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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

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-second session, to be held in Angers, France, from September 14 to 18, 2009*

(Changes to documents TG/59/7(proj.3) are shown in red font)

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	Lily, azucena

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 cm (circumference)**, all other types 14-16 **cm (circumference)**. 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 of 20 plants, 1 off-type is allowed. In the case of a sample size of 50 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 **central part** (characteristic 19)
- (d) Tepal: number of papillae and/or spots (characteristic 27)
- (e) Tepal: color of papillae and/or spots (characteristic 29)
- (f) Classification of *Lilium* by cultivar groups:

Asiatic group:

- a. Flowering time: early (char 41); lilies with upright to nearly upright flowers (char 15), flowers varying from bowl shaped to flattened bowl shaped (char 16), no perfume (char 26).**
- b. Flowering time; early (char 41); lilies with horizontal (outward facing) flowers (char 15) varying from bowl shaped to flattened bowl shaped (char 16), no perfume (char 26).**

Trumpet group:

- c. Flowering time: medium (char 41); flowers semi upright to nearly horizontal (char 15), lilies with trumpet shaped flowers (char 16).**
- d. Flowering time: medium (char 41); flowers horizontal to drooping (char 15), lilies with trumpet shaped flowers (char 16).**

Oriental group :

- e. Flowering time: late (char 41); lilies with (mostly) large semi upright to large horizontal (outward facing) flowers (char 15), flowers flattened bowl shaped to flat and (mostly) with an intense perfume (char 26).**

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					
QN	short				Orange Pixie	3
	medium				Casablanca	5
	tall				Golden Tycoon	7
2. (*) (+)	Stem: anthocyanin coloration					
QN	(a) absent or weak				Casablanca, White Europe, Zanlophator	1
	medium					2
	strong				Conception, Tresor	3
3.	Stem: number of leaves					
QN	(a) few					3
	medium					5
	many					7
4. (*) (+)	Leaf: arrangement					
QL	alternate					1
	opposite (decussate)				Aristo, Vedeá	2
	whorled				Kurumayuri	3
	spiral				Example from Japan	4
5.	Leaf: length					
QN	(a) short				Denia, Peach Dwarf	3
	medium				Lorina, Mero Star, Vedeá	5
	long				White Europe, Zanlophator	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
6.	Leaf: width					
	(+)					
QN	(a) narrow				Pink Pixie	3
	medium				Golden Tycoon, White Europe	5
	broad				Acapulco, Helvetia	7
7.	Leaf: variegation					
	(*)					
QL	absent				Acapulco	1
	present				Chotaro	9
8.	Leaf: glossiness of upper side					
QN	absent or very weak					1
	weak				Acapulco, Vedeo	3
	medium				White Elegance	5
	strong				Golden Tycoon	7
	very strong					9
9.	Leaf: cross section					
	(+)					
QL	(a) flat				Vedeo	1
	V-shaped				Da Vinci	2

