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UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

JAPANESE PLUM

UPOV Code: PRUNU_SAL

Prunus salicina Lindl.

[*]

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from the European Community

to be considered by the
Technical Working Party for Fruit Crops
at its fortieth session, to be held in Angers, France, from September 21 to 25, 2009

Alternative Names:[*]

Botanical name	*English*	*French*	*German*	*Spanish*
Prunus salicina Lindl.	Japanese plum	Prunier Japonais	Ostasiatische Pflaume	Ciruelo Japonés

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 *Prunus salicina* Lindl.. These test guidelines may also be useful for the examination of hybrids involving *P. salicina*.

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 budsticks, dormant shoots or one-year-old trees grafted on a rootstock selected by the testing authority.

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

- 5 budsticks with sufficient buds to propagate 5 trees (to be sent at budding time); or
- 5 dormant shoots for grafting, sufficient to propagate 5 trees (to be sent at grafting time); or
- 5 virus-tested one-year-old trees grafted on a rootstock selected by the testing authority.

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

3.1.1 The minimum duration of tests should normally be two independent growing cycles.

3.1.2 The growing cycle is considered to be the duration of a single growing season, beginning with bud burst (flowering and/or vegetative), flowering and fruit harvest and concluding when the following dormant period ends with the swelling of new season buds.

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. Trees should only be pruned in the year of planting to ensure good branch formation.

3.3.2 In particular, it is essential that the trees produce a satisfactory crop of fruit in each of the two growing cycles.

3.3.3 The optimum stage of development for the assessment of each characteristic is indicated by a number in the second column of the Table of Characteristics. The stages of development denoted by each number are described at the end of Chapter 8.

3.4 Test Design

3.4.1 Each test should be designed to result in a total of at least 5 trees.

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

3.5 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, all observations should be made on 5 plants or parts taken from each of 5 plants. In the case of parts of plants, the number to be taken from each of the plants should be 2.

3.6 Additional Tests

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

4. Assessment of Distinctness, Uniformity and Stability

4.1 Distinctness

4.1.1 General Recommendations

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

4.1.2 Consistent Differences

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

4.1.3 Clear Differences

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

4.2 Uniformity

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

4.2.2 For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 5 plants, no off-types are 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 tested, either by growing a further generation, or by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

5. Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness are aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.

5.3 The following have been agreed as useful grouping characteristics:

(a) Fruit: size (characteristic 31)
(b) Fruit: ground color of skin (characteristic 44)
(c) Fruit: over color of skin (characteristic 46)
(d) Fruit: color of flesh (characteristic 50)
(e) Time of beginning of flowering (characteristic 66)
(f) Time of beginning of fruit ripening (characteristic 67)

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

6. Introduction to the Table of Characteristics

6.1 Categories of Characteristics

6.1.1 Standard Test Guidelines Characteristics

Standard Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which members of the Union can select those suitable for their particular circumstances.

6.1.2 Asterisked Characteristics

Asterisked characteristics (denoted by *) are those included in the Test Guidelines which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all members of the Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

6.2 States of Expression and Corresponding Notes

States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.

6.3 Types of Expression

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudo-qualitative) is provided in the General Introduction.

6.4 Example Varieties

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic.

6.5 Legend

(*) Asterisked characteristic – see Chapter 6.1.2

QL: Qualitative characteristic – see Chapter 6.3
QN: Quantitative characteristic – see Chapter 6.3
PQ: Pseudo-qualitative characteristic – see Chapter 6.3

