

PROTOCOL FOR DISTINCTNESS, UNIFORMITY AND STABILITY TESTS

Prunus salicina Lindl.

JAPANESE PLUM

UPOV Code: PRUNU_SAL

Adopted on 28/11/2012

Entry into force on 01/01/2012

I SUBJECT OF THE PROTOCOL

The protocol describes the technical procedures to be followed in order to meet the Council Regulation (EC) N°2100/94 on Community Plant Variety Rights. The technical procedures have been agreed by the Administrative Council and are based on general UPOV Document TG/1/3 and UPOV Guideline TG/84/4 dated 20/10/2011 for the conduct of tests for Distinctness, Uniformity and Stability. This protocol applies to all varieties of ***Prunus salicina Lindl.***

II SUBMISSION OF PLANT MATERIAL

1. The Community Plant Variety Office (CPVO) is responsible for informing the applicant of

- the closing date for the receipt of plant material;
- the minimum amount and quality of plant material required;
- the examination office to which material is to be sent.

A sub-sample of the material submitted for test will be held in the variety collection as the definitive sample of the candidate variety.

The applicant is responsible for ensuring compliance with any customs and plant health requirements.

2. Final dates for receipt of documentation and material by the Examination Office

The final dates for receipt of requests, technical questionnaires and the final date or submission period for plant material will be decided by the CPVO and each Examination Office chosen.

The Examination Office is responsible for immediately acknowledging the receipt of requests for testing, and technical questionnaires. Immediately after the closing date for the receipt of plant material the Examination Office should inform the CPVO whether acceptable plant material has been received or not. However if unsatisfactory plant material is submitted the CPVO should be informed as soon as possible.

3. Plant material requirements

Information with respect to closing dates and submission requirements of plant material for technical examination of varieties can be found on the CPVO website (www.cpvo.europa.eu) in the S2 Gazette.

Quality of plants: Should not be less than the standards laid down in Council Directive 2000/29/EC and its amendments concerning quarantine organisms, and Council Directive 2008/90/EC and Commission Directive 93/48/EEC and their amendments concerning organisms impairing quality, at the date of adoption of this protocol; please refer to "Eur-Lex" for the full text and in case of any subsequent amendments to the three aforesaid Directives.

Chemical treatment: The plant material must not have undergone any treatment unless the CPVO and the examination office allow or request such treatment. If it has been treated, full details of the treatment must be given.

Labelling of sample:

- Species
- File number of the application allocated by the CPVO
- Breeder's reference
- Examination reference (if known)
- Name of applicant
- The phrase «On request of the CPVO»

III CONDUCT OF TESTS

1. Variety collection

A variety collection will be maintained for the purpose of establishing distinctness of the candidate varieties in test. A variety collection may contain both living material and descriptive information. A variety will be included in a variety collection only if plant material is available to make a technical examination.

Pursuant to Article 7 of Council Regulation (EC) No. 2100/94, the basis for a collection should be the following:

- varieties listed or protected at the EU level or at least in one of the EEA Member States;
- varieties protected in other UPOV Member States;
- any other variety in common knowledge.

The composition of the variety collection in each Examination Office depends on the environmental conditions in which the Examination Office is located.

Variety collections will be held under conditions which ensure the long term maintenance of each accession. It is the responsibility of Examination Offices to replace reference material which has deteriorated or become depleted. Replacement material can only be introduced if appropriate tests confirm conformity with the existing reference material. If any difficulties arise for the replacement of reference material, Examination Offices must inform the CPVO. If authentic plant material of a variety cannot be supplied to an Examination Office the variety will be removed from the variety collection.

2. Material to be examined

Candidate varieties will be directly compared with other candidates for Community plant variety rights tested at the same Examination Office, and with appropriate varieties in the variety collection. When necessary an Examination Office may also include other candidates and varieties. Examination Offices should therefore make efforts to co-ordinate the work with other Offices involved in DUS testing of Japanese plum. There should be at least an exchange of technical questionnaires for each candidate variety, and during the test period, Examination Offices should notify each other and the CPVO of candidate varieties which are likely to present problems in establishing distinctness. In order to solve particular problems Examination Offices may exchange plant material.

3. Characteristics to be used

The characteristics to be used in DUS tests and preparation of descriptions shall be those referred to in the Annex 1. All the characteristics shall be used, providing that observation of a characteristic is not rendered impossible by the expression of any other characteristic, or the expression of a characteristic is prevented by the environmental conditions under which the test is conducted. In the latter case, the CPVO should be informed. In addition the existence of some other regulation e.g. plant health, may make the observation of the characteristic impossible.

The Administrative Council empowers the President, in accordance with Article 23 of Commission Regulation (EC) No. 874/2009, to insert additional characteristics and their expression in respect of a variety.

4. Grouping of varieties

The varieties and candidates to be compared will be divided into groups to facilitate the assessment of distinctness. Characteristics which are suitable for grouping purposes are those which are known from experience not to vary, or to vary only slightly, within a variety and which in their various states of expression are fairly evenly distributed throughout the collection. In the case of continuous grouping characteristics overlapping states of expression between adjacent groups is required to reduce the risks of incorrect allocation of candidates to groups. The characteristics which could be used for grouping are the following:

- a) Fruit: size (characteristic 29)
- b) Fruit: ground colour of skin (characteristic 40)
- c) Fruit: over colour of skin (characteristic 42)
- d) Fruit: colour of flesh (characteristic 46)
- e) Time of beginning of flowering (characteristic 60)
- f) Time of beginning of fruit ripening (characteristic 61)

5. Trial designs and growing conditions

The minimum duration of tests will normally include at least two satisfactory crops of fruit. Tests will be carried out under conditions ensuring normal growth. The size of the plots will be such that plants or parts of plants may be removed for measuring and counting without prejudice to the observations which must be made up to the end of the growing period.

The test design is as follows

Each test should include 5 plants.

