

UPOV

TG/PHLOX(proj.3)

ORIGINAL: English

DATE: 2009-02-16

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

DRAFT**PHLOX**

UPOV Code: PHLOX_PAN

Phlox paniculata L.**GUIDELINES****FOR THE CONDUCT OF TESTS****FOR DISTINCTNESS, UNIFORMITY AND STABILITY***prepared by an expert from the Netherlands*

*to be considered by the Technical Committee at its forty-fifth session,
to be held in Geneva from March 30 to April 1, 2009*

Alternative Names:*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Phlox</i> L.	Phlox	Phlox	Hoher Staudenphlox	Flox
<i>Phlox paniculata</i> L.	Fall phlox, Fall pink, Garden phlox, Panicked phlox, Perennial phlox, Perennial pink, Summer phlox, Sweet William			Flox paniculada

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 Number of Plants / Parts of Plants to be Examined.....	4
3.6 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.....	5
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS	6
6.1 Categories of Characteristics.....	6
6.2 States of Expression and Corresponding Notes.....	6
6.3 Types of Expression	6
6.4 Example Varieties	6
6.5 Legend.....	6
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES.....	7
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS	13
8.1 Explanations covering several characteristics	13
8.2 Explanations for individual characteristics	13
9. LITERATURE	17
10. TECHNICAL QUESTIONNAIRE	18

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Phlox paniculata* L. of the family *Polemoniaceae*.

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 capable of 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:

20 young 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 Unless otherwise stated, all observations should be made at the time of full flowering.

3.3.3 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.

3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 20 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 *Number of Plants / Parts of Plants to be Examined*

Unless otherwise indicated, all observations should be made on 10 plants or parts taken from each of 10 plants.

3.6 *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.

4.2 *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 20 plants, 1 off-type is allowed.

4.3 *Stability*

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

4.3.2 Where appropriate, or in cases of doubt, the stability may be tested, either by growing a further generation, or by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the previous 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: height (characteristic 1)
- (b) Leaf: variegation (characteristic 11)
- (c) Corolla: main color of upper side (excluding eye) (characteristic 27) with the following groups:
 - Gr. 1: white
 - Gr. 2: pink
 - Gr. 3: red
 - Gr. 4: violet
 - Gr. 5: purple red
 - Gr. 6: purple
 - Gr. 7: blue
- (d) Corolla: eye (characteristic 29)

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction.

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*

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.

