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GENEVA

DRAFT**LILY**

UPOV Code: LILIU

*Lilium L.***GUIDELINES****FOR THE CONDUCT OF TESTS****FOR DISTINCTNESS, UNIFORMITY AND STABILITY***prepared by experts from the Netherlands*

*to be considered by the
Technical Working Party for Ornamental Plants and Forest Trees
at its forty-first session, to be held in Wageningen, Netherlands, from June 9 to 13, 2008*

Alternative Names: *

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Lilium L.</i>	Lily	Lys	Lily	

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 *Lilium* L. of the family *Liliaceae*.

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 bulbs.

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

vegetatively propagated varieties:

a minimum of 30 bulbs, of sufficient size to show full flowering in the first year; for full flowering the following size is recommended: hybrids with an Oriental parent: 16-18, all other types 14-16. Bulbs should have one vegetation point only.

seed propagated varieties:

a minimum of 300 seeds with a germination capacity of at least 50%.

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.

3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 20 plants for vegetatively propagated varieties and 50 plants for seed propagated varieties.

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*

3.5.1 Vegetatively propagated varieties: unless otherwise indicated, all observations on single plants should be made on 10 plants or parts taken from each of 10 plants and any other observations made on all plants in the test.

3.5.2 Seed-propagated varieties: unless otherwise indicated, all observations on single plants should be made on 30 plants or parts taken from each of 30 plants and any other observations made on all plants in the test.

3.5.3 Unless otherwise indicated, all observations should be made at the time of anther dehiscence of the first flower.

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 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 between 6 and 35 plants, 1 off-type is allowed. In the case of a sample size between 36 and 82 plants, 2 off-types are allowed.

4.2.3 The assessment of uniformity for seed-propagated varieties should be according to the recommendations for cross-pollinated varieties in the General Introduction.

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 tested, either by growing a further generation, or by testing a new seed or 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) Flower: attitude of perianth (excluding pedicel) (characteristic 15)
- (b) Flower: shape of perianth (excluding pedicel) (characteristic 16)

- (c) Flower: tepal: main color of center (characteristic 19)
- (d) Tepal: number of papillae and/or spots (characteristic 26)
- (e) Tepal: color of papillae and/or spots (characteristic 28)
- (f) Classification of *Lilium* by cultivar groups:

1. Asiatic group

‘real’ Asiatics and look-alikes.

Definition: Flowering time: early; lilies with upright or outward facing flowers, flowers varying from bowl shaped to flattened- bowl shaped, no perfume.

2. Trumpet group

‘real’ Trumpets and look-alikes

Definition: Flowering time: medium; lilies with trumpet shaped flowers, flowers varying from semi upright to semi drooping.

3. Oriental group

‘real’ Orientals and look-alikes

Definition: Flowering time: late; lilies with mostly large semi upright to outward facing flowers, flowers varying from flattened bowl-shaped to mostly flat and with an intense perfume.