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

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

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1.		**Tree: type of bearing**					
PQ		on spurs only					1
		spurs and long shoots					2
		long shoots only					3
2.		**Tree: vigor**					
(+)							
QN		weak				Black Gold	3
		medium				Autumn Giant, Black Diamond	5
		strong				Robusto, Royal Diamond, Taiyou	7
3.		**Tree: habit**					
PQ		upright				Freedom, Taiyou	1
		semi-upright				Laroda	2
		spreading				Shiro	3
		drooping				Weeping Santa Rosa	4
4.		**One-year-old shoot: color**					
(+)							
QN	**(a)**	green					1
		green brown					2
		yellow brown					3
		red brown					4
		purple red					5
5.		**Spur: length**					
QN		short				Laroda	3
		medium				Frontier	5
		long				October Purple	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
6.		**Vegetative bud: size**					
(+)							
QN	**(a)**	small				Harry Pickstone	3
		medium				Great Yellow	5
		large					7
7.		**Vegetative bud: shape of apex**					
(+)							
PQ	**(a)**	acute				Eldorado	1
		obtuse				Songold	2
		rounded				Satsuma	3
8.		**One-year-old shoot: position of vegetative bud in relation to shoot**					
(+)							
QN	**(a)**	adpressed				Queen Ann	1
		slightly held out				Satsuma	2
		markedly held out				Songold	3
9.		**Leaf blade: attitude in relation to shoot**					
QN	**(a)**	upwards				Menthley	3
		horizontal				October Purple	5
		downwards				Queen Ann	7
10.		**Leaf blade: length**					
QN	**(a)**	very short					1
		short				Honey Rosa	3
		medium				Taiyou	5
		long				Ozark Premier	7
		very long					9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
11.		**Leaf blade: width**					
QN	**(a)**	very narrow					1
		narrow				Beauty	3
		medium				Sordum	5
		broad				Conbination	7
		very broad					9
12. **(*)**		**Leaf blade: length/width ratio**					
QN	**(a)**	very small					1
		small					3
		medium					5
		large					7
		very large					9
13. **(*)** **(+)**		**Leaf blade: shape**					
PQ	**(a)**	ovate				Myrobalan 96009	1
		elliptic				October Purple, Syokou, Taiyou	2
		circular				Red Ace, Yellow Egg	3
		obovate				Kanro	4
14. **(*)** **(+)**		**Leaf blade: angle of apex (excluding tip)**					
QN	**(a)**	acute				Ozark Premier, Taiyou	1
		right angled				Satsuma	2
		obtuse				Methley	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
15.		**Leaf blade: intensity of green color of upper side**					
QN	**(a)**	light				Flaming Delicious, Taiyou	3
		medium				Abundance	5
		dark				Gaviota	7
16.		**Leaf: glossiness of upper side**					
QN	**(a)**	weak				Ozark Premier, Taiyou	1
		medium				Frontier	2
		strong				Nubiana	3
17.		**Leaf blade: pubescence of lower side**					
QN	**(a)**	weak				Redheart, Taiyou	1
		medium				Queen Ann	2
		strong					3
18. **(+)**		**Leaf blade: incisions of margin**					
PQ	**(a)**	crenate				Gaviota, Harry Pickstone	1
		bi-crenate				Golden Kiss, Pioneer	2
		serrate				Dapple Dandy	3
		bi-serrate					4
19. **(*)**		**Petiole: length**					
QN		short				Kelsey	3
		medium				Frontier	5
		long					7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
20.		**Petiole: pubescence of upper side**					
QN		absent					1
		present					9
21.		**Leaf: position of nectaries**					
QN	**(a)**	predominantly on base of leaf blade				Methley	1
		equally on base of leaf blade and on petiole				Nubiana	2
		predominantly on petiole				Queen Ann	3
22. (*)		**Pedicel: length**					
QN		short				Methley	3
		medium				Queen Ann	5
		long				Red Ace, Taiyou	7
23.		**Flowers: frequency of flowers with more than five petals**					
QN	**(b)**	few					3
		medium					5
		many					7