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
10.	Flower bud: main color					
(+)						
PQ	white					1
	green					2
	yellow green					3
	yellow					4
	orange					5
	orange pink					6
	pink					7
	red					8
	purple red					9
	purple					10
	purple brown					11
11.	Inflorescence: type					
(*)						
(+)						
QL	racemose				Helvetia, Vedeia	1
	umbellate to racemose				Pavia	2
12.	Inflorescence: number of flowers					
QN	one or very few					1
	few				Brindisi, Zanlophator	3
	medium				Golden Tycoon, Siberia	5
	many				Monte Negro	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
13.	Inflorescence: pubescence					
QN	absent or very weak				Val di Sole, White Europe	1
	weak				Helvetia, Vedeo	3
	medium				Ceb Crimson	5
	strong				Tiny Scyline	7
	very strong					9
14.	Flower: type					
(+)						
QL	single				Golden Tycoon	1
	semi double					2
	double				Little Kiss	3
15.	Flower: attitude of perianth (excluding pedicel)					
(*) (+)						
PQ	G erect				Tresor	1
	erect to horizontal				Siberia, Stargazer	2
	horizontal (outward facing)				Casablanca, White Heaven	3
	drooping				Galloway	4
16.	Flower: shape of perianth (excluding pedicel)					
(*) (+)						
PQ	G trumpet				White Elegance	1
	bowl				Siberia	2
	flat				Sugar Jewel	3
	recurved				Belletti	4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
17.	Flower: length of tepal					
QN	(b) short				Tresor, Val di Sole	3
	medium				Casablanca, Siberia	5
	long				White Elegance, Zanlophator	7
18.	Flower: width of tepal					
QN	(b) narrow				Helvetia	3
	medium				Siberia, White Europe, White Lace	5
	broad				Zanlophator	7
19. (*) (+)	Flower: tepal: main color of central part					
PQ	RHS Colour Chart (indicate reference number)					
20. (*) (+)	Flower: tepal: main color of basal part					
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					
PQ	(c) white				Vedea	1
	green				Brindisi	2
	yellow green				Val di Sole	3
	yellow				Pavia	4
	orange				Tresor	5
	orange pink					6
	pink				Vedea	7
	red				Mero Star	8
	purple red					9
	purple					10
	purple brown					11
22. (*) (+)	Flower: tepal: main color of distal part					
PQ	RHS Colour Chart (indicate reference number)					
23. (*) (+)	Flower: tepal: main color of marginal zone					
PQ	(c) RHS Colour Chart (indicate reference number)					
24. (+)	Flower: main color of <u>outer</u> side of inner tepal					
PQ	(c) 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				Imperia, Pyramid	1
	green				Helvetia, Vede	2
	yellow green				Double Surprise	3
	yellow				Mero Star	4
	orange				Tresor	5
	orange pink					6
	pink				Minerva, Vermeer	7
	red					8
	purple red					9
	purple					10
	purple brown					11
26.	Flower: fragrance					
QN	absent or weak					1
	medium					2
	strong					3
27.	Tepal: number of papillae and/or spots					
(*)						
(+)						
QN	(d) absent or very few				Siberia, White Europe	1
	few				Vedea, Vermeer	3
	medium				Purple Rain, Stargazer	5
	many				Pink Mystery	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
28. (*) (+)	Tepal: size of area with papillae and/or spots					
QN	(d) absent or very small					1
	small				Pink Supreme	3
	medium				Minerva, Vedeá	5
	large				Purple Rain	7
29. (*) (+)	Tepal: color of papillae and/or spots					
PQ	white				Siberia	1
	yellow				Conca d Or	2
	brown yellow					3
	brown					4
	red brown					5
	pink					6
	red					7
	purple red				Dizzy	8
30.	Tepal: ribbing					
QN	(d) absent or weak					1
	medium					2
	strong					3
31. (+)	Tepal: undulation of margin					
QN	(b) absent or very weak					1
	weak					3
	medium					5
	strong				Vedeá	7
	very strong					9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
32.	Tepal: type of undulation of margin					
(+)						
PQ	(b) fine only				Vedea	1
	coarse only				Casablanca	2
	fine and coarse					3
33.	Tepal: recurved part					
(*)						
(+)						
QN	(c) apex only				White Europe	1
	distal part only				Casablanca	2
	whole tepal					3
34.	Tepal: degree of recurving					
(*)						
QN	(c) weak					3
	medium				Vedea	5
	strong				Casablanca	7
34.	Tepal: shape of tip					
35.	Stamen: length					
QN	short				Fangio	3
	medium				Mero Star	5
	long				Casablanca	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
36. (*) (+)	Stamen: main color of filament					
PQ	white				Verdi, Zanlophator	1
	green				Casablanca, White Europe	2
	yellow green				Yelloween	3
	yellow				Golden Tycoon	4
	orange				Tresor	5
	orange pink					6
	pink				Vermeer	7
	red					8
	purple red				Red Alert	9
	purple					10
	purple brown					11
37. (*)	Stamen: color of anther					
PQ	orange brown					1
	orange yellow					2
	reddish brown					3
	brown					4
	purple				Mero Star	5
	purple-red					6