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)-(d) 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			
QN	short	basse	niedrig		Orange Pixie	3
	medium	moyenne	mittel		Casablanca	5
	tall	haute	hoch		Golden Tycoon	7
2. (*) (+)	Stem: anthocyanin coloration	Tige: pigmentation anthocyanique (au tiers moyen)	Stengel: Anthocyanfärbung (im mittleren Drittel)			
QN (a)	absent or weak				Casablanca, White Europe, Zanlophator	1
	medium					2
	strong				Conception, Tresor	3
3.	Stem: number of leaves	Tige: nombre de feuilles au tiers moyen	Stengel: Anzahl Blätter im mittleren Drittel			
QN (a)	few	petit	gering		Vermeer	3
	medium	moyen	mittel			5
	many	grand	gross			7
4. (*) (+)	Leaf: arrangement	Feuilles: disposition	Blatt: Anordnung			
	alternate	alternées	wechselständig			1
	opposite (decussate)	opposées	gegenständig		Aristo, Vedeo	2
	whorled	verticillées	quirlig		Kurumayuri	3
	spiral				Example from Japan	4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
5.	Leaf: length	Feuille: longueur	Blatt: Länge			
QN (a)	short	courte	kurz		Denia, Peach Dwarf	3
	medium	moyenne	mittel		Lorina, Mero Star, Vedea	5
	long	longue	lang		White Europe, Zanlophator	7
6.	Leaf: width	Feuille: largeur	Blatt: Breite			
QN (a)	narrow	étroite	schmal		Pink Pixie	3
	medium	moyenne	mittel		Golden Tycoon, White Europe,	5
	broad	large	breit		Acapulco, Helvetia	7
7. (*)	Leaf: variegation	Feuille:	Blatt:			
QL	absent					1
	present				Chotaro	9
8.	Leaf: glossiness of upper side	Feuille: lustre de la face supérieure	Blatt: Glanz der Oberseite			
QN	absent or very weak	nul ou très faible	fehlend oder sehr gering			1
	weak	faible	gering		Acapulco, Vedea	3
	medium	moyen	mittel		White Elegance	5
	strong	fort	stark		Golden Tycoon	7
	very strong	très fort	sehr stark			9
9. (+)	Leaf: cross section	Feuille: section transversale				
QL (a)	angled	coudée	gewinkelt		Da Vinci	1
	flat	droite	flach		Vedea	2

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
10. (+)	Flower: main color of bud					
PQ	white	blanc	weiss			1
	green	vert	grün			2
	yellow green	vert jaune	gelbgrün			3
	yellow	jaune	gelb			4
	orange	orange	orange			5
	orange pink	rose orange	orangerosa			6
	pink	rose	rosa			7
	red	rouge	rot			8
	purple red	rouge pourpre	purpurrot			9
	purple	pourpre	purpur			10
	purple brown	brun pourpre	purpurbraun			11
11. (*) (+)	Inflorescence: type	Inflorescence: type	Blütenstand: Typ			
QL	racemose	racème	Traube		Helvetia, Vedeia	1
	umbellate to racemose				Pavia	2
12.	Inflorescence: number of flowers	Inflorescence: nombre de fleurs	Blütenstand: Anzahl Blüten			
QN	one or very few					1
	few	petit	gering		Brindisi, Zanlophator	3
	medium	moyen	mittel		Golden Tycoon, Siberia	5
	many	grand	gross		Monte Negro	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
13.	Inflorescence: pubescence	Inflorescence: pilosité	Blütenstand: Behaarung			
QN	absent or very weak	absente ou très faible	fehlend oder sehr gering		Val di Sole, White Europe	1
	weak	faible	gering		Helvetia, Vedeá	3
	medium	moyenne	mittel		Ceb Crimson	5
	strong	forte	stark		Tiny Scyline	7
	very strong	très forte	sehr stark			9
14.	Flower: type	Fleur: type	Blüte: Typ			
(+)						
QL	single	simple	einfach		Golden Tycoon	1
	semi double					2
	double	double	gefüllt		Little Kiss	3
15.	G Flower: attitude of (*) perianth (excluding (+) pedicel)	Fleur: port de l'axe	Blüte: Stellung der Längsachse			
PQ	erect	dressé	aufrecht		Tresor,	1
	erect to horizontal				Siberia, Stargazer	2
	horizontal	horizontal	waagrecht		Casablanca, White Heaven,	3
	recurved				xxx To be completed	4
16	G Flower: shape of (*) perianth (excluding (+) pedicel)					
PQ	trumpet					1
	bowl					2
	flat					3
	recurved					4

