

UPOV

TG/CHERRY-SW(proj.2)

ORIGINAL: English

DATE: 2005-07-22

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

SWEET CHERRY *

UPOV Code: PRUNU_AVI

Prunus avium L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

*prepared by experts from Hungary**to be considered by the Technical Working Party for Fruit Crops at its thirty-sixth session,
to be held in Kôfu, Japan, from September 5 to 9, 2005*

Alternative Names: *

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Prunus avium</i> L. <i>Cerasus avium</i> (L.) Moench	Sweet cherry	Cerise douce	Süßkirsche	Cerezo dulce

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.]

TABLE OF CONTENTSPAGE

1.	SUBJECT OF THESE TEST GUIDELINES	3
2.	MATERIAL REQUIRED	3
3.	METHOD OF EXAMINATION	3
3.1	Number of Growing Cycles.....	3
3.2	Testing Place	3
3.3	Conditions for Conducting the Examination	3
3.4	Test Design	4
3.5	Number of Plants / Parts of Plants to be Examined	4
3.6	Additional Tests.....	4
4.	ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY	4
4.1	Distinctness.....	4
4.1.1	General Recommendations.....	4
4.1.2	Consistent Differences	4
4.1.3	Clear Differences.....	4
4.2	Uniformity	5
4.3	Stability	5
5.	GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL	5
6.	INTRODUCTION TO THE TABLE OF CHARACTERISTICS	6
6.1	Categories of Characteristics	6
6.1.1	Standard Test Guidelines Characteristics	6
6.1.2	Asterisked Characteristics	6
6.2	States of Expression and Corresponding Notes	6
6.3	Types of Expression	6
6.4	Example Varieties	6
6.5	Legend	6
7.	TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES	7
8.	EXPLANATIONS ON THE TABLE OF CHARACTERISTICS	17
8.1	Explanations covering several characteristics	17
8.2	Explanations for individual characteristics.....	18
8.3	Synonym(s) of Example Varieties.....	21
9.	LITERATURE	22
10.	TECHNICAL QUESTIONNAIRE	24

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Prunus avium* L.

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 one-year-old grafts, budsticks or dormant shoots for grafting.

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

5 trees (one-year-old grafts) or
3 budsticks or
5 dormant shoots for grafting, sufficient to propagate 5 trees.

The rootstock to be used is specified by the competent 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*

The minimum duration of tests should normally be two independent growing cycles. The growing cycle is considered to be the duration of a single growing season, beginning with bud burst, 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*

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

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. In particular, in the case of fruit and stone characteristics, observations should be made on 15 fruits, three taken from each of five trees.

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 20);
- (b) Fruit: color of skin (characteristic 27);
- (c) Fruit: color of flesh (characteristic 31);
- (d) Time of beginning of flowering (characteristic 40);
- (e) Time of beginning of fruit ripening (characteristic 41).

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 Section 6.1.2

(QL) Qualitative characteristic – see Section 6.3

(QN) Quantitative characteristic – see Section 6.3

(PQ) Pseudo-qualitative characteristic – see Section 6.3

(a)–(d) See Explanations on the Table of Characteristics in Chapter 8.1

(+) See Explanations on the Table of Characteristics in Chapter 8.2

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

Char. No.	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1.	Tree: vigor					
(+)						
QN	(a)	very weak			Compact Van, Compact Stella	1
		weak			Sumtare, Szomolyai fekete	3
		medium			Stella, Kordia	5
		strong			Hedelfinger	7
		very strong			Regina	9
2.	Tree: habit					
(*)						
(+)						
PQ	(a)	upright			Melitopol'skaya rannyaya, Stella	1
		semi-upright			Burlat, Napoléon	2
		spreading			Vega, Vera	3
		drooping			Jaboulay, Kordia	4
3.	Tree: branching					
(*)						
(+)						
QN	(a)	weak			Merton Glory, Rainier	3
		medium			Hedelfinger	5
		strong			Alex, Szomolyai fekete	7