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

6. Special tests

In accordance with Article 83(3) of Council Regulation (EC) No. 2100/94 an applicant may claim either in the Technical Questionnaire or during the test that a candidate has a characteristic which would be helpful in establishing distinctness. If such a claim is made and is supported by reliable technical data, a special test may be undertaken providing that a technically acceptable test procedure can be devised.

Special tests will be undertaken, with the agreement of the President of CPVO, where distinctness is unlikely to be shown using the characteristics listed in the protocol.

7. Standards for decisions

a) **Distinctness**

A candidate variety will be considered to be distinct if it meets the requirements of Article 7 of Council Regulation (EC) No. 2100/94.

b) **Uniformity**

For the assessment of uniformity a population standard of 1% and an acceptance probability of 95% should be applied.

For a sample size of 5 plants, no off-types are allowed.

c) **Stability**

A candidate will be considered to be sufficiently stable when there is no evidence to indicate that it lacks uniformity.

IV REPORTING OF RESULTS

After each recording season the results will be summarised and reported to the CPVO in the form of a UPOV model interim report in which any problems will be indicated under the headings distinctness, uniformity and stability. Candidates may meet the DUS standards after two fruiting periods but in some cases three fruiting periods may be required. When tests are completed the results will be sent by the Examination Office to the CPVO in the form of a UPOV model final report.

If it is considered that the candidate complies with the DUS standards, the final report will be accompanied by a variety description in the format recommended by UPOV. If not, the reasons for failure and a summary of the test results will be included with the final report. The variety description should be supplemented by:

- (i) A colour photograph of transversally sliced fruit,
- (ii) A colour photograph of an industry standard tray full of fruit.

The CPVO must receive interim reports and final reports by the date agreed between the CPVO and the examination office.

Interim reports and final examination reports shall be signed by the responsible member of the staff of the Examination Office and shall expressly acknowledge the exclusive rights of disposal of CPVO.

The interim report as well as the final report shall be sent by the Examination Office to the CPVO.

V LIAISON WITH THE APPLICANT

If problems arise during the course of the test the CPVO should be informed immediately so that the information can be passed on to the applicant. Subject to prior agreement, the applicant may be directly informed at the same time as the CPVO particularly if a visit to the trial is advisable.

VI ENTRY INTO FORCE

The present protocol enters into force on **01/01/2012**. Any ongoing DUS examination of candidate varieties started before the aforesaid date will not be affected by the approval of the revised Technical Protocol. Technical examinations of candidate varieties are carried out according to the TP in force when the DUS test starts. The starting date of a DUS examination is considered to be the due date for submitting of plant material for the first test period.

In cases where the Office requests to take-over a DUS report for which the technical examination has either been finalized or which is in the process to be carried out at the moment of this request, such report can only be accepted if the technical examination has been carried out according to the CPVO TP which was in force at the moment when the technical examination started.

ANNEXES TO FOLLOW

ANNEX I

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Legend:

(*)	UPOV asterisked characteristic
(+)	See Explanation on the Table of Characteristics
(a)-(c)	See Explanations on the Table of Characteristics
G	Grouping characteristics

Types of expression of characteristics:

QL	Qualitative characteristic
QN	Quantitative characteristic
PQ	Pseudo-qualitative characteristic

Type of observation of characteristics:

MG	Single measurement of a group of plants or parts of plants
MS	Measurement of a number of individual plants or parts of plants
VG	Visual assessment by a single observation of a group of plants or parts of plants
VS	Visual assessment by observation of individual plants or parts of plants

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ANNEX I

TABLE OF CHARACTERISTICS

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note
1.	1.	VG	Tree: type of bearing		
PQ	PQ		on spurs only	Gaviota	1
			on spurs and long shoots	Angeleno, Shiro	2
			on long shoots only		3
2.	2.	VG	Tree: vigour		
(+)	(+)		weak	Black Gold, Satsuma	3
QN	QN		medium	Autumn Giant, Black Diamond	5
			strong	Robusto, Royal Diamond, Taiyou	7
3.	3.	VG	Tree: habit		
	(*)		upright	Formosa, Freedom, Taiyou	1
PQ	PQ		semi-upright	Laroda	2
			spreading	Ozark Premier, Shiro	3
			drooping	Weeping Santa Rosa	4
4.	4.	VG	One-year-old shoot: colour		
(+)	(+)		greyish brown	Taiyou	1
PQ	PQ		yellow brown	Sordum	2
			brown	Methley	3
			reddish brown	Comination	4
5.	5.	VG	Spur: length		
QN	QN		short	Laroda, Sordum	3
			medium	Frontier	5
			long	October Purple	7
6.	6.	VG	Vegetative bud: size		
(+)	(+)	(a)	small	Harry Pickstone	1
QN	QN		medium	Black Gold, Great Yellow	2
			large		3

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note
7.	7.	VG	Vegetative bud: shape of apex		
(+)	(+)	(a)	acute	Eldorado	1
PQ	PQ		obtuse	Songold	2
			rounded	Satsuma	3
8.	8.	VG	One-year-old shoot: position of vegetative bud in relation to shoot		
(+)	(+)	(a)	adpressed	Queen Ann	1
QN	QN		slightly held out	Satsuma	2
			markedly held out	Songold	3
9.	9.	MS/VG	Leaf blade: length		
	(*)	(a)	short	Honey Rosa	3
QN	QN		medium	Taiyou	5
			long	Ozark Premier, Sordum	7
10.	10.	MS/VG	Leaf blade: width		
	(*)	(a)	narrow	Beauty	3
QN	QN		medium	Black Diamond, Sordum	5
			broad	Combination	7
11.	11.	MS/VG	Leaf blade: length/width ratio		
	(*)	(a)	slightly elongated	Casselman	1
QN	QN		moderately elongated	Pioneer	2
			very elongated	Eclipse	3
12.	12.	VG	Leaf blade: shape		
	(*)	(a)	ovate		1
(+)	(+)		elliptic	Black Gold, October Purple, Syokou, Taiyou	2
QN	QN		obovate	Kanro, Kelsey	3