24.		**Flower: size**					
QN	**(b)**	small				Nubiana	3
		medium				October Purple, Taiyou	5
		large				Methley	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
25. **(+)**		**Flower: arrangement of petals (flowers with 5 petals only)**					
QN	**(b)**	free				Apple	1
		touching				Harry Pickstone	2
		overlapping				Beauty	3
26.		**Sepal: shape**					
PQ	**(b)**	triangular				Mariposa	1
		narrow/medium ovate				Harry Pickstone	2
		broad ovate				George Wilson	3
		narrow elliptic				Laroda	4
		medium/broad elliptic				Nubiana	5
27.		**Petal: length**					
QN	**(b)**	short				Shigyoku	3
		medium				Santa Rosa	5
		long				Burbank	7
28. **(*)** **(+)**		**Petal: shape**					
PQ	**(b)**	elliptic				Red Ace, Taiyou	1
		circular				Wickson	2
		oblate				Wright's Early	3
		obovate				Mammoth Cardinal	4
29.		**Petal: undulation of margin**					
QN	**(b)**	weak				Redheart, Taiyou	1
		medium				Queen Ann	2
		strong					3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
30.		**Stigma: position in relation to anthers**					
QN	**(b)**	below				Mariposa	1
		same level				Methley	2
		above				Mammoth Cardinal	3
31. (*)		**Fruit: size**					
QN	**(c)**	very small				Methley	1
		small				Allo, Eldorado	3
		medium				Shiro	5
		large				Angeleno, Taiyou	7
		very large				Songold	9
32.		**Fruit: length**					
QN	**(c)**	small				Eclipse	3
		medium				Harry Pickstone	5
		large				Valentine	7
33.		**Fruit: width**					
QN		small				Amber Jewel	3
		medium				Casselman	5
		large				Simka	7
34.		**Fruit: length/width ratio**					
QN	**(c)**	small				Gaviota	3
		medium				Betty Anne, Simka	5
		large				Valentine	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
35. (*) (+)		**Fruit: general shape (in lateral view)**					
PQ	**(c)**	oblong				Reubennel	1
		elliptic				Ozark Premier, Taiyou	2
		circular				Red Beauty, Shiro	3
		oblate				Friar	4
		cordate				Morettini 355	5
		obovate					6
		obcordate				Santa Rosa	7
36. (*)		**Fruit: symmetry (ventral view, along suture)**					
PQ	**(c)**	symmetric or slightly asymmetric					1
		moderately asymmetric					2
		strongly asymmetric					3
37. (*) (+)		**Fruit: shape of apex**					
PQ	**(c)**	pointed				Morettini 355, Taiyou	1
		flat				Black Gold, Green Sun	2
		depressed				Calita, Durado	3
38. (+)		**Fruit: shape of base**					
PQ	**(c)**	pointed				Golden Plumza	1
		rounded				Shiro	2
		flattened				Angeleno	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
39.		**Fruit: length of stalk**					
(+)							
QN	**(c)**	short				Shigyoku	3
		medium				Terada	5
		long				Hollywood	7
40.		**Fruit: depth of stalk cavity**					
QN	**(c)**	shallow				Taiyou	3
		medium				Nubiana	5
		deep				Black Gold	7
41.		**Fruit: width of stalk cavity**					
(+)							
QN	**(c)**	narrow				Koike Sumomo	3
		medium				Benryouzen	5
		broad				Finroza	7
42.		**Fruit: depth of suture**					
(+)							
PQ	**(c)**	shallow				Taiyou	1
		medium				Sordum	2
		deep				Akihime	3
43.	**(c)**	**Fruit: bloom of skin**					
(+)							
QN		absent or very weak					1
		weak				Red June	3
		medium				Ooishi Nakate	5
		strong				Sordum	7
		very strong					9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
44. (+) (*)		**Fruit: ground color of skin**					
PQ	**(c)**	not visible				Angeleno	1
		green				Gaviota, Santa Rosa	2
		yellowish-green				Songold, Taiyou	3
		yellow				Shiro	4
45. (*)		**Fruit: relative area of over-color**					
QN	**(c)**	absent or very small				Green Sun, Shiro	1
		small				Bragialla	3
		medium				Fortune	5
		large				Taiyou	7
		very large or whole surface					9
46. (*)		**Fruit: over color of skin**					
PQ	**(c)**	yellow				Golden Japan	1
		orange-yellow					2