Char. No.	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
4.	Young shoot: anthocyanin coloration of apex (during rapid growth)					
QN	absent or very weak				Marta	1
	weak				Merton Glory, Van	3
	medium				Napoléon, Rebekka	5
	strong				Namosa, Rivan	7
	very strong				Aida	9
5.	Young shoot: pubescence of apex (during rapid growth)					
	weak				Hedelfinger, Van	3
	medium				Kassins Frühe	5
	strong				Burlat, Early Rivers	7
6. (* (+)	One-year-old shoot: type					
QL (a)	normal				Burlat	1
	spur				Compact Lambert, Compact Stella	2
7.	One-year-old shoot: number of lenticels					
QN (a)	few				Kordia, Sam	3
	medium				Hedelfinger, Van	5
	many				Krupnoplodnaya, Querfurter Königskirsche	7

Char. No.	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
8.	One-year-old shoot: thickness (at midlength)					
QN (a)	thin				Szomolyai fekete	3
	medium				Hedelfinger	5
	thick				Kavics, Van	7
9.	Leaf blade: length					
QN (b)	short				Sumtare, Szomolyai fekete	3
	medium				Napoléon, Vanda	5
	long				Hedelfinger, Merton Crane	7
10.	Leaf blade: width					
QN (b)	narrow				Sumtare, Sylvia	3
	medium				Guillaume, Stella	5
	broad				Badacsonyi, Germersdorfi 45, Merton Crane	7
11. (*)	Leaf blade: ratio length/width					
QN (b)	small				Badacsonyi, Hudson,	3
	medium				Bing, Merton Crane	5
	large				Hedelfinger, Sylvia, Vanda	7
12.	Leaf blade: intensity of green color of upper side					
QN (b)	light				Bigarreau d'Or, Sumtare	3
	medium				Napoléon, Vanda	5
	dark				Burlat, Hedelfinger	7

Char. No.	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
13. (*)	Leaf: length of petiole					
QN	(b)	short			Sylvia, Van	3
		medium			Sam, Stella	5
		long			Badacsonyi, Merton Crane	7
14.	Leaf: ratio length of blade / length of petiole					
QN	(b)	small			Badacsonyi, Lambert	3
		medium			Burlat, Sam	5
		large			Hedelfinger, Stella	7
15. (*)	Petiole: nectaries					
QL	(b)	absent			Namosa, Sylvia	1
		present			Summit, Sumtare	9
16. (+)	Petiole: color of nectaries					
PQ	(b)	greenish yellow			Drogans Gelbe, Van	1
		orange yellow			Hudson, Reverchon	2
		light red			Burlat, Sylvia	3
		dark red			Early Rivers, Germersdorfi 45	4
		purple			Gege, Paulus	5
17. (+)	Flower: diameter					
QN	(c)	small			Anita, Szomolyai fekete	3
		medium			Sylvia, Van	5
		large			Aida, Burlat	7

Char. No.	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
18.	Flower: shape of petal					
(+)						
PQ	(c) circular				Kordia, Schneiders spaete Knorpel	1
	medium obovate				Burlat, Sunburst	2
	broad obovate				Hedelfinger, Van	3
19.	Flower: arrangement of petals					
(+)						
PQ	(c) free				Burlat, Sunburst	1
	intermediate				Germersdorfi 45, Van	2
	overlapping				Hudson	3
20.	Fruit: size					
(*)						
QN	(d) very small				Müncheberger Frühernte	1
	small				Annonay, Szomolyai fekete	3
	medium				Early Rivers, Schmidt	5
	large				Burlat, Rainier	7
	very large				Duroni 3, Sunburst	9
21.	Fruit: shape					
(*)						
(+)						
PQ	(d) reniform				Van, Vera	1
	oblate				Alex, Burlat,	2
	circular				Germersdorfi 45, Reverchon	3
	oblong				Hedelfinger	4
	cordate				Kordia, Summit	5

Char. No.	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
22.	Fruit: pistil end					
(+)						
QN	(d) prominent				Guillaume, Kavics	1
	flat				Hedelfinger, Van	2
	depressed				Reverchon, Sunburst	3
23.	Fruit: suture					
QN	(d) absent or very weakly conspicuous				Hedelfinger	1
	weakly conspicuous				Germersdorfi 45	2
	strongly conspicuous				Burlat, Rita	3
24.	Fruit: length of stalk					
(*)						
QN	(d) very short				Van	1
	short				Burlat, Szomolyai fekete	3
	medium				Hedelfinger, Sunburst	5
	long				Kordia, Noire de Meched	7
	very long				Delflash	9
25.	Fruit: thickness of stalk					
QN	(d) thin				Hedelfinger, Kordia	3
	medium				Sunburst, Germersdorfi 45	5
	thick				Van	7
26.	Fruit: abscission layer between stalk and fruit					
QL	(d) absent				Burlat, Sunburst	1
	present				Alex, Vittoria	9