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note			
13.	13.	VG	Leaf blade: colour of upper side					
			(*)	light green	Flaming Delicious, Taiyou	1		
			PQ	PQ	(a)	medium green	Abundance, Laroda	2
						dark green	Gaviota, Shiro	3
			reddish purple	Hollywood	4			
14.	14.	VG	Leaf blade: angle of apex (excluding tip)					
			(*)	(a)	acute	Ozark Premier, Taiyou	1	
			(+)	(+)	right angled	Satsuma	2	
			QN	QN	obtuse	Methley	3	
15.	15.	VG	Leaf: glossiness of upper side					
			QN	QN	(a)	weak	Ozark Premier, Taiyou	1
						medium	Frontier, Shiro	2
						strong	Nubiana	3
16.	16.	VG	Leaf blade: density of pubescence of lower side					
			QN	QN	(a)	sparse	Angeleno, Redheart, Taiyou	1
						medium	Queen Ann, Shiro	2
						dense	Obilnaja	3
17.	17.	VG	Leaf blade: incisions of margin					
			(*)	(a)	crenate	Gaviota, Harry Pickstone	1	
			(+)	(+)	bi-crenate	Golden Kiss, Pioneer	2	
			PQ	PQ	serrate	Dapple Dandy	3	
					bi-serrate		4	
18.	18.	MS/VG	Petiole: length					
			(*)	(a)	short	Kelsey	3	
			QN	QN	medium	Frontier	5	
					long	Combination	7	

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note
19.	19.	VG	Leaf: position of nectaries		
QN	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
20.	20.	MS/VG	Pedicel: length		
	(*)	(b)	short	Methley	3
(+)	(+)		medium	Queen Ann, Shiro	5
QN	QN		long	Red Ace, Taiyou	7
21.	21.	MS/VG	Flower: diameter		
QN	QN	(b)	small	Black Gold, Nubiana	3
			medium	October Purple, Shiro, Taiyou	5
			large	Kiyou, Methley, Ozark Premier	7
22.	22.	VG	Flowers: arrangement of petals		
(+)	(+)	(b)	free	Laroda	1
QN	QN		touching	Harry Pickstone, Shiro	2
			overlapping	Beauty	3
23.	23.	VG	Sepal: shape		
	(*)	(b)	triangular	Mariposa	1
(+)	(+)		medium ovate	Harry Pickstone	2
PQ	PQ		broad ovate	George Wilson	3
			narrow elliptic	Laroda	4
			medium elliptic	Nubiana	5
24.	24.	MS/VG	Petal: length		
	(*)	(b)	short	Laroda, Shigyoku	3
QN	QN		medium	Santa Rosa	5
			long	Burbank	7

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note
25.	25.	VG	Petal: shape		
	(*)	(b)	elliptic	Red Ace, Taiyou	1
	(+)	(+)	circular	Shiro, Wickson	2
	PQ	PQ	oblate	Wright's Early	3
			obovate	Mammoth Cardinal	4
26.	26.	VG	Petal: undulation of margin		
QN	QN	(b)	weak	Redheart, Shiro, Taiyou	1
			medium	Queen Ann	2
			strong	Lady Red, Morettini 355, Showtime	3
27.	27.	VG	Stigma: position in relation to anthers		
	(*)	(b)	below	Mariposa	1
QN	QN		same level	Methley	2
			above	Mammoth Cardinal	3
28.	28.	MS	Fruit: length of stalk		
QN	QN		short	Yonemomo	3
			medium	Sordum	5
			long	Hollywood	7
29.	29.	VG	Fruit: size		
	(*)	(c)	very small	Methley	1
(+)	(+)		small	Allo, Eldorado	3
QN	QN		medium	Shiro	5
			large	Angeleno, Taiyou	7
G			very large	Songold	9
30.	30.	MS	Fruit: height		
	(*)	(c)	short	Eclipse	3
(+)	(+)		medium	Harry Pickstone	5
QN	QN		tall	Valentine	7

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note
31.	31.	MS	Fruit: width		
	(*)	(c)	narrow	Amber Jewel	3
(+)	(+)		medium	Casselman	5
QN	QN		broad	Simka	7
32.	32.	VG	Fruit: shape in lateral view		
	(*)	(c)	oblong	Reubennel	1
(+)	(+)		elliptic	Ozark Premier, Taiyou	2
PQ	PQ		circular	Red Beauty, Shiro	3
			oblate	Friar	4
			cordate	Morettini 355	5
			obovate		6
			obcordate	Santa Rosa	7
33.	33.	VG	Fruit: symmetry		
(+)	(+)	(c)	symmetric or slightly asymmetric	Laroda, Shiro	1
QN	QN		moderately asymmetric	Friar, Harry Pickstone	2
			strongly asymmetric	Ozark Premier	3
34.	34.	VG	Fruit: shape of base		
	(*)	(c)	pointed	Morettini 355, Taiyou	1
(+)	(+)		truncate	Black Gold, Green Sun	2
PQ	PQ		depressed	Calita, Durado, Gabora	3
35.	35.	VG	Fruit: shape of apex		
(+)	(+)	(c)	pointed	Golden Plumza	1
PQ	PQ		rounded	Shiro	2
			truncate	Angeleno	3
			depressed	Friar, Tereda	4

