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UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

TREE PAEONY

UPOV Code: PAEON

Paeonia Sect. *Moutan*

[*]

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by experts from China

to be considered by the

Technical Committee at its forty-eighth session,
to be held in Geneva from March 26 to 28, 2012

Alternative Names:[*]

Botanical name	*English*	*French*	*German*	*Spanish*
Paeonia suffruticosa, Paeonia jishanensis, Paeonia ostii,Paeonia rockii, Paeonia delavayi	Tree Paeony, Moutan Paeony	Pivoine en arbre	Strauchpäonie	Paeonia

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

ASSOCIATED DOCUMENTS

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

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

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Paeonia* Sect. *Moutan* including *Paeonia suffruticosa, Paeonia jishanensis, Paeonia ostii, Paeonia rockii, Paeonia delavayi.*

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 at least one year old plants grafted on a rootstock.

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

5 plants.

2.4 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease. The rootstock should be named when the plant material is supplied. The competent authorities may prescribe the rootstock on which the variety should be grafted.

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 5 plants.

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

3.5 Additional Tests

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

4. Assessment of Distinctness, Uniformity and Stability

4.1 Distinctness

4.1.1 General Recommendations

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

4.1.2 Consistent Differences

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

4.1.3 Clear Differences

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

4.1.4 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 5 plants or parts taken from each of 5 plants and any other observations made on all plants in the test, disregarding any off-type plants.

4.1.5 Method of Observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the second column of the Table of Characteristics (see document TGP/9 "Examining Distinctness", Section 4 "Observation of characteristics"):

MG: single measurement of a group of plants or parts of plants
MS: measurement of a number of individual plants or parts of plants
VG: visual assessment by a single observation of a group of plants or parts of plants
VS: visual assessment by observation of individual plants or parts of plants

Type of observation: visual (V) or measurement (M)

"Visual" observation (V) is an observation made on the basis of the expert's judgment. For the purposes of this document, "visual" observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, "G" provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness."

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

4.2 Uniformity

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

4.2.2 For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 5 plants, no 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 (characteristic 2)
(c) Leaf: type (characteristic 12)
(d) Leaf: number of leaflets (characteristic 13)
(e) Lateral leaflets: depth of sinus (characteristic 20)
(f) Flower: most complex form (characteristic 23)
(g) Flower: diameter (characteristic 24)
(h) Flower: main color (characteristic 26)
(i) Petal: basal blotch (inner side) (characteristic 32)
(j) Petal: size of blotch (characteristic 34)
(k) Pistil: pubescence of carpels (characteristic 43)
(l) Flowering: time of beginning of the first flowering (characteristic 50）

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)-(h) See Explanations on the Table of Characteristics in Chapter 8.1
(+) See Explanations on the Table of Characteristics in Chapter 8.2

