

UPOV

TG/CHERRY-SO(proj.2)

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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

DRAFT

SOUR CHERRY

UPOV Code: PRUNU_CSD

Prunus cerasus L.

DUKE CHERRY

UPOV Code: PRUNU_GON

Prunus ×gondouinii (Poit. & Turpin) Rehder

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, 2000*

Alternative Names:*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Prunus cerasus</i> L., <i>Cerasus vulgaris</i> Mill.	Sour cherry, Tart cherry, Morello	Cerise acide	Sauerkirsche	Cerezo ácido, Guindo
<i>Prunus ×gondouinii</i> (Poit. & Turpin) Rehder, <i>P. avium</i> × <i>P. cerasus</i>	Duke cherry			

The purpose of these guidelines ("Test Guidelines") is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

ASSOCIATED DOCUMENTS

These Test Guidelines should be read in conjunction with the General Introduction and its associated TGP documents.

* These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.]

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Prunus cerasus* L. and *Prunus ×gondouinii* (Poit. & Turpin) Rehder.

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 27);
- (b) Fruit: color of skin (characteristic 36);
- (c) Fruit: color of flesh (characteristic 37);
- (d) Fruit: color of juice (characteristic 38);
- (e) Time of beginning of flowering (characteristic 46);
- (f) Time of beginning of fruit ripening (characteristic 47).

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

6. Introduction to the Table of Characteristics

6.1 *Categories of Characteristics*

6.1.1 Standard Test Guidelines Characteristics

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

6.1.2 Asterisked Characteristics

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

6.2 *States of Expression and Corresponding Notes*

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

6.3 *Types of Expression*

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

6.4 *Example Varieties*

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

6.5 *Legend*

(*) Asterisked characteristic – see Chapter 6.1.2

QL Qualitative characteristic – see Chapter 6.3

QN Quantitative characteristic – see Chapter 6.3

PQ Pseudo-qualitative characteristic – see Chapter 6.3

(a) – (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

English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1. Tree: vigor					
(+)					
QN (a) very weak				Kelleriis 14, Morava	1
weak				Gerema, Samor	3
medium				Karneol, Montmorency	5
strong				Kántorjánosi 3, Pándy Bb. 119	7
very strong				Érdi nagygyümölcsű, Piramis	9
2. Tree: habit					
(*)					
(+)					
PQ (a) upright				Oblachinska, Piramis, Tarina	1
semi-upright				Safir, Újfehértói fürtös	2
spreading				Karneol, Montmorency, Samor	3
drooping				Cigánymeggy 7	4
3. Tree: branching					
(*)					
(+)					
QN (a) weak				Meteor korai, Piramis, Samor	3
medium				Morsam, Pándy Bb 119	5
strong				Cigánymeggy 7, Montmorency, Safir	7

English	français	deutsch	español	Example Varieties/ Exemples/ Beispielsorten/ Variedades ejemplo	Note/ Nota
4. Tree: bud distribution					
(+)					
PQ (a)	along entire branch			Maliga emléke, Piramis	1
	only on the middle and distal part of branch			Érdi jubileum, Meteor, Morava	2
	only on distal part of branch			Cigánymeggy 7, Samor, Schattenmorelle,	3
5. Young shoot: anthocyanin coloration of apex (during rapid growth)					
QN	absent or very weak			Cigánymeggy 59, Meteor	1
	weak			Montmorency, Morellenfeuer	3
	medium			Érdi bőtermő, Favorit	5
	strong			Érdi jubileum, Fanal	7
	very strong			Érdi nagygyümölcsű, Topas	9
6. Young shoot: pubescence of apex (during rapid growth)					
QN	weak			Cigánymeggy 7, Csengódi, Karneol	3
	medium			Favorit, Morava	5
	strong			Cigánymeggy 59	7
7. Shoot: type					
(*)					
(+)					
QL (a)	normal			Fanal, Montmorency, Pándy 279	1
	spur				2

English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
8. One-year-old shoot: number of lenticels					
QN (a) few				Gerema, Morellenfeuer	3
medium				Meteor, Pándy Bb. 119	5
many				Maliga emléke, Meteor korai, Piramis	7
9. Leaf blade: length					
QN (b) short				Cigánymeggy C. 404, Meteor, Oblachinska	3
medium				Karneol, Kántorjánosi 3, Morellenfeuer	5
long				Érdi bőtermő, Favorit, Maliga emléke	7
10. Leaf blade: width					
QN (b) narrow				Montmorency, Schattenmorelle	3
medium				Karneol, Morellenfeuer, Pándy Bb 119	5
broad				Érdi bőtermő, Maliga emléke	7
11. Leaf blade: ratio length/width (*)					
QN (b) small				Cigánymeggy 7, Morellenfeuer	3
medium				Karneol, Maliga emléke	5
large				Favorit, Meteor korai, Oblachinska	7
12. Leaf blade: intensity of green color of upper side					
QN (b) light				Cigánymeggy 59, Pipacs 1	3
medium				Karneol, Morina, Schattenmorelle	5
dark				Pándy Bb. 119	7