Char. No.	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
27. (*)	Fruit: color of skin					
PQ	(d) yellow				Bigarreau d'Or, Dönnissens Gelbe	1
	yellow with blush				Napoléon, Vega	2
	orange red				Tardif de Vignola	3
	light red				Krupnoplodnaya	4
	red				Alex, Sunburst	5
	brown red				Burlat, Kordia	6
	dark red				Hedelfinger, Stella	7
	blackish				Knauffs, Namosa, Szomolyai fekete	8
28.	Fruit: size of lenticels on skin					
QN	(d) small				Hedelfinger	3
	medium				Guillaume	5
	large				Reverchon	7
29.	Fruit: number of lenticels on skin					
QN	(d) few				Burlat, Rita	3
	medium				Sunburst	5
	many				Marmotte, Vera	7
30.	Fruit: thickness of skin					
QN	(d) thin				Müncheberger Frühernte	3
	medium				Germersdorfi 45	5
	thick				Carmen	7

Char. No.	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
31. (*)	Fruit: color of flesh					
PQ	(d) cream white				Napoléon	1
	yellow				Dönnissens Gelbe	2
	pink				Reverchon, Sunburst	3
	red				Germersdorfi 45, Hedelfinger	4
	dark red				Rubin, Szomolyai fekete	5
32.	Fruit: color of juice					
PQ	(d) colorless				Dönnissens Gelbe	1
	cream yellow				Napoléon	2
	pink				Reverchon, Sunburst	3
	red				Sam, Van	4
	purple				Hedelfinger, Kavics	5
33. (*)	Fruit: firmness					
QN	(d) soft				Merton Glory	3
	medium				Napoléon, Sunburst	5
	firm				Reverchon, Van	7
	very firm				Kavics	9
34.	Fruit: acidity					
QN	(d) very low or low				Müncheberger Frühernte, Burlat	1
	medium				Napoléon, Van	2
	high				Sunburst	3
35.	Fruit: sweetness					
QN	(d) weak				Müncheberger Frühernte	3
	medium				Burlat, Sunburst	5
	strong				Bigarreau d'Or, Kordia	7

Char. No.	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
36.	Fruit: juiciness					
QN	(d) weak				Reverchon	3
	medium				Early Rivers, Kordia	5
	strong				Sándor, Szomolyai fekete	7
37. (*)	Stone: size					
QN	(d) small				Hedelfinger, Van	3
	medium				Burlat, Germersdofi 45	5
	large				Guillaume, Merton Glory	7
	very large				Valerij Chkalov, Carmen	
38. (*) (+)	Stone: shape (in ventral view)					
PQ	(d) medium elliptic				Kordia, Napoléon	1
	broad elliptic				Knauffs, Rita	2
	circular				Germersdofi 45, Van	3
39. (*)	Fruit: ratio weight of fruit / weight of stone					
QN	(d) small				Müncheberger Frühernte	3
	medium				Hedelfinger, Reverchon	5
	large				Sunburst, Vera	7
40. (*) (+)	Time of beginning of flowering					
QN	very early				Cristobalina	1
	early				Lapins, Marmotte	3
	medium				Merton Glory, Napoléon	5
	late				Germersdofi 45, Reverchon	7
	very late				Regina	9

Char. No.	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
41.	Time of beginning					
(*)	of fruit ripening					
(+)						
QN	very early				Cristobalina, Hâtive de Bâle, Müncheberger Frühernte	1
	early				Burlat, Valerij Chkalov	3
	medium				Guillaume, Sunburst	5
	late				Hedelfinger, Katalin	7
	very late				Hudson, Regina	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:

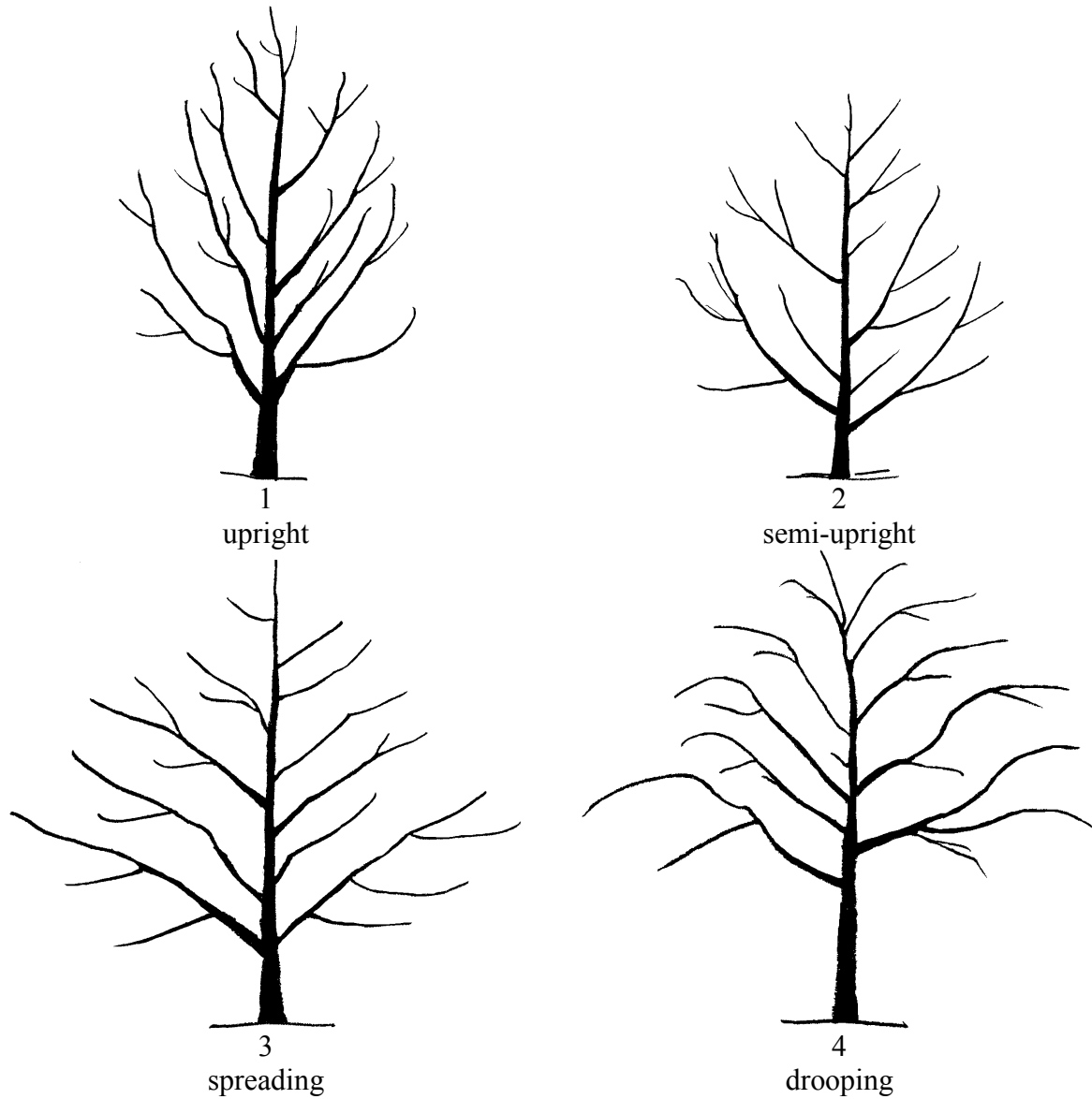
- (a) Tree / One-year-old shoot: Unless otherwise stated, all observations on the tree and on the one-year-old shoot should be made during winter, on trees that have fruited at least once.
- (b) Leaf: Unless otherwise stated, all observations on the leaf should be made in summer on the middle, fully developed leaf of a spur.
- (c) Flower: Unless otherwise stated, all observations on the flower should be made on fully developed flowers at the beginning of anther dehiscence.
- (d) Fruit: All observations on the fruit and stone should be made at full maturity.