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note
36.	36.	MS/VG	Fruit: depth of stalk cavity		
	(*)	(c)	shallow	Taiyou	1
QN	QN		medium	Angeleno, Nubiana	2
			deep	Black Gold, Laroda	3
37.	37.	VG/MS	Fruit: width of stalk cavity		
	(*)	(c)	narrow	Koike Sumomo	1
(+)	(+)		medium	Beni Ryozen	2
QN	QN		broad	Finroza	3
38.	38.	VG	Fruit: depth of suture		
	(*)	(c)	absent or very shallow	Sunrise	1
(+)	(+)		shallow	Taiyou	2
QN	QN		medium	Sordum	3
			deep	Akihime	4
39.	39.	VG	Fruit: bloom of skin		
	(*)	(c)	absent or very weak		1
(+)	(+)		weak	Red June	3
QN	QN		medium	Ooishi Nakate	5
			strong	Sordum	7
			very strong		9
40.	40.	VG	Fruit: ground colour of skin		
	(*)	(c)	not visible	Angeleno	1
(+)	(+)		green	Gaviota, Santa Rosa	2
PQ	PQ		yellowish green	Songold, Taiyou	3
G			yellow	Shiro	4

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note		
41.	41.	VG	Fruit: relative area of over colour				
			(*)	(c)	absent or very small	Green Sun, Shiro	1
			(+)	(+)	small	Bragialla	3
			QN	QN	medium	Fortune	5
					large	Taiyou	7
			very large or whole surface	Black Diamond, Friar	9		
42.	42.	VG	Fruit: over colour of skin				
			(*)	(c)	yellow	Golden Japan	1
			(+)	(+)	orange yellow	Formosa	2
			PQ	PQ	medium red	Red Beauty	3
					dark red	Starking Delicious, Taiyou	4
					purple	Karari, Morettini 355	5
					dark blue	Black Amber	6
G			black	Angeleno	7		
43.	43.	VG	Fruit: pattern of over colour				
			(*)	(c)	flecks only	Tiger	1
			(+)	(+)	mottled	Omega	2
PQ	PQ		solid flush only	Friar, Taiyou	3		
44.	44	VG	Fruit: number of lenticels				
			(*)	(c)	few	ARC PR 3	3
			QN	QN	medium	Sunrise	5
			many	Polar Eclipse	7		
45.	45.	VG	Fruit: size of lenticels				
			(*)	(c)	small	Sunset	1
			QN	QN	medium	Extreme	2
			large	Southern Belle	3		

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note		
46.	46.	VG	Fruit: colour of flesh				
			(*)	(c)	whitish	Taiyou	1
	PQ	PQ		green	Reina Claudia	2	
				yellowish green	Shiro	3	
				yellow	Angeleno, Golden Japan, Reubennel	4	
				orange	Black Amber, Sun Gold	5	
				medium red	Satsuma, Sordum	6	
				dark red	Beauty, Hawera, Karari, Stark Delicious	7	
G			purplish	Sangue di Drago	8		
47.	47.	MS	Fruit: firmness				
			(+)	(c)	soft	Shiro	3
			QN	QN	medium	Frontier	5
firm	Laroda, Taiyou	7					
48.	48.	MG	Fruit: juiciness				
			(+)	(c)	low	Autumn Giant, Laroda	1
			QN	QN	medium	Gaviota, Ozark Premier	2
high	Reubennel, Shiro, Santa Rosa	3					
49.	49.	MG	Fruit: acidity				
			(+)	(c)	low	Angeleno, Durado	1
			QN	QN	medium	Green Sun, Shiro, Taiyou	2
high	Carmen, Obilnaja	3					
50.	50.	MG	Fruit: sweetness				
			(+)	(c)	low	Durado, Obilnaja, Shiro	1
			QN	QN	medium	Angeleno	2
high	Black Gold, Laroda, Taiyou	3					
51.	51.	VG	Fruit: adherence of stone to flesh				
			(*)	(c)	non-adherent	Fortune	1
			QN	QN	semi-adherent	Nubiana, Taiyou	2
adherent	Shiro, Songold	3					

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note
52.	52.	VG	Fruit: amount of fiber		
(+)	(+)		low		1
QN	QN		medium		2
			high		3
53.	53.	VG	Stone: size		
	(*)		small	Angeleno, Eldorado	3
QN	QN	(c)	medium	Taiyou, Wickson	5
			large	Freedom	7
54.	54.	VG	Stone: shape in lateral view		
	(*)	(c)	narrow elliptic	Eldorado	1
(+)	(+)		medium elliptic	Santa Rosa, Taiyou	2
PQ	PQ		circular	Angeleno, Kelsey	3
			broad ovate		4
55.	55.	VG	Stone: shape in ventral view		
	(*)	(c)	narrow elliptic	Kelsey	1
(+)	(+)		medium elliptic	Santa Rosa, Taiyou	2
PQ	PQ		broad elliptic	Eldorado	3
56.	56.	VG	Stone: shape in basal view		
	(*)	(c)	narrow elliptic	Shiro, Songold	1
PQ	PQ		medium elliptic	Bragialla	2
			broad elliptic	Black Gold, Frontier	3
57.	57.	VG	Stone: symmetry in lateral view		
QN	QN	(c)	symmetric or slightly asymmetric	Angeleno, Frontier	1
			moderately asymmetric	Shiro	2
			strongly asymmetric		3

CPVO N°	UPOV N°	Stage, method	Characteristics	Examples	Note
58.	58.	VG	Stone: texture of lateral surfaces		
PQ	PQ	(c)	fine grained	Eldorado	1
			granular	Nubiana	2
			rough	Laroda, Songold	3
			hammered	Harry Pickstone	4
59.	59.	VG	Stone: width of stalk-end		
(+)	(+)	(c)	narrow	Frontier	1
QN	QN		medium	Harry Pickstone	2
			broad	Angeleno, Lady Red	3
60.	60.	MG	Time of beginning of flowering		
	(*)		very early	Durado, Karari, Red Beauty	1
(+)	(+)		early	Fortune, Mariposa, Taiyou	3
QN	QN		medium	Green Sun, Nubiana	5
			late	Gaviota, Shiro	7
G			very late	Angeleno, Simka	9
61.	61.	MG	Time of beginning of fruit ripening		
	(*)		very early	Beauty, Durado, Red Noble	1
(+)	(+)		early	Mariposa, Shiro	3
QN	QN		medium	Black Gold, Gaviota	5
			late	Angeleno, Nubiana, Taiyou	7
G			very late	Akihime, Autumn Giant, Golden King	9

EXPLANATIONS AND METHODS

Explanations covering several characteristics

Characteristics containing the following key in the third 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.