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

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*) (+)	**VG**	**Plant: growth habit**	**Plante : port**	**Pflanze: Wuchsform**	**Planta: hábito de crecimiento**		
QN	**(a)**	upright	dressé	aufrecht	erguido	Kao, Shichifukujin	1
		semi-upright	demi-dressé	halbaufrecht	semierguido	Wu Long Peng Sheng	2
		spreading	étalé	breitwüchsig	extendido	Zhao Fen	3
2. (*)	**VG/ MG**	**Plant: height**	**Plante : hauteur**	**Pflanze: Höhe**	**Planta: altura**		
QN	**(a)**	short	basse	niedrig	baja	Shan Hu Tai	3
		medium	moyenne	mittel	media	Kao, LuoYang Hong	5
		tall	haute	hoch	alta	Hanakisoi	7
3. (*) (+)	**VG**	**Plant: attitude of flowers**	**Plante : port des fleurs**	**Pflanze: Stellung der Blüten**	**Planta: porte de los flores**		
QN	**(g)**	upward	vers le haut	aufrecht	ascendente	Kao	1
		outward	perpendiculaire	nach außen gerichtet	orientado hacia el exterior	Rou Fu Rong	2
		downward	vers le bas	nach unten gerichtet	descendente	Dou Lv	3
4. (*) (+)	**VG**	**Plant: position of flower in relation to foliage**	**Plante : position de la fleur par rapport au feuillage**	**Pflanze: Position der Blüte im Verhältnis zum Laub**	**Planta: posición de la flor en relación con las hojas**		
QN	**(d)**	within	à l'intérieur	innerhalb	dentro	Cang Zhi Hong	1
		same level or nearly same level	au même niveau ou quasiment au même niveau	auf gleicher oder fast gleicher Höhe	al mismo nivel o casi al mismo nivel	Cong Zhong xiao	2
		above	au-dessus	oberhalb	encima	Kao	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
5. **(+)**	**VG**	**Mixed bud: shape in lateral view**	**Bourgeon mixte : forme en vue latérale**	**Gemischte Knospe: Form in Seitenansicht**	**Yema mixta: forma en perspectiva lateral**		
PQ	**(b)**	very narrow ovate	ovale très étroit	sehr schmal eiförmig	oval muy estrecha		1
		narrow ovate	ovale étroit	schmal eiförmig	oval estrecha	Qing Long Wo MO Chi, Rou Fu Rong	2
		medium ovate	ovale moyen	mittel eiförmig	oval media	LuoYang Hong	3
		rounded	arrondi	abgerundet	redonda	Cai Xia, Cong zhong xiao,	4
6.	**VG**	**Mixed bud: color**	**Bourgeon mixte : couleur**	**Gemischte Knospe: Farbe**	**Yema mixta: color**		
PQ	**(b)**	yellow brown	brun jaunâtre	gelbbraun	marrón amarillo	Yang Huang	1
		green	vert	grün	verde	Cui Ye Zi, Zhi Hong,	2
		red	rouge	rot	rojo	Hu Hong, Zhu Sha Lei	3
		purple	pourpre	purpurn	púrpura	Kao	4
7. **(+)**	**VG**	**Very young shoot: color**	**Très jeune pousse : couleur**	**Sehr junger Trieb: Farbe**	**Brote muy joven: color**		
PQ	**(d)**	yellow green	vert jaunâtre	gelbgrün	verde amarillo	San Qing Bai	1
		medium green	vert moyen	mittelgrün	verde medio	Bai Hua Du, Shin-jitsugetu	2
		pink	rose	rosa	rosa	Lu He Hong	3
		purple red	rouge pourpre	purpurrot	rojo púrpura	Si He Lian	4
		brown red	rouge brun	braunrot	rojo marrón	Shou An Hong	5
8. **(*)**	**VG/ MG**	**One year old branch: length**	**Rameau vieux d'un an : longueur**	**Einjähriger Ast: Länge**	**Rama de un año: longitud**		
QN	**(c)**	short	court	kurz	corta	Shan Hu Tai, Ying Luo Bao Zhu	3
		medium	moyen	mittel	media	Luo Yang Hong, Zhao Fen	5
		long	long	lang	larga	Tian Xiang Zhan Lu, Zi Die Ying Feng	7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
9. (*)	**VG**	**Two-year-old branch: number of flowering branches**	**Rameau vieux de deux ans : nombre de rameaux florifères**	**Zweijähriger Ast: Zahl der blühenden Äste**	**Rama de dos años: número de ramas en floración**		
QN		one	un	einer	una	Shou An Hong	1
		two	deux	zwei	dos	Hanakisoi, Zhu Sha Lei	2
		more than two	plus de deux	mehr als zwei	más de dos	Taiyo	3
10. (*) (+)	**VG/ MG**	**Petiole: length**	**Pétiole : longueur**	**Blattstiel: Länge**	**Peciolo: longitud**		
QN	**(e)**	short	court	kurz	corto	Mei Ren Hong, Yi Pin Zhu Yi	3
		medium	moyen	mittel	medio	Luo Yang Hong	5
		long	long	lang	largo	Yu Ji Yan Zhuang	7
11. (+)	**VG**	**Leaf: attitude in relation to the stem**	**Feuille : port par rapport à la tige**	**Blatt: Stellung im Verhältnis zum Stamm**	**Hoja: porte en relación con el tallo**		
QN	**(e)**	upright	dressé	aufrecht	erguido	Kinkaku	1
		semi-upright	demi-dressé	halbaufrecht	semierguido	Cang Zhi Hong, Shou An Hong	2
		horizontal	horizontal	horizontal	horizontal	Dou Lv, Zi Hong Zheng Yan	3
12. (*) (+)	**VG/ MG**	**Leaf: type**	**Feuille : type**	**Blatt: Typ**	**Hoja: tipo**		
QL	**(e)**	pinnate	penné	gefiedert	pinnada	Zhong Sheng Hei	1
		bipinnate	bipenné	doppelt gefiedert	bipinnada	Luo Yang hong	2
13.	**MG**	**Leaf: number of leaflets**	**Feuille : nombre de folioles**	**Blatt: Anzahl der Blattfiedern**	**Hoja: número de foliolos**		
QN		3-5	3 à 5	3-5	3-5	Zhong Sheng Hei	1
		9-15	9 à 15	9-15	9-15	Luo Yang Hong	2
		more than 15	plus de 15	mehr als 15	más de 15	Xiong Mao	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14. (*) (+)	**MG**	**Leaf: length**	**Feuille : longueur**	**Blatt: Länge**	**Hoja: longitud**		
QN	**(e)**	short	courte	kurz	corta	Mei Ren Hong	3
		medium	moyenne	mittel	media	Luo Yang Hong	5
		long	longue	lang	larga	Rou Fu Rong	7
15. (*) (+)	**MG**	**Leaf: width**	**Feuille : largeur**	**Blatt: Breite**	**Hoja: anchura**		
QN	**(e)**	narrow	étroite	schmal	estrecha	Yin Hong Qiao Dui	3
		medium	moyenne	mittel	media	Luo Yang Hong	5
		broad	large	breit	ancha	Rou Fu Rong	7
16.	**MG**	**Leaf: color of upper side**	**Feuille : couleur de la face supérieure**	**Blatt: Farbe der Oberseite**	**Hoja: color del haz**		
PQ	**(f)**	yellow green	jaune vert	gelbgrün	verde amarillo	Zhao Fen	1
		medium green	vert moyen	mittelgrün	verde medio	Dou Lv	2
		dark green	vert foncé	dunkelgrün	verde oscuro	Guan Shi Mo Yu, Zhuang Yuan Hong	3
		grey green	vert gris	graugrün	verde gris	Mo Kui	4
17.	**VG**	**Leaf: anthocyanin coloration on upper side**	**Feuille : pigmentation anthocyanique sur la face supérieure**	**Blatt: Anthocyanfärbung der Oberseite**	**Hoja: pigmentación antociánica del haz**		
QN	**(f)**	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Bai Hua Du	1
		medium	moyenne	mittel	media	Hu Hong	2
		strong	forte	stark	fuerte	Dan Lu Yan	3
18. (*)	**VG**	**Leaf: pubescence on lower side**	**Feuille : pubescence sur la face inférieure**	**Blatt: Behaarung der Unterseite**	**Hoja: pubescencia del envés**		
QN	**(f)**	absent or weak	absente ou faible	fehlend oder gering	ausente o débil	Yin Fen Jin Lin	1
		medium	moyenne	mittel	media		2
		strong	forte	stark	fuerte	Dou Lv	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
19. (*) (+)	**VG**	**Lateral leaflets: shape**	**Folioles latérales : forme**	**Seitliche Blattfiedern: Form**	**Foliolos laterales: forma**		
PQ	**(e)**	lanceolate	lancéolée	lanzettlich	lanceolada		1
		ovate	ovale	eiförmig	oval		2
		elliptic	elliptique	elliptisch	elíptica		3
		broad elliptic	elliptique large	breit elliptisch	elíptica ancha		4
		broad ovate	ovale large	breit eiförmig	oval ancha		5
20. (*) (+)	**VG**	**Lateral leaflets: depth of sinus**	**Folioles latérales : profondeur du sinus**	**Seitliche Blattfiedern: Tiefe der Buchten**	**Foliolos laterales: profundidad del seno**		
QN	**(e)**	absent or very shallow	absente ou très peu profonde	fehlend oder sehr flach	ausente o muy poco profundo		1
		shallow	peu profonde	flach	poco profundo		3
		medium	moyenne	mittel	medio		5
		deep	profonde	tief	profundo		7
		very deep	très profonde	sehr tief	muy profundo		9
21. (*) (+)	**VG**	**Flower bud: shape in lateral view**	**Bourgeon floral : forme en vue latérale**	**Blütenknospe: Form in Seitenansicht**	**Botón floral: forma en perspectiva lateral**		
PQ	**(g)**	narrow ovate	ovale étroit	schmal eiförmig	oval estrecha	Yu Mian Tao Hua	1
		broad ovate	ovale large	breit eiförmig	oval ancha	Zhu Sha Lei	2
		circular	circulaire	kreisförmig	circular	Shan Hu TAi	3
		oblate	aplati	breitrund	achatada	Shou An Hong	4
22. (*) (+)	**VG**	**Flowering stem: presence of lateral flowers**	**Tige florifère : présence de fleurs latérales**	**Blütenstengel: Vorhandensein lateraler Blüten**	**Tallo floral: presencia de flores laterales**		
QN	**(g)**	none	aucune	keine	ninguna	Luo Yang Hong	1
		one or two	une ou deux	eine oder zwei	una o dos	Zi Mei You Chun	2
		more than two	plus de deux	mehr als zwei	más de dos	High Noon	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
23. (*) (+)	**VG**	**Flower: most complex form**	**Fleur : forme la plus complexe**	**Blüte: komplexeste Form**	**Flor: forma más compleja**		
PQ	**(g)**	single form	en forme unique	einfache Form	forma simple	Shu Sheng Peng Mo	1
		lotus form	en forme de lotus	Lotusform	forma de loto	Yu Ban Bai	2
		chrysanthemum form	en forme de chrysanthème	Chrysanthemenform	forma de crisantemo	Cong Zhong Xiao, Ru Hua Si Yu	3
		rose form	en forme de rose	Rosenform	forma de rosa	Luo Yang Hong	4
		golden stamen form	en forme d'étamine dorée	goldene Staubblattform	forma de estambre dorado	Yao Huang	5
		anemone form	en forme d'anémone	Anemonenform	forma de anémona	Yin Si Guan Ding	6
		golden circle form	en forme de cercle doré	goldene Kreisform	forma de círculo dorado	Fen Mian Tao Hua	7
		crown form	en forme de couronne	Kronenform	forma de corona	Shou An Hong	8
		globular form	en forme circulaire	Kugelform	forma globular	Fen Yu Qiu	9
		hundred proliferate form	en forme de prolifération en centaine de pétales	ganz gefüllte Form	en forma de floración en cien pétalos	Jun Yan Hong	10
		crown proliferate form	en forme de prolifération en couronne	gefüllt, Kronenform	en forma de floración en corona	Xian Tao	11
24. (*)	**MG**	**Flower: diameter**	**Fleur : diamètre**	**Blüte: Durchmesser**	**Flor: diámetro**		
QN	**(g)**	small	petit	klein	pequeño	Pan Zhong Qu Guo	3
		medium	moyen	mittel	medio	Luo Yang Hong	5
		large	large	groß	grande	Bai He Liang Chi, Xian Tao	7
25. (*) (+)	**MG**	**Flower: height of most complex form**	**Fleur : hauteur de la forme la plus complexe**	**Blüte: Höhe der komplexesten Form**	**Flor: altura de la forma más compleja**		
QN	**(g)**	absent	absente	fehlend	ausente		1
		short	courte	kurz	baja	Dou Lv	2
		medium	moyenne	mittel	media	Shou An Hong	3
		tall	haute	hoch	alta	Zi Rong Qiu	4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
26. (*) (+)	**VG**	**Flower: main color**	**Fleur : couleur principale**	**Blüte: Hauptfarbe**	**Flor: color principal**		
PQ		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)		
27. (*) (+)	**VG**	**Flower: secondary color**	**Fleur : couleur secondaire**	**Blüte: Sekundärfarbe**	**Flor: color secundario**		
PQ		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. (*) (+)	**VG**	**Flower: distribution of secondary color**	**Fleur : distribution de la couleur secondaire**	**Blüte: Verteilung der Sekundärfarbe**	**Flor: distribución del color secundario**		
PQ	**(g)**	none	aucune	keine	ninguno	Luo Yang Hong	1
		stripe	bande	Streifen	en rayas	He Pin Hua Er Qiao	2
		block	bloc	Block	en bloques	Hua Er Qiao	3
		center	centre	Mitte	en el centro	Yuan Yang Pu	4
		circle	cercle	Kreis	en círculos	Tao Yang Jin	5
29. (*)	**MG/ VG**	**Flower: petaloid stamens on most complex form**	**Fleur : étamines pétaloïdes dans la forme la plus complexe**	**Blüte: petaloide Staubblätter bei komplexester Form**	**Flor: estambres petaloideos en la forma más compleja**		
QN	**(g)**	none or very few	aucune ou très rares	fehlend oder sehr wenige	ninguno o muy pocos	Renkaku	1
		few	rares	wenige	pocos	Yu Ban Bai	2
		medium	moyennes	mittel	medio	Luo Yang Hong	3
		many	nombreuses	viele	abundantes	Kun Shan Ye Guang	4
		very many	très nombreuses	sehr viele	muy abundantes	Tao Hong Xian Mei	5
30. (*) (+)	**VG**	**Flower: type of petaloid stamen on most complex form**	**Fleur : type d'étamine pétaloïde dans sa forme la plus complexe**	**Blüte: Typ der petaloiden Staubblätter der komplexesten Form**	**Flor: tipo de estambre petaloideo en la forma más compleja**		
QL	**(g)**	stamen-like	en form d'étamine	staubblattähnlich	en forma de estambre		1
		petal-like	en forme de pétale	blütenblattähnlich	en forma de pétalo		2

