Plant	Thunberg lily, Showy lily	97(09010)	Primary essential character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Stem length	5 plants	Measurement	1:<=29 cm 2:30-59 cm 3:60-89 cm 4:90-119 cm 5:120-149 cm 6:150-179 cm 7:180-209 cm 8:>=210 cm	Length from ground to boot leaf
2	First peduncle	5 plants	Measurement	1:<=29 mm 2:30-59 mm 3:60-89 mm 4:90-119 mm 5:120-149 mm 6:150-179 mm 7:180-209 mm 8:>=210 mm	The first flower
3	Flower cluster type	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V	At the full flowering time of the first flower
4	Leaf type	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V 6:Type VI 7:Type VII 8:Type VIII 9:Type IX	Leaf at the middle part of stem
5	Leaf angle	5 plants	Measurement	1:<=29 2:30-59 3:60-89 4:90-119 5:120-149 6:>=150	Angle made by a line from leaf base to leaf tip, and a vertical line
6	Flower angle	5 plants	Measurement	1:<=29 2:30-59 3:60-89 4:90-119 5:120-149 6:>=150	Angle made by the central line of the first flower, and a vertical flower
7	Basal color of petal	5 plants	Observation		At the full flowering time of the first flower, central part of petal. Refer to RHS color chart
8	Flower diameter	5 plants	Measurement	1:<=29 mm 2:30-59 mm 3:60-89 mm 4:90-119 mm 5:120-149 mm 6:150-179 mm 7:180-209 mm 8:210-239 mm 9:>=240 mm	At the full flowering time of the first flower
9	Number of flowers	5 plants	Measurement	1:<=2 2:3-5 3:6-8 4:9-11 5:12-14 6:15-17 7:18-20 8:>=20	Normal flower number per plant
10	Flowering time	5 block	Observation	date	Date when 50% of flowers have bloomed
11	Leaf length	5 plants	Measurement	1:<=19 mm 2:20-29 mm 3:30-49 mm 4:50-79 mm 5:80-119 mm 6:120-169 mm 7:170-229 mm 8:230-299 mm 9:>=300 mm	Of the middle part of stem
12	Number of blotches of one inner perianth	5 plants	Measurement	0:0 1:1-9 2:10-19 3:20-29 4:30-39 5:40-49 6:50-59 7:60-69 8:>=70	At the full flowering time of the first flower

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No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Seed weight	1000 grains	Measurement	1:<=1.9 g 2:2.0-3.9 g 3:4.0-5.9 g 4:6.0-7.9 g 5:>=8.0 g	For seed propagation varieties
2	Bulb color	5 plants	Observation	1:White 2:Pale yellow 3:Yellow 4:Pale red purple 5:Red purple 6:Deep red purple 7:Red brown 8:Brown	Color at the harvesting time
3	Bulb type	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V 6:Type VI 7:Type VII 8:Type VIII 9:Type IX	
4	Scale width	5 plants	Measurement	1:<=4 mm 2:5-9 mm 3:10-14 mm 4:15-19 mm 5:20-24 mm 6:25-29 mm 7:30-34 mm 8:35-39 mm 9:>=40 mm	Central part of the outermost substantial scale
5	Scale length	5 plants	Measurement	1:<=9 mm 2:10-19 mm 3:20-29 mm 4:30-39 mm 5:40-49 mm 6:50-59 mm 7:60-69 mm 8:70-79 mm 9:>=80 mm	Central part of the outermost substantial scale
6	Scale thickness	5 plants	Measurement	1:<=1.9 mm 2:2.0-3.9 mm 3:4.0-5.9 mm 4:6.0-7.9 mm 5:8.0-9.9 mm 6:10.0-11.9 mm 7:>=12.0 mm	Central part of the outermost substantial scale
7	Plant height	5 plants	Measurement	1:<=29 cm 2:30-59 cm 3:60-89 cm 4:90-119 cm 5:120-149 cm 6:150-179 cm 7:180-209 cm 8:>=210 cm	Length of whole plant
8	Next stem length in culture by bulb on seed propagation variety	5 plants	Measurement	1:<=29 cm 2:30-59 cm 3:60-89 cm 4:90-119 cm 5:120-149 cm 6:150-179 cm 7:180-209 cm 8:>=210 cm	Length from ground to the boot leaf
9	Stem diameter	5 plants	Measurement	1:<=2.4 mm 2:2.5-4 mm 3:5-9 mm 4:10-14 mm 5:15-19 mm 6:20-24 mm 7:25-29 mm 8:>=30 mm	Diameter at 1/3 length from the boot leaf of stem
10	Upper part stem color	5 plants	Observation	1:Yellow green 2:Pale green 3:Green 4:Deep green 5:Pale brown 6:Brown 7:Deep brown	Upper 1/3 length of stem
11	Middle part stem color	5 plants	Observation	1:Yellow green 2:Pale green 3:Green 4:Deep green 5:Pale brown 6:Brown 7:Deep brown	Middle 1/3 length of stem
12	Lower part stem color	5 plants	Observation	1:Yellow green 2:Pale green 3:Green 4:Deep green 5:Pale brown 6:Brown 7:Deep brown	Lower 1/3 part of stem

