



EUROPEAN UNION

COMMUNITY PLANT VARIETY OFFICE

PROTOCOL FOR DISTINCTNESS, UNIFORMITY AND STABILITY TESTS

Prunus domestica L.

EUROPEAN PLUM

UPOV Species Code: PRUNU_DOM

Adopted on 06/11/2003

I SUBJECT OF THE PROTOCOL

The protocol describes the technical procedures to be followed in order to meet the Council Regulation 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/41/5 dated 1704/2002 for the conduct of tests for Distinctness, Uniformity and Stability. This protocol applies to fruit varieties of *Prunus domestica* L.

II SUBMISSION OF SEED AND OTHER 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

The final dates for request for technical examination and sending of Technical Questionnaire by the CPVO as well as submission date of plant material by the applicant can be found in the S2 supplement of the CPVO Official Gazette and the CPVO website (www.cpvo.europa.eu).

Quality of plants: Should not be less than the standards laid down in Council Directive 77/93/EEC and their implementing measures. The plant material must be free from:-

Insects, mites and nematodes at all stages of their development:

- *Aculops fockeui*
- *Capnodis tenebrionis*
- *Eriophyes similis*
- *Meloidogyne* spp.
- Scale insects, in particular:
Epidiaspis leperii, *Pseudaulacaspis pentagona*,
Quadraspidiotus perniciosus

Bacteria

- *Agrobacterium tumefaciens*
- *Pseudomonas syringae* pv. *mors prunorum*
- *Pseudomonas syringae* pv. *syringae*

Fungi

- *Armillariella mellea*
- *Chondrostereum purpureum*
- *Nectria galligena*
- *Rosellinia necatrix*
- *Verticillium* spp.

Viruses and virus-like organisms, and in particular

- Prune dwarf virus
- Prunus necrotic ringspot virus

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 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 European 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 N° 1239/95, 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 characters which may be used for grouping are the following:

- (a) Fruit: size (characteristic 43)
- (b) Fruit: shape in lateral view (characteristic 44)
- (c) Fruit: ground colour of skin (after removing bloom) (characteristic 50)
- (d) Time of beginning of flowering (characteristic 61)
- (e) Time of beginning of fruit ripening (characteristic 62)

5. Trial designs and growing conditions

The minimum duration of tests (independent growing cycles) 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 determined by measurement, weighing and counting should be made on 5 plants or 10 parts, 2 from each of 5 plants. All observations on the fruit should be made on a minimum of 10 typical fruits, 2 from each fruit tree.

Unless otherwise stated, all observations on the tree and on the one-year-old shoot should be made during winter on trees that have fruited at least once. The thickness of the shoot and the length of internodes should be observed in the middle of the shoot.

All observations on the vegetative bud should be made on one-year-old shoots.

Unless otherwise stated, all observations on the leaf should be made in summer on fully developed leaves from the middle third of a current season's shoot.

Unless otherwise stated, all observations on the flower should be made on fully developed flowers at the beginning of anther dehiscence.

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

6. Special tests

In accordance with Article 83(3) of Council Regulation 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 characters 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 No. 2100/94.

b) **Uniformity**

A candidate will be considered to be sufficiently uniform if the number of off-types does not exceed the number of plants as indicated in the table below. A population standard of 1% and an acceptance probability of 95% should be applied.

Table of maximum numbers of off-types allowed for uniformity standards.

Number of plants	off-types allowed
≤ 5	0

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 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.

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.

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

ANNEXES TO FOLLOW

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ANNEX II

Technical Questionnaire

ANNEX I

TABLE OF CHARACTERISTICS TO BE USED IN DUS-TEST AND PREPARATION OF DESCRIPTIONS

CPVO N°	UPOV N°	Characteristics	Examples	Note	
1. (+)		Tree: vigour	weak	Ruth Gerstetter	3
			medium	Felsina, Victoria	5
			strong	Valor	7
2.		Tree: density of crown	sparse	Čačanska najbolja, Reine Claude verte	3
			medium	Anna Späth, d'Ente	5
			dense	Mirabelle de Nancy	7
3.		One-year-old shoot: attitude	erect	Čačanska Julia, Empress, Reine Claude de Bavay	1
			semi-erect	d'Ente, Hanita	3
			horizontal	Graf Brühl, Gräfin Cosel, Reine Claude verte	5
			drooping	Primacotes	7
4.		One-year-old shoot: thickness	thin	Precoce de Tour, Victor Christian	3
			medium	Reine Claude verte	5
			thick	Reine Claude de Bavay	7
5.		One-year-old shoot: length of internodes	short	Andrierez Plum, California Blue	3
			medium	Anna Späth, Reine Claude verte	5
			long	Angelina Burdett, Reine Claude de Bavay	7
6.		One-year-old shoot: pubescence (upper third)	weak	d'Ente, Felsina	3
			medium	Reine Claude verte, Top	5
			strong	The Czar	7

CPVO N°	UPOV N°	Characteristics		Examples	Note
7.		One-year-old shoot: number of lenticels	few	Anna Späth, Hauszwetsche	3
			medium	d'Ente, Gräfin Cosel	5
			many	Graf Brühl, Reine Claude de Bavay	7
8.		One-year-old shoot: size of vegetative bud	small	Althanova, Elena	3
			medium	d'Ente, Empress	5
			large	Golden Transparent	7
9. (+)		One-year-old shoot: shape of vegetative bud	acute	Anna Späth, Bountiful	1
			obtuse	Reine Claude d'Oullins	2
			rounded	Herman	3
10. (+)		One-year-old shoot: position of vegetative bud in relation to shoot	adpressed	Anna Späth, Marjorie's Seedling	1
			slightly held out	Coe's Golden Drop, Hanita	2
			markedly held out	Herman, Victoria	3
11. (+)		One-year-old shoot: size of vegetative bud support	small	Belle de Louvein, Hanita	3
			medium	The Czar, Felsina	5
			large	Elena, Reine Claude d'Oullins	7
12. (+)		One-year-old shoot: decurrence of vegetative bud support	absent	Coe's Golden Drop	1
			present	Laxton's Cropper	9
13.		Young shoot: anthocyanin coloration of growing tip (during rapid growth)	weak	Herman, Reine Claude d'Oullins	3
			medium	Anna Späth, Hanita, Hauszwetsche	5
			strong	Cambridge Gage, Felsina	7