		red				Red Beauty, Taiyou	3
		purple					4
		violet-blue					5
		dark blue				Black Amber	6
		black				Angeleno	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
47.		**Fruit: pattern of overcolor**					
PQ	**(c)**	isolated areas of flecks only					1
		covered all over with small flecks					2
		flush mottled				Omega	3
		solid flush with flecks					4
		solid flush only					5
48.		**Fruit: number of lenticels**					
QN	**(c)**	few					3
		medium					5
		many					7
49.		**Fruit: size of lenticels**					
QN	**(c)**	small					3
		medium					5
		large					7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
50. (*)		**Fruit: color of flesh**					
PQ	**(c)**	whitish				Taiyou	1
		green				Reina Claudia, Santa Rosa	2
		yellowish green					3
		yellow				Angeleno, Golden Japan, Reubennel	4
		orange				Black Amber, Sun Gold	5
		red				Santa Rosa	6
		dark red					7
		purplish					8
51.		**Fruit: firmness of flesh**					
QN	**(c)**	soft				Shiro	3
		medium				Frontier	5
		firm				Laroda	7
52.		**Fruit: juiciness**					
QN	**(c)**	low				Autumn Giant, Laroda	3
		medium				Gaviota, Ozark Premier	5
		high				Reubennel, Shiro, Taiyou	7
53.		**Fruit: acidity**					
(+)							
QN	**(c)**	low				Angeleno, Durado	1
		medium				Green Sun, Shiro, Taiyou	2
		high				Carmen, Obilnaja	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
54.		**Fruit: sweetness**					
(+)							
QN	**(c)**	low				Durado, Obilnaja	1
		medium				Angeleno, Shiro, Taiyou	2
		high				Black Gold, Laroda	3
55. **(*)**		**Fruit: degree of adherence of stone to flesh**					
QN	**(c)**	non-adherent				Fortune	1
		semi-adherent				Nubiana, Taiyou	2
		adherent				Sungold	3
56. **(*)**		**Stone: size**					
QN	**(c)**	small				Eldorado	3
		medium				Taiyou, Wickson	5
		large				Freedom	7
57. **(*)**		**Stone: shape in lateral view**					
PQ	**(c)**	narrow elliptic				Eldorado	1
		medium elliptic				Santa Rosa, Taiyou	2
		circular				Kelsey	3
		broad ovate					4
58. **(+)**		**Stone: shape in ventral view**					
QN	**(c)**	narrow elliptic				Eldorado	1
		medium elliptic				Santa Rosa, Taiyou	2
		broad elliptic				Kelsey	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
59.		**Stone: shape in basal view**					
PQ	**(c)**	narrow elliptic					1
		medium elliptic					2
		broad elliptic					3
60.		**Stone: symmetry in lateral view**					
QN	**(c)**	symmetric or slightly asymmetric					1
		moderatly asymmetric					2
		strongly asymmetric					3
61. (*)		**Stone: length/width ratio**					
QN	**(c)**	small				Harry Pickstone	1
		medium				Songold, Taiyou	2
		large				Nubiana	3
62. (+)		**Stone: texture of lateral surfaces**					
PQ	**(c)**	fine grained				Eldorado	1
		granular				Nubian	2
		rough				Songold	3
		hammered				Harry Pickstone	4
63.		**Stone: sharpness of edge**					
QN	**(c)**	weak				Santa Rosa	1
		medium				Nubia	2
		strong				Laroda	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
64. **(+)**		**Stone: width of stalk-end**					
QN	**(c)**	narrow				Frontier	3
		medium				Harry Pickstone	5
		broad					7
65. **(+)**		**Stone: angle of stalk-end**					
QN	**(c)**	acute				Laroda	1
		right angled				Santa Rosa	2
		obtuse				Nubiana	3
66. **(*)** **(+)**		**Time of beginning of flowering**					
QN		very early				Durado, Red Beaut	1
		early				Fortune, Mariposa, Taiyou	3
		medium				Green Sun, Nubiana	5
		late				Gaviota, Shiro	7
		very late				Angeleno, Simka	9
67. **(*)** **(+)**		**Time of beginning of fruit ripening**					
QN		very early				Beauty, Durado, Red Noble	1
		early				Mariposa, Shiro	3
		medium				Black Gold, Gaviota	5
		late				Angeleno, Nubiana, Taiyou	7
		very late				Autumn Giant, Golden King	9