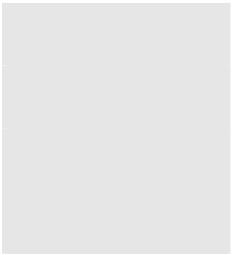
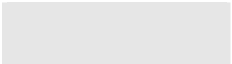
	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
17.	Flower: length of tepal	Fleur: largeur du tépale externe	Blüte: Breite des äußeren Perigonblatts			
QN (b)	short	étroit	schmal		Tresor, Val di Sole	3
	medium	moyen	mittel		Casablanca, Siberia	5
	long	large	breit		White Elegance, Zanlophator	7
18.	Flower: width of tepal	Fleur: largeur du tépale externe	Blüte: Breite des äußeren Perigonblatts			
QN (b)	narrow		schmal		Helvetia	3
	medium		mittel		Siberia, White Europe, White Lace	5
	broad	large	breit		Zanlophator	7
19. (*) (+)	G Flower: tepal: main color of center	Fleur: type de coloration de la face <u>interne</u> du tépale <u>interne</u>	Blüte: Art der Färbung der <u>Innenseite</u> des <u>inneren</u> Perigonblatts			
PQ (c)	RHS Colour Chart (indicate reference number)					
20 (*) (+)	Flower: tepal: main color of basal part	Fleur: type de coloration de la face <u>interne</u> du tépale <u>interne</u>	Blüte: Art der Färbung der <u>Innenseite</u> des <u>inneren</u> Perigonblatts			
PQ (c)	RHS Colour Chart (indicate reference number)					

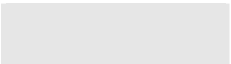
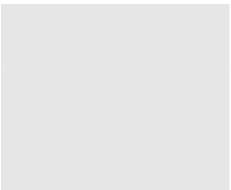
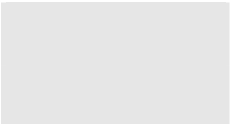
	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
21. (*) (+)	Flower: tepal: color of zone bordering on nectar furrow	Tépale: couleur à la base de la nervure principale (à l'exclusion du sillon nectarifaire)	Perigonblatt: Farbe an der Basis der Hauptader (Nektarfurche ausgenommen)			
PQ (c)	white	blanc	weiss		Vedea	1
	green	vert	grün		Brindisi	2
	yellow green	vert jaune	gelbgrün		Val di Sole	3
	yellow	jaune	gelb		Pavia	4
	orange	orange	orange		Tresor	5
	orange pink	rose orange	orangerosa			6
	pink	rose	rosa		Vedea	7
	red	rouge	rot		Mero Star	8
	purple red	rouge pourpre	purpurrot			9
	purple	pourpre	purpur			10
	purple brown	brun pourpre	purpurbraun			11
22 (*) (+)	Flower: tepal: main color of distal part	Fleur: type de coloration de la face <u>interne</u> du tépale <u>interne</u>	Blüte: Art der Färbung der <u>Innenseite</u> des <u>inneren</u> Perigonblatts			
PQ (c)	RHS Colour Chart (indicate reference number)					
23. (*) (+)	Flower: tepal: main color of marginal zone	Fleur: type de coloration de la face <u>interne</u> du tépale <u>interne</u>	Blüte: Art der Färbung der <u>Innenseite</u> des <u>inneren</u> Perigonblatts			
PQ (c)	RHS Colour Chart (indicate reference number)					
24.	Flower: main color of <u>outer</u> side of inner tepal	Fleur: couleur de fond de la face <u>externe</u> du tépale	Blüte: Grundfarbe der <u>Aussenseite</u> des Perigonblatts			
PQ	RHS Colour Chart (indicate reference number)					