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
31. **(+)**	**VG**	**Only varieties with flower petaloid stamens on most complex form: Flower: conspicuousness of anthers**	**Seulement variétés avec étamines pétaloïdes florales dans la forme la plus complexe : Fleur : netteté des anthères**	**Nur Sorten mit Blüten, die petaloide Staubblätter in der komplexesten Form aufweisen: Ausprägung der Antheren**	**Únicamente variedades con estambres petaloideos en la forma más compleja: Flor: visibilidad de las anteras**		
QN	**(g)**	inconspicuous	peu nette	undeutlich	poco visibles		1
		moderately conspicuous	modérément nette	mäßig deutlich	moderadamente visibles		2
		very conspicuous	très nette	sehr deutlich	muy visibles		3
32. **(*)** **(+)**	**VG**	**Petal: basal blotch (inner side)**	**Pétale : tache basale (face interne)**	**Blütenblatt: basaler Fleck (Innenseite)**	**Pétalo: mancha basal (lado interior)**		
QL	**(g)** **(h)**	absent	absente	fehlend	ausente	Zhao Fen	1
		present	présente	vorhanden	presente	Luo Yang Hong	9
33. **(*)** **(+)**	**VG**	**Petal: shape of blotch**	**Pétale : forme de la tache**	**Blütenblatt: Form des Flecks**	**Pétalo: forma de la mancha**		
PQ	**(h)**	lanceolate	lancéolée	lanzettlich	lanceolada		1
		narrow ovate	ovale	schmal eiförmig	oval estrecha		2
		oblong	oblongue	rechteckig	oblonga		3
		oblanceolate	oblancéolée	verkehrt lanzettlich	oblanceolada		4
		ovate	ovale	eiförmig	oval		5
		broad oblong	oblongue large	breit rechteckig	oblonga ancha		6
		broad ovate	ovale large	breit eiförmig	oval ancha		7
		oblate	aplatie	breitrund	achatada		8
		narrow obovate	obovale étroite	schmal verkehrt eiförmig	oboval estrecha		9
		obovate	obovale	verkehrt eiförmig	oboval		10
		circular	circulaire	kreisförmig	circular		11
		square	carrée	quadratisch	cuadrada		12
		obtriangular	obtriangulaire	verkehrt dreieckig	obtriangular		13

