



TG/230/2(proj.1)

ORIGINAL: English

DATE: 2021-05-30

## INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

**SOUR CHERRY; DUKE CHERRY**UPOV Code(s): PRUNU\_CSD;  
PRUNU\_GON*Prunus cerasus* L.;  
*Prunus xgondouinii* (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 fifty-second session, to be held in Zhengzhou, China,  
from 2021-07-12 to 2021-07-16*

*Disclaimer: this document does not represent UPOV policies or guidance*

Alternative names:\*

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

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](http://www.upov.int)), for the latest information.]

TABLE OF CONTENTS	PAGE
1. SUBJECT OF THESE TEST GUIDELINES.....	<a href="#">4</a>
2. MATERIAL REQUIRED.....	<a href="#">4</a>
3. METHOD OF EXAMINATION.....	<a href="#">4</a>
3.1 Number of Growing Cycles.....	<a href="#">4</a>
3.2 Testing Place.....	<a href="#">4</a>
3.3 Conditions for Conducting the Examination.....	<a href="#">5</a>
3.4 Test Design.....	<a href="#">6</a>
3.5 Additional Tests.....	<a href="#">6</a>
4. ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY.....	<a href="#">6</a>
4.1 Distinctness.....	<a href="#">6</a>
4.2 Uniformity.....	<a href="#">7</a>
4.3 Stability.....	<a href="#">7</a>
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL.....	<a href="#">8</a>
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS.....	<a href="#">8</a>
6.1 Categories of Characteristics.....	<a href="#">8</a>
6.2 States of Expression and Corresponding Notes.....	<a href="#">8</a>
6.3 Types of Expression.....	<a href="#">8</a>
6.4 Example Varieties.....	<a href="#">8</a>
6.5 Legend.....	<a href="#">9</a>
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES.....	<a href="#">10</a>
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS.....	<a href="#">23</a>
8.1 Explanations for individual characteristics.....	<a href="#">24</a>
9. LITERATURE.....	<a href="#">27</a>
10. TECHNICAL QUESTIONNAIRE.....	<a href="#">28</a>

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Prunus cerasus* L. and *Prunus xgondouinii* (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 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:

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

5 trees 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*

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

3.1.2 The two independent growing cycles may be observed from a single planting, examined in two separate growing cycles.

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

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

3.1.5 The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test.

3.2 *Testing Place*

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 "Examining Distinctness".

### 3.3 *Conditions for Conducting the Examination*

- 3.3.1 The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.
- 3.3.2 The optimum stage of development for the assessment of each characteristic is indicated by a number in the Table of Characteristics. The stages of development denoted by each number are described in Chapter 8.

### 3.4 *Test Design*

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

### 3.5 *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.

#### 4.1.4 Number of Plants or Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 5 plants or parts of plants taken from each of 5 plants and any other observations made on all plants in the test, disregarding any off-type plants.

#### 4.1.5 Method of Observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the Table of Characteristics (see document TGP/9 "Examining Distinctness", Section 4 "Observation of characteristics"):

MG: single measurement of a group of plants or parts of plants

MS: measurement of a number of individual plants or parts of plants

VG: visual assessment by a single observation of a group of plants or parts of plants

VS: visual assessment by observation of individual plants or parts of plants

Type of observation: visual (V) or measurement (M)

“Visual” observation (V) is an observation made on the basis of the expert’s judgment. For the purposes of this document, “visual” observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, “G” provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness.

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

#### 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 These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation, the recommendations in the General Introduction and document TGP/13 "Guidance for new types and species" Section 4.5 "Testing Uniformity" should be followed.

#### 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 further examined by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the initial 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:

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction and document TGP/9 “Examining Distinctness”.

## 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*

6.2.1 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.

6.2.2 All relevant states of expression are presented in the characteristic.

6.2.3 Further explanation of the presentation of states of expression and notes is provided in document TGP/7 "Development of Test Guidelines".

### 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

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1	2	3	4	5	6	7	
		Name of characteristics in English	Nom du caractère en français	Name des Merkmals auf Deutsch	Nombre del carácter en español		
		states of expression	types d'expression	Ausprägungsstufen	tipos de expresión		

1 Characteristic number

2 (\*) Asterisked characteristic – see Chapter 6.1.2

3 Type of expression

QL

Qualitative characteristic

– see Chapter 6.3

QN

Quantitative characteristic

– see Chapter 6.3

PQ

Pseudo-qualitative characteristic

– see Chapter 6.3

4 Method of observation (and type of plot, if applicable)

MG, MS, VG, VS

– see Chapter 4.1.5

5 (+)