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
25. (+)	Flower: color of nectar furrow					
PQ	white	blanc	weiss		Imperia, Pyramid	1
	green	vert	grün		Helvetia, Vede	2
	yellow green	vert jaune	gelbgrün		Double Surprise	3
	yellow	jaune	gelb		Mero Star	4
	orange	orange	orange		Tresor	5
	orange pink	rose orange	orangerosa			6
	pink				Minerva, Vermeer	7
	red	rouge	rot			8
	purple red	rouge pourpre	purpurrot			9
	purple	pourpre	purpur			10
	purple brown	brun pourpre	purpurbraun			11
26. (*) (+)	G Tepal: number of papillae and/or spots					
QN	(d) absent or very few				Siberia, White Europe	1
	few	petit	gering		Vede, Vermeer	3
	medium	moyen	mittel		Purple Rain, Stargazer	5
	many	grand	gross		Pink Mystery	7
27. (*) (+)	Tepal: size of area with papillae and/or spots					
QN	(d) absent or very small					1
	small	petite	klein		Pink Supreme	3
	medium	moyenne	mittel		Minerva, Vede	5
	large	grande	gross		Purple Rain	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
28. (*) (+)	G Tepal: color of papillae and/or spots	Tépale: taches sur les papilles	Perigonblatt: Flecken auf den Papillen			
PQ	white					1
	yellow					2
	brown yellow					3
	brown					4
	red brown					5
	pink					6
	red					7
	purple red					8
29.	Tepal: ribbing					
QN	(d) absent or very weak					1
	medium					2
	strong					3
30. (+)	Tepal: undulation of margin	Tépale: ondulation du bord	Perigonblatt: Wellung des Randes			
QN	(b) absent or very weak	absente ou très faible	fehlend oder sehr gering			1
	weak	faible	gering			3
	medium	moyenne	mittel			5
	strong	forte	stark		Vedea	7
	very strong	très forte	sehr stark			9
31. (+)	Tepal: type of undulation of margin	Tépale: type de l'ondulation du bord	Perigonblatt: Art der Wellung des Randes			
PQ	(b) fine only	seulement fine	nur fein		Vedea	1
	coarse only	seulement grossière	nur grob		Casablanca	2
	fine and coarse	fine et grossière	fein und grob			3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
32. (*)	Tepal: recurved part	Tépale: partie recourbée	Perigonblatt: zurückgebogener Teil			
QN	(c) tip only	extrémité seulement	nur Spitze		White Europe	1
	distal part only	partie distale seulement	nur oberer Teil		Casablanca	2
	whole tepal	tépale entier	gesamtes Perigonblatt			3
33. (*)	Tepal: degree of recurving	Tépale: degré de recourbure	Perigonblatt: Stärke der Biegung			
QN	(c) weak	faible	gering			3
	medium	moyen	mittel		Vedea	5
	strong	fort	stark		Casablanca	7
34 (*)	Tepal: shape of tip	Tépale: degré de recourbure	Perigonblatt: Stärke der Biegung			
QN	(c) acute					1
	obtuse					2
	rounded					3
	mucronate					4
	emarginate					5
35.	Stamen: length	Etamine: longueur	Staubgefäß: Länge			
QN	short	courte	kurz		Fangio	3
	medium	moyenne	mittel		Mero Star	5
	long	longue	lang		Casablanca	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
36. (*)	Stamen: main color of filament	Etamine: couleur principale du filet	Staubgefäß: Hauptfarbe des Staubfadens			
PQ	white	blanc	weiss		Verdi, Zanolphator	1
	green	vert	grün		Casablanca, White Europe	2
	yellow green	vert jaune	gelbgrün		Yelloween	3
	yellow	jaune	gelb		Golden Tycoon	4
	orange	orange	orange		Tresor	5
	orange pink	rose orange	orangerosa			6
	pink	rose	rosa		Vermeer	7
	red	rouge	rot			8
	purple red	rouge pourpre	purpurrot		Red Alert	9
	purple	pourpre	purpur			10
	purple brown	brun pourpre	purpurbraun			11
37. (*)	Stamen: color of anther	Etamine: couleur des anthères	Staubgefäß: Antherenfarbe			
PQ	orange brown	brun orangé	orangebraun			1
	orange yellow					2
	reddish brown	brun rougeâtre	rötlichbraun			3
	brown	brunes	braun			4
	purple	pourpre	purpur		Mero Star	5
	purple-red					6