English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
13. Leaf blade: glossiness					
QN (b) absent or weak				Csengődi, Schattenmorelle	3
medium				Debreceni bőtermő, Nana	5
strong				Karneol, Montmorency	7
14. Leaf: length of petiole (*)					
QN (b) short				Karneol, Morellenfeuer, Oblachinska	3
medium				Maliga emléke, Montmorency, Újfehértói fürtös	5
long				Favorit, Piramis	7
15. Leaf: anthocyanin coloration of petiole (upper side)					
QN (b) weak				Gerema, Oblachinska	3
medium				Favorit	5
strong				Fanal, Montmorency, Safir	7
16. Leaf: ratio length of blade / length of petiole					
QN (b) small				Favorit, Pipacs 1	3
medium				Montmorency, Schattenmorelle	5
large				Karneol, Meteor, Morellenfeuer	7
17. Leaf: nectaries (*) (+)					
QL absent				North Star, Oblachinska	1
present				Favorit, Piramis	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
18.	Leaf: color of nectaries					
(+)						
PQ	greenish yellow				Samor, Újfehértói fűrtös	1
	orange yellow				Kántorjánosi 3, Safir, Topas	2
	light red				Cigánymeggy 7, Érdi bőtermő, Oblachinska	3
	dark red				Meteor, Nana	4
	brownish				Karneol, Morina, Morsam	5
19.	Petiole: position of nectaries					
(+)						
PQ	at the base of leaf blade				Karneol, Meteor	1
	both at the base of leaf blade and on petiole				Favorit, Montmorency	2
	on petiole				Kántorjánosi 3, Pipacs 1, Ţarina	3
20.	Stipule: size					
(+)						
QN (b)	small				Favorit, Schattenmorelle, Újfehértói fűrtös	3
	medium				Debreceni bőtermő, Maliga emléke, Samor	5
	large				Meteor korai, Morsam	7
21.	Stipule: extension					
(+)						
QN (b)	absent or weak				Oblachinska, Schattenmorelle, Újfehértói fűrtös	1
	medium				Piramis, Samor	2
	strong				Csengődi, Meteor korai, Morellenfeuer	3

English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
22.	Stipule: attitude				
(+)					
QN (b)	leaning away from shoot			Meteor, Morellenfeuer, Samor	1
	adpressed to shoot			Favorit, Pándy 279	2
	leaning across shoot			Csengődi, Pipacs 1, Piramis	3
23.	Flower: diameter				
(+)					
QN (c)	small			Oblachinska, Samor	3
	medium			Montmorency, Morellenfeuer, Újfehértói fűrtös	5
	large			Érdi bötermő, Kántorjánosi 3, Pándy Bb. 119	7
24.	Flower: arrangement of petals				
(+)					
QN (c)	free			Érdi bötermő, Morellenfeuer, Újfehértói fűrtös	1
	intermediate			Érdi jubileum, Montmorency, Schattenmorelle	2
	overlapping			Favorit, Meteor korai, Oblachinska	3
25.	Flower: shape of petal				
(+)					
PQ (c)	circular			Favorit, Meteor, Oblachinska	1
	medium obovate			Morellenfeuer, Pipacs 1, Safir	2
	broad obovate			Érdi bötermő, Korai pipacs, Schattenmorelle	3

English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
26. Flower: arrangement					
(+)					
PQ (c) solitary				Cerella, Nabella	1
double				Safir	2
in clusters				Stevnsbear, Újfehértói fürtös	3
irregular				Schattenmorelle	4
27. Fruit: size					
(*)					
QN (d) very small				Oblachinska, Stevnsbaer	1
small				Cigánymeggy 7, Cigánymeggy C. 404	3
medium				Érdi bőtermő, Schattenmorelle	5
large				Favorit, Karneol, Pándy Bb. 119	7
very large				Érdi nagygyümölcsű, Piramis, Safir	9
28. Fruit: shape in ventral view					
(*)					
(+)					
PQ (d) reniform				Érdi jubileum, Pándy Bb. 119	1
oblate				Montmorency, Morina	2
circular				Maliga emléke, Nana	3
oblong				Csengődi, Karneol, Morsam	4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
29.	Fruit: pistil end					
(+)						
QN (d)	prominent				Favorit, Morsam	1
	flat				Korai pipacs, Samor	2
	depressed				Cigánymeggy C. 404, Montmorency, Schattenmorelle	3
30.	Fruit: length of stalk					
(*)						
QN (d)	very short				Maliga emléke, Montmorency	1
	short				Nana, Piramis	3
	medium				Morina, Pándy Bb. 119	5
	long				Favorit	7
	very long				Csengödi, Pipacs 1	9
31.	Fruit: thickness of stalk					
QN (d)	thin				Morsam, Schattenmorelle	3
	medium				Karneol, Pándy 279	5
	thick				Maliga emléke, Piramis	7
32.	Fruit: anthocyanin coloration of stalk					
(*)						
QL (d)	absent				Meteor korai	1
	present				Újfehértói fürtös	9
33.	Fruit: number of bracts on stalk					
QN (d)	absent or few				Piramis, Ţarina	1
	medium				Érdi bőtermő, Morina,	2
	many				Gerema, Kántorjánosi 3, Morellenfeuer	3