6.3 *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

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

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

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

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1.	Plant: height	Plante: hauteur	Pflanze: Höhe	Planta: altura		
(+)						
QN (a)	short	courte	niedrig	baja	Barfourteen	3
	medium	moyenne	mittel	media	Barnine	5
	tall	haute	hoch	alta	Landhochzeit	7
2.	Stem: thickness at middle third	Tige: épaisseur au tiers central	Stiel: Dicke im mittleren Drittel	Tallo: grosor del tercio central		
QN (a)	thin	fine	dünn	fino	Becky Towe	1
	medium	moyenne	mittel	medio	Elisabeth	2
	thick	épaisse	dick	grueso	Bareleven	3
3.	Stem: anthocyanin coloration	Tige: pigmentation anthocyanique	Stiel: Anthocyanfärbung	Tallo: pigmentación antocianica		
QN (a)	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Becky Towe	1
	weak	faible	gering	débil	Red Feelings	3
	medium	moyenne	mittel	media	Bartwentyeight	5
	strong	forte	stark	fuerte	Lizzy	7
4.	Stem: length of internode at middle third	Tige: longueur de l'entre-noeud au tiers central	Stiel: Länge des Internodiums im mittleren Drittel	Tallo: longitud de los entrenudos en el tercio central		
QN (a)	short	courte	kurz	corta		3
	medium	moyenne	mittel	media		5
	long	longue	lang	larga		7
5.	Leaf: length	Feuille: longueur	Blatt: Länge	Hoja: longitud		
QN (b)	short	courte	kurz	corta	Elisabeth	3
	medium	moyenne	mittel	media	Bareleven	5
	long	longue	lang	larga	Barthirtyfive	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
6.	Leaf: width	Feuille: largeur	Blatt: Breite	Hoja: anchura		
QN (b)	narrow	étroite	schmal	estrecha	Junior Surprise	3
	medium	moyenne	mittel	media	Becky Towe	5
	broad	large	breit	ancha	Barthirtyfour	7
7.	Leaf: ratio length/ width	Feuille: rapport longueur/largeur	Blatt: Verhältnis Länge/Breite	Hoja: relación longitud/anchura		
QN (b)	moderately elongated	modérément allongé	mäßig länglich	moderadamente alargada	Barfive, Rubymine	3
	medium	moyen	mittel	media	Barfourteen, Goldmine	5
	moderately compressed	modérément comprimé	mäßig zusammengedrückt	moderadamente comprimida	Barthirtyfour	7
8. (+)	Leaf: position of broadest part	Feuille: position de la partie la plus large	Blatt: Position der breitesten Stelle	Hoja: posición de la parte más ancha		
QN (b)	slightly towards base	légèrement vers la base	leicht zur Basis hin	ligeramente hacia la base	Esm Zeus	1
	moderately towards base	modérément vers la base	mäßig zur Basis hin	moderadamente hacia la base	Bartwentyeight	2
	strongly towards base	fortement vers la base	stark zur Basis hin	fuertemente hacia la base	Becky Towe	3
9.	Leaf: shape in cross section	Feuille: forme en section transversale	Blatt: Form im Querschnitt	Hoja: forma en sección transversal		
QN (b)	concave	concave	konkav	cóncava		1
	straight	droite	gerade	recta		2
	convex	convex	konvex	convexa		3
10. (+)	Leaf: shape of apex	Feuille: forme du sommet	Blatt: Form der Spitze	Hoja: forma del ápice		
PQ (b)	acuminate	acuminé	zugespitzt	acuminado	Bartwentyeight	1
	acuminate to acute	acuminé à aigu	zugespitzt bis spitz	acuminado a agudo		2
	acute	aigu	spitz	agudo	Becky Towe	3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
11.	Leaf: variegation	Feuille: panachure	Blatt: Panaschierung	Hoja: variegación		
QL (b)	absent	absente	fehlend	ausente	Bartwentyeight, Lizzy	1
	present	présente	vorhanden	presente	Becky Towe, Elisabeth	9
12.	Leaf: anthocyanin coloration on upper side	Feuille: pigmentation anthocyanique de la face supérieure	Blatt: Anthocyanfärbung der Oberseite	Hoja: ondulación del margen		
QN (b)	absent or weak	absente ou faible	fehlend oder gering	ausente o débil	Becky Towe	1
	medium	moyenne	mittel	media		2
	strong	forte	stark	fuerte	Empty feelings, Rubymine	3
13.	Leaf: undulation of margin	Feuille: ondulation du bord	Blatt: Wellung des Randes	Hoja: ondulación del margen		
QN (b)	absent or weak	nulle ou faible	fehlend oder gering	ausente o débil	Barfourteen, Lizzy	1
	medium	moyenne	mittel	media	Elisabeth, Rubymine	2
	strong	forte	stark	fuerte		3
14.	Inflorescence: number of flowers	Inflorescence: nombre de fleurs	Blütenstand: Anzahl Blüten	Inflorescencia: cantidad de flores		
QN (c)	few	faible	gering	débil	Barfive, Junior Surprise	3
	medium	moyen	mittel	media	Barforty, Delilah	5
	many	élevé	gross	elevada	Bareleven, Barnine	7
15.	Flower: diameter	Fleur: diamètre	Blüte: Durchmesser	Flor: diámetro		
QN (c)	small	petit	klein	pequeño	Red Feelings	3
	medium	moyen	mittel	medio	Elisabeth, Vebablu	5
	large	élevé	groß	grande	Goldmine, Lizzy	7
16.	Pedicel: length	Pédoncule: longueur	Blütenstiel: Länge	Pedículo: longitud		
QN (c)	short	courte	kurz	corto	Barfourteen	3
	medium	moyenne	mittel	medio	Becky Towe, Red Feelings	5
	long	longue	lang	largo	Barnine, Goldmine	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
17.	Pedice: anthocyanin coloration	Pédoncule: pigmentation anthocyanique	Blütenstiel: Anthocyanfärbung	Pedículo: pigmentación antociánica		
QN (c)	absent or weak	absente ou faible	fehlend oder gering	ausente o débil	Elisabeth, Esm Indigo	1
	medium	moyenne	mittel	media	Esm Zeus	2
	strong	forte	stark	fuerte	Barthirtyfive, Esm Egeo	3
18.	Calyx: length	Calice: longueur	Kelch: Länge	Cáliz: longitud		
QN (c)	short	courte	kurz	corta	Elisabeth	1
	medium	moyenne	mittel	media	Junior Surprise	2
	long	longue	lang	larga	Barthirtyfive	3
19.	Calyx: anthocyanin coloration	Calice: pigmentation anthocyanique	Kelch: Anthocyanfärbung	Cáliz: pigmentación antociánica		
QN (c)	absent or weak	absente ou faible	fehlend oder gering	ausente o débil	Barthirtysix, Elisabeth	1
	medium	moyenne	mittel	media	VBL26	2
	strong	forte	stark	fuerte	Esm Indigo	3
20.	Flower: perianth	Fleur : périanthe	Blüte: Blütenhülle	Flor: perianto		
(+)						
QL (c)	absent	absent	fehlend	ausente	Empty Feelings	1
	present	présent	vorhanden	presente	Elisabeth	9
21.	Corolla tube: length	Tube de la corolle: longueur	Kronröhre: Länge	Tubo de la corola: longitud		
(+)						
QN (c)	short	courte	kurz	corta	Junior Surprise	3
	medium	moyenne	mittel	media	Esm Indigo	5
	long	longue	lang	larga	Elisabeth	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
22.	Corolla tube: diameter just below lobes	Tube de la corolle: diamètre juste en dessous des lobes	Kronröhre: Durchmesser unmittelbar unter den Lappen	Tubo de la corola: diámetro justo por debajo de los lóbulos		
(+)						
QN	(c) small	petit	klein	pequeño	Esm Egeo, Rubymine	1
	medium	moyen	mittel	medio	Delilah, Vebablu	2
	large	élevé	groß	grande	Esm Indigo	3
23.	Corolla tube: color	Tube de la corolle: couleur	Kronröhre: Farbe	Tubo de la corola: color		
(+)						
PQ	(c) RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
24.	Corolla lobe: length	Lobe de la corolle: longueur	Kronlappen: Länge	Lóbulo de la corola: longitud		
(+)						
QN	(c) short	courte	kurz	corta	Bartwenty-nine	3
	medium	moyenne	mittel	media	Becky Towe, Rubymine	5
	long	longue	lang	larga	Bartwenty-eight, Lizzy	7
25.	Corolla lobe: width	Lobe de la corolle: largeur	Kronlappen: Breite	Lóbulo de la corola: anchura		
(+)						
QN	(c) narrow	étroite	schmal	estrecha	Barthirty-two	3
	medium	moyenne	mittel	media	Junior Dream	5
	broad	large	breit	ancha	Esm Indigo	7
26.	Corolla lobe: shape	Lobe de la corolle: forme	Kronlappen: Form	Lóbulo de la corola: forma		
(+)						
PQ	(c) medium elliptic	elliptique moyen	mittel elliptisch	elíptico medio		1
	broad elliptic	elliptique large	breit elliptisch	elíptico ancho	Lizzy	2
	obovate	obovale	verkehrt eiförmig	oboval	Bartwenty-nine	3
	obdeltoid	obdeltoïde	verkehrt deltaförmig	obdeltoide	Bartwenty-eight	4