Explanations for individual characteristics

Ad. 2: Tree: vigour

The vigour of the tree is observed as the overall abundance of vegetative growth.

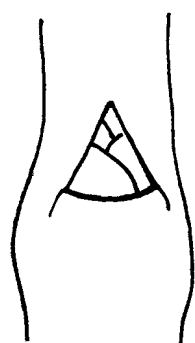
Ad. 4: One-year-old shoot: colour

To be observed on the sunny side after removal of cuticle.

Ad. 6: Vegetative bud: size

To be observed on one-year-old shoots before the opening up of the bud.

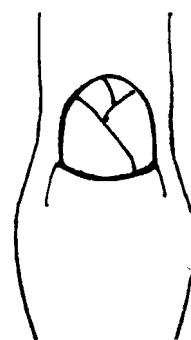
Ad. 7: Vegetative bud: shape of apex



1
acute

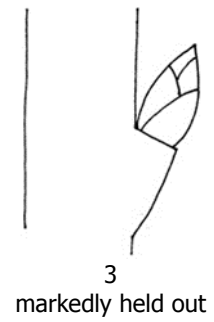


2
obtuse



3
rounded

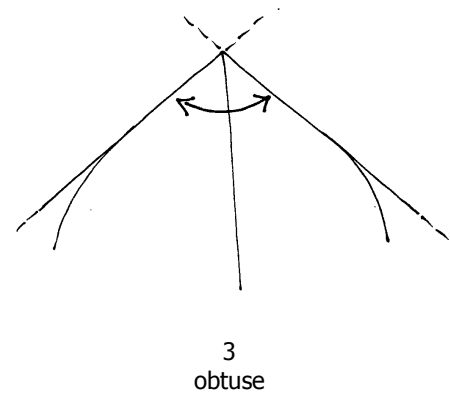
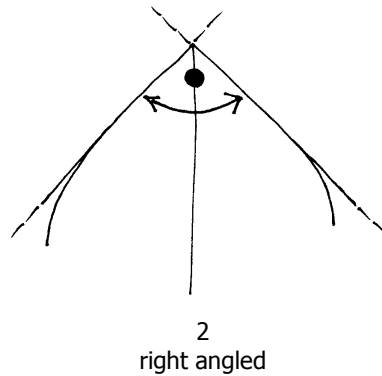
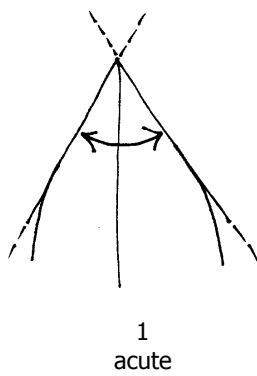
Ad. 8: One-year-old shoot: position of vegetative bud in relation to shoot



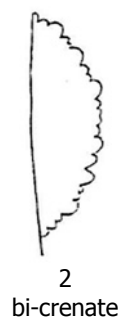
Ad. 12: Leaf blade: shape



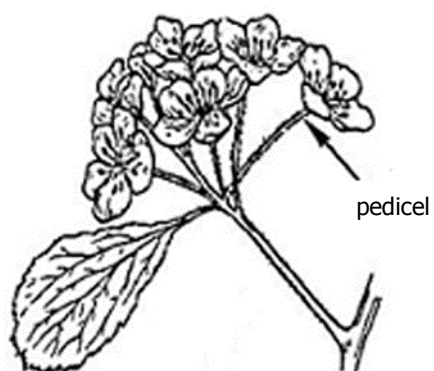
Ad. 14: Leaf blade: angle of apex (excluding tip)



Ad. 17: Leaf blade: incisions of margin

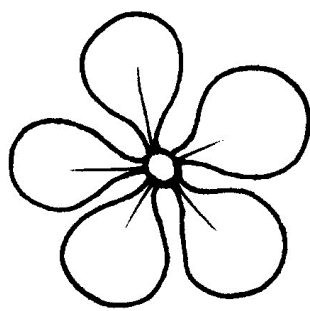


Ad. 20: Pedicel: length

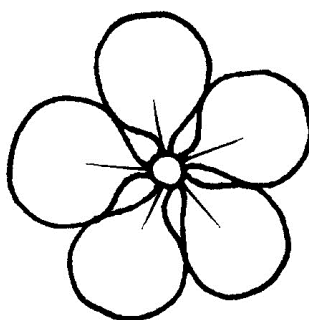


Ad. 22: Flower: arrangement of petals

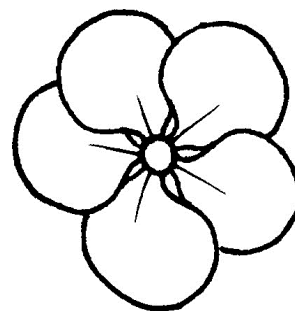
To be observed solely on flowers which have five petals.