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34. (*)	**VG/ MG**	**Petal: size of blotch**	**Pétale : taille de la tache**	**Blütenblatt: Größe des Fleckes**	**Pétalo: tamaño de la mancha**		
QN	**(h)**	very small	très petite	sehr klein	muy pequeña	Hu Hong	1
		small	petite	klein	pequeña	Luo Yang Hong	2
		medium	moyenne	mittel	media	Xiao Hu Die	3
		large	grande	groß	grande	Shu Sheng Peng Mo	4
		very large	très grande	sehr groß	muy grande	Zhong Ban Bai	5
35. (*)	**VG**	**Petal: color of blotch**	**Pétale : couleur de la tache**	**Blütenblatt: Farbe des Fleckes**	**Pétalo: color de la mancha**		
PQ	**(h)**	white	blanc	weiß	blanco	Zheng Chun	1
		red	rouge	rot	rojo	High Noon	2
		purple red	rouge pourpre	purpurrot	rojo púrpura	Xue Hai Dan Xin	3
		red brown	brun rouge	rotbraun	rojo marrón	Xue Hai Yin Zhen	4
		dark purple or black	pourpre foncé ou noir	dunkelpurpur oder schwarz	púrpura oscuro o negro	Zi Die Ying Feng	5
36. (+)	**VG**	**Petal: white line in the center of the blotch**	**Pétale : ligne blanche au centre de la tache**	**Blütenblatt: weiße Linie in der Mitte des Fleckes**	**Pétalo: línea blanca en el centro de la mancha**		
QN	**(h)**	absent or very inconspicuous	absente ou très peu nette	fehlend oder sehr undeutlich	ausente o muy poco visible		1
		moderately conspicuous	modérément nette	mäßig deutlich	moderadamente visible		2
		very conspicuous	très nette	sehr deutlich	muy visible		3
37. (+)	**VG**	**Petal: incision of apex (excluding petaloid)**	**Pétale : incision du sommet (à l'exclusion du pétaloïde)**	**Blütenblatt: Einschnitt der Spitze (ausgenommen Petaloide)**	**Pétalo: incisión del ápice (excluidos los petaloideos)**		
QN	**(g)**	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Cong Zhong Xiao	1
		medium	moyenne	mittel	media	Luo Yang Hong	3
		strong	forte	stark	fuerte	Zi Rong Jian Rong	5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
38. **(+)**	**VG**	**Petal: shape (excluding petaloid)**	**Pétale : forme (à l'exclusion du pétaloïde)**	**Blütenblatt: Form (Petaloide ausgenommen)**	**Pétalo: forma (excluidos los petaloideos)**		
PQ	**(g)**	circular	circulaire	kreisförmig	circular		1
		obovate	obovale	verkehrt eiförmig	oboval		2
		transverse elliptic	elliptique transverse	quer elliptisch	elíptica transversal		3
39.	**VG**	**Stamen: main color of filaments**	**Étamine : couleur principale des filaments**	**Staubblatt: Hauptfarbe der Staubfäden**	**Estambre: color principal de los filamentos**		
PQ	**(g)**	white	blanc	weiß	blanco	Renkaku	1
		light yellow	jaune clair	hellgelb	amarillo claro	Xue Lian	2
		pink	rose	rosa	rosa	Zhao Fen	3
		light purple	violet clair	hellpurpurn	púrpura claro	Luo Yang Hong	4
		dark purple	pourpre foncé	dunkelpurpurn	púrpura oscuro	Yan Long Zi Zhu Pan	5
40.	**MG**	**Pistil: number**	**Pistil : nombre**	**Stempel: Anzahl**	**Pistilo: número**		
QN	**(g)**	few	rares	wenig	pequeño	Shou An Hong	1
		medium	moyen	mittel	medio	Zi Die Ying Feng	2
		many	nombreux	viele	grande	Luo Yang Hong	3
41. **(*)**	**VG**	**Pistil: color of stigma**	**Pistil : couleur du stigmate**	**Stempel: Farbe der Narbe**	**Pistilo: color del estigma**		
PQ	**(g)**	light yellow	jaune clair	hellgelb	amarillo claro	Renkaku, Yu Ban Bai	1
		pink	rose	rosa	rosa	Zhao Fen	2
		red	rouge	rot	rojo	Guo Qi Hong	3
		purple red	rouge pourpre	purpurrot	rojo púrpura	Luo Yang Hong	4
		purplish black	noir violacé	purpurschwarz	negro purpúreo	Ye Guang Bei	5
		black	noir	schwarz	negro	Yan Long Zi Zhu Pan	6

