaf blade: incisions



3
few



5
medium

7
many

Ad. 14: Leaf blade: depth of lobing



1
absent or
very shallow



3
shallow



5
medium



7
deep

Ad. 15: Leaf blade: undulation



1
absent or weak



3
strong

Ad. 16: Leaf blade: variegation

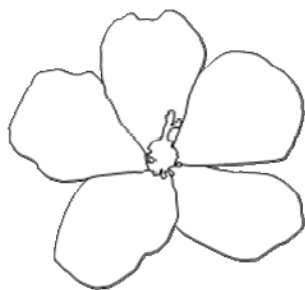


1
absent



9
present

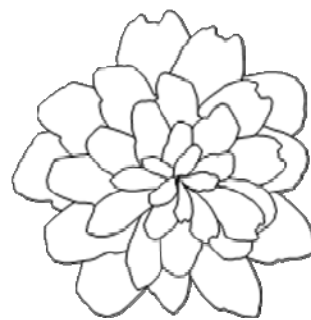
Ad. 19: Flower: type



1
single



2
semi-double



3
double

Ad. 21: Flower: attitude of outermost petals



1
strongly ascending



2
moderately ascending



3
horizontal

Ad. 22: Only varieties with single and semi-double flowers: Flower: arrangement of outermost petals



1
free



2
touching or
slightly overlapping



3
strongly overlapping

Ad. 24: Flower: eye zone



1
absent



9
present

Ad. 25: Flower: size of eye zone relative to petal(extensions excluded)



3
small

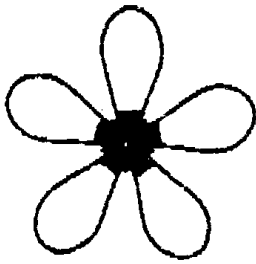


5
medium

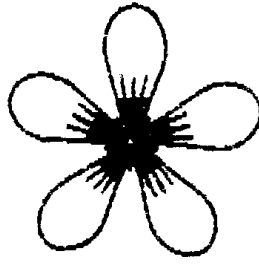


7
large

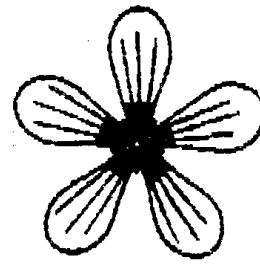
Ad. 26: Eye zone: length of extensions



1
absent or very short



2
short

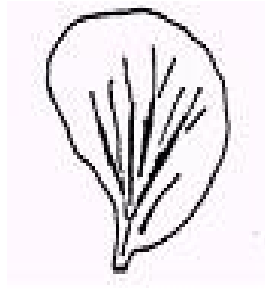


4
long

Ad. 30: Petal: shape



1
type 1



2
type 2



3
type 3

Ad. 32: Petal: main color on inner side(eye zone excluded)

Ad. 33: Petal: position of secondary color(eye zone excluded)

The main color is the color with the largest total surface area the secondary color is the color with the second largest total surface area

Ad. 34: Petal: distribution of secondary color(eye zone excluded)



1
on marginal zone
(asadal type)



2
distal half



3
throughout

Ad. 35: Petal: incisions



1
absent or weak



2
medium



3
strong

Ad. 36: Petal: undulation



3
weak



5
medium



7
strong

Ad. 37: Excluding varieties with flower type: double: staminal column: length



Ad. 38: Time of beginning of flowering

It should be observed when at least three plants have fully opened flowers.

9. Literature

Hillier, J. and Coombes, A. 2002 The Hillier manual of trees and shrubs. David and Charles, Newton Abbot, UK.

Lawton, B.P. 2004 Hibiscus. Timber Press, Portland, US

Ryu D. Y. 1987: 나라꽃 무궁화, Hakwonsa, Seoul, KR, pp. 177 to 261.

Song W.S. 2004: Hibiscus, Semyoungbook, Seoul, KR, ISBN 89-89097-21-5

Hogan S. 2003: Flora, A Gardener's Encyclopedia, Vol. 1, Timber Press, Inc., Oregon, US, ISBN 0-88192-538-1, p. 704.

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		
In the case of hybrid varieties which are the subject of an application for plant breeders' rights, and where the parent lines are to be submitted as a part of the examination of the hybrid variety, this Technical Questionnaire should be completed for each of the parent lines, in addition to being completed for the hybrid variety.		
1. Subject of the Technical Questionnaire		
1.1 Botanical name	<input type="text" value="Hibiscus syriacus L."/>	
1.2 Common name	<input type="text" value="Rose of Sharon"/>	
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"/>	

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

#4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

- (a) controlled cross []
 (please state parent varieties)

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

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

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

- (c) unknown cross []

- 4.1.2 Mutation []
 (please state parent variety)

--

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

--

- 4.1.4 Other []
 (please provide details)

--

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 Seed []

4.2.3 Other []

.....

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 Plant : growth habit		
(1) upright		1[]
semi upright		2[]
spreading		3[]
drooping		4[]
5.2 Plant : height		
(2) very short		1[]
very short to short		2[]
short		3[]
short to medium		4[]
medium		5[]
medium to tall		6[]
tall		7[]
tall to very tall		8[]
very tall		9[]
5.3 Leaf blade : variegation		
(16) absent		1[]
present		9[]

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

5.4 Flower : type		
(19) single		1[]
semi double		2[]
double		3[]
5.5 Flower : eye zone		
(23) absent		1[]
present		9[]
5.6 Petal : main color on inner side		
(31) (eye zone excluded)		
white or near white		1[]
pink		2[]
red		3[]
purple		4[]
violet blue		5[]

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

6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>	<i>Plant: growth habit</i>	<i>upright</i>	<i>semi upright</i>

Comments:

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

#7. Additional information which may help in the examination of the variety

7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?

Yes [] No []

(If yes, please provide details)

7.2 Are there any special conditions for growing the variety or conducting the examination?

Yes [] No []

(If yes, please provide details)

7.3 Other information

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.

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]