8.2 *Explanations for individual characteristics*

Ad. 1: Tree: vigor

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

Ad. 2: Tree: habit



Ad. 3: Tree: branching

Observations should be carried out on scaffold branches with the degree of branching being indicated by the density of lateral branches and shoots, excluding fruiting shoots.

Ad. 6: One-year-old shoot: type



1
normal



2
spur

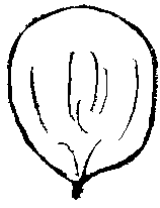
Ad. 16: Petiole: color of nectaries

Observations of this characteristic should be made in summer on fully developed leaves from the middle third of a well developed current season's shoot.

Ad. 17: Flower: diameter

Observations or measurements should be carried out on completely opened flowers with petals pressed into horizontal position.

Ad. 18: Flower: shape of petal



1
circular

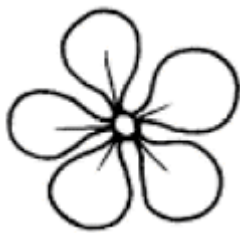


2
medium obovate

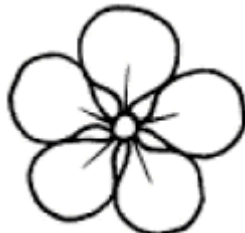


3
broad obovate

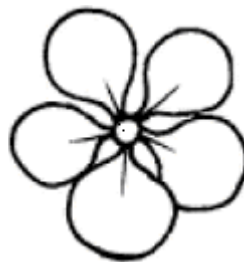
Ad. 19: Flower: arrangement of petals



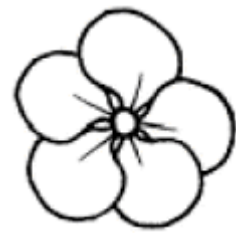
1
free



2
intermediate



2
intermediate



3
overlapping

Ad. 21: Fruit: shape



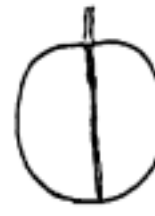
1
reniform



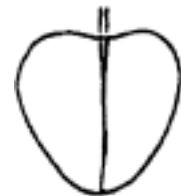
2
oblate



3
circular

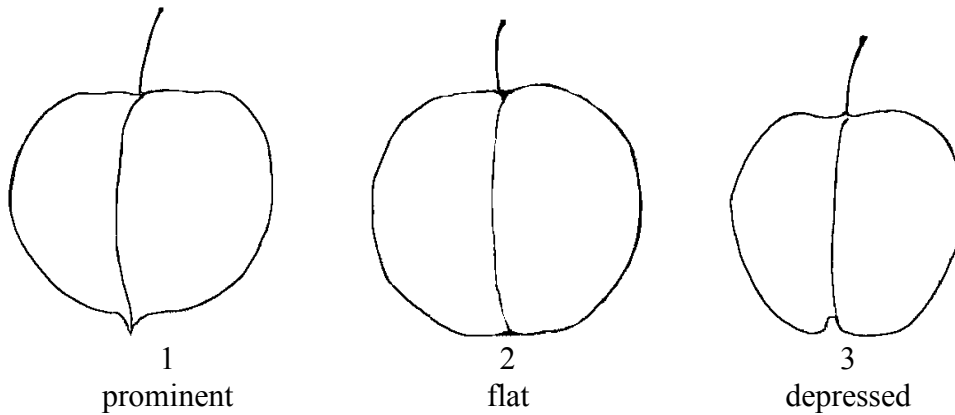


4
oblong

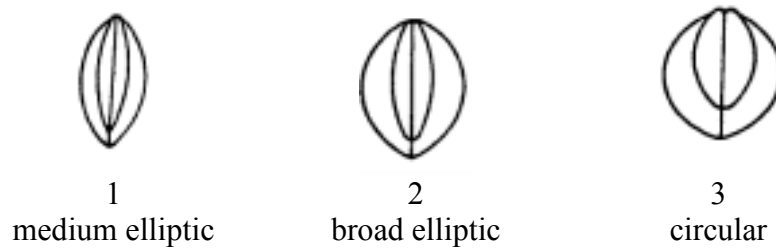


5
cordate

Ad 22: Fruit: pistil end



Ad. 38: Stone: shape (in ventral view)



Ad. 40: Time of beginning of flowering

When 5-10% open flowers can be observed.