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
42. (*) (+)	**VG**	**Pistil: openness of disc**	**Pistil : ouverture du disque**	**Stempel: Öffnung der Scheibe**	**Pistilo: apertura del disco**		
QN	**(g)**	closed	fermé	geschlossen	cerrado		1
		partly open	en partie ouvert	teilweise geöffnet	parcialmente abierto		3
		fully open	complètement ouvert	vollständig geöffnet	totalmente abierto		5
43. (*)	**VG**	**Pistil: pubescence of carpels**	**Pistil : pubescence des carpelles**	**Stempel: Behaarung der Fruchtblätter**	**Pistilo: pubescencia de los cárpelos**		
QN	**(g)**	absent or sparse	absente ou lâche	fehlend oder gering	ausente o escasa	Guo Qi Hong	1
		medium	moyenne	mittel	media	High Noon	2
		dense	dense	stark	densa	Luo Yang Hong	3
44. (+)	**VG**	**Pistil: texture of disc**	**Pistil : texture du disque**	**Stempel: Textur der Scheibe**	**Pistilo: textura del disco**		
PQ	**(g)**	leathery	dur comme du cuir	lederartig	correosa	Luo Yang Hong	1
		intermediate	intermédiaire	mittel	intermedia	Hua Xia Yi Pin Huang	2
		fleshy	charnu	fleischig	carnosa	Guo Qi Hong	3
45. (*)	**VG**	**Pistil: color of disc**	**Pistil : couleur du disque**	**Stempel: Farbe der Scheibe**	**Pistilo: color del disco**		
PQ	**(g)**	yellowish white	blanc jaunâtre	gelblich weiß	blanco amarillento	Renkaku, Xue Lian	1
		yellow	jaune	gelb	amarillo	Hua Xia Yi Pin Huang	2
		pink	rose	rosa	rosa	Zhao Fen	3
		purple red	rouge pourpre	purpurrot	rojo púrpura	Xue Hai Dan Xin	4
		dark purple	pourpre foncé	dunkelpurpurn	púrpura oscuro	Yan Long Zi Zhu Pan	5
46. (*) (+)	**VG**	**Petaloid pistil on the most complex form**	**Pistil pétaloïde dans sa forme la plus complexe**	**Petaloider Stempel bei komplexester Form**	**Pistilo petaloideo en la forma más compleja**		
QL	**(g)**	absent	absent	fehlend	ausente		1
		present	présent	vorhanden	presente		9

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
47. (*) (+)	**VG**	**Petaloid pistil on the most complex form: type**	**Pistil pétaloïde dans sa forme la plus complexe : type**	**Petaloider Stempel bei komplexester Form: Typ**	**Pistilo petaloideo en la forma más compleja: tipo**		
PQ	**(g)**	only stigma	stigmate seulement	nur Narbe	únicamente el estigma		1
		partly petaloid	en partie pétaloïde	teilweise petaloid	parcialmente petaloideo		2
		completely petaloid	complètement pétaloïde	vollständig petaloid	completamente petaloideo		3
48. (*)	**VG**	**Petaloid pistil on the most complex form: color**	**Pistil pétaloïde dans sa forme la plus complexe : couleur**	**Petaloider Stempel der komplexesten Form: Farbe**	**Pistilo petaloideo en la forma más compleja: color**		
PQ	**(g)**	white only	blanche seulement	nur weiß	únicamente blanco	Zhi Hong Zheng Yan	1
		green and white	verte et blanche	grün und weiß	verde y blanco	Yan Zhi Dian Cui	2
		green only	verte seulement	nur grün	únicamente verde	Kun Shan Ye Guang	3
		green and red	verte et rouge	grün und rot	verde y rojo	Wu Long Peng Sheng	4
49. (*)	**VG**	**Flower: fragrance**	**Fleur : parfum**	**Blüte: Duft**	**Flor: aroma**		
QN	**(g)**	weak	faible	gering	débil	Yu Ban Bai	1
		medium	moyen	mittel	medio	Luo Yang Hong	2
		strong	fort	stark	fuerte	Guan Qun Fang	3
50. (*) (+)	**MG**	**Flowering: time of beginning of the first flowering**	**Floraison : époque de début de la première floraison**	**Blüte: Zeitpunkt des Blühbeginns**	**Floración: época de inicio de la primera floración**		
QN	**(d)**	early	précoce	früh	temprana	Huo Lian Jin Dan	3
		medium	moyenne	mittel	media	Luo Yang Hong	5
		late	tardive	spät	tardía	High Noon	7

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

(a) Plant: All observations on growth habit are made after leaf fall in the winter. All observations on height should be made when plants are in flower.

(b) Mixed bud: a bud yielding both leaves and flowers. Observations on the buds should be made on the first lateral bud from the apex on a current year branch during after leaf fall in the autumn. A current year branch is a branch which is current or belongs to the present year.

(c) Branch: Observations on current year branches should exclude basal shoots. All observation on length should be made after leaf falls. Two year old branches are those developed and flower buds differentiated on last year.

(d) Very young shoots are less than 10 cm in length, some very young shoots have flower buds, some not. Young shoots are longer than 10 cm in length.

(e) All observations on the petiole, leaf and leaflet should be made on the third and fourth fully developed leaves from the base in current year's branch in flower.

(f) All observations on leaf color are made at the beginning of flowering.

(g) Flower, petal, stamen, pistil, plant: all observations on the flower should be made on the terminal flower on a primary branch. All observations on the shape of flower bud should be made when the bud is beginning to show the color. All observations on the petal should be made when the flower is fully open, except for the observations on the petal color which are made on the middle part of the petal at the time of flower opening. All observations on the blotch should be made on the first inner 1~2 wheel petals.

(h) Blotch: an irregularly shaped and sized spot at the base of the petal. All observations should be made when the flower is fully open.

8.2 Explanations for individual characteristics

Ad. 1: Plant: growth habit

1
upright

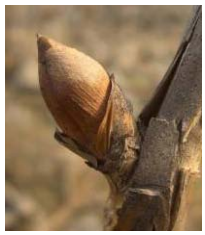
2
semi-upright

3
spreading

Ad. 3: Plant: attitude of flowers
Ad. 4: Plant: position of flower in relation to foliage
Ad. 5: Mixed bud: shape in lateral view

Mixed bud is a bud which produces both leaves and flowers.

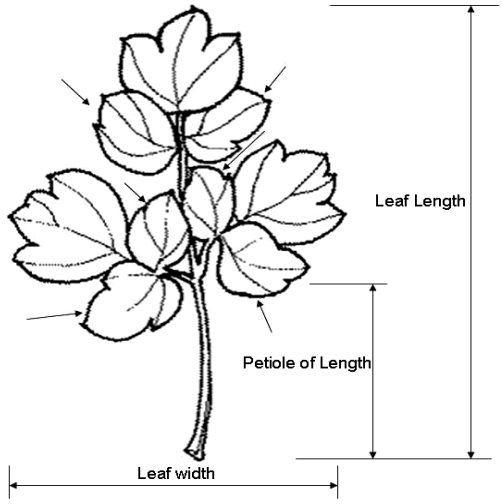
← broadest part →		
(below middle)	at middle	(above middle)

width (ratio length/width) ← broad (compressed) → narrow (elongated)			
		 2 narrow ovate	 1 very narrow ovate
		 4 rounded	 3 medium ovate

Ad. 7: Very young shoot: color

The color of very young shoots excludes that of flower buds.