See Explanations on the Table of Characteristics in Chapter 8.1

6 Not applicable

7 Not applicable

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

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>1.</b>	<b>QN</b>	<b>VG</b>	<b>(+)</b>				
	<b>Tree: vigor</b>						
		very weak				Demesova, Kelleriis 14, Samor	1
		weak				Gerema, Nana	3
		medium				Karneol, Montmorency	5
		strong				Kántorjánosi 3, Pándy Bb. 119	7
		very strong				Érdi nagygyümölcsű, Piramis	9
<b>2. (*)</b>	<b>PQ</b>	<b>VG</b>	<b>(+)</b>				
	<b>Tree: habit</b>						
		upright				Oblachinska, Piramis, Tarina	1
		semi-upright				Safir, Újfehértói fűtös	2
		spreading				Karneol, Montmorency, Samor	3
		drooping				Cigánymeggy 7	4
<b>3. (*)</b>	<b>QN</b>	<b>VG</b>	<b>(+)</b>				
	<b>Tree: branching</b>						
		weak				Meteor korai, Piramis, Samor	3
		medium				Morsam, Pándy Bb 119	5
		strong				Cigánymeggy 7, Montmorency, Safir	7
<b>4.</b>	<b>PQ</b>	<b>VG</b>	<b>(+)</b>				
	<b>Tree: bud distribution</b>						
		along entire branch				Coralin, Maliga emléke, Piramis	1
		only on middle and distal part of branch				Érdi jubileum, Meteor, Morava	2
		only on distal part of branch				Cigánymeggy 7, Samor, Schattenmorelle	3



	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>5.</b>	<b>QN</b>	<b>VG</b>					
	<b>Young shoot: anthocyanin coloration of apex (during rapid growth)</b>						
	absent or very weak					Cigánymeggy 59, Meteor	1
	weak					Kelleris 16, Montmorency	3
	medium					Érdi bőtermő, Meteor korai, Schattenmorelle	5
	strong					Érdi jubileum, Fanal	7
	very strong					Érdi nagygyümölcsű, Topas	9
<b>6.</b>	<b>QN</b>	<b>VG</b>					
	<b>Young shoot: pubescence of apex (during rapid growth)</b>						
	weak					Cigánymeggy 7, Csengődi, Karneol	3
	medium					Favorit, Morava	5
	strong					Cigánymeggy 59	7
<b>7. (*)</b>	<b>QL</b>	<b>VG</b>	<b>(+)</b>				
	<b>One-year-old shoot: length of internode</b>						
	very short					Erika, Samor	1
	short					Meteor, Schattenmorelle	3
	medium					Cigánymeggy 7, Petri	5
	long					Érdi bőtermő	7
	very long					Érdi jubileum	9
<b>8.</b>	<b>QN</b>	<b>VG</b>					
	<b>One-year-old shoot: number of lenticels</b>						
	few					Gerema, Kelleris 16	3
	medium					Meteor, Pándy Bb. 119	5
	many					Maliga emléke, Meteor korai, Píramis	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>9.</b>	<b>QN</b> <b>VG</b>					
	<b>Leaf blade: length</b>					
	short				Cigánymeggy C. 404, Meteor, Oblachinska	3
	medium				Kántorjánosi 3, Karneol, Kelleriis 16	5
	long				Érdi bőtermő, Favorit, Maliga emléke	7
<b>10</b>	<b>QN</b> <b>VG</b>					
	<b>Leaf blade: width</b>					
	narrow				Montmorency, Schattenmorelle	3
	medium				Karneol, Kelleriis 16, Pándy Bb 119	5
	broad				Érdi bőtermő, Maliga emléke	7
<b>11 (*)</b>	<b>QN</b> <b>VG</b>					
	<b>Leaf blade: ratio length/width</b>					
	small				Cigánymeggy 7, Kelleriis 16	3
	medium				Karneol, Maliga emléke	5
	large				Favorit, Meteor korai, Oblachinska	7
<b>12</b>	<b>QN</b> <b>VG</b>					
	<b>Leaf blade: intensity of green color of upper side</b>					
	light				Cigánymeggy 59, Pipacs 1	3
	medium				Karneol, Morina, Schattenmorelle	5
	dark				Pándy Bb. 119	7
<b>13</b>	<b>QN</b> <b>VG</b>					
	<b>Leaf blade: glossiness</b>					
	absent or weak				Csengődi	1
	weak				Schattenmorelle	3
	medium				Debreceni bőtermő	5
	strong				Karneol, Pándy 279	7
	very strong				Maliga emléke	9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>14 (*)</b>	<b>QN</b> <b>VG</b>					
	<b>Leaf: length of petiole</b>					
	short				Karneol, Kelleriis 16, Oblachinska	3
	medium				Maliga emléke, Montmorency, Újfehértói fűrtös	5
	long				Favorit, Piramis	7
<b>15</b>	<b>QN</b> <b>VG</b>					
	<b>Leaf: anthocyanin coloration of petiole (upper side)</b>					
	weak				Gerema, Oblachinska	3
	medium				Favorit	5
	strong				Fanal, Montmorency, Safir	7
<b>16</b>	<b>QN</b> <b>VG</b>					
	<b>Leaf: ratio length of blade / length of petiole</b>					
	small				Favorit, Pipacs 1	3
	medium				Montmorency, Schattenmorelle	5
	large				Karneol, Kelleriis 16, Meteor	7
<b>17 (*)</b>	<b>QL</b> <b>VG</b>	<b>(+)</b>				
	<b>Leaf: presence of nectaries</b>					
	absent				North Star, Oblachinska	1
	present				Favorit, Piramis	9
<b>18</b>	<b>PQ</b> <b>VG</b>	<b>(+)</b>				
	<b>Nectaries: position</b>					
	at base of leaf only				Karneol, Meteor	1
	both at base of leaf blade and on petiole				Favorit, Montmorency	2
	on petiole only				Kántorjánosi 3, Pipacs 1, Tarina	3