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

(a) All observations on the bud, the leaf and the shoot should be made at the central third of the shoot. The observations on the leaf should be made on mature leaves from current season's shoots.

(b) All observations on the flower should be made at the time of full flowering.

(c) All observations on the fruit should be made at full maturity for consumption.

8.2 Explanations for individual characteristics

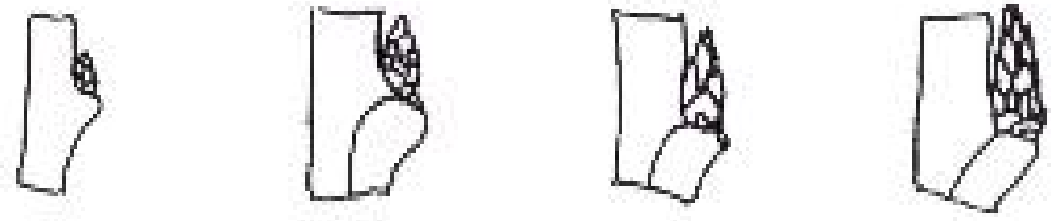
Ad. 2: Tree: vigor

To be provided

Ad. 4: One-year-old shoot: color

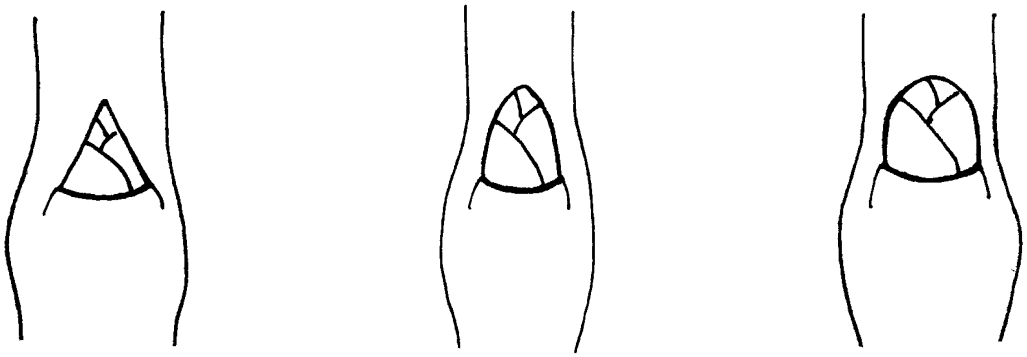
To be observed on the sunny side after removal of cuticle