1
free


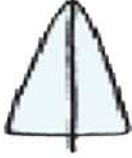
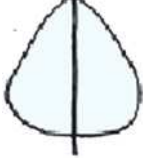
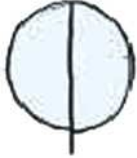
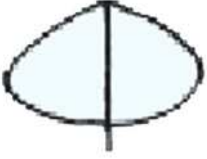


2
touching

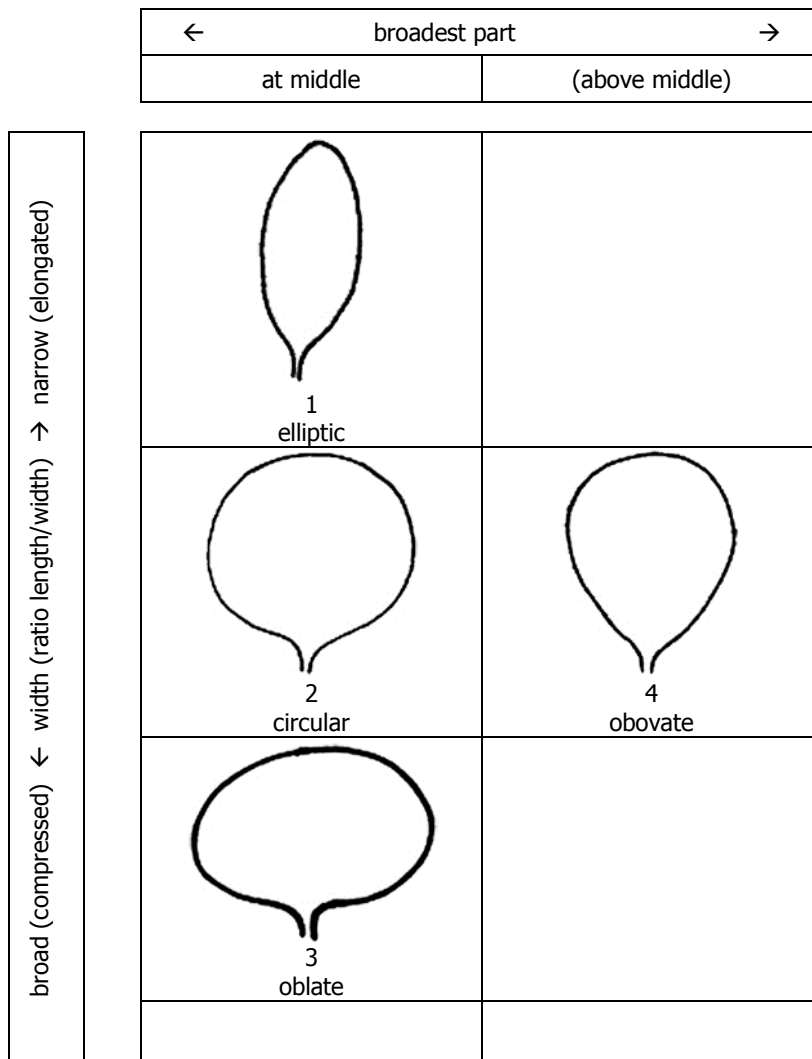


3
overlapping

Ad. 23: Sepal: shape

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

Ad. 25: Petal: shape

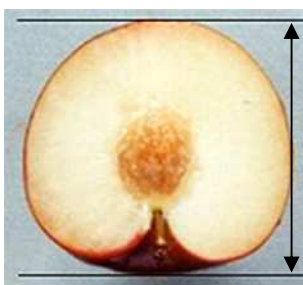


Ad. 29: Fruit: size

To be observed on the area of the lateral section of the fruit.

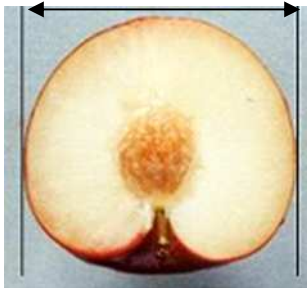
Ad. 30: Fruit: height

Height to be observed from ventral view.



Ad. 31: Fruit: width

Width to be observed from ventral view.



Ad. 32: Fruit: shape in lateral view

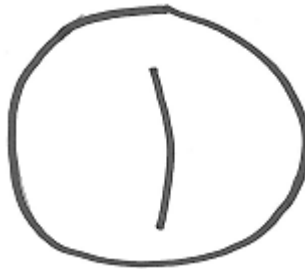
		← broadest part →			
		(below middle)	at middle		(above middle)
broad (compressed) ← width (ratio length/width) → narrow (elongated)	 5 cordate	 2 elliptic			
		 1 oblong	 3 circular	 7 obcordate	 6 obovate
		 4 oblate			

Ad. 33: Fruit: symmetry

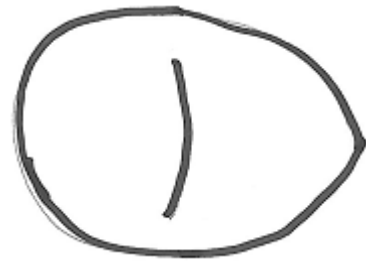
Symmetry to be observed from ventral view, along suture.



1
symmetric or slightly asymmetric



2
moderately asymmetric



3
strongly asymmetric

Ad. 34: Fruit: shape of base



1
pointed



2
truncate



3
depressed

Ad. 35: Fruit: shape of apex



1
pointed



2
rounded



3
truncate



4
depressed

Ad. 37: Fruit: width of stalk cavity



1
narrow



2
medium

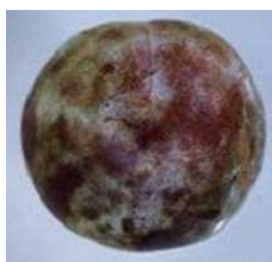


3
broad

Ad. 38: Fruit: depth of suture



2
shallow



3
medium



4
deep

Ad. 39: Fruit: bloom of skin

The bloom is the waxy layer that can be removed by rubbing.



3
weak



5
medium



7
strong

Ad. 40: Fruit: ground colour of skin

Ad. 41: Fruit: relative area of over colour

To be observed without the bloom. The ground colour is the first colour to appear chronologically during the development of the skin and upon which other colours will develop in time in the form of spots, a macule, or a colour flush or blush. It is not always necessarily the largest area of the fruit. The over colour is the second colour developing over time over the ground colour. The coloration does not necessarily cover the smallest area of the fruit and consists of a pattern such as a flush or flecking.