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
38.	Pollen: color	Pollen: couleur	Pollen: Farbe			
PQ	light yellow	jaune clair	hellgelb			1
	medium yellow	jaune	gelb			2
	orange	orange	orange		Pink Supreme	3
	light brown	brun clair	hellbraun			4
	medium brown				Zanlophator	5
	orange brown	brun orangé	orangebraun		Casablanca, Sorbonne	6
	red brown	brun rougeâtre	rötlichbraun		Brindisi	7
	dark brown	brun foncé	dunkelbraun		Fangio	8
39. (*)	Style: main color	Style: couleur principale	Griffel: Hauptfarbe			
PQ	white	blanc	weiss			1
	green	vert	grün		Casablanca, White Europe	2
	yellow green	vert jaune	gelbgrün		Pink Supreme	3
	yellow	jaune	gelb		Golden Tycoon	4
	orange	orange	orange		Brindisi	5
	orange pink	rose orange	orangerosa			6
	pink	rose	rosa			7
	red	rouge	rot			8
	purple red	rouge pourpre	purpurrot		Red Alert	9
	purple	pourpre	purpur			10
	purple brown	brun pourpre	purpurbraun			11

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
40.	Stigma: color	Stigmate: couleur	Narbe: Farbe			
PQ	grey	gris	grau		d'Oleron	1
	grey-green					2
	green	vert	grün		White Europe	3
	yellow					4
	orange	orange	orange			5
	purple red	rouge pourpre	purpurrot		Casablanca	6
	purple	pourpre	purpur			7
	dark purple	pourpre foncé	dunkelpurpur			8
	brown	brun	braun			9
41.	Time of flowering	Époque de floraison	Zeitpunkt der Blüte			
QN	very early	très précoc	sehr früh			1
	early	précoc	früh			3
	medium	moyenne	mittel		Vedea	5
	late	tardive	spät			7
	very late	très tardive	sehr spät		Mero Star	9

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

- (a) To be examined on middle third of the stem
- (b) Unless otherwise indicated, all measurements on shape and size should be made on outer tepals.
- (c) Unless otherwise indicated, all observations on color should be made on the inner side of inner tepal, excluding papillae, spots and nectar furrow.
- (d) Unless otherwise indicated, all observations on papillae and/or spots and ribbing should be made on the inner side of inner tepal.

8.2 *Explanations for individual characteristics*

Ad. 1: Plant height

Should be measured from bottom of plant to top of inflorescence.

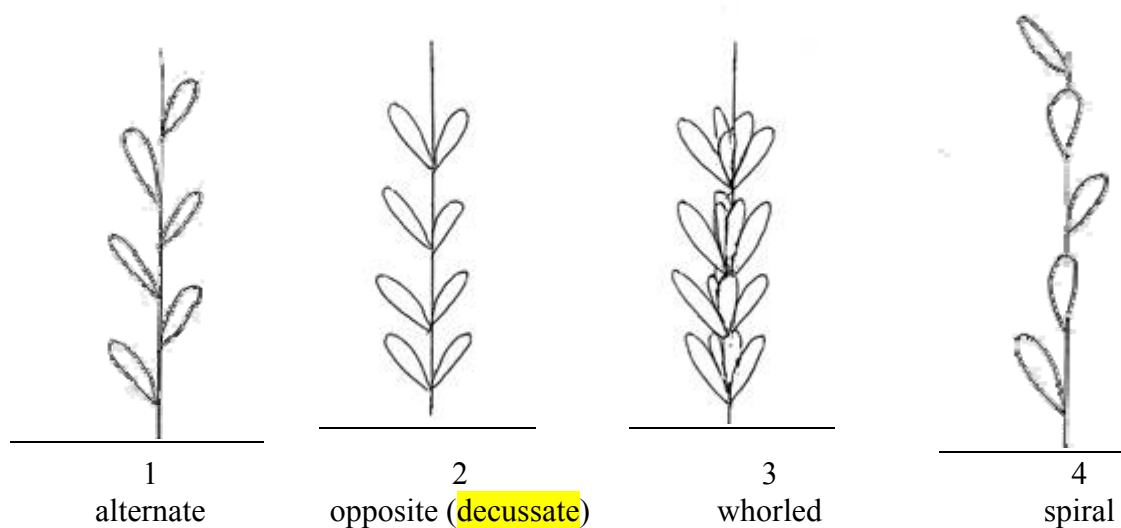
Ad. 2: Stem: anthocyanin coloration of middle third