CPVO N°	UPOV N°	Characteristics	Examples	Note	
14. (+)		Leaf blade: attitude in relation to shoot	upwards	1	
			outwards	Early Laxton	2
			downwards	Victoria	3
15.		Leaf blade: length	short	Ruth Gerstetter	3
			medium	Graf Brühl, Reine Claude verte	5
			long	Anna Späth, d'Ente	7
16.		Leaf blade: width	narrow	d'Ente, Hanita	3
			medium	Graf Brühl, Reine Claude verte	5
			broad	Nordens, Valor	7
17.		Leaf blade: ratio length/width	small	Nordens, Valor	3
			medium	d'Ente, Hanita	5
			large	Anna Späth, Felsina, Hauszwetsche	7
18. (+)		Leaf blade: shape	ovate		1
			elliptic	d'Ente, Top	2
			obovate	Allgrove's Superb, Hanita	3
19. (+)		Leaf blade: angle of apex (excluding tip)	acute	Anna Späth, Damson Prune	1
			right-angled	d'Ente, Gräfin Cosel	2
			obtuse	Graf Brühl, Pershore	3
20. (+)		Leaf blade: shape of base	acute	Katinka, Top, Verity	1
			obtuse	Anna Späth, Hanita	2
			truncate	Marjorie's Seedling	3

CPVO N°	UPOV N°	Characteristics		Examples	Note
21.		Leaf blade: green colour of upper side	light	Ersinger Frühzwetsche	3
			medium	d'Ente, Katinka, Opal	5
			dark	Anna Späth, Elena	7
22.		Leaf blade: glossiness of upper side	weak	Early Rivers	3
			medium	Shropshire Damson	5
			strong	President	7
23.		Leaf blade: pubescence of lower side	absent	Reine Claude verte	1
			present	Anna Späth	9
24. (+)		Leaf blade: incisions of margin	crenate	Hanita, Reine Claude d'Oullins	1
			serrate	Anna Späth, Golden Bullace	2
25.		Petiole: length	short	Althanova	3
			medium	d'Ente, Felsina	5
			long	Victoria	7
26.		Petiole: pubescence of upper side	weak	Ruth Gerstetter, Hanita, Althanova	3
			medium	d'Ente, Empress	5
			strong	Herman, Professeur Collumbien	7
27.		Leaf: ratio length of leaf blade/length of petiole	small	Graf Brühl, Reine Claude verte	3
			medium	d'Ente, Hanita	5
			large	Hauszwetsche Typ Schüfer	7
28.		Leaf: presence of nectaries	absent	Anna Späth, Jefferson	1
			present	Grand Duke, Victoria	9

CPVO N°	UPOV N°	Characteristics	Examples	Note	
29.		Leaf: position of nectaries	predominantly on base of blade	Reine Claude de Bavay, Mirabelle de Metz	1
			equally on base of blade and petiole	d'Ente, Reine Claude verte	2
			predominantly on petiole	Althanova	3
30.		Flowering shoot: number of flowers	few	d'Ente	3
			medium	Felsina, Reine Claude de Bavay	5
			many	Elena, Grand Prize	7
31.		Flower: diameter (fully opened flowers)	small	Early Laxton, Elena, Hanita	3
			medium	Herman, Ruth Gerstetter, Victoria	5
			large	Čaćanska najbolja, Felsina, Reine Claude d'Oullins	7
32.		PediceL: length	short	Reine Claude de Bavay, Ruth Gerstetter	3
			medium	Ersinger Frühzwetsche, Reine Claude verte	5
			long	d'Ente, Felsina, Ortenauer	7
			very long	Graf Brühl	9
33.		PediceL: pubescence	absent	Čaćanska najbolja, Elena	1
			present	Ersinger Frühzwetsche	9
34. (+)		Calyx: attitude of sepals	adpressed to petals	Hanita, Marjorie's Seedling	1
			touching neither petals nor receptacle	Anna Späth, Reine Claude d'Oullins	2
			touching receptacle	Čaćanska rana, Washington	3

CPVO N°	UPOV N°	Characteristics	Examples	Note	
35. (+)		Sepal: shape	narrow elliptic	Prugna d'Italia, Hauszwetsche	1
			elliptic	Reine Claude d'Oullins	2
			ovate	Washington, Coe's Golden Drop	3
			broad ovate	The Czar	4
			triangular	Kirke's	5
36. (+)		Flower: arrangement of petals	free	Anna Späth, Prugna d'Italia	1
			touching	Coe's Golden Drop, Empress	2
			overlapping	Ontario, Ruth Gerstetter	3
37.		Petal: size	small	Golden Bullace	3
			medium	Königin Victoria	5
			large	Reine Claude d'Oullins	7
38. (+)		Petal: shape	elliptic	Anna Späth, Opal	1
			broad elliptic	Graf Brühl	2
			circular	Althanova, The Czar	3
			obovate	Gräfin Cosel, Herman	4
39.		Petal: undulation of margin	absent	Red Magnum	1
			present	Anna Späth	9
40.		Stigma: position in relation to anthers	below	Althanova, Ersinger Frühzwetsche	1
			at same level	Graf Brühl, Hanita, Prugna d'Italia	2
			above	Herman, Reine Claude verte	3
41.		Anther: colour (just before dehiscence)	yellowish	d'Ente, Hanita, Victoria	1
			reddish orange	Gräfin Cosel, Valor, Reine Claude verte	2

CPVO N°	UPOV N°	Characteristics	Examples	Note	
42.		Ovary: pubescence	absent	Hanita, Washington	1
			present	Anna Späth, Belle de Louvain	9
43.		Fruit: size	very small	Mirabelle de Nancy	1
			small	Bonne de Bry, Hauszwetsche	3
			medium	Hanita, Stanley	5
			large	Nordens, Reine Claude d'Oullins	7
			very large	Giant	9
44. (+)		Fruit: shape in lateral view	oblong	Grand Prize	1
			elliptic	Empress, Victoria	2
			circular	Fortune, Mirabelle de Nancy	3
			oblate	Althanova	4
			ovate	Hanita, Stanley, Valjevka	5
			obovate	Elena, President	6
45. (+)		Fruit: symmetry (in ventral view)	symmetric	Reine Claude verte	1
			asymmetric	Angelina Burdett, Anna Späth	2
46.		Fruit: depth of suture towards stalk end	shallow	Hanita, Reine Claude Tardive de Chambourcy	3
			medium	Reine Claude de Bavay	5
			deep		7
47.		Fruit: depression at apex	absent or weak	Jefferson, Reine Claude verte	1
			intermediate	Reine Claude d'Oullins	2
			strong	Victoria	3