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>19</b>	<b>PQ</b>	<b>VG</b>	<b>(+)</b>				
	<b>Nectaries: color</b>						
	greenish yellow					Coralin, Samor	1
	orange yellow					Kántorjánosi 3, Topas	2
	light red					Cigánymeggy 7, Érdi bőtermő, Oblachinska	3
	dark red					Meteor, Nana	4
	brownish					Karneol, Morina	5
<b>20</b>	<b>QN</b>	<b>VG</b>	<b>(+)</b>				
	<b>Stipule: attitude</b>						
	leaning away from shoot					Kelleris 16, Meteor, Samor	1
	adpressed to shoot					Favorit, Pándy 279	2
	leaning across shoot					Csengődi, Pipacs 1, Piramis	3
<b>21</b>	<b>QN</b>	<b>VG</b>	<b>(+)</b>				
	<b>Stipule: size</b>						
	small					Favorit, Schattenmorelle, Újfehértói fűrtös	3
	medium					Debreceni bőtermő, Maliga emléke, Samor	5
	large					Meteor korai, Morsam	7
<b>22</b>	<b>QN</b>	<b>VG</b>	<b>(+)</b>				
	<b>Stipule: extensions of margins</b>						
	absent or weak					Oblachinska, Schattenmorelle, Újfehértói fűrtös	1
	medium					Piramis, Samor	2
	strong					Csengődi, Kelleris 16, Meteor korai	3
<b>23</b>	<b>QN</b>	<b>VG</b>	<b>(+)</b>				
	<b>Flower: diameter</b>						
	small					Oblachinska, Samor	3
	medium					Kelleris 16, Montmorency, Újfehértói fűrtös	5
	large					Érdi bőtermő, Kántorjánosi 3, Pándy Bb. 119	7

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>24</b>	<b>QN</b>	<b>VG</b>	<b>(+)</b>				
	<b>Flower: arrangement of petals</b>						
	free					Kelleris 16, Újfehértói fűrtös	1
	intermediate					Érdi jubileum, Montmorency, Schattenmorelle	2
	overlapping					Favorit, Meteor korai, Oblachinska	3
<b>25</b>	<b>PQ</b>	<b>VG</b>	<b>(+)</b>				
	<b>Flower: shape of petal</b>						
	circular					Favorit, Meteor, Oblachinska	1
	medium obovate					Kelleris 16, Pipacs 1, Safir	2
	broad obovate					Érdi bőtermő, Korai pipacs, Schattenmorelle	3
<b>26</b>	<b>PQ</b>	<b>VG</b>	<b>(+)</b>				
	<b>Flower: arrangement</b>						
	solitary					Cerella, Nabella	1
	double					Safir	2
	in clusters					Újfehértói fűrtös	3
	irregular					Schattenmorelle	4
<b>27 (*)</b>	<b>QN</b>	<b>VG</b>					
	<b>Fruit: size</b>						
	very small					Oblachinska	1
	small					Cigánymeggy 7, Cigánymeggy C. 404	3
	medium					Érdi bőtermő, Schattenmorelle	5
	large					Favorit, Karneol, Pándy Bb. 119	7
	very large					Petri, Piramis, Safir	9