Ad. 6: Vegetative bud: size



~~1~~ ~~very small~~ | 3 small | 5 medium | 7 large

Ad. 7: Vegetative bud: shape of apex

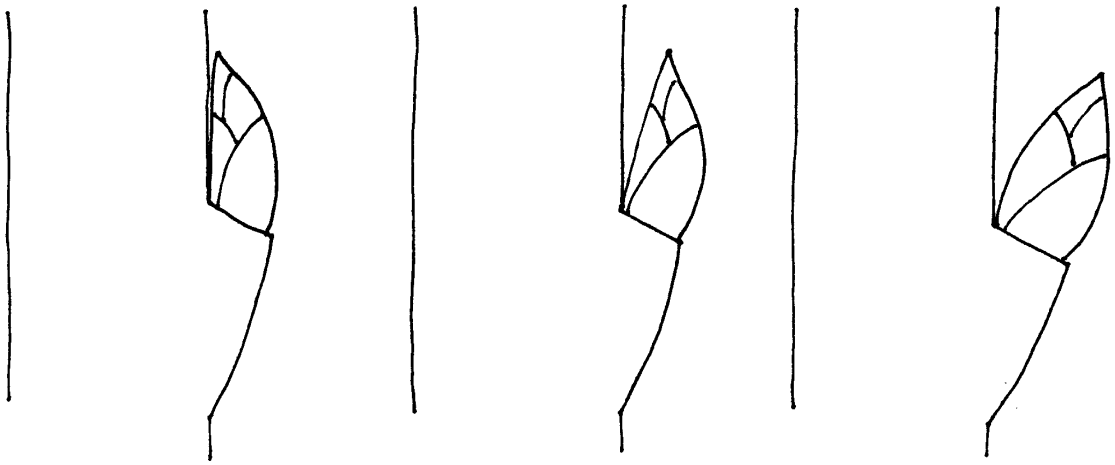


1
acute

2
obtuse

3
rounded

Ad. 8: One-year-old shoot: position of vegetative bud in relation to shoot

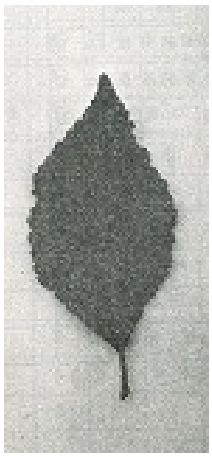


1
adpressed

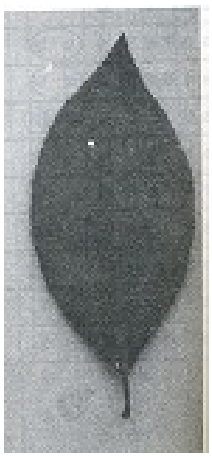
2
slightly held out

3
markedly held out

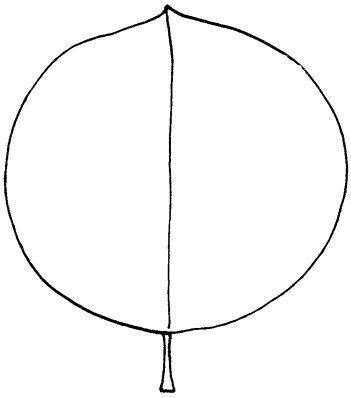
Ad. 13: Leaf blade: shape



1
ovate



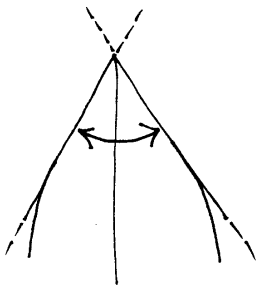
2
elliptic



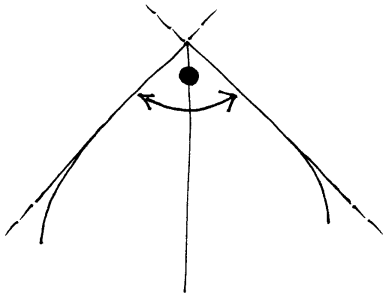
3
circular

4
obovate

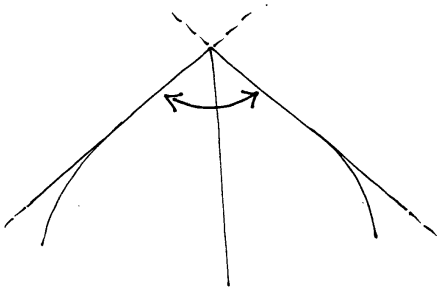
Ad. 14: Leaf blade: angle of apex (excluding tip)



1
acute



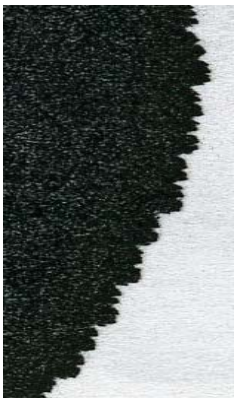
2
right angled



3
obtuse

Ad. 18: Leaf blade: incisions of margin

1
crenate



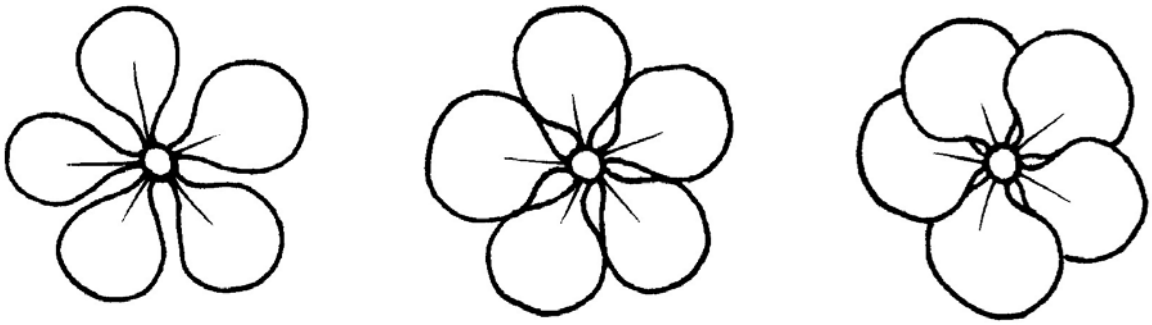
2
bi-crenate

3
serrate

Illustration required

4
bi-serrate

Ad. 25: Flower: arrangement of petals (flowers with 5 petals only)

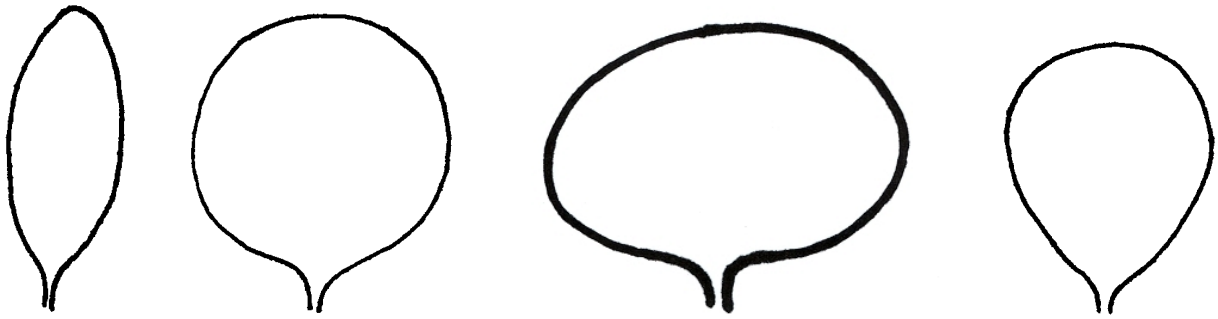


1
free

2
touching

3
overlapping

Ad. 28: Petal: shape



1
elliptic

2
circular

3
oblate

4
obovate

Ad. 35: Fruit: general shape (in lateral view)

