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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

ABELIA

UPOV Code(s): ABELI

Abelia R. Br.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by experts from France
to be considered by the
Enlarged Editorial Committee
at its meeting, to be held in Geneva,
from 2017-01-11 to 2017-01-12

Disclaimer: this document does not represent UPOV policies or guidance

Alternative names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Abelia R. Br.	Abelia	Abelia	Abelie	Abelia

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.

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Abelia* R. Br.

2. Material Required

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

2.2 The material is to be supplied in the form of plants 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:

6 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 6 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 or 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 of plants 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 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 6 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) Plant: height in relation to width (characteristic 2)
(c) Young shoot: anthocyanin coloration (characteristic 5)
(d) Leaf blade: main color (characteristic 12)
Gr. 1: green
Gr. 2: yellow
Gr. 3: green
Gr. 4: grey green
Gr. 5: purple green
(e) Leaf blade: secondary color (characteristic 13)
Gr. 1: white
Gr. 2: pinkish white
Gr. 3: yellow
Gr. 4: yellow red
(f) Sepal: color (characteristic 21)
Gr. 1: greenish
Gr. 2: pinkish white
Gr. 3: light pink
Gr. 4: orange pink
Gr. 5: reddish
(g) Corolla lobe: main color of outer side (characteristic 27)
Gr. 1: white
Gr. 2: pink
Gr. 3: 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

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

1 Characteristic number

2 (*) Asterisked characteristic – see Chapter 6.1.2

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

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

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

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

7 Not applicable

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

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. **(*)**	**PQ** **VG**	**(+)** **(a)**				
	Plant: growth habit					
	upright				Edward Goucher	1
	semi-upright				Minaud	2
	rounded				Minpan	3
	spreading				Lynn	4
2. **(*)**	**QN** **VG**	**(a)**				
	Plant: height in relation to width					
	taller than broad				Edward Goucher, Sherwood	1
	as tall as broad				Minpan	2
	broader than tall				Rupestri	3
3.	**QN** **VG**	**(+)** **(a)**				
	Plant: density					
	sparse				Francis Mason	1
	sparse to medium				Semperflorens	2
	medium				Edward Goucher	3
	medium to dense				Sherwood	4
	dense				Minpan	5
4.	**PQ** **VG**	**(a)**				
	One-year-old-Stem: color					
	light brown					1
	dark brown					2
	reddish				Edward Goucher	3
5. **(*)**	**QN** **VG**					
	Young shoot: anthocyanin coloration					
	absent or very weak				White Surprise	1
	weak				Minaud	2
	medium				Edward Goucher	3
	strong				Snowdrift	4
	very strong				Rupestri	5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
6.		**PQ** **VG**	**(c)**				
		Young leaf blade: main color on upper side					
		RHS Colour Chart (indicate reference number)					
7.		**PQ** **VG**	**(d)**				
		Young leaf blade: secondary color on upper side					
		RHS Colour Chart (indicate reference number)					
8.		**QN** **MG/VG**	**(e), (f)**				
		Leaf blade: length					
		very short				Lynn, Minpan	1
		short					2
		medium				Edward Goucher	3
		long					4
		very long					5
9.		**QN** **MG/VG**	**(e), (f)**				
		Leaf blade: width					
		very narrow				Lynn, Minpan	1
		narrow					2
		medium				Edward Goucher	3
		broad					4
		very broad					5
10.	**(*)**	**QN** **MG/VG**	**(e), (f)**				
		Leaf blade: ratio length/width					
		very low					1
		low					2
		medium					3
		high					4
		very high					5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
11.	**(*)**	**PQ VG**	**(e), (f)**				
		Leaf blade: shape					
		lanceolate					1
		ovate					2
		elliptic					3
		obovate					4
12.	**(*)**	**PQ VG**	**(+)** **(c), (e)**				
		Leaf blade: main color					
		RHS Colour Chart (indicate reference number)					
13.	**(*)**	**PQ VG**	**(d), (e)**				
		Leaf blade: secondary color					
		RHS Colour Chart (indicate reference number)					
14.	**(*)**	**PQ VG**	**(+)** **(d), (e)**				
		Leaf blade: distribution of secondary color					
		none				Edward Goucher	1
		on margin only				Wevo2	2
		marginal zone				Keylib	3
		central zone					4
		irregular				Francis Mason	5
15.	**(*)**	**PQ VG**	**(+)** **(e)**				
		Leaf blade: tertiary color					
		none				Edward Goucher	1
		white					2
		green					3
		yellow					4
		pink				Keylib	5
		red					6