CPVO N°	UPOV N°	Characteristics	Examples	Note	
48.		Fruit: pubescence at apex	absent	Ersinger Frühzwetsche, Ortenauer	1
			present	Anna Späth	9
49.		Fruit: depth of stalk cavity	shallow	Anna Späth, Hanita, Monsieur Jaune	3
			medium	Graf Brühl, Reine Claude de Bavay	5
			deep	Bleue de Belgique, Gräfin Cosel	7
50.		Fruit: ground colour of skin (after removing bloom)	greenish white	Reine Claude diaphane	1
			green	Reine Claude verte	2
			yellowish green	Reine Claude d'Oullins	3
			yellow	Drap d'Or d'Espéren	4
			orange yellow	Emma Leppermann	5
			red	Victoria	6
			light violet	Althanova, Opal	7
			purplish violet	d'Ente	8
			dark violet	Anna Späth, Royal Blue	9
			violet blue	Early Rivers, Valor	10
			dark blue	Čáčanska lepotica, Čáčanska najbolja	11
51.		Fruit: colour of flesh	whitish		1
			green	Ersinger Frühzwetsche, Reine Claude verte	2
			yellowish green	Anna Späth, Reine Claude d'Oullins, Ruth Gerstetter	3
			yellow	Ariel, Graf Brühl, Monsieur Jaune	4
			orange	Early Transparent, Gräfin Cosel, Hanita	5
			red	Bountiful	6

CPVO N°	UPOV N°	Characteristics		Examples	Note
52.		Fruit: firmness of flesh	soft	Čačanska rodna, Empress, Gräfin Cosel	3
			medium	Elena, Monsieur Jaune	5
			firm	Hauszwetsche, Nordens	7
53.		Fruit: juiciness	low	Hauszwetsche, Top	3
			medium	Anna Späth	5
			high	Čačanska najbolja, Jefferson	7
54.		Fruit: degree of adherence of stone to flesh	non-adherent	Hauszwetsche, Kirke's	1
			semi-adherent	Drap d'Or d'Espéren, Elena	2
			adherent	Ersinger Frühzwetsche, Jefferson	3
55. (+)		Stone: general shape in lateral view	narrow elliptic	Drap d'Or d'Espéren, Ortenauer	1
			elliptic	Graf Brühl, Washington	2
			circular	Early Transparent, Mirabelle de Nancy	3
56. (+)		Stone: shape in ventral view	narrow elliptic	Hauszwetsche	1
			elliptic	Hanita, Washington	2
			broad elliptic	Gräfin Cosel, Reine Claude verte	3
			cuneate	President	4
57. (+)		Stone: development of keel	weak	d'Ente, Herman, Stanley	3
			medium	Anna Späth, Coes Golden Drop	5
			strong	Althanova	7
58. (+)		Stone: texture of lateral surfaces	grained	Chrudimer, Herman, The Czar	1
			hammered	Anna Späth, Elena, Valor	2

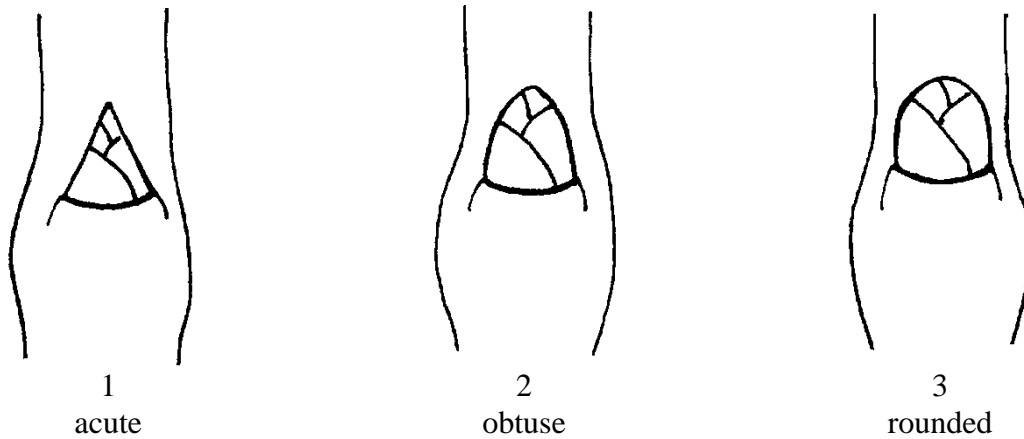
CPVO N°	UPOV N°	Characteristics	Examples	Note	
59. (+)		Stone: width at base	narrow	Kirke's, Mirabelle de Nancy	3
			medium	Hanita, Marjorie's Seedling	5
			broad	Gräfin Cosel, Washington	7
60. (+)		Stone: shape of apex	acute	Čačanska rodna, Ortenauer, The Czar	1
			obtuse	Anna Späth, Hanita	2
			rounded	Althanova, Monsieur Jaune	3
61.		Time of beginning of flowering	very early	Graf Brühl, Lützelsachser Frühzwetsche	1
			early	Ruth Gerstetter, Utility	3
			medium	d'Ente, Hanita, Reine Claude verte	5
			late	Elena, Hauszwetsche	7
			very late	Hauszwetsche Typ Schüfer, Quetsche Blanche de Cétricourt	9
62. (+)		Time of beginning of fruit ripening	very early	Ruth Gerstetter	1
			early	Bonne de Bry, Ersinger Frühzwetsche	3
			medium	Graf Brühl, Reine Claude verte	5
			late	Čačanska rodna, d'Ente	7
			very late	Elena, President, Reine Claude de Bavay	9

EXPLANATIONS AND METHODS

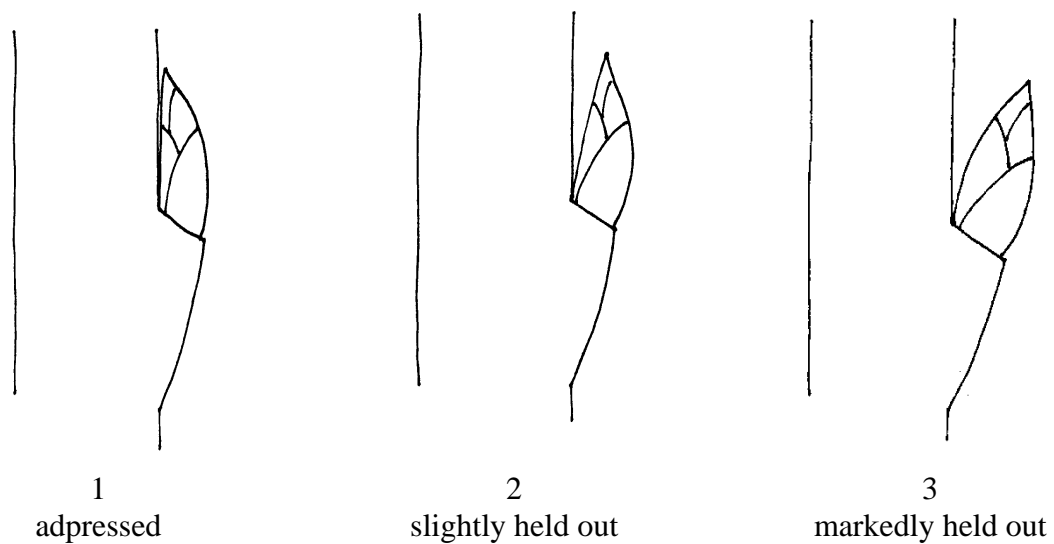
Ad. 1: Tree: vigour

The vigour of the tree should be considered as the overall abundance of vegetative growth.