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>28</b>	<b>(*)</b>	<b>PQ</b>	<b>VG</b>	<b>(+)</b>			
		<b>Fruit: shape in ventral view</b>					
		reniform				Érdi jubileum, Pándy Bb. 119	1
		oblate				Montmorency, Morina	2
		circular				Maliga emléke, Nana	3
		elliptic				Csengődi, Karneol, Morsam	4
		cordate				Érdi bíbor	5
<b>29</b>		<b>QN</b>	<b>VG</b>	<b>(+)</b>			
		<b>Fruit: pistil end</b>					
		pointed				Favorit, Morsam	1
		flat				Korai pipacs, Samor	2
		depressed				Cigánymeggy C. 404, Montmorency, Schattenmorelle	3
<b>30</b>	<b>(*)</b>	<b>QN</b>	<b>VG</b>				
		<b>Fruit: length of stalk</b>					
		very short				Erika, Maliga emléke	1
		short				Nana, Piramis	3
		medium				Morina, Pándy Bb. 119	5
		long				Favorit, Petri	7
		very long				Pipacs 1, Újfehértói fűrtös	9
<b>31</b>		<b>QN</b>	<b>VG</b>				
		<b>Fruit: thickness of stalk</b>					
		thin				Morsam, Schattenmorelle	3
		medium				Karneol, Pándy 279	5
		thick				Maliga emléke, Piramis	7
<b>32</b>	<b>(*)</b>	<b>QL</b>	<b>VG</b>				
		<b>Fruit: anthocyanin coloration of stalk</b>					
		absent				Meteor korai	1
		present				Újfehértói fűrtös	9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
33	QN VG					
	<b>Fruit: number of bracts on stalk</b>					
	absent or few				Piramis, Tarina	1
	medium				Érdi bőtermő, Morina	2
	many				Gerema, Kántorjánosi 3, Kelleriis 16	3
34	QN VG					
	<b>Fruit: size of bracts on stalk</b>					
	small				Érdi bőtermő, Maliga emléke	3
	medium				Cigánymeggy C. 404, Favorit	5
	large				Kántorjánosi 3, Újfehértói fűrtős	7
35	QL VG					
	<b>Fruit: abscission layer between stalk and fruit</b>					
	absent				Csengődi, Meteor korai	1
	present				Karneol, Újfehértói fűrtős	9
36 (*)	PQ VG					
	<b>Fruit: color of skin</b>					
	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, Kelleriis 16, Schattenmorelle	5
	blackish				Érdi jubileum, North Star	6
37 (*)	PQ VG					
	<b>Fruit: color of flesh</b>					
	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
<b>38</b>	<b>(*) PQ VG</b>					
	<b>Fruit: color of juice</b>					
	colorless				Montmorency	1
	light yellow				Pipacs 1	2
	pink				Meteor, Pándy	3
	medium red				Kántorjánosi 3, Karneol	4
	dark red				Cigánymeggy 7, Érdi jubileum, Fanal	5
<b>39</b>	<b>(*) QN VG</b>					
	<b>Fruit: firmness</b>					
	soft				Csengődi, Samor	3
	medium				Karneol, Pándy 279	5
	firm				Érdi jubileum	7
<b>40</b>	<b>QN VG</b>					
	<b>Fruit: acidity</b>					
	very low				Érdi nagygyümölcsű, Meteor korai	1
	low				Érdi bőtermő, Spinell	3
	medium				Impératrice Eugénie, Pándy 279	5
	high				Meteor, Montmorency	7
	very high				Cigánymeggy 7, Schattenmorelle	9
<b>41</b>	<b>QN VG</b>					
	<b>Fruit: sweetness</b>					
	low				Montmorency	3
	medium				Pándy 279	5
	high				Érdi jubileum, Favorit, Korai pipacs	7
<b>42</b>	<b>QN VG</b>					
	<b>Fruit: juiciness</b>					
	weak				Érdi jubileum, Korai pipacs	3
	medium				Maliga emléke, Pándy 279	5
	strong				Csengődi, Favorit, Montmorency	7



	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>43 (*)</b>	<b>QN VG</b>					
	<b>Stone: size</b>					
	small				Oblachinska, Stevnsbaer	3
	medium				Érdi bőtermő, Schattenmorelle	5
	large				Maliga emléke, Pándy Bb 119	7
<b>44 (*)</b>	<b>QN VG</b>	<b>(+)</b>				
	<b>Stone: shape in ventral view</b>					
	narrow elliptic				Csengődi, Meteor	1
	broad elliptic				Fanal, Maliga emléke	2
	circular				Érdi jubileum, Kelleriis 16	3
<b>45 (*)</b>	<b>QN VG</b>					
	<b>Fruit: ratio weight of fruit / weight of stone</b>					
	small				Cigánymeggy 7, Érdi jubileum, Karneol	3
	medium				Érdi bőtermő, Schattenmorelle	5
	large				Érdi nagygyümölcsű, Meteor, Piramis	7
<b>46 (*)</b>	<b>QN VG</b>	<b>(+)</b>				
	<b>Time of beginning of flowering</b>					
	very early				Érdi bőtermő	1
	early				Favorit, Meteor korai	3
	medium				Cigánymeggy 7, Vowi	5
	late				Gerema, Kelleriis 16	7
	very late				Schattenmorelle	9
<b>47 (*)</b>	<b>QN VG</b>	<b>(+)</b>				
	<b>Time of beginning of fruit ripening</b>					
	very early				Érdi ipari, Tarina	1
	early				Meteor korai, Piramis	3
	medium				Érdi bőtermő, Favorit	5
	late				Kántorjánosi 3, Pándy 279	7
	very late				Gerema, Vowi	9