English	français	deutsch	español	Example Varieties/ Exemples/ Beispielsorten/ Variedades ejemplo	Note/ Nota
34. Fruit: size of bracts on stalk					
QN (d) small				Érdi bőtermő, Maliga emléke	3
medium				Cigánymeggy C. 404, Favorit	5
large				Kántorjánosi 3, Újfehértói fürtös	7
35. Fruit: abscision layer between stalk and fruit					
QL (d) absent				Csengődi, Meteor korai	1
present				Karneol, Újfehértói fürtös	9
36. Fruit: color of skin (*)					
PQ (d) orange red				Meteor, Pipacs 1	1
light red				Favorit, Montmorency	2
medium red				Pándy Bb. 119	3
dark red				Cigánymeggy 7, Gerema, Nana	4
brown red				Karneol, Morellenfeuer, Schattenmorelle	5
blackish				Dropia, North Star	6
37. Fruit: color of flesh (*)					
PQ (d) yellowish				Montmorency, Pipacs 1	1
pink				Meteor, Pándy 279	2
medium red				Kántorjánosi 3, Karneol	3
dark red				Cigánymeggy 7, Fanal	4

English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
38. Fruit: color of juice					
(*)					
PQ (d) colorless				Montmorency	1
whitish yellow				Pipacs 1	2
pink				Meteor, Pándy	3
medium red				Kántorjánosi 3, Karneol	4
dark red				Cigánymeggy 7, Érdi jubileum, Fanal	5
39. Fruit: firmness					
(*)					
QN (d) soft				Csengődi, Samor	3
medium				Karneol, Pándy 279	5
firm				Érdi jubileum	7
40. Fruit: acidity					
QN (d) very low				Érdi nagygyümölcsű, Meteor korai	1
low				Érdi bőtermő, Favorit	3
medium				Impératrice Eugénie, Pándy 279	5
high				Meteor, Montmorency	7
very high				Cigánymeggy 7, Schattenmorelle	9
41. Fruit: sweetness					
QN (d) weak				Montmorency	3
medium				Pándy 279	5
strong				Érdi jubileum, Favorit, Korai pipacs	7

English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
42. Fruit: juiciness					
QN (d) weak				Érdi jubileum, Korai pipacs	3
medium				Maliga emléke, Pándy 279,	5
strong				Csengödi, Favorit, Montmorency,	7
43. Stone: size (*)					
QN (d) small				Oblachinska, Stevnsbaer	3
medium				Érdi bőtermő, Schattenmorelle	5
large				Maliga emléke, Pándy Bb 119	7
44. Stone: shape in (*) (+) ventral view					
QN (d) narrow elliptic				Csengödi, Meteor	1
broad elliptic				Fanal, Maliga emléke	2
circular				Érdi jubileum, Morellenfeuer	3
45. Fruit: ratio weight (*) of fruit / weight of stone					
QN (d) small				Cigánymeggy 7, Érdi jubileum, Karneol	3
medium				Érdi bőtermő, Schattenmorelle	5
large				Érdi nagygyümölcsű, Meteor, Piramis	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
46.	Time of beginning					
(*)	of flowering					
(+)						
QN	very early				Érdi bőtermő	1
	early				Favorit, Meteor korai	3
	medium				Cigánymeggy 7, Vowi	5
	late				Gerema, Morellenfeuer	7
	very late				Schattenmorelle	9
47.	Time of beginning					
(*)	of fruit ripening					
(+)						
QN	very early					1
	early				Impératrice Eugénie, Meteor korai	3
	medium				Érdi bőtermő, Favorit	5
	late				Pándy 279, Kántorjánosi 3	7
	very late				Gerema, Nana, Vowi	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:

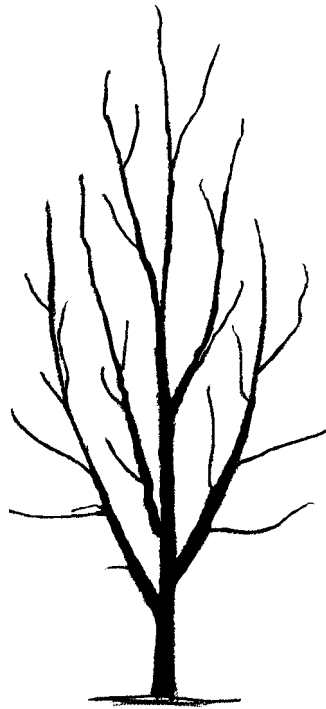
- (a) Tree/One-year-old shoot: Unless otherwise stated, all observations on the tree and on the one-year-old shoot should be made during winter, on trees that have fruited at least once.
- (b) Leaf: Unless otherwise stated, all observations of the leaf should be made on the middle fully developed leaves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

8.2 *Explanations for individual characteristics*

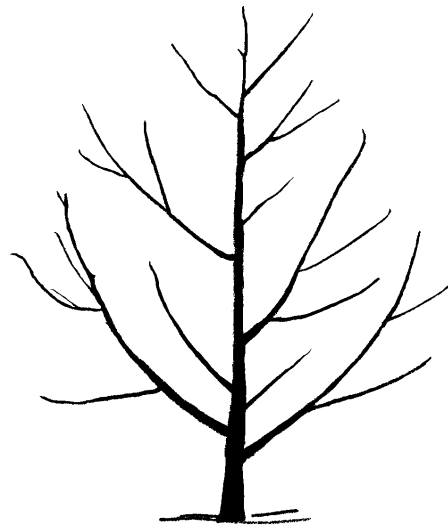
Ad. 1: Tree: vigor

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

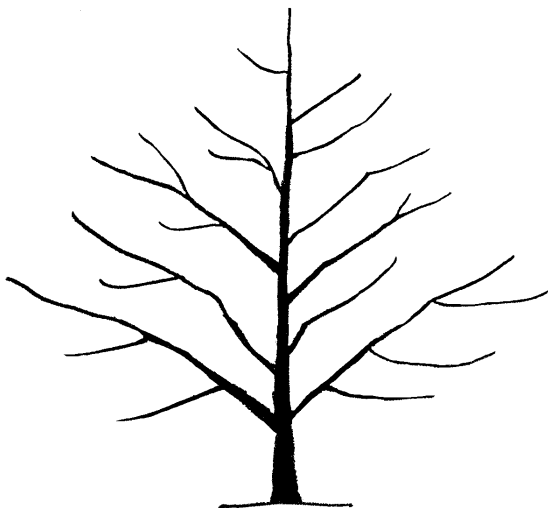
Ad. 2: Tree: habit



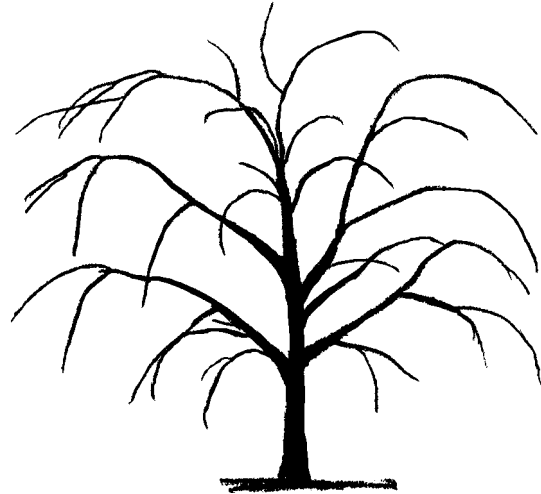
1
upright



2
semi-upright



3
spreading



4
drooping

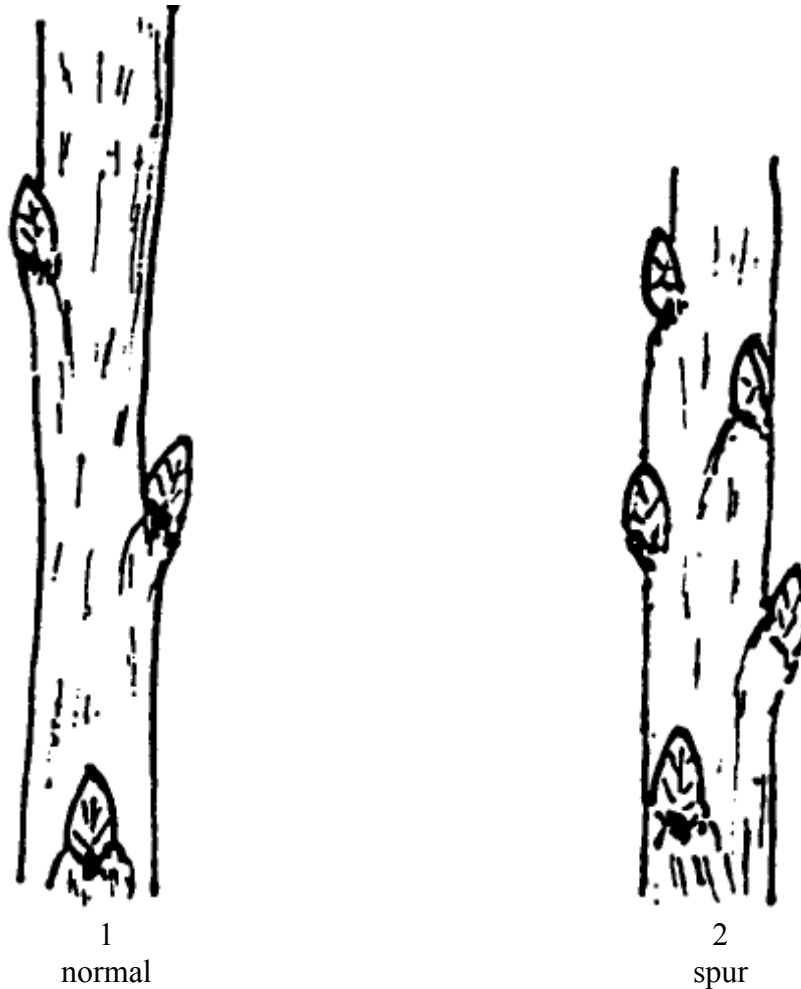
Ad. 3: Tree: branching

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. 4: Tree: bud distribution

Observations should be carried out before picking time.