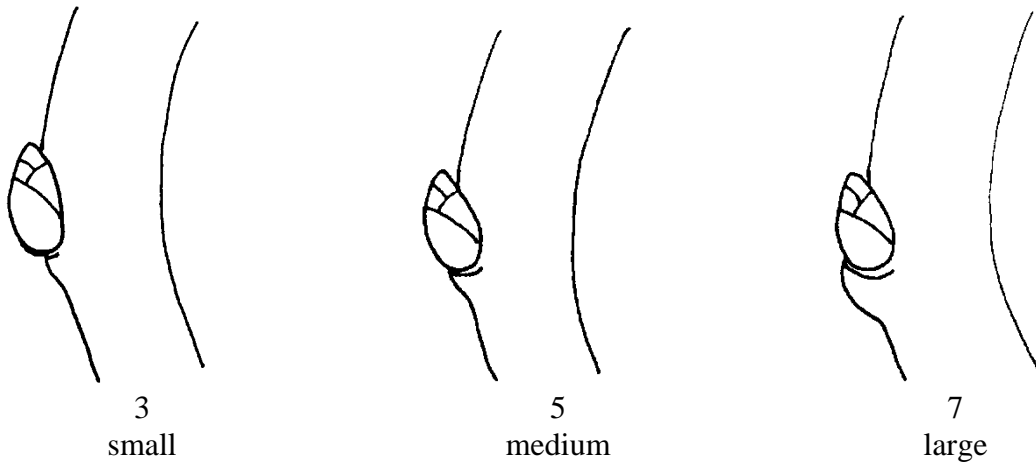
Ad. 9: One-year-old shoot: shape of vegetative bud



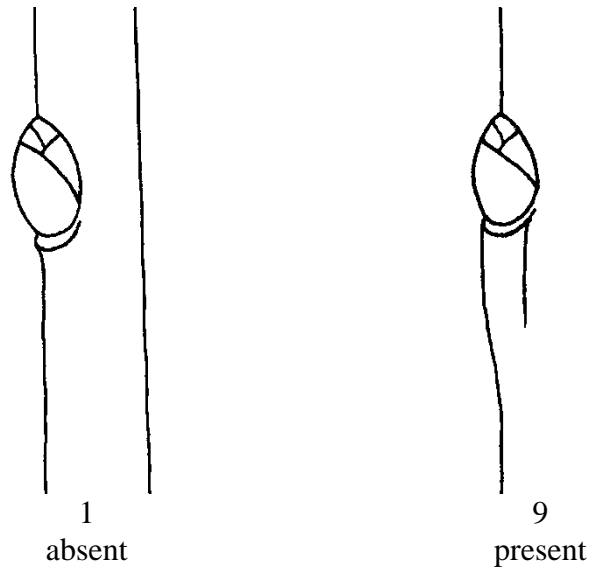
Ad. 10: One-year-old shoot: position of vegetative bud in relation to shoot



Ad. 11: One-year-old shoot: size of vegetative bud support

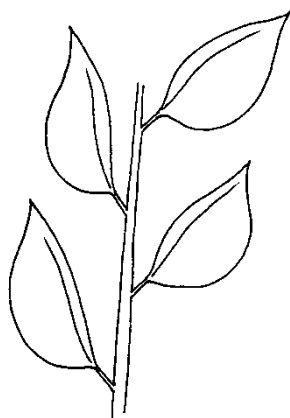


Ad. 12: One-year-old shoot: decurrence of vegetative bud support

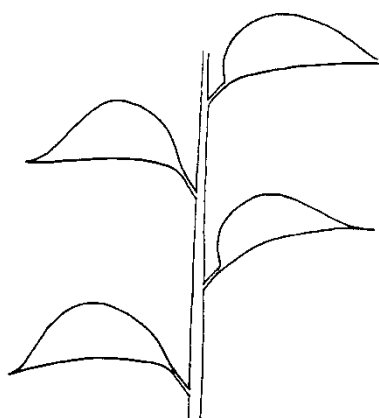


Ad. 14: Leaf blade: attitude in relation to shoot

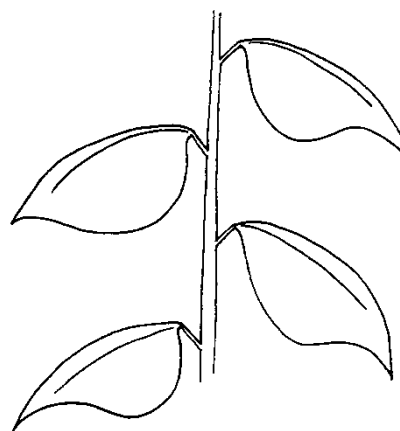
The attitude of the leaf blade in relation to shoot should be observed in the morning.