		English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
16.		**PQ**	**VG**		**(e)**				
		Leaf blade: distribution of tertiary color							
		none						Edward Goucher	1
		on margin only						Minpan	2
		irregular						Keylib	3
17.		**QN**	**VG**		**(e)**				
		Leaf blade: undulation							
		absent or weak							1
		medium							2
		strong							3
18.	**(*)**	**QN**	**VG**		**(e)**				
		Leaf blade: glossiness							
		absent or weak						Panaché	1
		medium						Edward Goucher	2
		strong						Snowdrift	3
19.		**QN**	**VG**	**(+)**	**(e)**				
		Leaf blade: blistering							
		absent or weak							1
		medium							2
		strong							3
20.	**(*)**	**PQ**	**VG**	**(+)**					
		Flower bud: color							
		RHS Colour Chart (indicate reference number)							
21.	**(*)**	**PQ**	**VG**		**(g), (h)**				
		Sepal: color							
		greenish							1
		light pink						Gold Spot	2
		orange pink						Minaud	3
		reddish						Edward Goucher	4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
22.	**(*)**	**QN MG**	**(g), (h)**				
		Sepal: number					
		only two				Edward Goucher	1
		only four				Francis Mason	2
		only five					3
		two to five				Minaud	4
23.		**QN VG**	**(+) (g), (h)**				
		Sepal: width					
		narrow					1
		medium					2
		broad				Lynn	3
24.	**(*)**	**QN VG**	**(+) (g)**				
		Corolla lobe: attitude					
		erect				Raspberry profusion	1
		semi-erect				Edward Goucher	2
		horizontal				Sherwood	3
25.		**QN MG/VG**	**(+) (g)**				
		Corolla: length					
		very short					1
		short				Panaché	3
		medium				Minaud	5
		long					7
		very long				Lynn	9
26.		**QN MG/VG**	**(+) (g)**				
		Corolla: diameter					
		narrow				Panaché	1
		medium				Minaud	2
		broad				Lynn	3
27.	**(*)**	**PQ VG**	**(c), (g), (i)**				
		Corolla lobe: main color of outer side					
		RHS Colour Chart (indicate reference number)					

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
28.	**(*)**	**PQ** **VG**	**(c), (g), (i)**				
		Corolla lobe: main color of inner side					
		RHS Colour Chart (indicate reference number)					
29.	**(*)**	**QN** **VG**	**(g)**				
		Corolla tube: length					
		short				Minpan	1
		medium				Kaleidoscope	2
		long					3
30.	**(*)**	**QL** **VG**	**(+)** **(g)**				
		Corolla throat: blotches					
		absent				Sherwood	1
		present				Minduo1	9
31.		**QN** **VG**	**(g)**				
		Corolla throat: hairiness					
		absent or sparse				Sherwood	1
		medium				Minduo1	2
		dense					3
32.	**(*)**	**QN** **VG**					
		Stigma: position in relation to anthers	**Stigmate : position par rapport aux anthères**	**Narbe: Stellung im Vergleich zu den Antheren**	**Estigma: posición en relación con las anteras**		
		below					1
		same level				Minaud	2
		above				Minduo1	3
33.	**(*)**	**PQ** **VG**					
		Anther: color	**Anthère : couleur**	**Anthere: Farbe**	**Antera: color**		
		white				Minaud	1
		yellowish				Minduo1	2
		pinkish					3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34.		**QN** **VG**					
		Flower: fragrance					
		absent or weak				Minaud	1
		medium				Sherwood	2
		strong					3
35.		**QN** **MG/VG**	**(+)**				
		Time of beginning of flowering					
		early					3
		medium				Minaud	5
		late				Minpan	7
36.	**(*)**	**QN** **VG**	**(+)**				
		Plant: floriferousness					
		very weak					1
		weak				Lynn	2
		medium				Minduo1	3
		strong				Francis Mason	4
		very strong					5

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 should be made just before flowering.