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
27.	Corolla lobe: main color of upper side (excluding eye)	Lobe de la corolle: couleur principale de la face supérieure (œil exclu)	Kronlappen: Hauptfarbe an der Oberseite (ohne Auge)	Lóbulo de la corola: color principal del haz (excluido el ojo)		
(+)						
PQ	(c) RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
28.	Corolla lobe: secondary color of upper side (excluding eye)	Lobe de la corolle : couleur secondaire de la face supérieure (œil exclu)	Kronlappen: Sekundärfarbe der Oberseite (ohne Auge)	Lóbulo de la corola: color secundario del haz (excluido el ojo)		
PQ	(c) RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
29.	Corolla: eye	Corolle: oeil	Krone: Auge	Corola: ojo		
(+)						
QL	(c) absent	absent	fehlend	ausente	Barthirtynine, Elisabeth	1
	present	présent	vorhanden	presente	Becky Towe, Rubymine	9
30.	Corolla: color of eye	Corolle: couleur de l'œil	Krone: Farbe des Auges	Corola: color del ojo		
(+)						
PQ	(c) RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
31.	Anther: color	Anthère: couleur	Anthere: Farbe	Antera: color		
PQ	(c) white	blanche	weiss	blanco	Barthirtysix, Elisabeth	1
	light yellow	jaune clair	hellgelb	amarillo claro	Esm Egeo	2
	light green	verte clair	hellgrün	verde claro		3
32.	Style: color	Style : couleur	Griffel: Farbe	Estilo: color		
PQ	(c) white	blanc	weiss	blanco		1
	light yellow	jaune clair	hellgelb	amarillo claro	Becky Towe	2
	light green	vert clair	hellgrün	verde claro	Ruby Mine	3
	purple red	pourpre rouge	purpurn	rojo púrpura	Goldmine, Lizzy	4