1
upwards

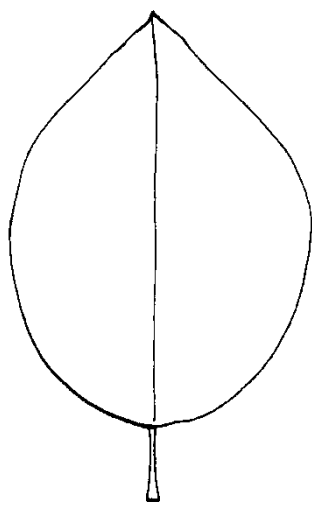


2
outwards

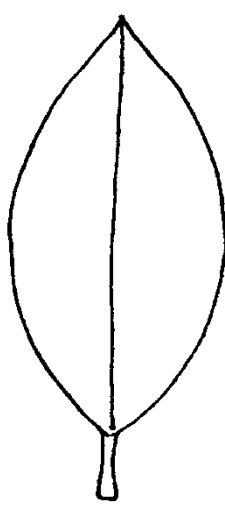


3
downwards

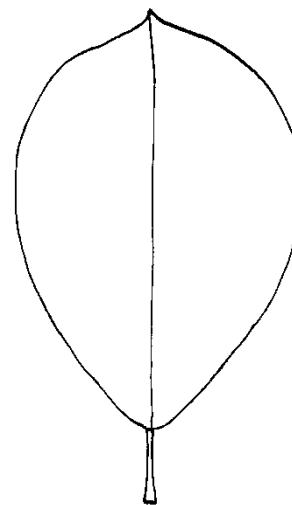
Ad. 18: Leaf blade: shape



1
ovate

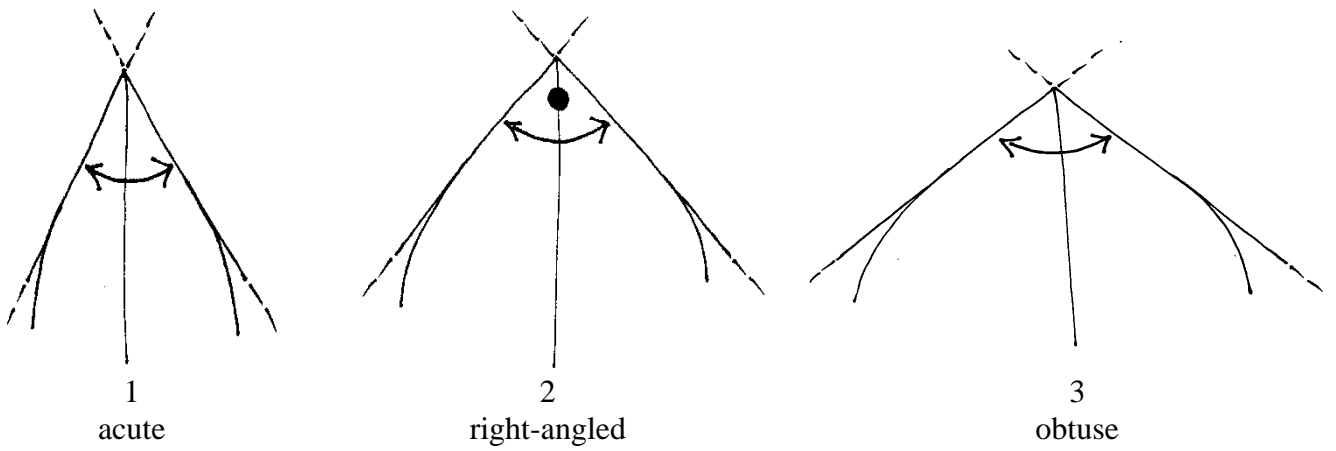


2
elliptic

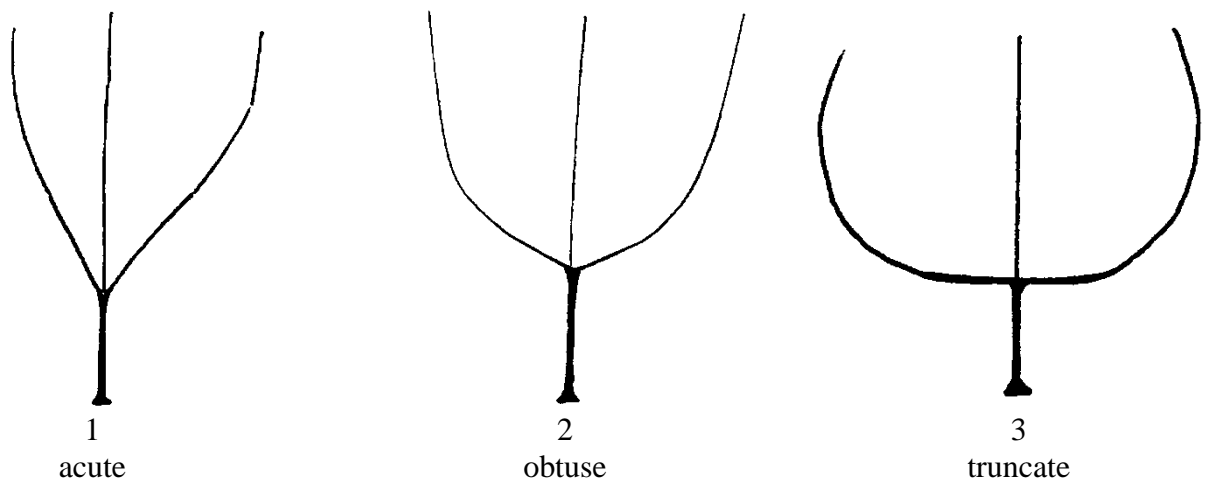


3
obovate

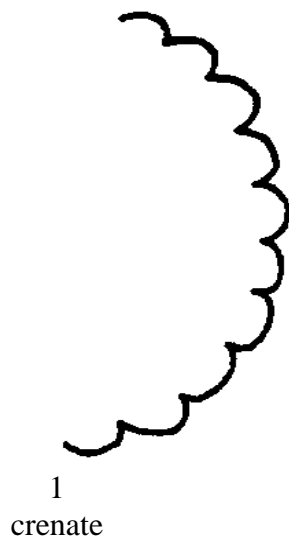
Ad. 19: Leaf blade: angle of apex (excluding tip)



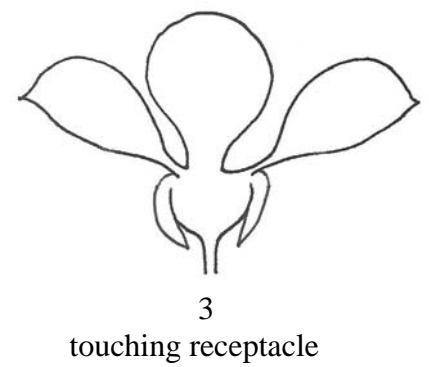
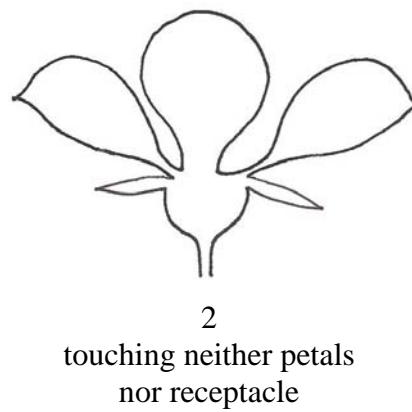
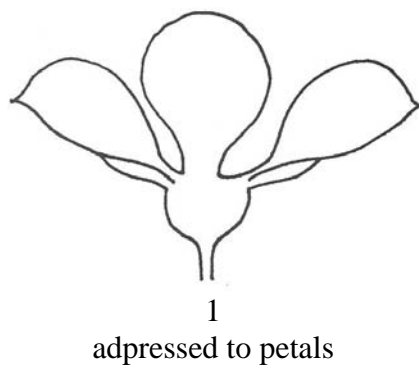
Ad. 20: Leaf blade: shape of base