### 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:

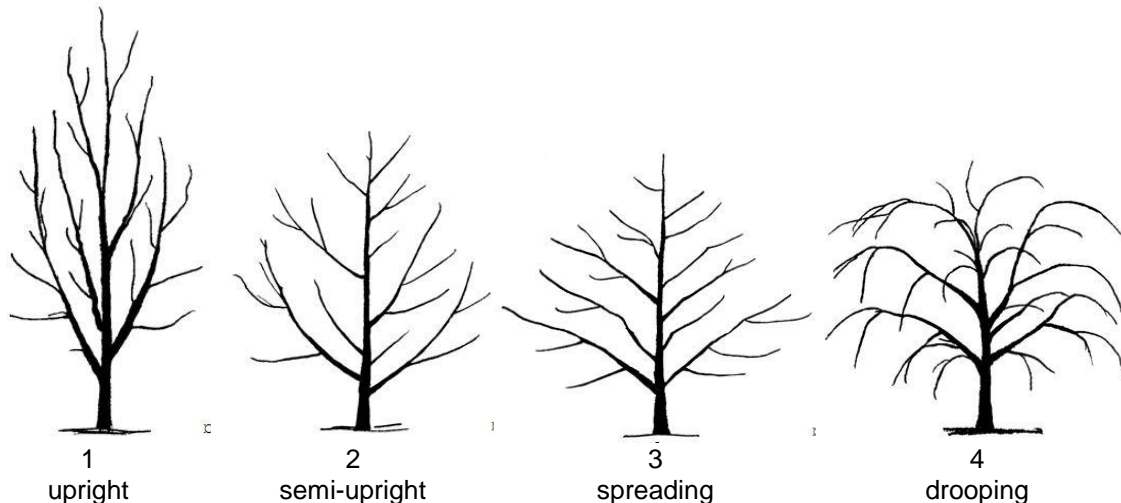
- (a) Tree/One-year-old shoot: Unless otherwise stated, all observations on the tree and on the one-year-old shoot should be made during winter, on trees that have fruited at least once.
- (b) Leaf: Unless otherwise stated, all observations of the leaf should be made on the middle fully developed leaves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



#### 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: One-year-old shoot: length of internode

Should be observed in the dormant period.