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:

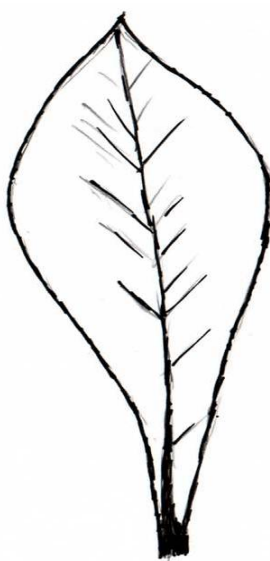
- (a) Observations on plant and stem should be made when 50% of flowers have opened on the first panicle.
- (b) Observations on leaves should be made on fully expanded leaves taken from the middle third of the flowering stem.
- (c) Observations on flowers should be made on fully expanded flowers when 50% of flowers have opened.

8.2 *Explanations for individual characteristics*

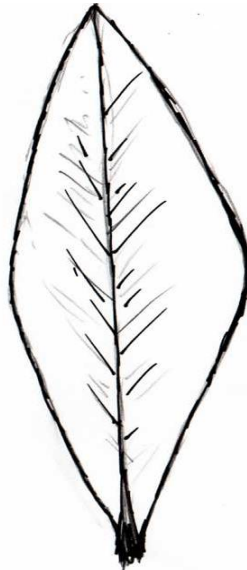
Ad. 1: Plant: height

Plant height should be measured from soil level to the top of the plant including the flowers.