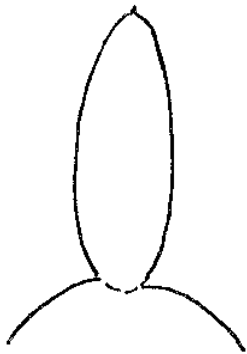
Ad. 24: Leaf blade: incisions of margin



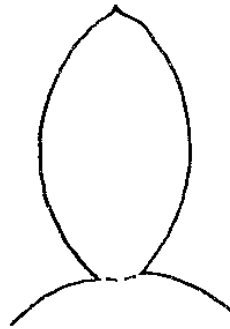
Ad. 34: Calyx: attitude of sepals



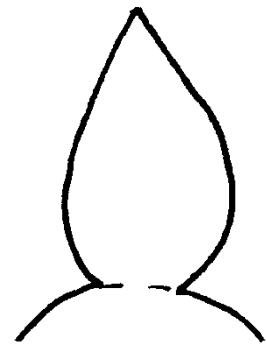
Ad. 35: Sepal: shape



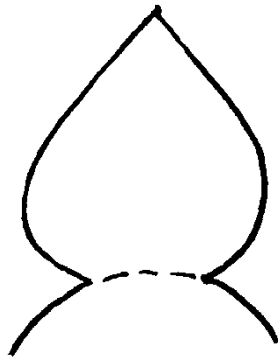
1
narrow elliptic



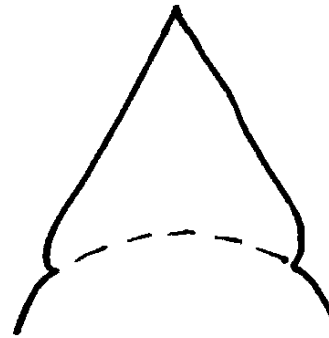
2
elliptic



3
ovate

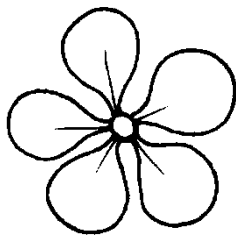


4
broad ovate

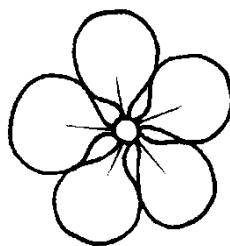


5
triangular

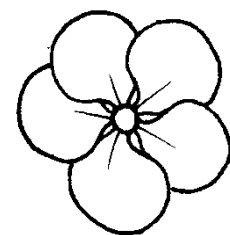
Ad. 36: Flower: arrangement of petals



1
free



2
touching

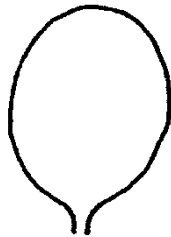


3
overlapping

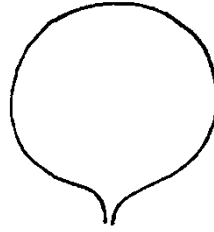
Ad. 38: Petal: shape



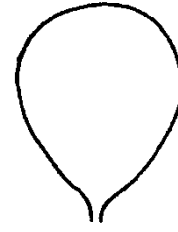
1
elliptic



2
broad elliptic



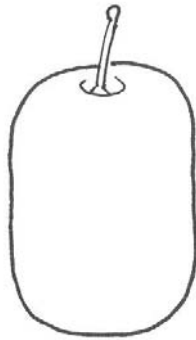
3
circular



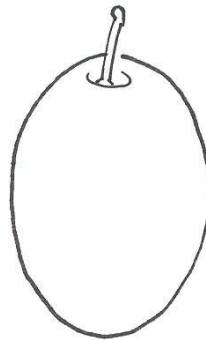
4
obovate

Ad. 44: Fruit: shape in lateral view

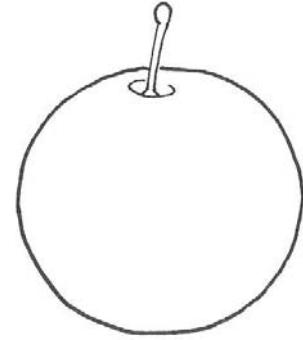
The following fruit shapes are presented as they appear in nature, nevertheless shape is to be observed in direction from the base (stalk end) to the top.