To be provided

1 oblong | 2 elliptic | 3 circular | 4 oblate | 5 cordate | 6 obovate | 7 obcordate

Ad. 37: Fruit: shape of apex

To be provided

1	2	3
pointed	flat	depressed

Ad. 38: Fruit: shape of base

To be provided

1	2	3
pointed	rounded	flattened

Ad. 39: Fruit: length of stalk

3
short

5
medium

7
long

Ad. 41: Fruit: width of stalk cavity

3
narrow

5
medium

7
broad

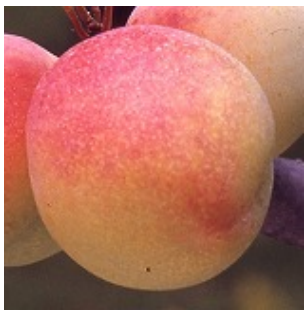
Ad. 42: Fruit: depth of suture

1
shallow

2
medium

3
deep

Ad. 43: Fruit: bloom of skin



3
weak

5
medium

7
strong

Ad. 44: Fruit: ground color of skin

To be observed without the bloom.

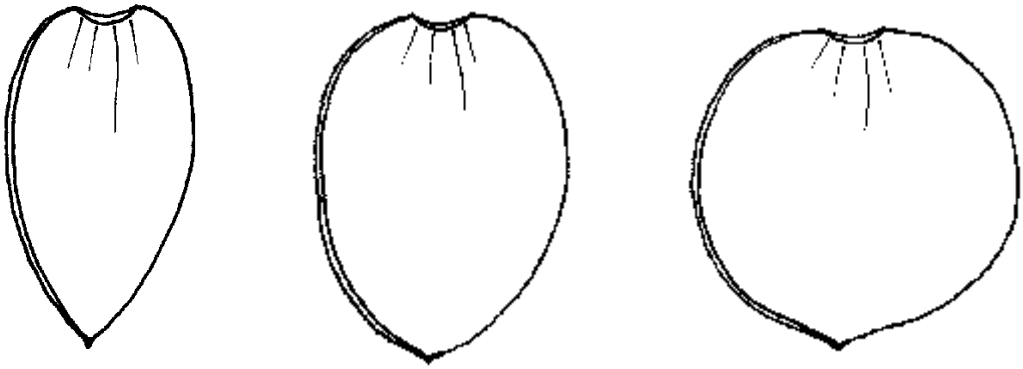
Ad. 53: Fruit: acidity

To be provided

Ad. 54: Fruit: sweetness

To be provided

Ad. 58: Stone: shape in ventral view



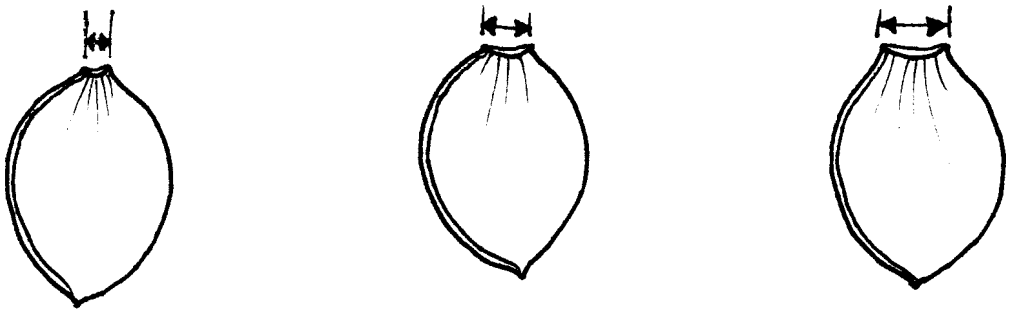
1	2	3
narrow elliptic	medium elliptic	broad elliptic