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
38.	Pollen: color					
PQ	light yellow					1
	medium yellow					2
	orange				Pink Supreme	3
	light brown					4
	medium brown				Zanlophator	5
	orange brown				Casablanca, Sorbonne	6
	red brown				Brindisi	7
	dark brown				Fangio	8
39. (*)	Style: main color					
PQ	white					1
	green				Casablanca, White Europe	2
	yellow green				Pink Supreme	3
	yellow				Golden Tycoon	4
	orange				Brindisi	5
	orange pink					6
	pink					7
	red					8
	purple red				Red Alert	9
	purple					10
	purple brown					11

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
40.	Stigma: color					
PQ	grey				d'Oleron	1
	grey-green					2
	green				White Europe	3
	yellow					4
	orange					5
	purple red				Casablanca	6
	purple					7
	dark purple					8
	brown					9
41.	Time of flowering					
QN	very early					1
	early					3
	medium				Vedea	5
	late					7
	very late				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

strong
medium
absent or weak

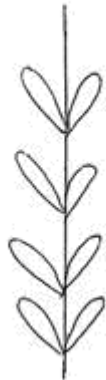
3
2
1



Ad. 4: Leaf: arrangement



1
alternate



2
opposite (**decussate**)



3
whorled



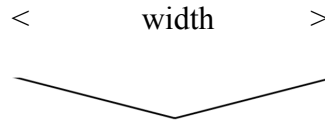
4
spiral

Ad. 6: Leaf: width

V-shaped leaves should be measured in a flattened way



V-shaped leaf:.....



...should be measured in a flattened way

Ad. 9: Leaf: cross section



1
flat



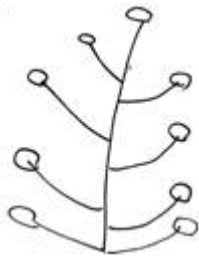
2
V-shaped

Ad. 10: Flower bud: main color

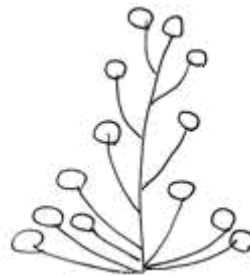
Main color is the color with the largest surface area. It should be observed just before opening of the flower.

Ad. 11: Inflorescence: type

Umbellate to racemose: First flowers (lowest) umbellate, further following flowers as a raceme (see picture note 2).



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

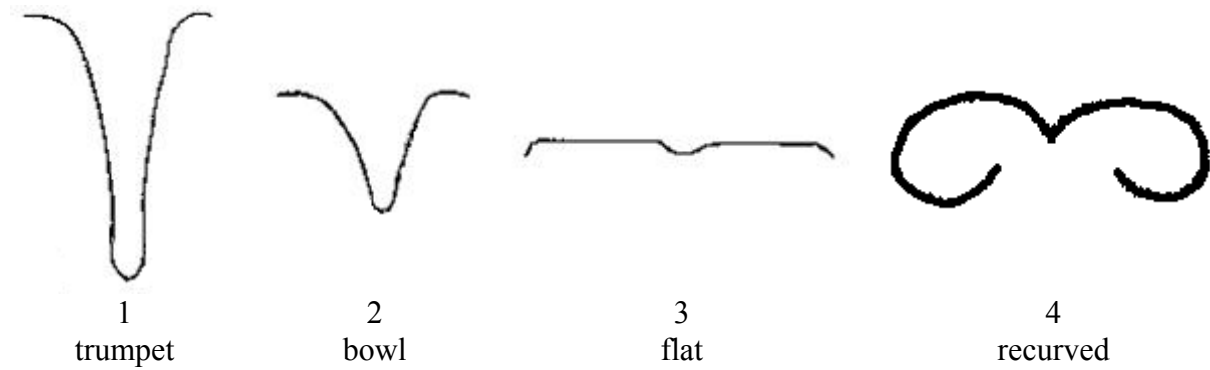


3
horizontal (outward facing)



4
drooping

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



Ad. 19: Flower: tepal: main color of central part.