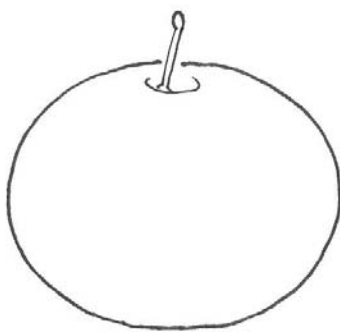
1
oblong



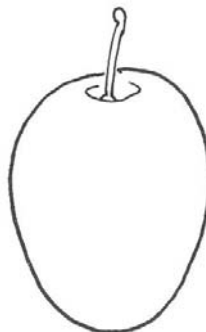
2
elliptic



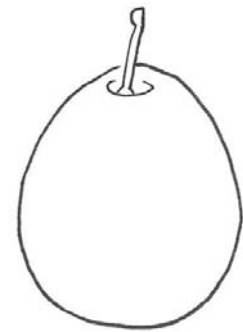
3
circular



4
oblate



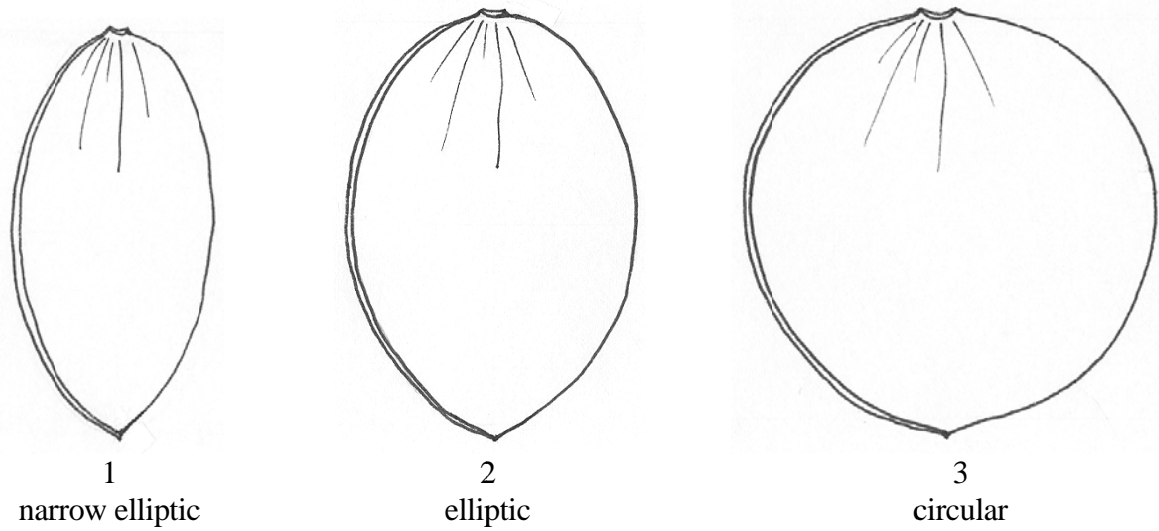
5
ovate



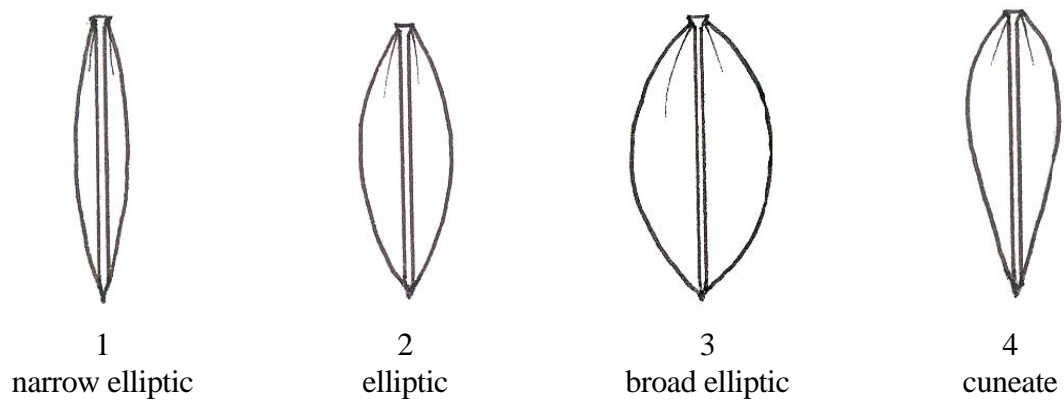
6
obovate

Ad. 45: Fruit: symmetry in ventral view

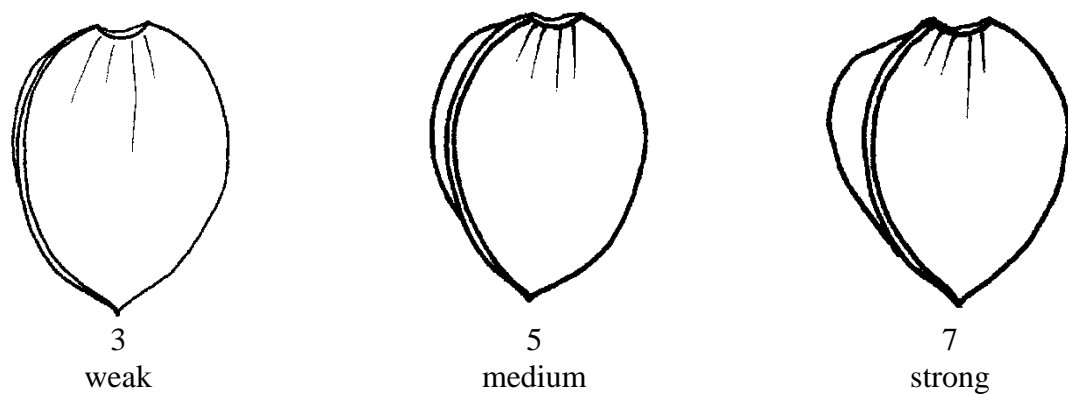
Ad. 55: Stone: general shape in lateral view



Ad. 56: Stone: shape in ventral view



Ad. 57: Stone: development of keel



Ad. 58: Stone: texture of lateral surfaces

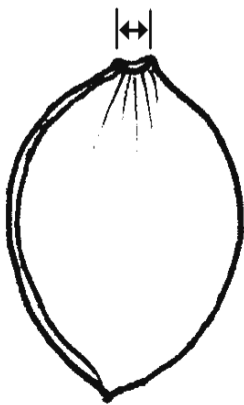


1
grained

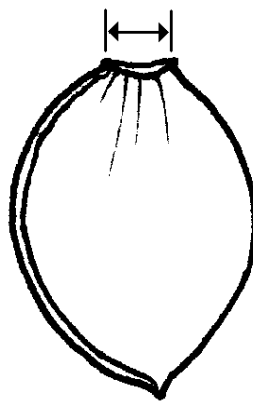


2
hammered

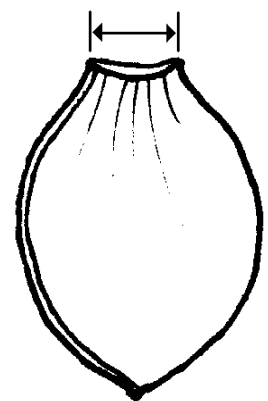
Ad. 59: Stone: width at base



3
narrow

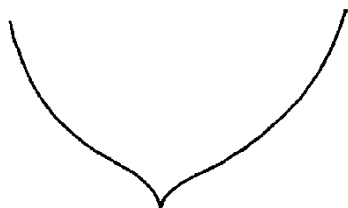


5
medium

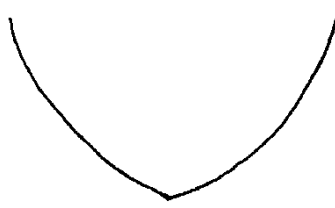


7
broad

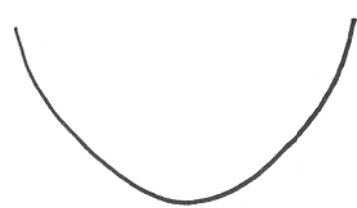
Ad. 60: Stone: shape of apex



1
acute



2
obtuse



3
rounded

Ad. 62: 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.

Synonyms of the example varieties:

Example Varieties	Synonyms
Althanova	Althann, Count Althanns Gage, Graf Althanns Reneklode, (Reine Claude) Conducta, Reine Claude (du comte) d'Althan
Čačanska Julia	Cacaks Julia
Čačanska lepotica	Cacaks Schöne
Čačanska najbolja	Cacaks Beste
Čačanska rana	Cacaks Frühe
Čačanska rodna	Cacaks Fruchtbare
Coe's Golden Drop	Bury seedling, Goutte d'or de Coe, Silver prune
d'Ente	Agen (d')Ente, Datte d'Agen, French prune, (Prune d') Ente, Robe de Sergent
Drap d'Or d'Espéren	Golden Esperen
Ersinger Frühzwetsche	Ahlbachs Frühzwetsche, Eisentaler Frühzwetsche, Goldquelle, Quetsche précoce d'Ersingen, Weißentaler Frühzwetsche
Hauszwetsche	Altesse ordinaire, Bauernpflaume, Early Russian, Hauspflaume, Impératrice Violette, Quetsche commune (d'Allemagne), Quetsche d'Alsace, Quetsche de Metz, Quetsche de Namur
Kirke's	Kirkes Pflaume
Mirabelle de Metz	Metzer Mirabelle, Mirabelle abricotée, Mirabelle aus Metz, Mirabelle petite
Mirabelle de Nancy	(Double) Drap d'Or, Double Mirabelle, Mirabelle grosse, Nancymirabelle
Monsieur hâtif	Early Orleans, Monsieur du Roi, Wilmot's Orleans
President	Président
Prugna d'Italia	Altesse double, Bleue d'Italie, Fellenberg, Italian Prune, Italienische Zwetsche, Quetsche d'Italie
Reine Claude de Bavay	Monstrueuse de Bavay, Saint Clair
Reine Claude diaphane	Reine Claude de Guigne, Transparent Gage
Reine Claude d'Oullins	Fausse Reine Claude, Massot, Oullins Golden, Oullins Reneklode, Reine Claude précoce
Reine Claude verte	Damas gris, Dauphine, Green Gage, Große Grüne Reneklode, Reine Claude Dorée, Zuckerpflaume
The Czar	Le Tsar, Czar
Victoria	Königin Viktoria, Queen Victoria, Viktoriapflaume