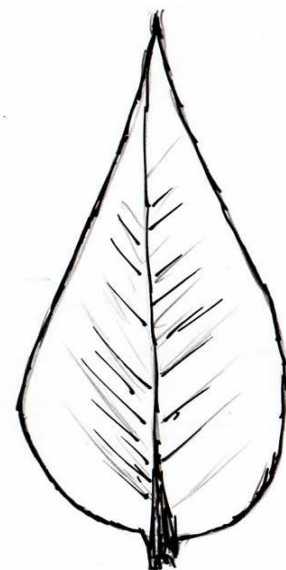
Ad. 8: Leaf: position of broadest part



1
slightly towards base

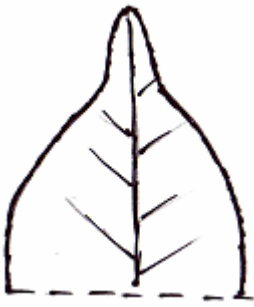


2
moderately towards base

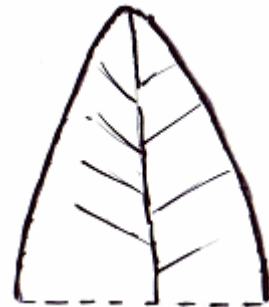


3
strongly towards base

Ad. 10: Leaf: shape of apex



1
acuminate



2
acuminate to acute

3
acute

Ad. 20: Flower: perianth

Varieties with perianth “absent” may have a vestigial perianth.



