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# INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

**APRICOT**

UPOV Code(s): PRUNU_ARM

*Prunus armeniaca* L.

**GUIDELINES**

**FOR THE CONDUCT OF TESTS**

**FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

*prepared by experts from South Africa*
*to be considered by the*
*Technical Working Party for Fruit Crops*
*at its forty-seventh session, to be held in Angers, France,*
*from 2016-11-14 to 2016-11-18*

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

Alternative names:*

| *Botanical name* | *English* | *French* | *German* | *Spanish* |
|---|---|---|---|---|
| *Prunus armeniaca* L., *Armeniaca vulgaris* Lam. | Apricot | Abricotier | Aprikose, Marille | Albaricoquero, Chabacano |

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.

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## 1. Subject of these Test Guidelines

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

For the examination of hybrids involving *Prunus armeniaca* L. guidance is provided in document TGP/13 “Guidance for New Types and Species”.

## 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:

(a) varieties resulting from crossings
5 trees (one-year-old grafts) or
5 budsticks or

(b) varieties resulting from mutations
10 trees (one-year-old grafts) or
10 budsticks

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 trees 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.

### *3.2 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.

### *3.4 Test Design*

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

3.4.2 In the case for mutations 9 plants should be observed.

### *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.

In the case of observations of parts taken from single plants, the number of parts to be taken from each of the plants should be 3.

#### 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 second column of 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 For the assessment of uniformity of vegetatively propagated varieties, 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, 0 off-types are allowed.

4.2.3 In the case of a sample size of 10 plants one off-type is 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 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:

(a) Fruit: size (characteristic 29)
(b) Fruit: ground color of skin (characteristic 46)
(c) Fruit: relative area of over color (characteristic 47)
(d) Fruit: color of flesh (characteristic 51)
(e) Time of beginning of flowering (characteristic 58)
(f) Time of beginning of fruit ripening (characteristic 59)

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 In the case of qualitative and pseudo-qualitative characteristics (see Chapter 6.3), all relevant states of expression are presented in the characteristic. However, in the case of quantitative characteristics with 5 or more states, an abbreviated scale may be used to minimize the size of the Table of Characteristics. For example, in the case of a quantitative characteristic with 9 states, the presentation of states of expression in the Test Guidelines may be abbreviated as follows:

| *State* | *Note* |
|---|---|
| small | 3 |
| medium | 5 |
| large | 7 |

However, it should be noted that all of the following 9 states of expression exist to describe varieties and should be used as appropriate:

| *State* | *Note* |
|---|---|
| very small | 1 |
| very small to small | 2 |
| small | 3 |
| small to medium | 4 |
| medium | 5 |
| medium to large | 6 |
| large | 7 |
| large to very large | 8 |
| very large | 9 |

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<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>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 8.2