Ad. 41: Time of beginning of fruit ripening

When 5-10% ripe fruits can be observed. Fruit ripening should be considered as the time of eating ripeness, when the fruit can be most easily removed from the stalk.

8.3 *Synonym(s) of Example Varieties*

<i>Example Varieties</i>	<i>Synonym(s)</i>
Dönnissens Gelbe	Pietroase Dönissen
Müncheberger Frühernte	Primavera

9. Literature

Aeppli, A., 1982: "Kirschensorten für alle Reifezeiten", Schweizerische Zeitschrift für Obst- und Weinbau, pp. 352-353., CH.

Aeppli, A.: Gremminger, U., Nyfeler, A., Zbinden, W., 1982: "Kirschensorten", Verlag Stutz & Co., Wädenswil, 95 pp., CH.

Anonymous, 1997: "The Brooks and Olmo register of new fruit and nut varieties". Third edition, ASHS Press, Alexandria, VA, US.

Baldini, E., et al., 1973: "Indagine sul ciliegio diffuso in Italia", Ed. Consiglio nazionale delle ricerche, Bologna, , 213 pp., IT.

Boček, O., 1954: "Pomologie". Státní Zemědělské Nakladatelství, Praha, CZ.

Bordeianu, T., *et al.*, 1963: "Pomologia Republicii Populare Romîne". Vol. 1-8, Editura Academiei Republicii Populare Romîne, Bucuresti, RO.

Cifranič, P., *et al.*, 1978: "Pomologia". Priroda, Bratislava, SK.

Götz, G., Silbereisen, R., 1989: "Obstsorten-Atlas, Kernobst, Steinobst, Beerenobst, Schalenobst", Verlag Eugen Ulmer, Stuttgart, DE

Grubb, N.H., 1949: "Cherries" Ed. Crosby Lockwood and Sons Ltd., London, 186 pp., GB.

G. Tóth M., 1997. "Gyümölcsészet (Pomology)" PRIMOM, Nyíregyháza, HU.

Hendrick, V.P., 1915: "Cherries of New York", J.B. Lyon and Co, 369 pp., US.

Kobel, F., 1937: "Kirschensorten der deutschen Schweiz", Verlag Benteli AG, Bern, 256 pp., CH.

Krümmel, H., Groh, W., Friedrich, G., 1964: "Deutsche Obstsorten". Bd. 1-3. Deutscher Landwirtschaftsverlag, Berlin, DE.

Leroy, A., 1877: « Dictionnaire de Pomologie, Fruits à noyau, Cerise », Tome V, 127 variétés, 280 pp., FR

Lichou, J., Edin, M., Tronel, C., Saunier, R., Claverie, J., et al., 1990: « Le cerisier: La cerise de table », C.T.I.F.L., 361 pp., FR.

Pochyba, D., *et al.*, 1964: "Pomologia," Slov. Vyd. Polnohosp. Lit., Bratislava, SK.

Rayman, J., Tomcsányi, P., 1964: "Gyümölcsfajták zsebkönyve. Almagyümölcsűek és csonthéjasok (Pocket manual of fruit varieties 1.)". Mezőgazdasági Kiadó, Budapest, HU.

Saunier, R., Fos, E., Tauzin, Y., Edin, M., Tronel, C., 1989: « Spécial cerise: les nouvelles variétés », l'Arboriculture fruitière, 416: 40-47, FR.

Saunier, R., Fos, E., Tauzin, Y., Edin, M., Tronel, C., 1989: "Special cerise: les bigarreaux d'industrie", *l'Arboriculture fruitiere*, 416: 48-53, FR.

Shepelskij, A. I., 1966: "Novye sorta plodovykh i yagodnykh kul'tur Ukrain (New fruit varieties of Ukraine)". Urozhai, Kiev, UA.

Simirenko, L. P., 1963: "Pomologiia". Vol. 1-3. Izd S/h. Lit. Ukr. SSR, Kiev, UA.

Sinskaya, E. N., 1949: "Kulturnaya flora SSSR. XVIII. Plodovye kostochkovye" (Cultivated plants of USSR. Stone fruits)". OGIZ-Sel'khozgiz, Moskva-Leningrad, RU.