Ad. 43: Fruit: pattern of over colour

The over colour is the second colour developing over time over the ground colour. The coloration does not necessarily cover the smallest area of the fruit and consists of a pattern such as a flush or flecking.

Ad. 47: Fruit: firmness

To be observed at eating ripeness with a penetrometer (see Ad. 61).

Ad. 48: Fruit: juiciness

The characteristic is observed as the juice content expressed as the percentage of total fruit weight obtained by pressing fruit.

Ad. 49: Fruit: acidity

Calculation of total titratable acidity of a juice sample. The equation is the following:

$$Ac (g/l) = (V1 * N * me) / V$$

V = sample volume in ml
V1 = NaOH volume in ml
N = normality of NaOH
me = equivalent weight of malic acid (67)

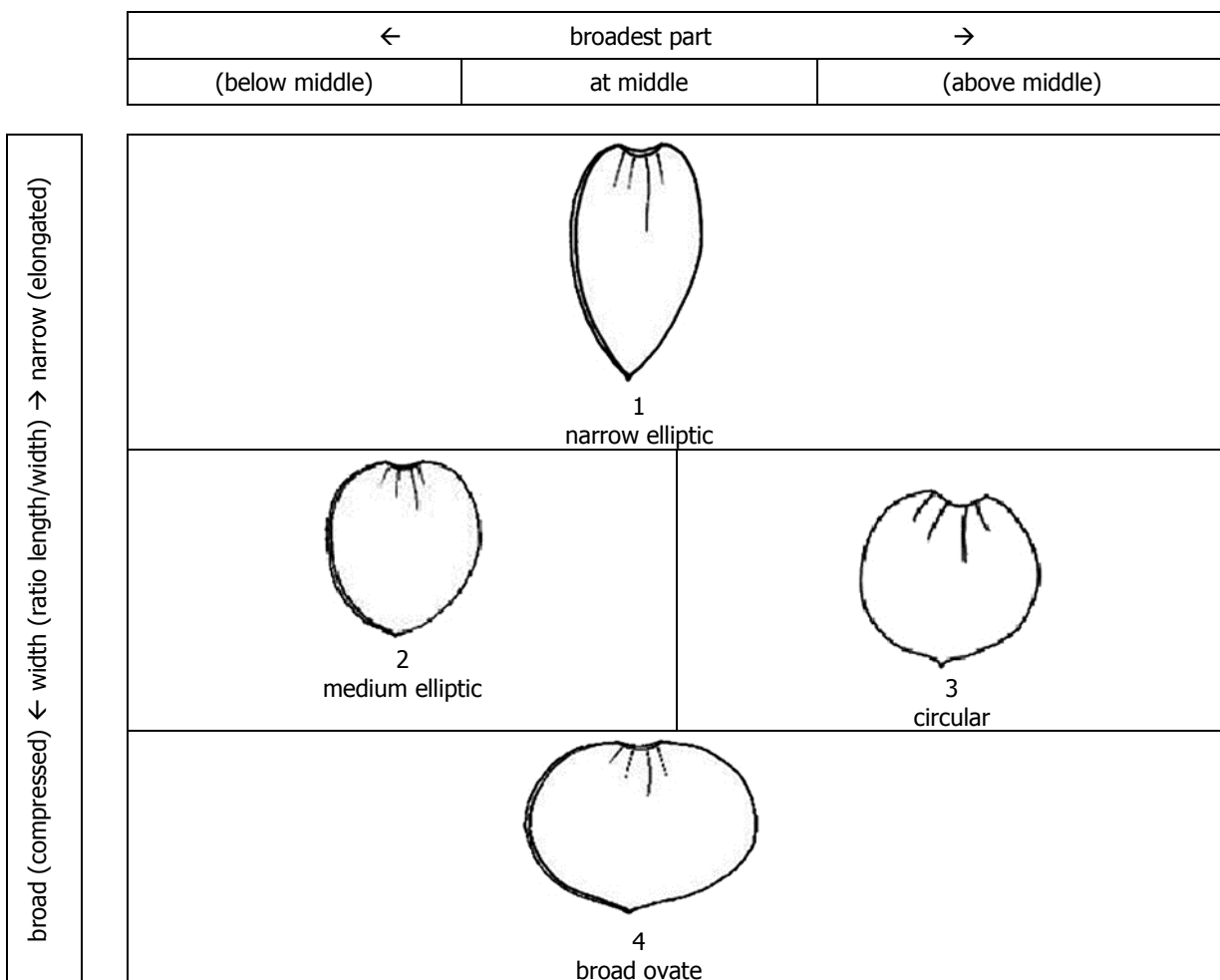
Ad. 50: Fruit: sweetness

Calculation of total soluble solids measured using a refractometer. The measured unit is the degree Brix (° Brix). One degree Brix corresponds to 1 gram of sucrose in 100 grams of solution.

Ad. 52: Fruit: amount of fiber

To be observed at eating ripeness. The fruit should be cut in half longitudinally and a visual observation made to see if there are visible fibers in the flesh. The sliced fruit should then be eaten to assess further the amount of fiber.

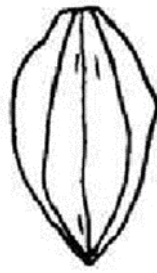
Ad. 54: Stone: shape in lateral view



Ad. 55: Stone: shape in ventral view



1
narrow elliptic



2
medium elliptic



3
broad elliptic

Ad. 59: Stone: width of stalk-end



1
narrow



2
medium



3
broad

Ad. 60: Time of beginning of flowering

The time of beginning of flowering is when all trees have 10% open flowers.

Ad. 61: 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 from the tree.

LITERATURE

No specific literature.