strong
 medium
 absent or weak

3
 2
 1



Ad. 4: Leaf: arrangement



Ad. 9: Leaf: cross section

Leaf: cross section

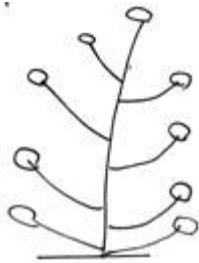
Angled : 

Flat : 

Ad. 10: Flower: main color of bud

Should be observed just before opening of the flower

Ad. 11: Inflorescence: type



1
racemose



2
umbellate to racemose

Ad. 14: Flower type

1 ≤ 6 tepals should be described as single,
7 ≤ 11 tepals should be classified as semi-double,
≥ 12 tepals should be described as double

Ad. 15: Flower: attitude of perianth (excluding pedicel)



1
erect



2
erect to horizontal



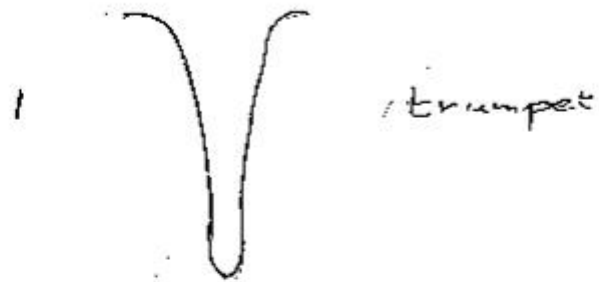
3
horizontal



4
recurved

Ad. 16: Flower: shape of perianth, (excluding pedicel)

16. Flower: shape of perianth



Ad. 19: Flower: tepal: main color of center

Ad. 20: Flower: tepal: main color of basal part

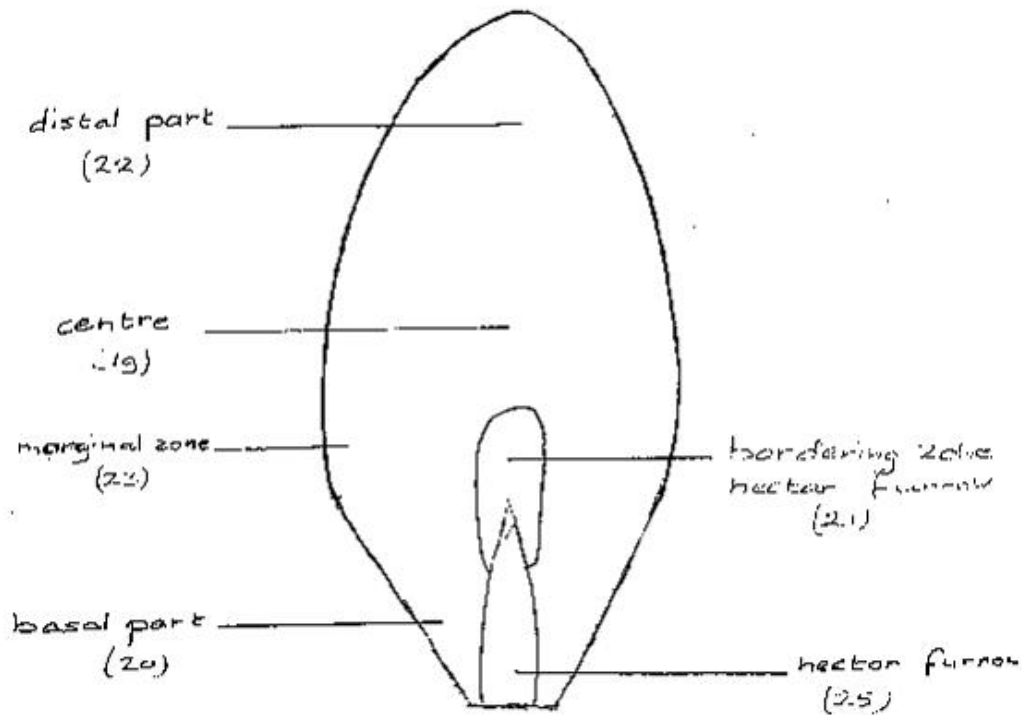
Ad. 21: Flower tepal: color of zone bordering on nectar furrow