Ad. 17: Leaf: presence of nectaries

Ad. 18: Nectaries: position

Ad. 19: Nectaries: color

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

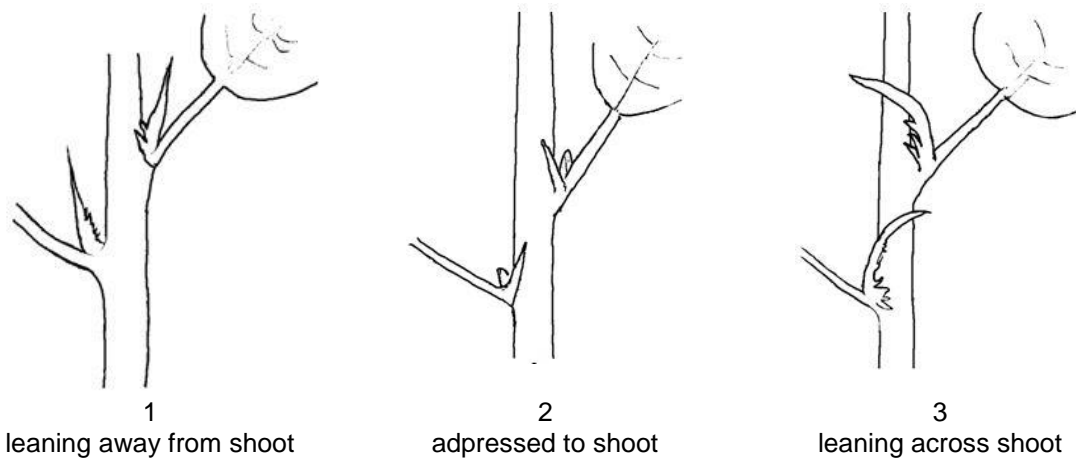
Ad. 20: Stipule: attitude

Ad. 21: Stipule: size

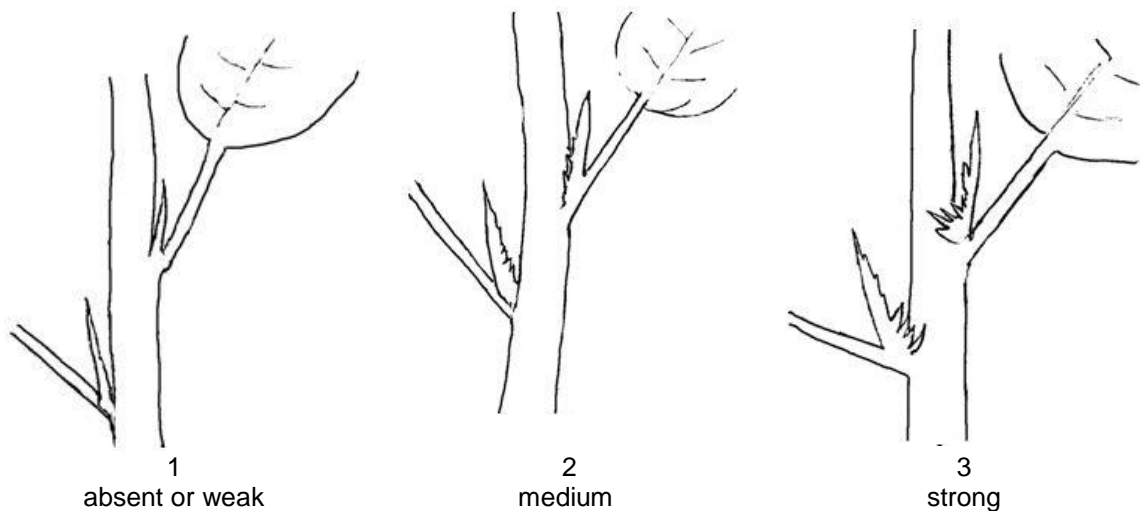
Ad. 22: Stipule: extensions of margins

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

Ad. 20: Stipule: attitude



Ad. 22: Stipule: extensions of margins



1 absent or weak

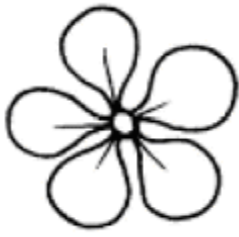
2 medium

3 strong

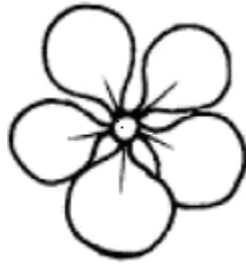
Ad. 23: Flower: diameter

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

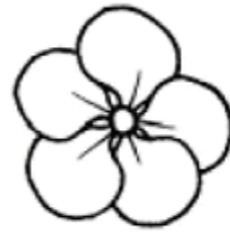
Ad. 24: Flower: arrangement of petals



1  
free



2  
intermediate



3  
overlapping

Ad. 25: Flower: shape of petal



1  
circular

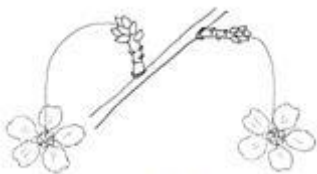


2  
medium obovate

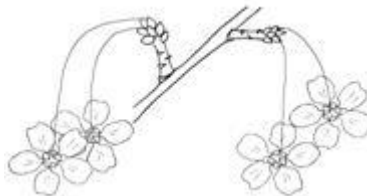


3  
broad obovate

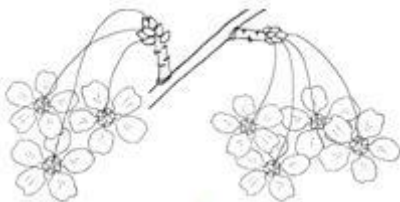
Ad. 26: Flower: arrangement



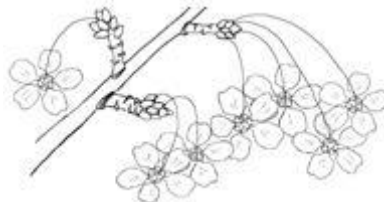
1  
solitary



2  
double

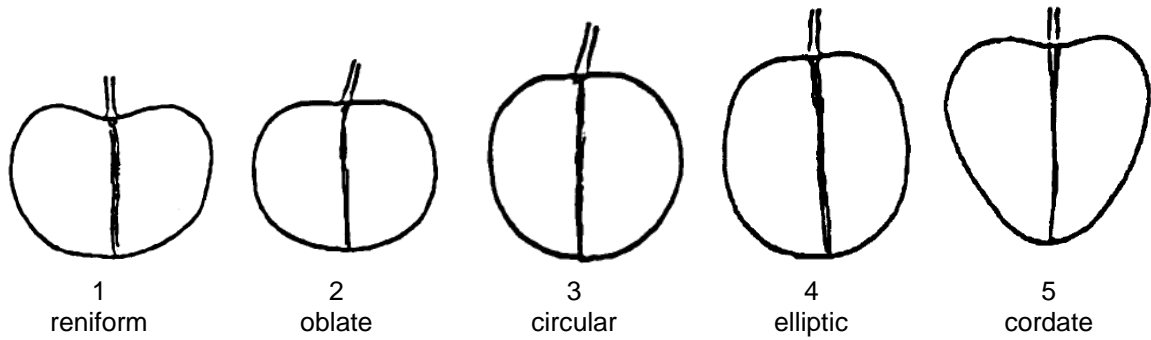


3  
in clusters

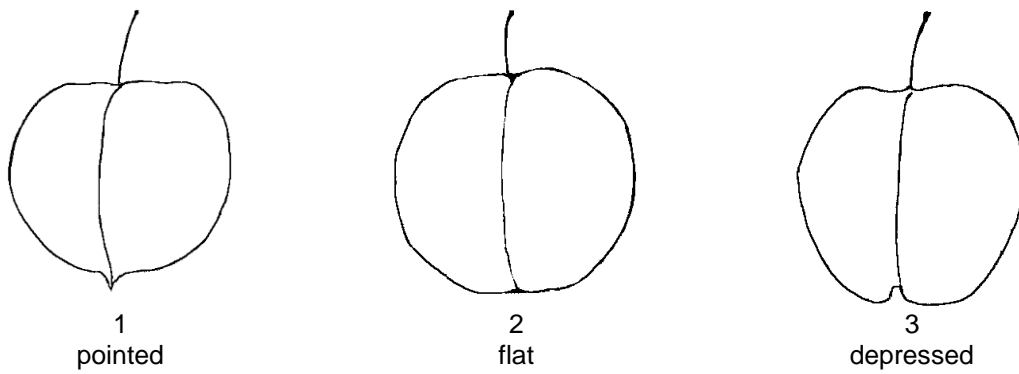


4  
irregular

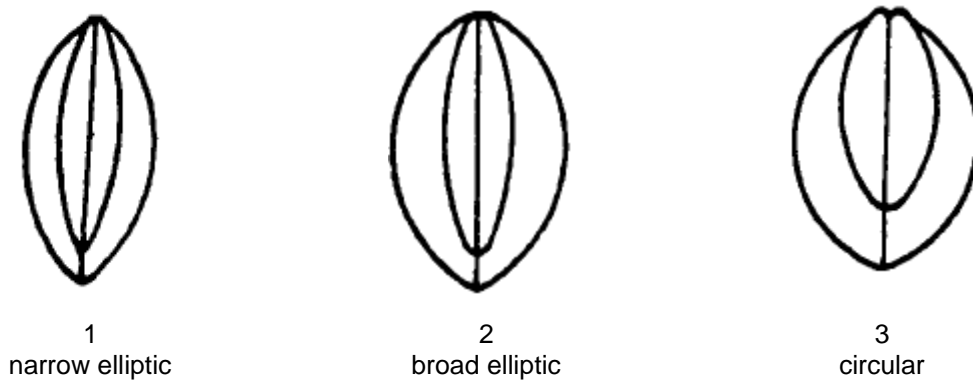
Ad. 28: Fruit: shape in ventral view



Ad. 29: Fruit: pistil end



Ad. 44: Stone: shape in ventral view



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% 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*

Example Varieties	Synonym(s)
Cigánymeggy	Zigeunerkirsche
Fanal	Heimanns Konservenweichsel
Kelleriis 16	Morellenfeuer
Petri	Lövöpetri
Schattenmorelle	Griotte du Nord, Lotovka, Latos meggy, Łutówka, Morella pozdńi

## 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 Zemědělske Nakladatelství, Praha, CZ.
- Bordeianu, T.: Constantinescu, N.; Stefan, N., 1965: Pomologia Republicii Populare Romîne. Vol. IV, Editura Academiei Republicii Populare Romîne, Bucuresti, RO.
- Brózik S. – Kállay T-né 2000: Csonthéjas gyümölcsfajták; Mezőgazda Kiadó, ISBN 963 9239 69 0