Ad. 7: Shoot: type



Ad. 17: Leaf: nectaries

Ad. 18: Leaf: color of nectaries

Ad. 19: Petiole: position of nectaries

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

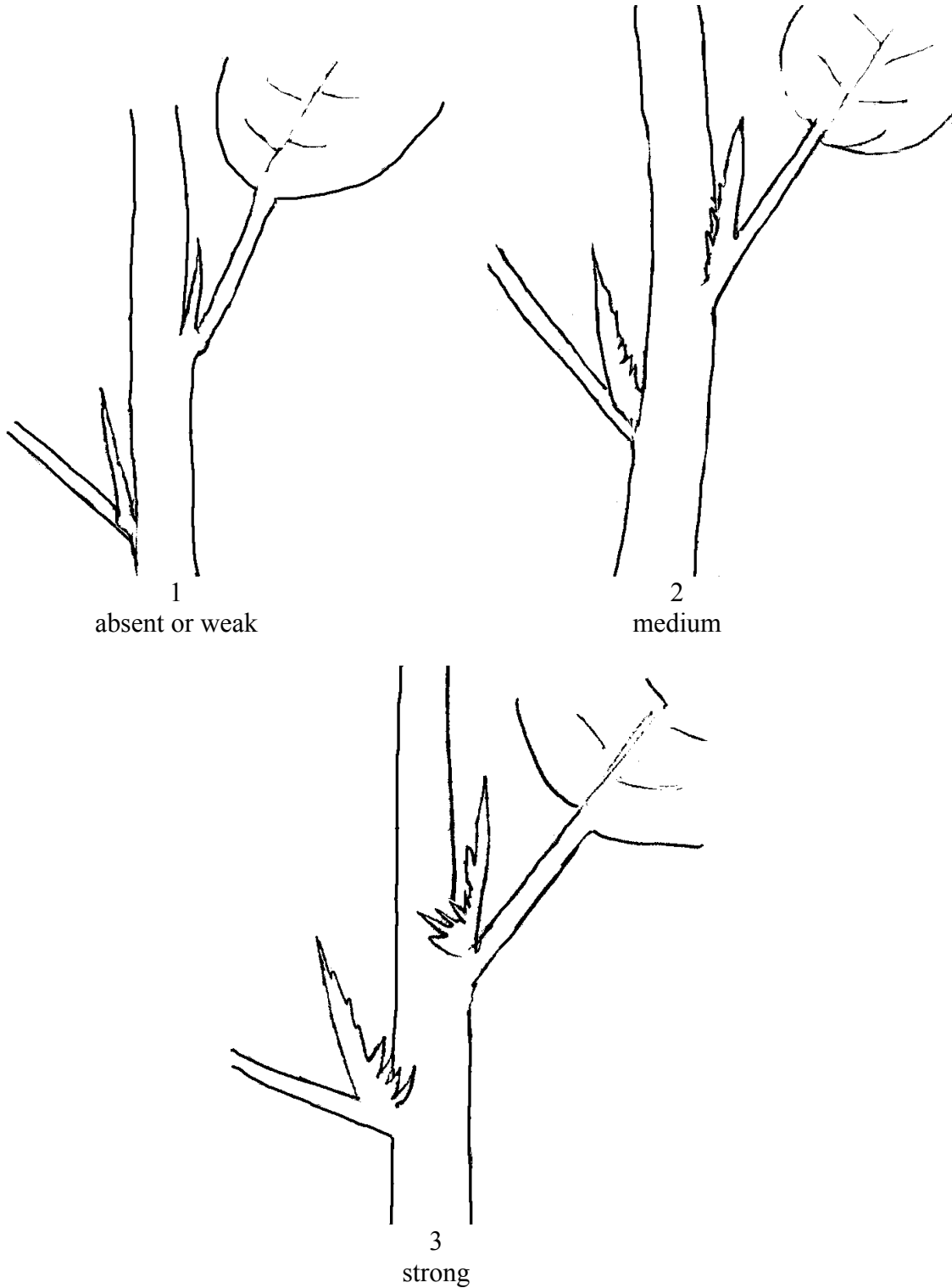
Ad. 20: Stipule: size