(b) Observations on shoots and leaves should be made on current year shoots.

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

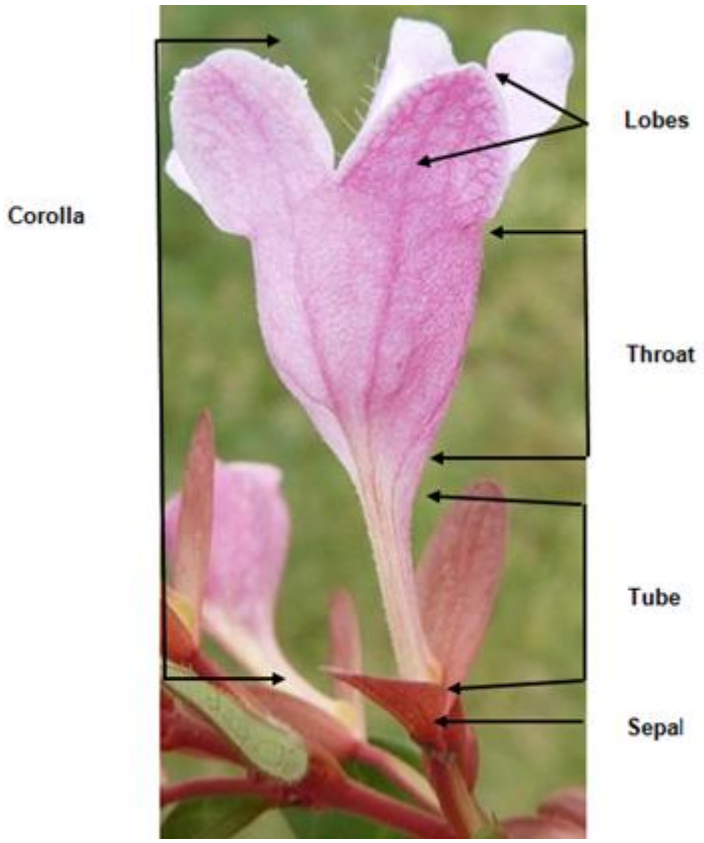
(d) The secondary color is the color with the second largest surface area. In cases where the areas of the secondary and tertiary color are too similar to reliably decide which color has the largest area, the darker color is considered to be the secondary color."

(e) Observations should be made on fully expanded leaves.

(f)

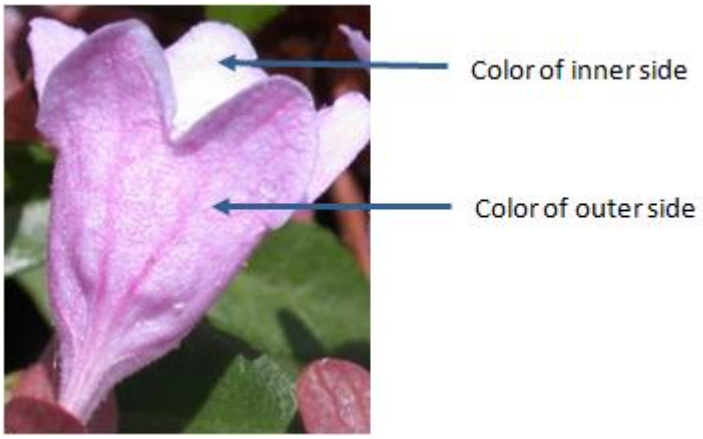
		← broadest part →		
		below middle	at middle	above middle
width (ratio length/width)				
narrow (high)		 1 lanceolate		
medium (medium)				
broad (low)		 2 ovate	 3 elliptic	 4 obovate

(g)



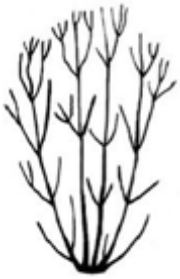
(h) Observations should be made at the time of full flowering.