Ad. 10: Petiole: length
Ad. 14: Leaf: length
Ad. 15: Leaf: width



Ad. 11: Leaf: attitude in relation to the stem

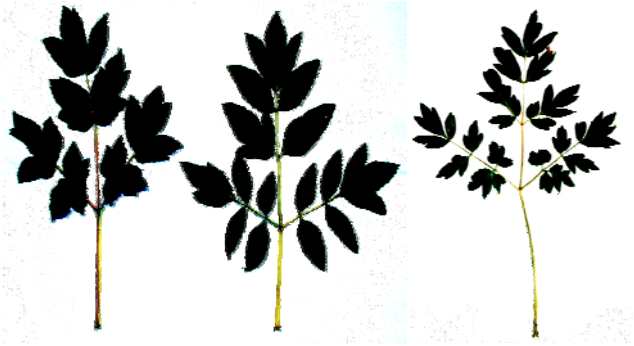
1
upright

2
semi-upright

3
horizontal

Ad. 12: Leaf: type

1
pinnate

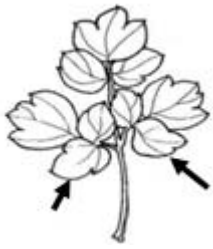


2
bipinnate

Ad. 19: Lateral leaflets: shape

Indicate the shape and position of observed leaflet blade.






The shape of leaflet blade position of observed leaflet blade

	← broadest part →		
	(below middle)	at middle	(above middle)
width (ratio length/width) narrow (elongated) →	 1 lanceolate	 3 elliptic	
	 2 ovate	 4 broad elliptic	
← broad (compressed)	 5 broad ovate		

Ad. 20: Lateral leaflets: depth of sinus

				
1	3	5	7	9
absent or very shallow	shallow	medium	deep	very deep

Ad. 21: Flower bud: shape in lateral view

	← broadest part →		
	(below middle)	at middle	(above middle)
narrow (elongated) ← width (ratio length/width) →	 1 narrow ovate		
	 2 broad ovate	 3 circular	
broad (compressed)		 4 oblate	

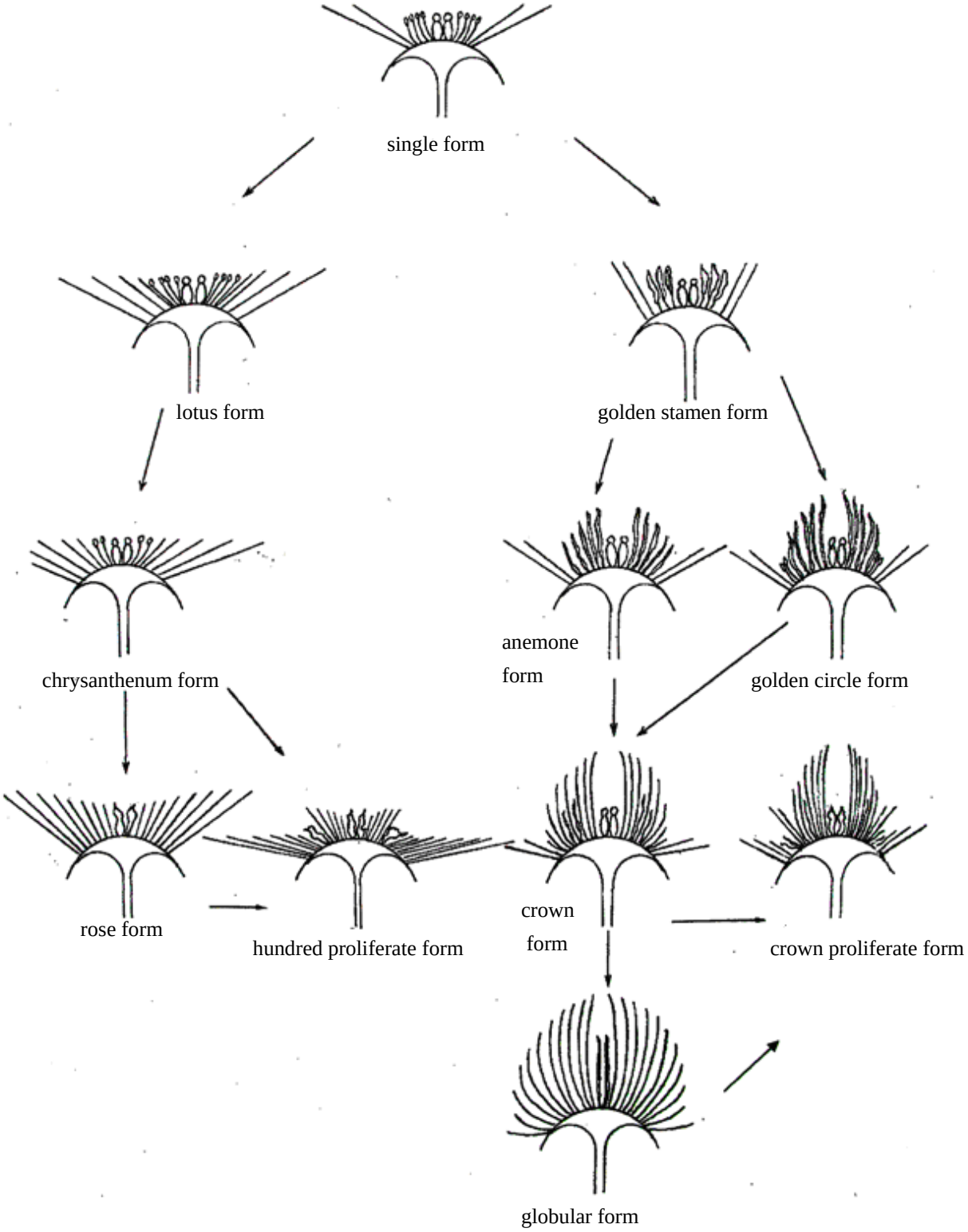
Ad. 22: Flowering stem: presence of lateral flowers

1
none

2
one or two

Ad. 23: Flower: most complex form

A variety may have more than one flower form, but flower form recorded will be the most complex.



1
single form

6
anemone form

2
lotus form

7
golden circle form

3
chrysanthemum form

8
crown form

4
rose form

9
globular form

10
hundred proliferate form

11
crown proliferate form

Ad. 26: Flower: main color

The main color is determined as the color with the largest surface area present on the upper side of a flower. If 50/50, the main color is darker one. The main color excludes the blotch and basal color.