Ad. 21: Stipule: extension

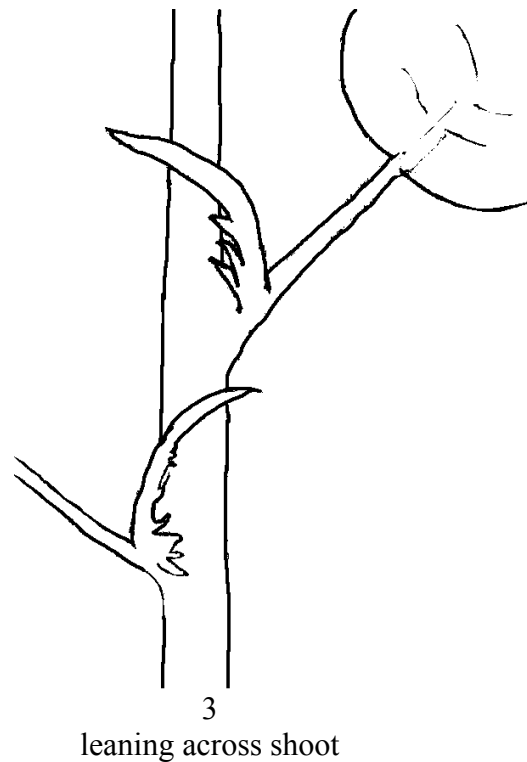
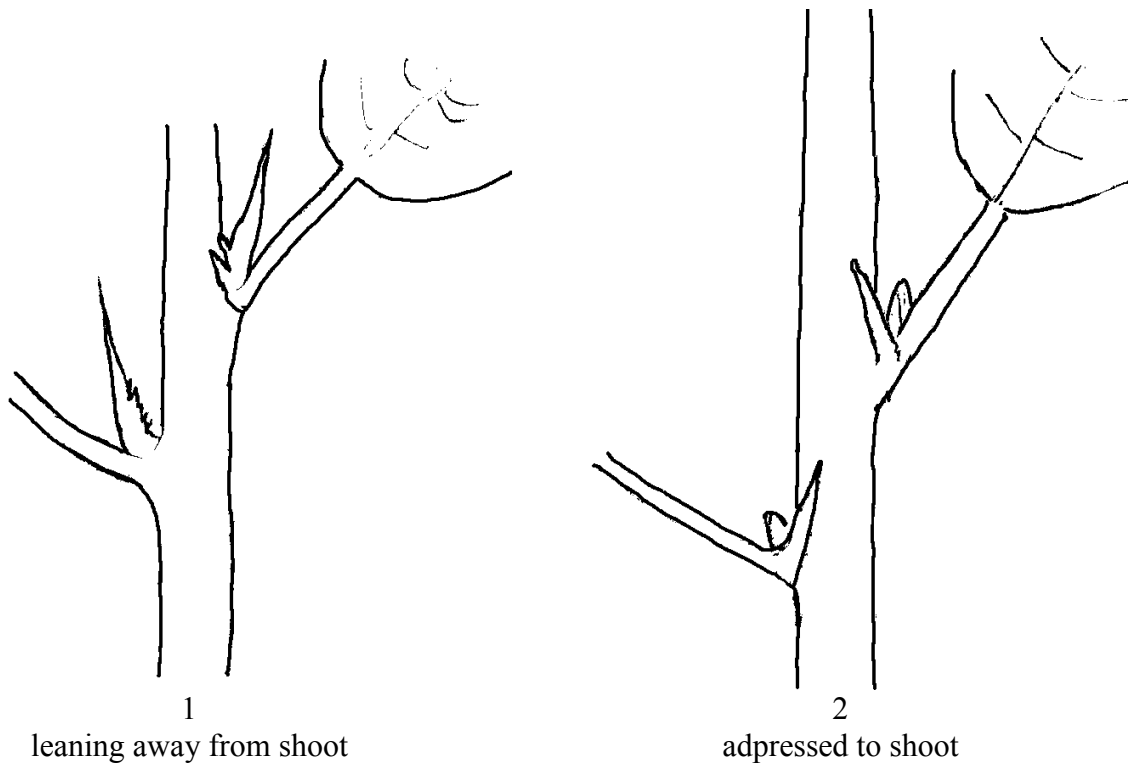
Ad. 22: Stipule: attitude

All observations of stipule should be made on the fifth or sixth fully developed leaf of a long shoot, during rapid growth.