Ad. 62: Stone: texture of lateral surfaces

To be provided

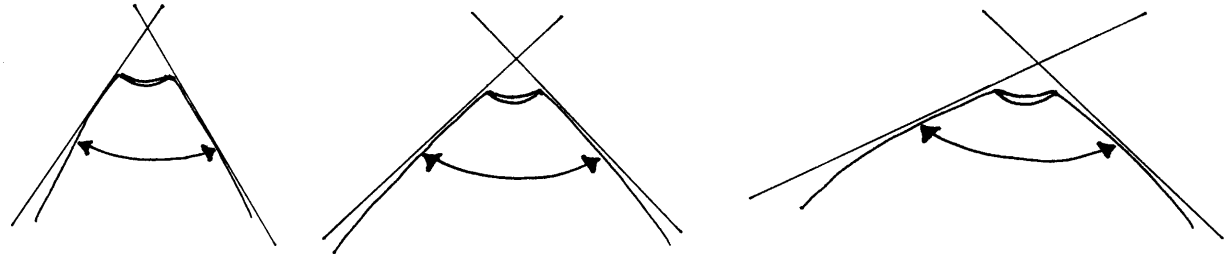
1	2	3	4
fine grained	granular	rough	hammered

Ad. 64: Stone: width of stalk-end



3	5	7
narrow	medium	broad

Ad. 65: Stone: angle of stalk-end



1	2	3
acute	right angled	obtuse

Ad. 66: Time of beginning of flowering

To be provided

Ad. 67: Time of beginning of fruit ripening

The time of fruit ripening should be considered as the time of eating ripeness, when the fruit is most easily removed.

9. Literature

No specific literature

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	*Prunus salicina* Lindl.
1.2 Common name	Japanese plum

2. Applicant

Name	
Address	
Telephone No.	
Fax No.	
E-mail address	
Breeder (if different from applicant)	

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	
Breeder's reference	

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

[#]4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

(a) controlled cross [ ]
(please state parent varieties)

(b) partially known cross [ ]
(please state known parent variety(ies))

(c) unknown cross [ ]

4.1.2 Mutation [ ]
(please state parent variety)

4.1.3 Discovery and development [ ]
(please state where and when discovered and how developed)

4.1.4 Other [ ]
(please provide details)

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) cuttings [ ]

(b) *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:

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 (31)	**Fruit: size**		
	very small	Methley	1[ ]
	small	Allo, Eldorado	3[ ]
	medium	Shiro	5[ ]
	large	Angeleno, Taiyou	7[ ]
	very large	Songold	9[ ]
5.2 (44)	**Fruit: ground color of skin**		
	not visible	Angeleno	1[ ]
	green	Gaviota, Santa Rosa	2[ ]
	yellowish-green	Songold, Taiyou	3[ ]
	yellow	Shiro	4[ ]
5.3 (46)	**Fruit: over color of skin**		
	yellow	Golden Japan	1[ ]
	orange-yellow		2[ ]
	red	Red Beauty, Taiyou	3[ ]
	purple		4[ ]
	violet-blue		5[ ]
	dark blue	Black Amber	6[ ]
	black	Angeleno	7[ ]

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

	Characteristics	Example Varieties	Note
5.4 (50)	**Fruit: color of flesh**		
	whitish		1[ ]
	green	Taiyou	2[ ]
	yellowish green	Reina Claudia, Santa Rosa	3[ ]
	yellow	Angeleno, Golden Japan, Reubennel	4[ ]
	orange	Black Amber, Sun Gold	5[ ]
	red	Santa Rosa	6[ ]
	dark red		7[ ]
	purplish		8[ ]
5.5 (66)	**Time of beginning of flowering**		
	very early	Durado, Red Beaut	1[ ]
	early	Fortune, Mariposa, Taiyou	3[ ]
	medium	Green Sun, Nubiana	5[ ]
	late	Gaviota, Shiro	7[ ]
	very late	Angeleno, Simka	9[ ]
5.6 (67)	**Time of beginning of fruit ripening**		
	very early	Beauty, Durado, Red Noble	1[ ]
	early	Mariposa, Shiro	3[ ]
	medium	Black Gold, Gaviota	5[ ]
	late	Angeleno, Nubiana, Taiyou	7[ ]
	very late	Autumn Giant, Golden King	9[ ]

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

6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the **similar** variety(ies)	Describe the expression of the characteristic(s) for **your** candidate variety
Example	*Fruit: color of flesh*	*orange*	*red*

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

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”.

……

9.3 Has the plant material to be examined been tested for the presence of virus or other pathogens?

Yes [ ]

(please provide details as specified by the Authority)

No [ ]

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]