Ad. 22: Flower: tepal: main color of distal part

Ad. 23: Flower tepal: main color of marginal zone

Ad. 25: Flower: color of nectar furrow

Tepal : chars. 19-23 and 25



Ad. 26: Tepal: number of papillae and/or spots

Ad. 27: Tepal: size of area with papillae and/or spots

Ad. 28: Tepal: color of papillae and/or spots

Papillae: Pimpled, with small, rounded, soft to firm, unequal bumps



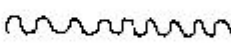
Spots: small areas of another color than the background color



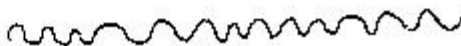
Ad. 30: Tepal: undulation of margin

Ad. 31: Tepal: type of undulation of margin

Tepal: type of undulation of
margin.

Fine only: 

Coarse only: 

Fine and coarse: 

9. Literature

(to be completed in next version)

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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	Application date: (not to be filled in by the applicant)
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TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights	
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1. Subject of the Technical Questionnaire	
1.1 Botanical name	Lilium L.
1.2 Common name	Lily

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:
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[#]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) Scales []
- (b) *in vitro* propagation []
- (c) other (state method) []

4.2.2 Seed []

4.2.3 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:
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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 Flower: attitude of perianth (excluding pedicel) (15)			
erect	Tresor,	1[]	
erect to horizontal	Siberia, Stargazer	2[]	
horizontal	Casablanca, White Heaven,	3[]	
recurved	xxx To be completed	4[..]	
5.2 Flower: shape of perianth (excluding pedicel) (16)			
trumpet		1[]	
bowl		2[]	
flat		3[]	
recurved		4[]	
5.3 Flower: tepal: main color of center (19)			
RHS Colour Chart (indicate reference number)			
5.4 Tepal: number of papillae and/or spots (26)			
absent or very few	Siberia, White Europe	1	
few	Vedea, Vermeer	3	
medium	Purple Rain, Stargazer	5	
many	Pink Mystery	7	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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Characteristics	Example Varieties	Note
5.5 Tepal: color of papillae and/or spots (28) white yellow brown yellow brown red brown pink red purple red		1[] 2[] 3[] 4[] 5[] 6[] 7[] 8[]
5.6 Classification of Lilium by species of hybrid groups: 1. Asiatic group ‘real’ Asiatics and look-alikes. Definition: Flowering time: early; lilies with upright or outward facing flowers, flowers varying from bowl shaped to flattened- bowl shaped, no perfume. 2. Trumpet group ‘real’ Trumpets and look-alikes Definition: Flowering time: medium; lilies with trumpet shaped flowers, flowers varying from semi upright to semi drooping. 3. Oriental group ‘real’ Orientals and look-alikes Definition: Flowering time: late; lilies with mostly large semi upright to outward facing flowers, flowers varying from flattened bowl-shaped to mostly flat and with an intense perfume.		

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>	<i>Flower: color</i>	<i>orange</i>	<i>orange red</i>
Comments:			

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