Ad. 21: Stipule: extension



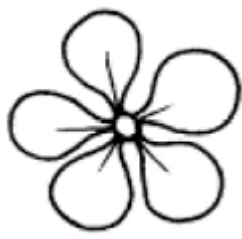
Ad. 22: Stipule: attitude



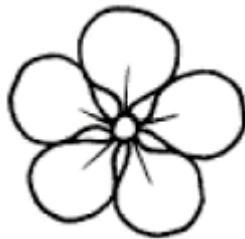
Ad. 23: Flower: diameter

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

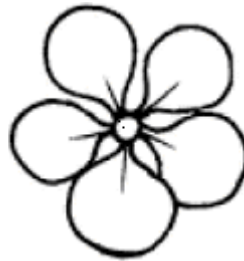
Ad. 24: Flower: arrangement of petals



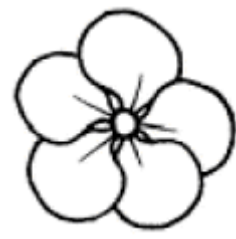
1
free



2
intermediate

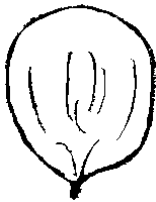


2
intermediate



3
overlapping

Ad. 25: Flower: shape of petal



1
circular

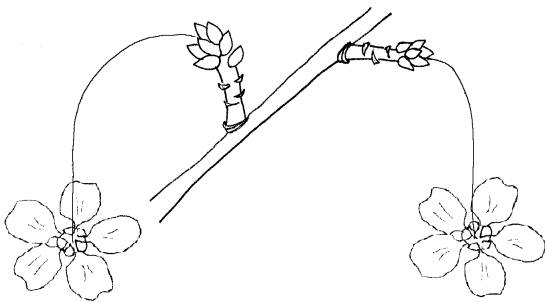


2
medium obovate

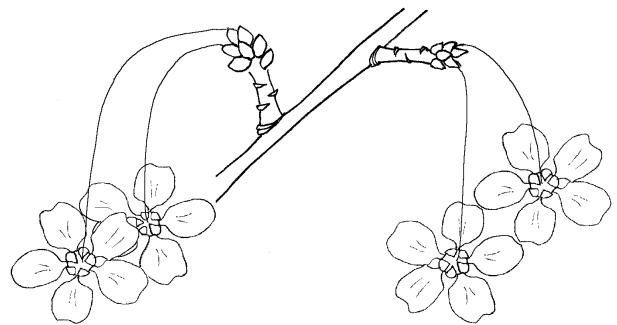


3
broad obovate

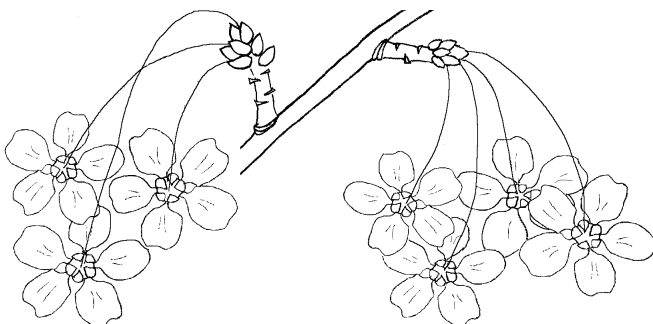
Ad. 26: Flower: arrangement



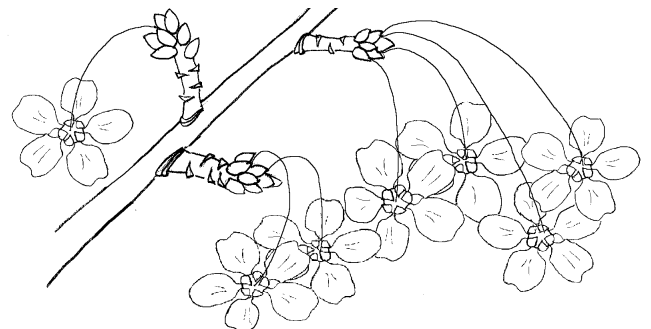
1
solitary



2
double



3
in clusters



4
irregular

Ad. 28: Fruit: shape in ventral view



1
reniform



2
oblate

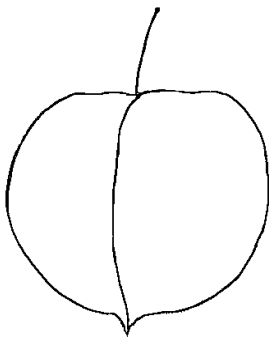


3
circular

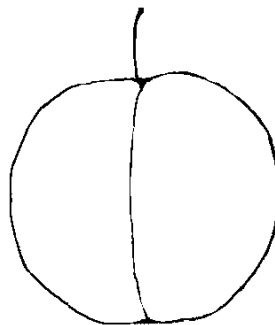


4
oblong

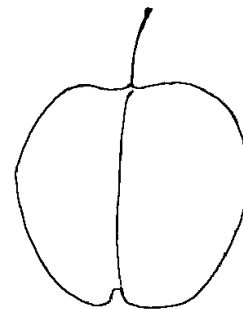
Ad. 29: Fruit: pistil end



1
prominent



2
flat



3
depressed

Ad. 44: Stone: shape in ventral view



1
narrow elliptic



2
broad elliptic



3
circular

Ad. 46: Time of beginning of flowering

When 5-10% open flowers can be observed.

Ad. 47: Time of beginning of fruit ripening

When 5-10% ripen 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*

Example Varieties	Synonym(s)
Cigánymeggy	Zigeunerkersche
Fanal	Heimanns Konservenweichsel
Morellenfeuer	Kelleriis 16
Schattenmorelle	Griotte du Nord, Lotovka, Latos meggy, Morella pozdní

9. Literature

Albertini, A., 1980: "Caratteristiche agro-bio-pomologiche e commerciali di cultivar di ciliegio acido meritevoli di attenzione". *L'Informatore Agrario*, 36: (40) 12407–12417 pp., IT

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

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., 1970: „Süss- und Sauerkirschen”. Ulmers Verlag, Stuttgart, DE.

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

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

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

Leroy, A., 1877: „Dictionnaire de Pomologie, Fruits a noyau, Cerise”, Tome V, 127 varieties, 280 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.

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

Simirenko, L. P., 1963: "Pomologija". 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		
1.1.1 Botanical Name	<input type="text" value="Prunus cerasus L."/>	