ANNEX II



TECHNICAL QUESTIONNAIRE

to be completed in connection with an application for Community Plant Variety Rights
Please answer all questions. A question without any answer will lead to a non-attribution
of an application date. **In cases where a field / question is not applicable, please state so**

1. Botanical taxon: Name of the genus, species or sub-species to which the variety belongs and common name

Species *Prunus salicina* Lindl.

JAPANESE PLUM

2. Applicant(s): Name(s) and address(es), phone and fax number(s), Email address, and where appropriate name and address of the procedural representative

3. Variety denomination

a) Where appropriate proposal for a variety denomination:

b) Provisional designation (breeder's reference):

4. Information on origin, maintenance and reproduction of the variety

4.1 Breeding, maintenance and reproduction of the variety

Please indicate breeding scheme, parents and other relevant information

Variety resulting from:

4.1.1 Crossing

a) controlled cross (indicate parent varieties) []

b) partially unknown cross (indicate known parent varieties) []

c) totally unknown cross []

4.1.2 Mutation..... []
(indicate parent varieties)

4.1.3 Discovery and development..... []
(indicate when and where discovered and how developed)

4.1.4 Other []
(please provide details)

4.2 Method of propagation

4.2.1 Vegetative propagation

a) cuttings []

b) *in vitro* propagation []

c) other (state method) []

4.2.2 Other []
(please provide details)

4.3 Pollinator

Good pollinators are the following varieties:

4.4 Virus status

- a) The variety is free from all known viruses as follows
(indicate from which viruses) []
- b) The plant material is virus tested
(indicate against which viruses)..... []
- c) The virus status is unknown..... []

4.5 Geographical origin of the variety: the region and the country in which the variety was bred or discovered and developed

5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in the CPVO Protocol; please mark the state of expression which best corresponds).

Characteristics		Example varieties	Note
5.1 (29)	Fruit: size		
	very small	Methley	1 []
	very small to small		2 []
	small	Allo, Eldorado	3 []
	small to medium		4 []
	medium	Shiro	5 []
	medium to large		6 []
	large	Angelino, Taiyou	7 []
	large to very large		8 []
very large	Songold	9 []	

	Characteristics	Example varieties	Note
5.2 (40)	Fruit: ground colour of skin		
	not visible	Angeleno	1 []
	green	Gaviota, Santa Rosa	2 []
	yellowish green	Songold, Taiyou	3 []
	yellow	Shiro	4 []
5.3 (42)	Fruit: over colour of skin		
	yellow	Golden Japan	1 []
	orange yellow	Formosa	2 []
	red	Red Beauty	3 []
	purple	Starking Delicious, Taiyou	4 []
	violet blue	Karari, Morettini 355	5 []
	dark blue	Black Amber	6 []
	black	Angeleno	7 []
5.4 (46)	Fruit: colour of flesh		
	whitish	Taiyou	1 []
	green	Reina Claudia	2 []
	yellowish green	Shiro	3 []
	yellow	Angeleno, Golden Japan, Reubennel	4 []
	orange	Black Amber, Sun Gold	5 []
	medium red	Satsuma, Sordum	6 []
	dark red	Beauty, Hawera, Karari, Stark Delicious	7 []
	purplish	Sangue di Drago	8 []

	Characteristics	Example varieties	Note
5.5 (60)	Time of beginning of flowering		
	very early	Durado, Karari, Red Beauty	1 []
	very early to early		2 []
	early	Fortune, Mariposa, Taiyou	3 []
	early to medium		4 []
	medium	Green Sun, Nubiana	5 []
	medium to late		6 []
	late	Gaviota, Shiro	7 []
	late to very late		8 []
	very late	Angeleno, Simka	9 []
5.6 (61)	Time of beginning of fruit ripening		
	very early	Beauty, Durado, Red Noble	1 []
	very early to early		2 []
	early	Mariposa, Shiro	3 []
	early to medium		4 []
	medium	Black Gold, Gaviota	5 []
	medium to late		6 []
	late	Angeleno, Nubiana, Taiyou	7 []
	late to very late		8 []
	very late	Akihime, Autumn Giant, Golden King	9 []

6. Similar varieties and differences from these varieties:			
Denomination of similar variety	Characteristic in which the similar variety is different ¹⁾	State of expression of similar variety	State of expression of candidate variety
<p>¹⁾ In the case of identical states of expressions of both varieties, please indicate the size of the difference</p>			
7. Additional information which may help to distinguish the variety A representative printed-out colour photo of the variety must be added to the Technical Questionnaire.			
7.1 Resistance to pests and diseases			
<input type="checkbox"/> YES, please specify			
<input type="checkbox"/> NO			
7.2 Special conditions for the examination of the variety			
<input type="checkbox"/> YES, please specify			
<input type="checkbox"/> NO			
7.3 Other information			
<input type="checkbox"/> YES, please specify			
<input type="checkbox"/> NO			

8. GMO-information required

The variety represents a Genetically Modified Organism within the meaning of Article 2(2) of Council Directive EC/2001/18 of 12/03/2001.

YES NO

If yes, please add a copy of the written attestation of the responsible authorities stating that a technical examination of the variety under Articles 55 and 56 of the Basic Regulation does not pose risks to the environment according to the norms of the above-mentioned Directive.

9. Information on plant material to be examined

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) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| (b) Chemical treatment (e.g. growth retardant or pesticide) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| (c) Tissue culture | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| (d) Other factors | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Please provide details of where you have indicated "Yes":

10. Possible place of the technical examination

In case the CPVO needs to arrange a technical examination for this candidate variety, there might be more than one examination office entrusted by the CPVO suitable to grow your variety. In this case, the Office will decide on the place of the technical examination but you might wish to express here a preference in respect of an examination office. The available entrusted examination offices for that species can be found in the S2 Gazette under:

<http://www.cpvo.europa.eu/main/en/home/documents-and-publications/s2-gazette>

I/we hereby declare that to the best of my/our knowledge the information given in this form is complete and correct.

Date

Signature

Name

[End of document]