LITERATURE

Anonymous: The Brooks and Olmo Register of Fruit & Nut Varieties. Alexandria VA, USA, ASHS Press, 3rd edition, 1997, 744 p.

Basso, M.; Faccioli, F. *et al.*: Le principali prugne coltivate in Italia. Bologna, 1978.

Bundessortenamt: Beschreibende Sortenliste Steinobst – Pflaume, Süßkirsche, Sauerkirsche. Hannover: Landbuch Verlag, 1997, 168 p.

Caillavet, H.: Variétés anciennes de pruniers domestiques. Paris: INRA et BRG, 1991, 540 p.

Dermine, E.; Liard, O.: Identification et Description de Variétés du Prunier Européen. Gembloux & Paris, 1957, 322 p.

Groh, W.: Anbau der Pflaume. Berlin: Deutscher Landwirtschaftsverlag, 1960, 152 p.

Hedrick, U.P.: The Plums of New York. State of New York – Dep. of Agric.: 18th Annual Report, Vol. 3, Part II. Albany, USA: J.B. Lyon Company, 1911, 616 p.

Nicotra, A.; Moser, L.; Cobianchi, D.; Damiano, D.; Faedi, W.: Monografia di cultivar di susino. Roma, 1983, 141 p.

Röder, K.: Sortenkundliche Untersuchungen an *Prunus domestica*. Halle (Saale): Kühn-Archiv Bd. 54, 1939, 131 p.

Taylor, H.V.: The Plums of England. London: Crosby Lockwood & Son, Ltd, 1949, 151 p.

ANNEX II



European Union
Community Plant Variety Office

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

Prunus domestica L.

EUROPEAN 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

- (a) Seedling of unknown parentage[]
- (b) Produced by controlled pollination (indicate parent varieties).....[]
 - (i) Seed bearing parent[]
 - (ii) Pollen parent.....[]
- (c) Produced by open pollination of (indicate seed bearing parent only)[]
- (d) Mutation or sport from (indicate parent variety).....[]
- (e) Discovery (indicate where and when).....[]

4.2 Method of propagation

- (a) Cuttings[]
- (b) *In vitro* propagation.....[]
- (c) Seed.....[]
- (d) Other (please specify):[]

4.3	Pollinator	Good pollinators are the following varieties :	
4.4	Virus status	<p>(a) The variety is free from all known viruses as follows (indicate from which viruses).....[]</p> <p>(b) The plant material is virus tested (indicate against which viruses).....[]</p> <p>(c) The virus status is unknown.....[]</p>	
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	Fruit: size (on physiologically ripe fruit)		
(43)	very small	Mirabelle de Nancy	1 []
	small	Bonne de Bry, Hauszwetsche	3 []
	medium	Hanita, Stanley	5 []
	large	Nordens, Reine Claude d'Oullins	7 []
	very large	Giant	9 []

Characteristics	Example varieties	Note
5.2 (44)	Fruit: shape in lateral view (on physiologically ripe fruit)	
oblong	Grand Prize	1 []
elliptic	Empress, Victoria	2 []
circular	Fortune, Mirabelle de Nancy	3 []
oblate	Althanova	4 []
ovate	Hanita, Stanley, Valjevka	5 []
obovate	Elena, President	6 []
5.3 (50)	Fruit: ground colour of skin (after removing bloom, on physiological ripe fruit)	
greenish white	Reine Claude diaphane	1 []
green	Reine Claude verte	2 []
yellowish-green	Reine Claude d'Oullins	3 []
yellow	Drap d'Or d'Espéren	4 []
orange yellow	Emma Leppermann	5 []
red	Victoria	6 []
light violet	Althanova, Opal	7 []
purplish violet	D'Ente	8 []
dark violet	Anna Späth, Royal Blue	9 []
violet blue	Early Rivers, Valor	10 []
dark blue	Čačanska lepotica, Čačanska najbolja	11 []

Characteristics	Example varieties	Note
5.4 (51)	Fruit: colour of flesh	
whitish		1 []
yellow	Ersinger Frühzwetsche, Reine Claude verte	2 []
yellowish green	Anna Späth, Reine Claude d'Oullins, Ruth Gerstetter	3 []
yellow	Ariel, Graf Brühl, Monsieur Jaune	4 []
orange	Early Transparent, Gräfin Cosel, Hanita	5 []
red	Bountiful	6 []
5.5 (54)	Fruit: degree of adherence of stone to flesh (on physiologically ripe fruit)	
non-adherent	Hauszwetsche, Kirke's	1 []
semi-adherent	Drap d'Or d'Espéren, Elena	2 []
adherent	Ersinger Frühzwetsche, Jefferson	3 []
5.6 (61)	Time of beginning of flowering	
very early	Graf Brühl, Lützelsachser Frühzwetsche	1 []
early	Ruth Gerstetter, Utility	3 []
medium	d'Ente, Hanita, Reine Claude verte	5 []
late	Elena, Hauszwetsche	7 []
very late	Hauszwetsche Typ Schüfer, Quetsche Blanche de Cétrécourt	9 []
5.7 (62)	Time of beginning of fruit ripening	
very early	Ruth Gerstetter	1 []
early	Bonne de Bry, Ersinger Frühzwetsche	3 []
medium	Graf Brühl, Reine Claude verte	5 []
late	Čáčanska rodna, d'Ente	7 []
very late	Elena, President, Reine Claude de Bavay	9 []

6. Similar varieties and differences from these varieties:

Denomination of similar variety

Characteristic in which the similar variety is different¹⁾

State of expression of similar variety

State of expression of candidate variety

¹⁾ In the case of identical states of expressions of both varieties, please indicate the size of the difference

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

7.2 Special conditions for the examination of the variety

YES, please specify

NO

7.3 Other information

YES, please specify

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":

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]