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

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

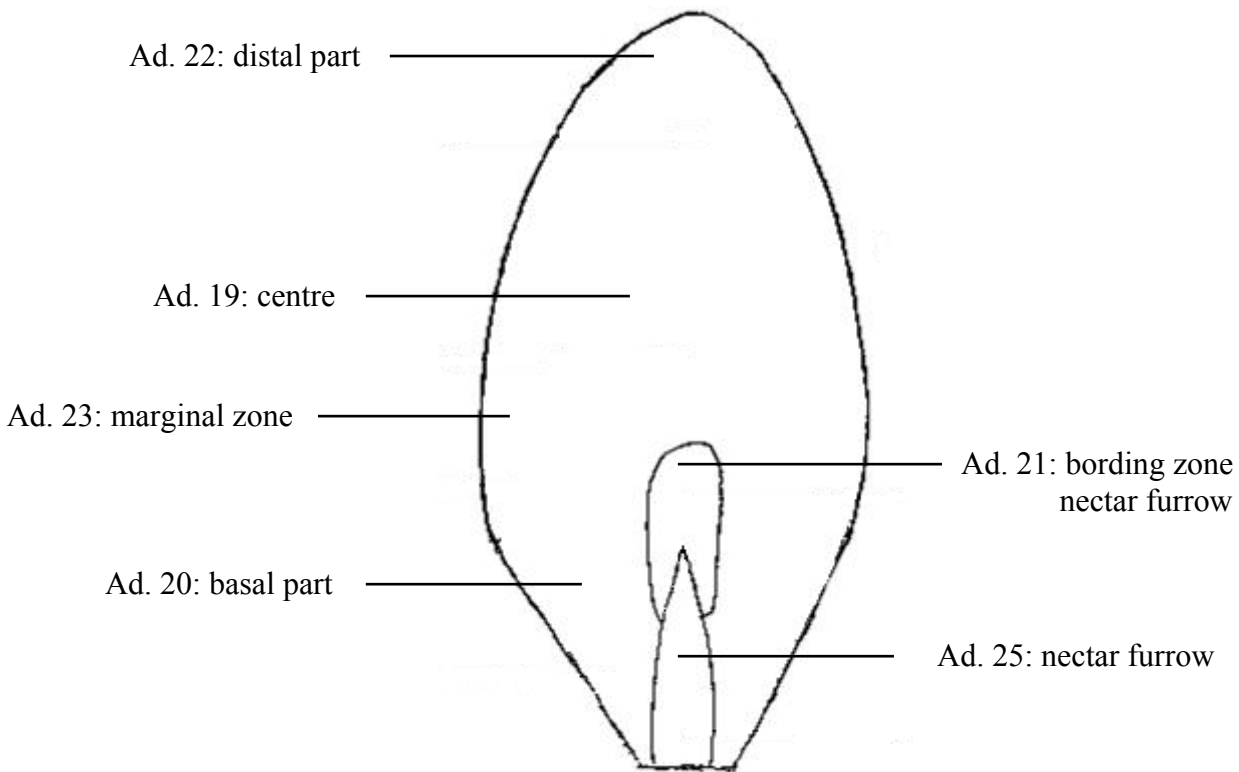
Ad. 22: Flower: tepal: main color of distal part

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

Ad. 24: Flower: main color of outer side of inner tepal

Ad. 25: Flower: color of nectar furrow

Main color is the color with the largest surface area.