- Cifranič, P., Hričovský, I., Hnídzik, F., Župník, M., 1978: Pomologia. Priroda, Bratislava, SK.
- Götz, G., 1970: Süß- und Sauerkirschen. Ulmer Verlag, Stuttgart, DE.
- Götz, G., Silbereisen, R., 1989: Obstsorten-Atlas, Kernobst, Steinobst, Beerenobst, Schalen-obst, 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 varietes, 280 pp., FR.
- Nyéki J. – Szabó T. – Soltész M., 2016: MEGGY (Sour cherry); IMI Print Nyomda, Nyíregyháza; ISBN 978-963-12-6523-1
- Pochyba, D., Hričovský, I., Cifranič, P., 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: 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., Bespechal'naya, V. V., 1974: Kostochkovye kul'tury (Stone fruits). Izdatel'stvo Kartya Moldovenyaske, Kishinev, MD
- Stoichkov, J., Velkov, V., 1960: B'lgarska pomologiya (Bulgarian Pomology). Zemizdat, Sofia, BG.
- Tomcsányi, P., Bödecs, L., Faluba Z., Harsányi L., Majoros L., 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)
<b>TECHNICAL QUESTIONNAIRE</b> to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1.1 Botanical name	<input style="width: 90%;" type="text" value="Prunus cerasus L."/>	[ ]
1.1.2 Common name	<input style="width: 90%;" type="text" value="Sour cherry, Tart cherry, Morello"/>	
1.2.1 Botanical name	<input style="width: 90%;" type="text" value="Prunus xgondouinii (Poit. &amp; Turpin) Rehder"/>	[ ]
1.2.2 Common name	<input style="width: 90%;" type="text" value="Duke cherry"/>	
2. Applicant		
Name	<input style="width: 95%;" type="text"/>	
Address	<input style="width: 95%;" type="text"/>	
Telephone No.	<input style="width: 95%;" type="text"/>	
Fax No.	<input style="width: 95%;" type="text"/>	
E-mail address	<input style="width: 95%;" type="text"/>	
Breeder (if different from applicant)	<input style="width: 95%;" type="text"/>	
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)	<input style="width: 95%;" type="text"/>	
Breeder's reference	<input style="width: 95%;" type="text"/>	