Plant	Thunberg lily, Showy lily	97(09010)	Primary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
13	Stem hair	5 plants	Observation	0:Absent 9:Present	
14	Internode length	5 plants	Measurement	1:<=4 mm 2:5-9 mm 3:10-19 mm 4:20-39 mm 5:40-59 mm 6:60-79 mm 7:80-99 mm 8:100-119 mm 9:>=120 mm	Middle part of stem
15	Internode length under a boot leaf	5 plants	Measurement	1:<=4 mm 2:5-9 mm 3:10-19 mm 4:20-39 mm 5:40-59 mm 6:60-79 mm 7:80-99 mm 8:100-119 mm 9:>=120 mm	
16	2nd. peduncle length	5 plants	Measurement	1:<=29 mm 2:30-59 mm 3:60-89 mm 4:90-119 mm 5:120-149 mm 6:150-179 mm 7:180-209 mm 8:>=210 mm	The second flower
17	Peduncle leaf presence	5 plants	Observation	0:Absent 9:Present	
18	First peduncle angle	5 plants	Measurement	1:<=14 2:15-29 3:30-59 4:60-89 5:90-119 6:120-149 7:>=150	Angle made by peduncle of the first flower and a vertical line
19	Number of leaves	5 plants	Measurement	1:<=19 2:20-39 3:40-59 4:60-79 5:80-99 6:100-119 7:120-139 8:140-159 9:>=160	Number of leaves from ground to boot leaf
20	Leaf width	5 plants	Measurement	1:<=4 mm 2:5-9 mm 3:10-19 mm 4:20-29 mm 5:30-39 mm 6:40-49 mm 7:50-59 mm 8:60-69 mm 9:>=70 mm	Maximum leaf width of middle part of stem
21	Leaf color	5 plants	Observation	1:Yellow green 2:Pale green 3:Green 4:Deep green 5:Purple green	Leaf at the middle part of stem
22	Leaf picotee	5 plants	Observation	0:Absent 9:Present	
23	Curvature of middle part of leaf	5 plants	Observation	1:Incurved 2:Absent 3:Outcurved	Adaxial side of leaves on the middle part of stem
24	Curvature of apex of leaf	5 plants	Observation	1:Incurved 2:Absent 3:Outcurved	Adaxial side of leaves on the middle part of stem
25	Undulation of leaf edge	5 plants	Observation	0:Absent 9:Present	Leaf at the middle part of stem
26	Leaf twisting	5 plants	Observation	0:Absent 9:Present	Leaf at the middle part of stem

Plant	Thunberg lily, Showy lily	97(09010)	Primary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
27	Leaf hair	5 plants	Observation	0:Absent 9:Present	Leaf at the middle part of stem
28	Basal part color of petal	5 plants	Observation		At the full flowering time of the first flower. Refer to RHS color chart
29	Middle part color of petal	5 plants	Observation		At the full flowering time of the first flower. Refer to RHS color chart
30	Apex part color of petal	5 plants	Observation		At the full flowering time of the first flower. Refer to RHS color chart
31	Back side color of petal	5 plants	Observation		At the full flowering time of the first flower. Refer to RHS color chart
32	Blotch of one outer perianth	5 plants	Measurement	0:0 1:1-9 2:10-19 3:20-29 4:30-39 5:40-49 6:50-59 7:60-69 8:>=70	At the full flowering time of the first flower
33	Color of petal blotches	5 plants	Observation		At the flowering time of the first flower. Refer to RHS color chart
34	Blotch size of petal	5 plants	Measurement	1:<=0.9 mm 2:1.0-1.9 mm 3:2.0-2.9 mm 4:3.0-3.9 mm 5:4.0-4.9 mm 6:5.0-5.9 mm 7:6.0-6.9 mm 8:7.0-7.9 mm 9:>=8.0 mm	At the full flowering time of the first flower. Diameter of middle class size of blotch
35	Bud type	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V	Just before flowering
36	Flower typeing	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV	At the full flowering time of the first flower
37	Double flowered	5 plants	Observation	3:Single 7:Double	
38	Inner perianth width	5 plants	Measurement	1:<=9 mm 2:10-9 mm 3:20-19 mm 4:30-39 mm 5:40-49 mm 6:50-59 mm 7:60-69 mm 8:70-79 mm 9:>=80 mm	At the full flowering time of the first flower
39	Inner perianth length	5 plants	Measurement	1:<=19 mm 2:20-29 mm 3:30-49 mm 4:50-79 mm 5:80-119 mm 6:120-169 mm 7:170-229 mm 8:230-299 mm 9:>=300 mm	At the full flowering time of the first flower