1
absent



9
present

Ad. 21: Corolla tube: length

Ad. 22: Corolla tube: diameter just below lobes

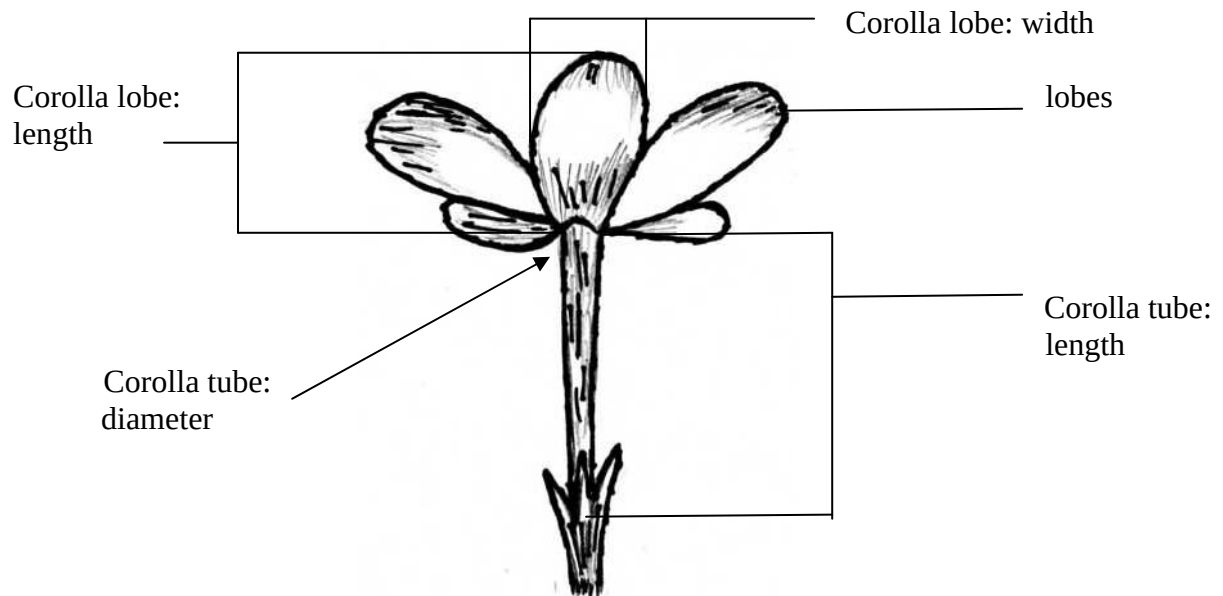
Ad. 23: Corolla tube: color

Ad. 24: Corolla lobe: length

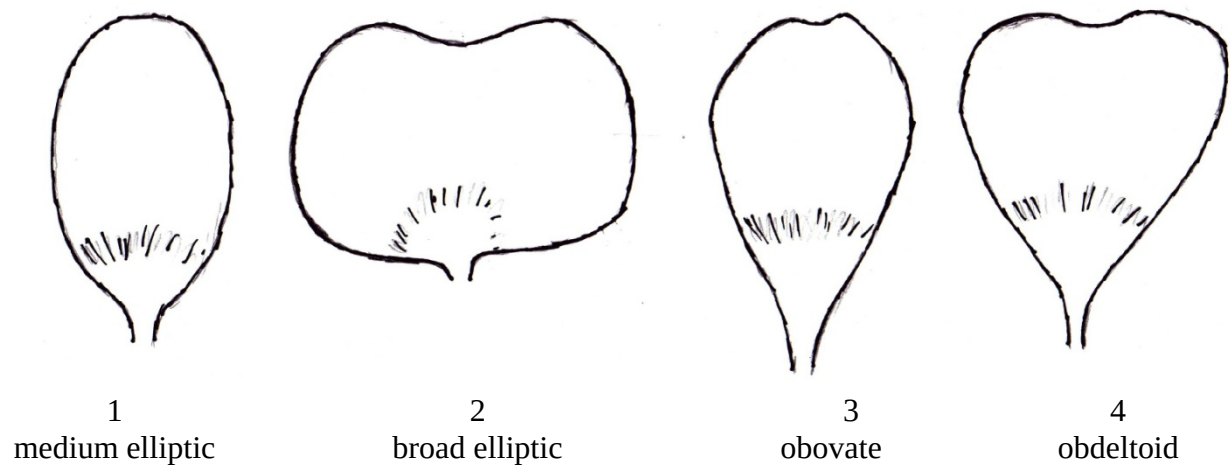
Ad. 25: Corolla lobe: width

Ad. 26: Corolla lobe: shape

Ad. 27: Corolla lobe: main color of upper side (excluding eye)



Ad. 26: Corolla lobe: shape

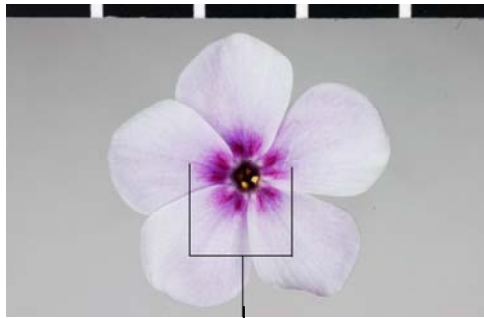


Ad. 27: Corolla lobe: main color of upper side (excluding eye)

The main color is the color with the largest surface area.

Ad. 29: Corolla: eye

Ad. 30: Corolla: color of eye



eye

9. Literature

Cheers, G., 2004: The Encyclopedia of Garden Flowers. Global Book Publishing Pty Ltd.

Fuchs, H., 1994: Phlox, Stauden- und Polsterphloxe. Eugen Ulmer Verlag. Stuttgart, DE.

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	Phlox paniculata L.	
1.2 Common name	Phlox	
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)	[]
(b) partially known cross (please state known parent variety(ies))	[]
(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)

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) cuttings	[]
(b) <i>in vitro</i> propagation	[]
(c) other (state method)	[]

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:
-------------------------	-----------------	-------------------

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: height (1)		
short	Barfourteen	3[]
medium	Barnine	5[]
tall	Landhochzeit	7[]
5.2 Leaf: variegation (11)		
absent	Bartwentyeight, Lizzy	1[]
present	Becky Towe, Elisabeth	9[]
5.3 Corolla lobe: main color of upper side (excluding eye) (27)		
white		1[]
pink		2[]
red		3[]
violet		4[]
purple red		5[]
purple		6[]
blue		7[]
5.4 Corolla: eye (29)		
absent	Barthirtynine, Elisabeth	1[]
present	Becky Towe, Rubymine	9[]

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

6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>	<i>Plant: height</i>	<i>short</i>	<i>tall</i>
Comments:			

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

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”.

.....

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

Applicant's name			
Signature			

[End of document]