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

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

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

(a) controlled cross

(b) partially known cross

(please state known parent variety(ies))

(.....) x (.....)

female parent male parent

(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)

# 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:
-------------------------	-----------------	-------------------

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)

In the case of hybrid varieties the production scheme for the hybrid should be provided on a separate sheet. This should provide details of all the parent lines required for propagating the hybrid e.g.

Single Hybrid

(.....) x (.....)  
 female parent male parent

Three-Way Hybrid

(.....) x (.....)  
 female line male line

(.....) x (.....)  
 single hybrid used as female parent male parent

and should identify in particular:

- (a) any male sterile lines
- (b) maintenance system of male sterile lines.

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
<b>5.1 Fruit: size (27)</b>		
very small	Oblachinska	1 [ ]
small	Cigánymeggy 7, Cigánymeggy C. 404	3 [ ]
medium	Schattenmorelle, Érdi bőtermő	5 [ ]
large	Favorit, Karneol, Pándy Bb. 119	7 [ ]
very large	Petri, Piramis, Safir	9 [ ]
<b>5.2 Fruit: color of skin (36)</b>		
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, Kelleriis 16, Schattenmorelle	5 [ ]
blackish	North Star, Érdi jubileum	6 [ ]
<b>5.3 Fruit: color of flesh (37)</b>		
yellowish	Montmorency, Pipacs 1	1 [ ]
pink	Meteor, Pándy 279	2 [ ]
medium red	Karneol, Kántorjánosi 3	3 [ ]
dark red	Cigánymeggy 7, Fanal	4 [ ]
<b>5.4 Fruit: color of juice (38)</b>		
colorless	Montmorency	1 [ ]
light yellow	Pipacs 1	2 [ ]
pink	Meteor, Pándy	3 [ ]
medium red	Karneol, Kántorjánosi 3	4 [ ]
dark red	Cigánymeggy 7, Fanal, Érdi jubileum	5 [ ]

Characteristics	Example Varieties	Note
<b>5.5 Time of beginning of flowering (46)</b>		
very early	Érdi bőtermő	1 [ ]
early	Favorit, Meteor korai	3 [ ]
medium	Cigánymeggy 7, Vowi	5 [ ]
late	Gerema, Kelleriis 16	7 [ ]
very late	Schattenmorelle	9 [ ]
<b>5.6 Time of beginning of fruit ripening (47)</b>		
very early	Érdi ipari, Tarina	1 [ ]
early	Meteor korai, Piramis	3 [ ]
medium	Favorit, Érdi bőtermő	5 [ ]
late	Kántorjánosi 3, Pándy 279	7 [ ]
very late	Gerema, Vowi	9 [ ]

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

6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the <b>similar</b> variety(ies)	Describe the expression of the characteristic(s) for <b>your</b> candidate variety
<i>Example</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 displaying its main distinguishing feature(s), should accompany the Technical Questionnaire. The photograph will provide a visual illustration of the candidate variety which supplements the information provided in the Technical Questionnaire.

The key points to consider when taking a photograph of the candidate variety are:

- Indication of the date and geographic location
- Correct labeling (breeder's reference)
- Good quality printed photograph (minimum 10 cm x 15 cm) and/or sufficient resolution electronic format version (minimum 960 x 1280 pixels)"

Further guidance on providing photographs with the Technical Questionnaire is available in document TGP/7 "Development of Test Guidelines", Guidance Note 35 (<http://www.upov.int/tgp/en/>).

[The link provided may be deleted by members of the Union when developing authorities' own test guidelines.]

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

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.

9. Information on plant material to be examined or submitted for examination

9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.

9.2 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

(a) Microorganisms (e.g. virus, bacteria, phytoplasma)	Yes [ ]	No [ ]
(b) Chemical treatment (e.g. growth retardant, pesticide)	Yes [ ]	No [ ]
(c) Tissue culture	Yes [ ]	No [ ]
(d) Other factors	Yes [ ]	No [ ]

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

.....

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]