1.1.2 Common Name	<input type="text" value="SOUR CHERRY"/>	

1.2.1 Botanical Name	<input type="text" value="Prunus ×gondouinii (Poit. & Turpin) Rehder"/>	
1.2.2 Common Name	<input type="text" value="DUKE 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:
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#4. Information on the breeding scheme and propagation of the variety

Variety resulting from:

4.1.1 Crossing

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

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

(c) unknown cross []

4.1.2 Mutation []
(please state parent variety)

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

4.1.4 Other []
(please provide details)

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) budding or grafting []

(b) other (state method) []

4.2.2 Other []
(please provide details)

Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page (x) of {y}	Reference Number:
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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 (27)		
very small	Oblachinska, Stevnsbaer	1[]
small	Cigánymeggy 7, Cigánymeggy C. 404	3[]
medium	Érdi bőtermő, Schattenmorelle	5[]
large	Favorit, Karneol, Pándy Bb. 119	7[]
very large	Érdi nagygyümölcsű, Piramis, Safir	9[]
5.2 Fruit: color of skin (36)		
orange red	Meteor, Pipacs 1	1[]
light red	Favorit, Montmorency	2[]
medium red	Pándy Bb. 119	3[]
dark red	Cigánymeggy 7, Gerema, Nana	4[]
brown red	Karneol, Morellenfeuer, Schattenmorelle	5[]
blackish	Dropia, North Star	6[]
5.3 Fruit: color of flesh (37)		
yellowish	Montmorency, Pipacs 1	1[]
pink	Meteor, Pándy 279	2[]
medium red	Kántorjánosi 3, Karneol	3[]
dark red	Cigánymeggy 7, Fanal	4[]

TECHNICAL QUESTIONNAIRE	Page (x) of {y}	Reference Number:
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Characteristics	Example Varieties	Note
5.4 Fruit: color of juice (38)		
colorless	Montmorency	1[]
whitish yellow	Pipacs 1	2[]
pink	Meteor, Pándy	3[]
medium red	Kántorjánosi 3, Karneol	4[]
dark red	Cigánymeggy 7, Érdi jubileum, Fanal	5[]
5.5 Time of beginning of flowering (46)		
very early	Érdi bőtermő	1[]
early	Favorit, Meteor korai	3[]
medium	Cigánymeggy 7, Vowi	5[]
late	Gerema, Morellenfeuer	7[]
very late	Schattenmorelle	9[]
5.6 Time of beginning of fruit ripening (47)		
very early		1[]
early	Impératrice Eugénie, Meteor korai	3[]
medium	Érdi bőtermő, Favorit	5[]
late	Pándy 279, Kántorjánosi 3	7[]
very late	Gerema, Nana, Vowi	9[]

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