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

7 Growth stage key See Explanations on the Table of Characteristics in Chapter 8

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

| | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|
| **1.** | **QN MG** | **(+) (a)** | **a** | | | |
| | **Tree: vigor** | | | | | |
| | very weak | | | | Sub-zero | 1 |
| | weak | | | | Ninfa, Polonais, Rustic | 3 |
| | medium | | | | Bergeron, Canino, Peeka, Rouge du Roussillon | 5 |
| | strong | | | | Earle Orange, Magyar kajszi, Palsteyn, Pisana, Portici | 7 |
| | very strong | | | | Monaco Bello, Moniquí, Solitaire, Viceroy | 9 |
| **2.** | **PQ VG** | **(+) (a)** | **a** | | | |
| | **Tree: habit** | | | | | |
| | fastigiate | | | | Japan's Early | 1 |
| | upright | | | | Harcot, Primando, Reale d'Imola | 2 |
| | upright to spreading | | | | Ceglédi óriás, Paz, Proimo Tyrinthos, Veecot | 3 |
| | spreading | | | | Blenheim, Canino, Grandir, Hargrand, Magyar kajszi | 4 |
| | drooping | | | | Palsteyn, Pisana, Polonais, Vesna | 5 |
| | weeping | | | | | 6 |
| **3.** | **QN VG** | **(+) (a)** | **a** | | | |
| | **Tree: degree of branching** | | | | | |
| | weak | | | | Earle Orange, Roxana | 3 |
| | medium | | | | Bergeron, Magyar kajszi, Roxanne, San Castrese | 5 |
| | strong | | | | Harlayne, Prevete, Roxy, Veecot | 7 |
| **4.** **(*)** | **QN VG** | **(a)** | **a** | | | |
| | **Tree: distribution of flower buds** | | | | | |
| | predominantly on spurs | | | | Earle Orange, Nugget, Roxy, Royal Rousillon, Sun Glo | 1 |
| | equally on spurs and on one-year-old shoots | | | | Bergeron, Bulida, Canino, San Castrese, Veecot | 2 |
| | predominantly on one-year-old shoots | | | | Amal, Ouardi, Rosa, Roxana | 3 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **5.** | **(*)** | **QN VG** | | | | | |
| | | **Young shoot: anthocyanin coloration of apex (during rapid growth)** | | | | | |
| | | weak | | | | Blenheim, Hargrand, Paz, Perla, Samarkandskij rannij | 3 |
| | | medium | | | | Cape Bebeco, Polonais, San Castrese, Sun Glo | 5 |
| | | strong | | | | Ceglédi bíbor, Harcot, Ladisun, Ohaicos, Ravival, Roxana | 7 |
| **6.** | | **PQ VG** | **(+) (a)** | **a** | | | |
| | | **One-year-old shoot: color on sunny side** | | | | | |
| | | yellow brown | | | | Cape Bebeco, Grandir | 1 |
| | | red brown | | | | Palsteyn, Polonais, Royal, Veecot | 2 |
| | | purple brown | | | | Blenheim, Harcot | 3 |
| **7.** | | **QN VG** | **(a)** | **a** | | | |
| | | **One-year-old shoot: size of bud support** | | | | | |
| | | small | | | | Canino, Cape Bebeco, Harcot, Vitillo | 1 |
| | | medium | | | | Hargrand, Magyar kajszi, Palsteyn, Portici, Tri Gems | 2 |
| | | large | | | | 4546, Ceglédi arany, Himidi, Roxana | 3 |
| **8.** | | **QN MS/VG** | **(b)** | **b** | | | |
| | | **Leaf blade: length** | | | | | |
| | | short | | | | Bulida, Early Biady, Perla, Samarkandskij rannij | 3 |
| | | medium | | | | Canino, Portici, Rouge du Roussillon, Veecot | 5 |
| | | long | | | | A. Vecchioni, Calirose, Ceglédi arany, Moniquí, Roxana | 7 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **9.** | | **QN MS/VG** | **(b)** | **b** | | | |
| | | **Leaf blade: width** | | | | | |
| | | narrow | | | | Ceglédi bíbor, Monaco Bello, Rouget de Sernhac, Veecot | 3 |
| | | medium | | | | Canino, Cape Bebeco, Harcot, Vitillo | 5 |
| | | broad | | | | Ceglédi piroska, Moniquí, Pisana | 7 |
| **10.** | **(*)** | **QN MG/VG** | **(b)** | **b** | | | |
| | | **Leaf blade: ratio length/width** | | | | | |
| | | very small | | | | Canino, Portici | 1 |
| | | small | | | | Cafona, Hargrand, Supergold | 3 |
| | | medium | | | | Harcot, Rouget de Sernhac, Rustic, San Castrese | 5 |
| | | large | | | | A. Vecchioni, Big Cot, Ceglédi bíbor | 7 |
| | | very large | | | | Calirose, Colorado, Noemi, Super Seven | 9 |
| **11.** | | **QN VG** | **(b)** | **b** | | | |
| | | **Leaf blade: intensity of green color of upper side** | | | | | |
| | | light | | | | Roxy, San Castrese, Veecot, Velasquez | 3 |
| | | medium | | | | Canino, Ceglédi óriás, Flaming Gold, Grandir, Harcot | 5 |
| | | dark | | | | A. Vecchioni, Stark Early Orange | 7 |
| | | very dark | | | | Ninja | 9 |
| **12.** | | **PQ VG** | **(+)** **(b)** | **b** | | | |
| | | **Leaf blade: shape of base** | | | | | |
| | | acute | | | | Ceglédi bíbor, Rouget de Sernhac, San Francesco | 1 |
| | | obtuse | | | | Bhart, Calirose, Magyar kajszi, Portici | 2 |
| | | truncate | | | | Bergeron, Blenheim, Canino, Perla | 3 |
| | | cordate | | | | Bulida, Monabri, Moniquí | 4 |

| | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|
| **13.** | **PQ VG** | **(+) (b)** | **b** | | | |
| | **Leaf blade: angle of apex (excluding tip)** | | | | | |
| | acute | | | | San Castrese | 1 |
| | right-angled | | | | Bulida, Canino, Ceglédi óriás | 2 |
| | moderately obtuse | | | | Bergeron, Farclo, Polonais, Portici | 3 |
| | strongly obtuse | | | | Hargrand, Moniquí | 4 |
| **14.** | **QN VG** | **(b)** | **b** | | | |
| | **Leaf blade: length of tip** | | | | | |
| | absent or very short | | | | Alpha | 1 |
| | short | | | | Amber Gold, Bhart, Harmat, Moniquí | 3 |
| | medium | | | | Magyar kajszi, Roxy | 5 |
| | long | | | | Calirose, Fina, Ivonne Liverani, Roxana | 7 |
| **15.** | **PQ VG** | **(+) (b)** | **b** | | | |
| | **Leaf blade: incisions of margin** | | | | | |
| | crenate | | | | Canino, Royal Rousillon, San Castrese, Verdun | 1 |
| | bicrenate | | | | Bhart, Ninfa | 2 |
| | bidentate | | | | Calicot | 3 |
| | serrate | | | | Calirose, Vitillo | 4 |
| | biserrate | | | | Farius, Himidi, Rakovszky, Roxana, San Francesco, Suapriseven | 5 |
| **16.** | **QN VG** | **(b)** | **b** | | | |
| | **Leaf blade: undulation of margin** | | | | | |
| | weak | | | | Harcot, Palsteyn, Portici | 3 |
| | medium | | | | Blenheim, Cape Bebeco, Nonno, Roxana | 5 |
| | strong | | | | Piet Cillié, Polonais, San Francesco | 7 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **17.** | | **QN VG** | **(+) (b)** | **b** | | | |
| | | **Leaf blade: profile in cross section** | | | | | |
| | | slightly convex | | | | Megatea | 1 |
| | | straight or weakly concave | | | | Earle Orange, Rouget de Sernhac, San Castrese | 2 |
| | | moderately concave | | | | Bergeron, Dulcinea, Moniquí, Rustic | 3 |
| | | strongly concave | | | | Polonais | 4 |
| **18.** | **(*)** | **QN MS/VG** | **(b)** | **b** | | | |
| | | **Petiole: length** | | | | | |
| | | short | | | | Cape Bebeco, Madison, Moniquí, Ninfa, Veecot | 3 |
| | | medium | | | | Bergeron, Bulida, Cafona, Canino, Hargrand | 5 |
| | | long | | | | HG nº1, Ladisun, Reale d'Imola, Skopska Krupna | 7 |
| **19.** | **(*)** | **QN MG/VG** | **(b)** | **b** | | | |
| | | **Leaf: ratio length of blade /length of petiole** | | | | | |
| | | small | | | | Earle Orange, Harcot, Pisana, Rouget de Sernhac | 3 |
| | | medium | | | | Bergeron, Calirose, Hâtif Colomer, Portici, Rouge du Roussillon | 5 |
| | | large | | | | | 7 |
| **20.** | | **QN VG** | **(b)** | **b** | | | |
| | | **Petiole: thickness** | | | | | |
| | | thin | | | | Flaming Gold, San Castrese, Veecot | 3 |
| | | medium | | | | Bulida, Harcot, Portici | 5 |
| | | thick | | | | Ceglédi arany, Moniquí, Reale d'Imola | 7 |