Ad. 28: Flower: distribution of secondary color

2
stripe

3
block

4
center

5
circle

Ad. 30: Flower: type of petaloid stamen on most complex form

1
stamen-like

2
petal-like

Ad. 31: Only varieties with flower petaloid stamens on most complex form: Flower: conspicuousness of anthers

1
inconspicuous

2
moderately conspicuous

3
very conspicuous

Ad. 32: Petal: basal blotch (inner side)

1
absent

9
present

Ad. 33: Petal: shape of blotch

← broadest part →		
(below middle)	at middle	(above middle)

width (ratio length/width) → narrow (elongated)

width (ratio length/width) ← broad (compressed)

1
lanceolate

3
oblong

4
oblanceolate

2
narrow ovate

5
ovate

6
broad oblong

12
square

9
narrow obovate

7
broad ovate

8
oblate

11
cicular

10
obovate

13
obtriangular

Ad. 36: Petal: white line in the center of the blotch

1
absent or very inconspicuous

2
moderately conspicuous

3
very conspicuous

Ad. 37: Petal: incision of apex (excluding petaloid)

1
absent or very weak

3
medium

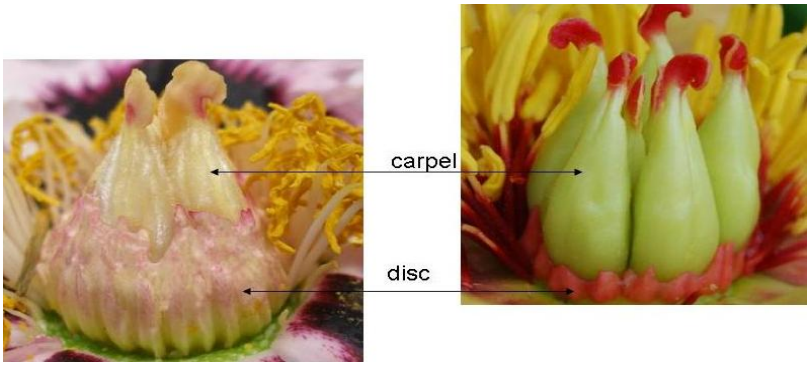
5
strong

Ad. 38: Petal: shape (excluding petaloid)

←	broadest part	→
(below middle)	at middle	(above middle)

width (ratio length/width)			
narrow (elongated) →		 2 obovate	
		 1 circular	
broad (compressed) ←		 3 transverse elliptic	

Ad. 42: Pistil: openness of disc



The position of the disc and carpel

1
closed

3
partly open

5
fully open

Ad. 44: Pistil: texture of the disc

1
leathery

2
intermediate

3
fleshy

Ad. 46: Petaloid pistil on the most complex form

1
absent

9
present

Ad. 47: Petaloid pistil on the most complex form: type

1
only stigma

2
partly petaloid

3
completely petaloid

Ad. 50: Flowering: time of beginning of the first flowering

The beginning of flowering is determined when 10% of all flower buds on the trail plants have opened.

9. Literature

Brickell, C., Editor-in Chief, 2003: A-Z Encyclopedia of Garden Plants. The Horticulture Society.

Rogers, A., 1995: Peonies. Timber Press.

Harding, A., 1993: The Peony. Sagapress/Timber press.

Wang Lian-ying, 1997: Pictorial Record of Chinese Tree peony Varieties. Chinese Forestry Publishing House

Li Jia -jue, Zhang,Xi-fang, Zhao Xiao-qing, 2011: Tree peony in China. Chinese Encyclopedia Publishing House.

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	*Paeonia suffruticosa, Paeonia Jishanensis, Paeonia ostii, Paeonia rockii, Paeonia delavayi*
1.2 Common name	Tree Paeony
1.3 Species	

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 Vegetatively propagated varieties [ ]

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	Kao, Shichifukujin	1[ ]
	semi-upright	Wu Long Peng Sheng	2[ ]
	spreading	Zhao Fen	3[ ]
5.2 (2)	**Plant: height**		
	very short		1[ ]
	very short to short		2[ ]
	short	Shan Hu Tai	3[ ]
	short to medium		4[ ]
	medium	Kao, LuoYang Hong	5[ ]
	medium to tall		6[ ]
	tall	Hanakisoi	7[ ]
	tall to very tall		8[ ]
	very tall		9[ ]

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

	Characteristics	Example Varieties	Note
5.3 (8)	**One year old branch: length**		
	very short		1[ ]
	very short to short		2[ ]
	short	Shan Hu Tai, Ying Luo Bao Zhu	3[ ]
	short to medium		4[ ]
	medium	Luo Yang Hong, Zhao Fen	5[ ]
	medium to long		6[ ]
	long	Tian Xiang Zhan Lu, Zi Die Ying Feng	7[ ]
	long to very long		8[ ]
	very long		9[ ]
5.4 (10)	**Petiole: length**		
	very short		1[ ]
	very short to short		2[ ]
	short	Mei Ren Hong, Yi Pin Zhu Yi	3[ ]
	short to medium		4[ ]
	medium	Lui Yang Hong	5[ ]
	medium to long		6[ ]
	long	Yu Ji Yan Zhuang	7[ ]
	long to very long		8[ ]
	very long		9[ ]

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

	Characteristics	Example Varieties	Note
5.5 (12)	**Leaf: type**		
	pinnate	Zhong Sheng Hei	1[ ]
	bipinnate	Luo Yang hong	2[ ]
5.6 (14)	**Leaf: length**		
	very short		1[ ]
	very short to short		2[ ]
	short	Mei Ren Hong	3[ ]
	short to medium		4[ ]
	medium	Luo Yang Hong	5[ ]
	medium to long		6[ ]
	long	Rou Fu Rong	7[ ]
	long to very long		8[ ]
	very long		9[ ]
5.7 (15)	**Leaf: width**		
	very narrow		1[ ]
	very narrow to narrow		2[ ]
	narrow	Yin Hong Qiao Dui	3[ ]
	narrow to medium		4[ ]
	medium	Luo Yang Hong	5[ ]
	medium to broad		6[ ]
	broad	Rou Fu Rong	7[ ]
	broad to very broad		8[ ]
	very broad		9[ ]

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

	Characteristics	Example Varieties	Note
5.8 (19)	**Lateral leaflets: shape**		
	lanceolate		1[ ]
	ovate		2[ ]
	elliptic		3[ ]
	broad elliptic		4[ ]
	broad ovate		5[ ]
5.9 (20)	**Lateral leaflets: depth of sinus**		
	absent or very shallow		1[ ]
	very shallow to shallow		2[ ]
	shallow		3[ ]
	shallow to medium		4[ ]
	medium		5[ ]
	medium to deep		6[ ]
	deep		7[ ]
	deep to very deep		8[ ]
	very deep		9[ ]