(i)



8.2 Explanations for individual characteristics

Ad. 1: Plant: growth habit



1
upright

2
semi-upright

3
rounded

4
spreading

Ad. 3: Plant: density

1
sparse

3
medium

5
dense

Ad. 12: Leaf blade: main color

The main color is the color with the largest surface area present on the upper side of a leaf. In cases where the areas of the main and secondary colors are too similar to reliably decide which color has the largest area of the blade, the darkest color is considered to be the main color.

Ad. 14: Leaf blade: distribution of secondary color

The secondary color is determined as the color with the second largest surface area, usually observed as a defined pattern on the upper side of a leaf.


1
none


2
on margin only


3
marginal zone


4
central zone


5
irregular

Ad. 15: Leaf blade: tertiary color

The tertiary color is determined as the color with the third largest surface area, usually observed as a defined pattern on the upper side of a leaf. The inner side is the same as the upper side.

Ad. 19: Leaf blade: blistering


1
absent or weak

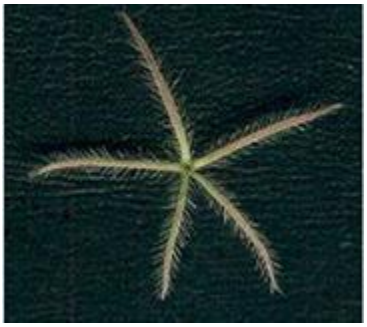

2
medium


3
strong

Ad. 20: Flower bud: color

To be observed just before opening of the bud.

Ad. 23: Sepal: width



1
narrow

2
medium

3
broad

Ad. 24: Corolla lobe: attitude

1
erect

2
semi-erect

3
horizontal

Ad. 25: Corolla: length

Ad. 26: Corolla: diameter

Ad. 30: Corolla throat: blotches

1
absent

9
present

Ad. 35: Time of beginning of flowering

The time of beginning of flowering is when all plants have approximately 10% of inflorescences with open flowers.

Ad. 36: Plant: floriferousness

The number of flowers should be observed as the number of flowers open at the same time on the plant, at the time of full flowering.

9. Literature

Barnes, P., 2001: 'Looking at Abelias New Plantsman', published by the Royal Horticultural Society.

Backlund, A. & N. Pyck (1998). Diervillaceae and Linnaeaceae, two new families of caprifolioids. Taxon 47(3): 657-661.

Bailey, L.H. & E.Z. Bailey (1976) Hortus Third. New York, Macmillan.

Clarke, D. (1988) Supplement to Bean's Trees and shrubs hardy in the British Isles. London, John Murray.

Griffiths, M. (ed.) (1994) The Royal Horticultural Society Index of Garden Plants. London, Macmillan.

Hayashi, Y. (1985) Woody plants of Japan. Tokyo, Yama-kei Publishers.

Hemsley (1888) Journ. Linn. Soc. Bot. 23: 358. London.

Hooker, W.J. (ed.) (1853) Curtis's Botanical Magazine t. 4694. London.

Hooker, J.D. (ed.) (1882) Curtis's Botanical Magazine t. 6601. London.

Iconographia Cormophytorum Sinicorum (1976) 4: 303

Iwatsuki, K., Yamazaki, T., Boufford, D.E. & Ohba, H. (eds.) (1993) Flora of Japan vol. 3a. Tokyo, Kodansha.

Kitamura & Murata, Colored illustrations of woody plants of Japan, 1: pl. 5: 30, f.13:4 (1983). Osaka, Hoikusha.