Ad. 27: Tepal: number of papillae and/or spots

Ad. 28: Tepal: size of area with papillae and/or spots

Ad. 29: Tepal: color of papillae and/or spots

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



Spots: small areas of another color than the background color



Ad. 31: Tepal: undulation of margin



3
weak

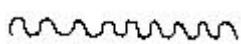


5
medium



7
strong

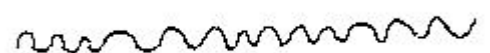
Ad. 32: Tepal: type of undulation of margin



1
fine only



2
coarse only



3
fine and coarse

Ad. 33: Tepal: recurved part

1
apex only



2
distal part only



3
whole tepal



Ad. 36: Stamen: main color of filament

Main color is the color with the largest surface area.

9. Literature

Tsukamoto, Y., 1991: The Grand Dictionary of Horticulture. Volume 5, The Shogakukan Ltd., Tokyo, JP, pp.198 to 211.

Kunishige, M., 1993: Lily: Breeding and Cultivation. The Seibundo-Shinkou Ltd., Tokyo, JP.

Shimizu, M., 1987: The Lilies of Japan: Species and Hybrid. The Seibundo-Shinkou Ltd., Tokyo, JP.

Tukamoto, Y., 1978: The Color Dictionary of Horticulture. The Hoiku Ltd., Tokyo, JP, pp. 93 to 125.

Leslie, A.C., 1982: The International Lily Register. RHS, London, GB, and yearly supplements [First (1983) to Twentieth (2002)].

**Victoria Matthews
The International Lily Register and Checklist 2007**

Feldmaier, C., McRae, J., 1982: Lilien. Eugen Ulmer, 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	<input type="text" value="Lilium L."/>	
1.2 Common name	<input type="text" value="Lily"/>	
2. Applicant		
Name	<input type="text"/>	
Address	<input type="text"/>	
Telephone No.	<input type="text"/>	
Fax No.	<input type="text"/>	
E-mail address	<input type="text"/>	
Breeder (if different from applicant)	<input type="text"/>	
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)	<input type="text"/>	
Breeder's reference	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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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:	
<p>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).</p>			
Characteristics	Example Varieties	Note	
<p>5.1 Flower: attitude of perianth (excluding pedicel) (15)</p>			
erect	Tresor	1[]	
erect to horizontal	Siberia, Stargazer	2[]	
horizontal	Casablanca, White Heaven	3[]	
drooping	Galloway	4[.]	
<p>5.2 Flower: shape of perianth (excluding pedicel) (16)</p>			
trumpet	White Elegance	1[]	
bowl	Siberia	2[]	
flat	Sugar Jewel	3[]	
recurved	Belletti	4[]	
<p>5.3 Flower: tepal: main color of central part (19)</p>			
<p>RHS Colour Chart (indicate reference number)</p>			
<p>5.4 Tepal: number of papillae and/or spots (27)</p>			
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 (29)	Tepal: color of papillae and/or spots		
	white	Siberia	1[]
	yellow	Conca d Or	2[]
	brown yellow		3[]
	brown		4[]
	red brown		5[]
	pink		6[]
	red		7[]
	purple red	Dizzy	8[]

5.6 Classification of Lilium by species of hybrid groups:

Asiatic group:

[]

- f. Flowering time: early (char 41); lilies with upright to nearly upright flowers (char 15), flowers varying from bowl shaped to flattened bowl shaped (char 16), no perfume (char 26).**
- g. Flowering time; early (char 41); lilies with horizontal (outward facing) flowers (char 15) varying from bowl shaped to flattened bowl shaped (char 16), no perfume (char 26).**

Trumpet group:

[]

- h. Flowering time: medium (char 41); flowers semi upright to nearly horizontal (char 15), lilies with trumpet shaped flowers (char 16).**
- i. Flowering time: medium (char 41); flowers horizontal to drooping (char 15), lilies with trumpet shaped flowers (char 16).**

Oriental group :

[]

- j. Flowering time: late (char 41); lilies with (mostly) large semi upright to large horizontal (outward facing) flowers (char 15), flowers flattened bowl shaped to flat and (mostly) with an intense perfume (char 26).**

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]