TECHNICAL QUESTIONNAIRE Page {x} of {y}	Reference Number:	
Characteristics	Example Varieties	Note
5.10 (23) **Flower: most complex form**		
single form	Shu Sheng Peng Mo	1[ ]
lotus form	Yu Ban Bai	2[ ]
chrysanthemum form	Cong Zhong Xiao, Ru Hua Si Yu	3[ ]
rose form	Luo Yang Hong	4[ ]
golden stamen form	Yao Huang	5[ ]
anemone form	Yin Si Guan Ding	6[ ]
golden circle form	Fen Mian Tao Hua	7[ ]
crown form	Shou An Hong	8[ ]
globular form	Fen Yu Qiu	9[ ]
hundred proliferate form	Jun Yan Hong	10[ ]
crown proliferate form	Xian Tao	11[ ]
5.11 (26) **Flower: main color**		
RHS Colour Chart (indicate reference number)		
5.12 (27) **Flower: secondary color**		
RHS Colour Chart (indicate reference number)		
5.13 (28) **Flower: distribution of secondary color**		
none	Luo Yang Hong	1[ ]
stripe	He Pin Hua Er Qiao	2[ ]
block	Hua Er Qiao	3[ ]
center	Yuan Yang Pu	4[ ]
circle	Tao Yang Jin	5[ ]

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

	Characteristics	Example Varieties	Note
5.18 (29)	**Flower: petaloid stamens on most cpmplex form**		
	none or very few	Renkaku	1[ ]
	few	Yu Ban Bai	2[ ]
	medium	Luo Yang Hong	3[ ]
	many	Kun Shan Ye Guang	4[ ]
	very many	Tao Hong Xian Mei	5[ ]
5.14 (32)	**Petal: basal blotch (inner side)**		
	absent	Zhao Fen	1[ ]
	present	Luo Yang Hong	9[ ]
5.15 (33)	**Petal: shape of blotch**		
	lanceolate		1[ ]
	narrow ovate		2[ ]
	oblong		3[ ]
	oblanceolate		4[ ]
	ovate		5[ ]
	broad oblong		6[ ]
	broad ovate		7[ ]
	oblate		8[ ]
	narrow obovate		9[ ]
	obovate		10[ ]
	circular		11[ ]
	square		12[ ]
	obtriangular		13[ ]

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

	Characteristics	Example Varieties	Note
5.15 (34)	**Petal: size of blotch**		
	very small	Hu Hong	1[ ]
	small	Luo Yang Hong	2[ ]
	medium	Xiao Hu Die	3[ ]
	large	Shu Sheng Peng Mo	4[ ]
	very large	Zhong Ban Bai	5[ ]
5.16 (35)	**Petal: color of blotch**		
	white	Zheng Chun	1[ ]
	red	High Noon	2[ ]
	purple red	Xue Hai Dan Xin	3[ ]
	red brown	Xue Hai Yin Zhen	4[ ]
	dark purple or black	Zi Die Ying Feng	5[ ]
5.17 (39)	**Stamen: main color of filaments**		
	white	Renkaku	1[ ]
	light yellow	Xue Lian	2[ ]
	pink	Zhao Fen	3[ ]
	light purple	Luo Yang Hong	4[ ]
	dark purple	Yan Long Zi Zhu Pan	5[ ]
5.18 (41)	**Pistil: color of stigma**		
	light yellow	Renkaku, Yu Ban Bai	1[ ]
	pink	Zhao Fen	2[ ]
	red	Guo Qi Hong	3[ ]
	purple red	Luo Yang Hong	4[ ]
	purplish black	Ye Guang Bei	5[ ]
	black	Yan Long Zi Zhu Pan	6[ ]

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	Characteristics	Example Varieties	Note
5.19 (42)	**Pistil: openness of disc**		
	closed		1[ ]
	partly open		3[ ]
	fully open		5[ ]
5.20 (43)	**Pistil: pubescence of carpels**		
	absent or sparse	Guo Qi Hong	1[ ]
	medium	High Noon	2[ ]
	dense	Luo Yang Hong	3[ ]
5.21 (45)	**Pistil: color of disc**		
	yellowish white	Renkaku, Xue Lian	1[ ]
	yellow	Hua Xia Yi Pin Huang	2[ ]
	pink	Zhao Fen	3[ ]
	purple red	Xue Hai Dan Xin	4[ ]
	dark purple	Yan Long Zi Zhu Pan	5[ ]
5.22 (46)	**Petaloid pistil on the most complex form**		
	absent		1[ ]
	present		9[ ]
5.23 (47)	**Petaloid pistil on the most complex form: type**		
	only stigma		1[ ]
	partly petaloid		2[ ]
	completely petaloid		3[ ]

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	Characteristics	Example Varieties	Note
5.24 (48)	**Petaloid pistil on the most complex form: color**		
	white only	Zhi Hong Zheng Yan	1[ ]
	green and white	Yan Zhi Dian Cui	2[ ]
	green only	Kun Shan Ye Guang	3[ ]
	green and red	Wu Long Peng Sheng	4[ ]
5.25 (49)	**Flower: fragrance**		
	weak	Yu Ban Bai	1[ ]
	medium	Luo Yang Hong	2[ ]
	strong	Guan Qun Fang	3[ ]
5.26 (50)	**Flowering: time of beginning of the first flowering**		
	very early		1[ ]
	very early to early		2[ ]
	early	Huo Lian Jin Dan	3[ ]
	early to medium		4[ ]
	medium	Luo Yang Hong	5[ ]
	medium to late		6[ ]
	late	High Noon	7[ ]
	late to very late		8[ ]
	very late		9[ ]

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6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the **similar** variety(ies)	Describe the expression of the characteristic(s) for **your** candidate variety
Example	*Plant: height*	*medium*	*short*

Comments:

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

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

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

Yes [ ] No [ ]

(If yes, please provide details)

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

Yes [ ] No [ ]

(If yes, please provide details)

7.3 Other information

7.3.1 Main use

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

7.3.2 A representative color photograph of the variety should accompany the Technical Questionnaire.

8. Authorization for release

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

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

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

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

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

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

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

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

(a) Microorganisms (e.g. virus, bacteria, phytoplasma) Yes [ ] No [ ]

(b) Chemical treatment (e.g. growth retardant, pesticide) Yes [ ] No [ ]

(c) Tissue culture Yes [ ] No [ ]

(d) Other factors Yes [ ] No [ ]

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

……

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 docuument]