Lindley, J. (1846) Botanical Register 32: t. 8. London.

Lord, A.W. (ed.) (1999) The RHS Plant Finder 2000-2001. London, RHS & Dorling Kindersley.

Planchon, J.E. (1853) Abelia uniflora, in Flore des Serres 8: 203, pl. 824.

Rehder, A. (1913) Abelia in Sargent, C.S. (ed.) Plantae Wilsonianae, 1: 118-129. Jamaica Plain, Arnold Arboretum.

Rehder, A. (1940) Manual of cultivated trees and shrubs (2nd edition). New York, Macmillan.

RHS Good Plant Guide (1998). London, Dorling Kindersley. N.B., RHS Plant Finder 2000-2001 CD-ROM.

Sugimoto, J. (1983) New Keys to Woody Plants of Japan (2nd edn.). Tokyo, Inoue Book Company.

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	*Abelia* R. Br.
1.2	Common name	Abelia

2. Applicant

Name	
Address	
Telephone No.	
Fax No.	
E-mail address	
Breeder (if different from applicant)	

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	
Breeder's reference	

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

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

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

(a) controlled cross [ ]

(please state parent varieties)

(……..……..…) x (……..……..…)

female parent male parent

(b) partially known cross [ ]

(please state known parent variety(ies))

(……..……..…) x (……..……..…)

female parent male parent

(c) unknown cross [ ]

4.1.2 Mutation [ ]

(please state parent variety)

4.1.3 Discovery and development [ ]

(please state where and when discovered and how developed)

4.1.4 Other [ ]

(please provide details)

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 (1)	**Plant: growth habit**		
	upright	Edward Goucher	1 [ ]
	semi-upright	Minaud	2 [ ]
	rounded	Minpan	3 [ ]
	spreading	Lynn	4 [ ]
5.2 (2)	**Plant: height in relation to width**		
	taller than broad	Edward Goucher, Sherwood	1 [ ]
	as tall as broad	Minpan	2 [ ]
	broader than tall	Rupestri	3 [ ]
5.3 (3)	**Plant: density**		
	sparse	Francis Mason	1 [ ]
	sparse to medium	Semperflorens	2 [ ]
	medium	Edward Goucher	3 [ ]
	medium to dense	Sherwood	4 [ ]
	dense	Minpan	5 [ ]
5.4 (5)	**Young shoot: anthocyanin coloration**		
	absent or very weak	White Surprise	1 [ ]
	weak	Minaud	2 [ ]
	medium	Edward Goucher	3 [ ]
	strong	Snowdrift	4 [ ]
	very strong	Rupestri	5 [ ]
5.5 (12)	**Leaf blade: main color**		
	RHS Colour Chart (indicate reference number)		
	green		1 [ ]
	yellow		2 [ ]
	green		3 [ ]
	grey green		4 [ ]
	purple green		5 [ ]

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

	Characteristics	Example Varieties	Note
5.6 (13)	**Leaf blade: secondary color**		
	RHS Colour Chart (indicate reference number)		
	white		1 [ ]
	pinkish white		2 [ ]
	yellow		3 [ ]
	yellow red		4 [ ]
5.7 (21)	**Sepal: color**		
	greenish		1 [ ]
	light pink	Gold Spot	2 [ ]
	orange pink	Minaud	3 [ ]
	reddish	Edward Goucher	4 [ ]
5.8 (27)	**Corolla lobe: main color of outer side**		
	RHS Colour Chart (indicate reference number)		
	white		1 [ ]
	pink		2 [ ]
	violet		3 [ ]

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	*Leaf blade: main color of upper side*	*green*	*yellow green*

Comments:

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

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

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

Yes [ ] No [ ]

(If yes, please provide details)

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

Yes [ ] No [ ]

(If yes, please provide details)

7.3 Other information

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

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

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

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

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

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

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

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

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

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

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

.....

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

Applicant’s name

Signature Date

[End of document]