Plant	Thunberg lily, Showy lily	97(09010)	Primary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
40	Inner perianth type	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V 6:Type VI 7:Type VII 8:Type VIII 9:Type IX	At the full flowering time of the first flower
41	Shape of apex of inner perianth	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V 6:Type VI 7:Type VII	At the full flowering time of the first flower
42	Curvature of inner perianth	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V	At the full flowering time of the first flower
43	Curvature of side part of inner perianth	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V 6:Type VI 7:Type VII 8:Type VIII 9:Type IX	At the full flowering time of the first flower
44	Outer perianth width	5 plants	Measurement	1:<=9 mm 2:10-19 mm 3:20-29 mm 4:30-39 mm 5:40-49 mm 6:50-59 mm 7:60-69 mm 8:70-79 mm 9:>=80 mm	At the full flowering time of the first flower
45	Outer perianth length	5 plants	Measurement	1:<=19 mm 2:20-29 mm 3:30-49 mm 4:50-79 mm 5:80-119 mm 6:120-169 mm 7:170-229 mm 8:230-229 mm 9:>=300 mm	At the full flowering time of the first flower
46	Outer perianth type	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V 6:Type VI 7:Type VII 8:Type VIII 9:Type IX	At the full flowering time of the first flower
47	Shape of apex of outer perianth	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V 6:Type VI 7:Type VII	At the full flowering time of the first flower
48	Curvature of outer perianth	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V	At the full flowering time of the first flower
49	Curvature of side part of outer perianth	5 plants	Observation	1:Type I 2:Type II 3:Type III 4:Type IV 5:Type V 6:Type VI 7:Type VII 8:Type VIII 9:Type IX	At the full flowering time of the first flower
50	Protrusion on perianth	5 plants	Observation	0:Absent 9:Present	At the full flowering time of the first flower
51	Anther length	5 plants	Measurement	1:<=4 mm 2:5-9 mm 3:10-14 mm 4:15-19 mm 5:20-24 mm 6:25-29 mm 7:30-34 mm 8:35-39 mm 9:>=40 mm	Just before anthesis

Plant	Thunberg lily, Showy lily	97(09010)	Primary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
52	Pollen color	5 plants	Observation		Anthesis time, refer to RHS color chart
53	Capsule length	5 plants	Measurement	1:<=19 mm 2:15-39 mm 3:40-59 mm 4:60-79 mm 5:80-99 mm 6:100-119 mm 7:120-139 mm 8:140-159 mm 9:>=160 mm	
54	Capsule width	5 plants	Measurement	1:<=4 mm 2:5-9 mm 3:10-14 mm 4:15-19 mm 5:20-24 mm 6:25-29 mm 7:30-34 mm 8:35-39 mm 9:>=40 mm	
55	Polyploidy	5 plants	Observation	1:Haploid 2:Diploid 3:Triploid 4:Tetraploid 5:Pentaploid 6:Hexaploid 7:Heptaploid 8:Octaploid 9:Other	

Plant	Thunberg lily, Showy lily	97(09010)	Secondary essential character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Stem length in forcing culture	5 plants	Measurement	1:<=29 cm 2:30-59 cm 3:60-89 cm 4:90-119 cm 5:120-149 cm 6:150-179 cm 7:180-209 cm 8:>=210 cm	Stem length in forcing culture
2	Abnormal flower ratio in forcing culture	5 blocks	Observation	0:0% 1:1-19% 3:20-39% 5:40-59% 7:60-79% 9:80-100%	Abnormal flower (calyx splitting, blind etc.) rate
3	Botrytis blight resistance	5 blocks	Observation	2:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 8:Very high	Degree of symptom occurrence

Plant	Thunberg lily, Showy lily	97(09010)	Secondary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Fusarium oxysporum resistance	5 blocks	Observation	2:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 8:Very high	Degree of symptom occurrence
2	Virus resistance	5 blocks	Observation	2:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 8:Very high	Degree of symptom occurrence

Plant	Thunberg lily, Showy lily	97(09010)	Tertiary essential character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Number of bublets	100 scales	Measurement	1:<=0.4 2:0.5-0.9 3:1.0-1.4 4:1.5-1.9 5:2.0-2.4 6:2.5-2.9 7:3.0-3.4 8:3.5-3.9 9:>=4.0	Average number of bulblets per scale
2	Bulblet weight	100 scales	Measurement	1:<=1.9 g 2:2.0-2.9 g 3:3.0-4.9 g 4:5.0-7.9 g 5:8.0-11.9 g 6:12.0-16.9 g 7:17.0-22.9 g 8:23.0-29.9 g 9:>=30.0 g	Average bulblet weight per scale

Plant	Thunberg lily, Showy lily	97(09010)	Tertiary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Storability	5 plants	Measurement	1:<=2 days 2:3-5 days 3:6-8 days 4:9-11 days 5:12-14 days 6:15-17 days 7:18-20 days 8:>=21 days	Days from the full flowering time to the wilting time of the first flower
2	Scale bitterness	5 plants	Sensory	0:Absent 2:Weak 5:Intermediate 7:Strong	
3	Fragrance	5 plants	Sensory	0:Absent 2:Weak 5:Intermediate 7:Strong	