Smirnov, V. F., 1972: "Novye sorta kostochkovykh kul'tur, vyvedennye v SSSR (New stone fruit varieties bred in USSR)". Izdatel'stvo Nauka, Moskva, RU.

Smykov, V. K., *et al.*, 1974: "Kostochkovye kul'tury (Stone fruits)". Izdatel'stvo Kartya Moldovenyaske, Kishinev, MD.

Stoichkov, J., *et al.*, 1960: "B'lgarska pomologiya (Bulgarian Pomology)". Zemizdat, Sofia, BG.

Tomcsányi, P., *et al.*, 1979: "Gyümölcsfajtáink, Gyakorlati pomológia (Practical Pomology)". Mezőgazdasági Kiadó, Budapest, HU.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page (x) of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1 Botanical Name	<input type="text" value="Prunus avium L."/>	
1.2 Common Name	<input type="text" value="SWEET CHERRY"/>	
2. Applicant		
Name	<input type="text"/>	
Address	<input type="text"/>	
Telephone No.	<input type="text"/>	
Fax No.	<input type="text"/>	
E-mail address	<input type="text"/>	
Breeder (if different from applicant)	<input type="text"/>	
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)	<input type="text"/>	
Breeder's reference	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page (x) of {y}	Reference Number:
-------------------------	-----------------	-------------------

<p>¹4. Information on the breeding scheme and propagation of the variety</p> <p>4.1 Breeding scheme</p> <p>Variety resulting from:</p> <p>4.1.1 Crossing</p> <p>(a) controlled cross [] (please state parent varieties)</p> <p>(b) partially known cross [] (please state known parent variety(ies))</p> <p>(c) unknown cross []</p> <p>4.1.2 Mutation [] (please state parent variety)</p> <p>4.1.3 Discovery and development [] (please state where and when discovered and how developed)</p> <p>4.1.4 Other [] (please provide details)</p> <p>4.2 Method of propagating the variety</p> <p>4.2.1 Vegetative propagation</p> <p>(a) budding or grafting []</p> <p>(b) other (state method) []</p> <p>4.2.2 Other [] (please provide details)</p>
--

¹ 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 Fruit: size (20)		
very small	Müncheberger Frühernte	1[]
small	Annonay, Szomolyai fekete	3[]
medium	Early Rivers, Schmidt	5[]
large	Burlat, Rainier	7[]
very large	Duroni 3, Sunburst	9[]
5.2 Fruit: color of skin (27)		
yellow	Bigarreau d'Or, Dönnissens Gelbe	1[]
yellow with blush	Napoléon, Vega	2[]
orange red	Tardif de Vignola	3[]
light red	Krupnoplodnaya	4[]
red	Alex, Sunburst	5[]
brown red	Burlat, Kordia	6[]
dark red	Hedelfinger, Stella	7[]
blackish	Knauffs, Namosa, Szomolyai fekete	8[]
5.3 Fruit: color of flesh (31)		
cream white	Napoléon	1[]
yellow	Dönnissens Gelbe	2[]
pink	Reverchon, Sunburst	3[]
red	Germersdorfi 45, Hedelfinger	4[]
dark red	Rubin, Szomolyai fekete	5[]

TECHNICAL QUESTIONNAIRE	Page (x) of {y}	Reference Number:
-------------------------	-----------------	-------------------

Characteristics	Example Varieties	Note
5.4 Time of beginning of flowering (40)		
very early	Cristobalina	1[]
early	Lapins, Marmotte	3[]
medium	Merton Glory, Napoléon	5[]
late	Germersdofi 45, Reverchon	7[]
very late	Regina	9[]
5.5 Time of beginning of fruit ripening (41)		
very early	Cristobalina, Hâtive de Bâle, Müncheberger Frühernte	1[]
early	Burlat, Valerij Chkalov	3[]
medium	Guillaume, Sunburst	5[]
late	Hedelfinger, Katalin	7[]
very late	Hudson, Regina	9[]

6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>	<i>Fruit: size</i>	<i>small</i>	<i>medium</i>
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.

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 or pesticide) | Yes [] | No [] |
| (c) Tissue culture | Yes [] | No [] |
| (d) Other factors | Yes [] | No [] |

Please provide details of where you have indicated "yes".

.....

10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Applicant's name

Signature

Date

[End of document]