| **21.** | | **QN VG** | **(b)** | **b** | | | |
| | | **Petiole: anthocyanin coloration of upper side** | | | | | |
| | | weak | | | | Cibo del Paradiso, Tri Gems | 3 |
| | | medium | | | | Bhart, Canino, Cape Bebeco, San Castrese | 5 |
| | | strong | | | | Ceglédi bíbor, Early Biady, Grandir, Harogem | 7 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **22.** | **(*)** | **QN MG** | **(b)** | **b** | | | |
| | | **Petiole: predominant number of nectaries** | | | | | |
| | | none or one | | | | Mandulakajszi, Rouget de Sernhac, Sant' Ambrogio | 1 |
| | | two or three | | | | Cafona, Magyar kajszi, Primarina, Veecot | 2 |
| | | more than three | | | | Bulida, Canino, Moniquí, Pisana | 3 |
| **23.** | | **QN VG** | **(b)** | **b** | | | |
| | | **Petiole: size of nectaries** | | | | | |
| | | small | | | | Alpha, Calirose, Madison, San Francesco, Yerevani | 3 |
| | | medium | | | | Bulida, Ceglédi óriás, San Castrese, Tilton | 5 |
| | | large | | | | Canino, Early Biady, Harmat, Pisana, Red Blush | 7 |
| **24.** | **(*)** | **QN MS/VG** | **(+) (c)** | **c** | | | |
| | | **Flower: diameter** | | | | | |
| | | small | | | | Borsi rózsa, Hâtif Colomer, Supergold | 3 |
| | | medium | | | | Calirose, Magyar kajszi, Polonais, Portici, Reale d'Imola | 5 |
| | | large | | | | Hargrand, Harmat, San Castrese | 7 |
| **25.** | | **QN VG** | **(c)** | **c** | | | |
| | | **Flower: position of stigma relative to anthers** | | | | | |
| | | below | | | | Canetta, Harmat, Rouge du Roussillon | 1 |
| | | same level | | | | Hargrand, Palsteyn, Portici | 2 |
| | | above | | | | Canino, Grandir, Pisana, Polonais | 3 |
| **26.** | | **PQ VG** | **(+) (c)** | **c** | | | |
| | | **Petal: shape (excluding claw)** | | | | | |
| | | elliptic | | | | Sant' Ambrogio | 1 |
| | | circular | | | | Faralia, Harcot, Luizet | 2 |
| | | oblate | | | | Canino, Polonais, Rustic, Vitillo | 3 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **27.** | | **PQ VG** | **(+) (c)** | **c** | | | |
| | | **Petal: color on lower side** | | | | | |
| | | white | | | | Bulida, Cafona, Polonais | 1 |
| | | light pink | | | | Harcot, Magyar kajszi, San Castrese | 2 |
| | | dark pink | | | | | 3 |
| **28.** | | **QN VG** | **(c)** | **c** | | | |
| | | **Flower: sepal attitude** | | | | | |
| | | upwards | | | | Bhart, Ladisun | 1 |
| | | outwards | | | | Calirose, Farbaly | 2 |
| | | downwards | | | | Cape Bebeco | 3 |
| **29.** | **(*)** | **QN MS/VG** | **(d)** | **c** | | | |
| | | **Fruit: size** | | | | | |
| | | very small | | | | Haggith, Menace, Supergold, Zard | 1 |
| | | small | | | | Borsi rózsa, Hâtif Colomer, Ladisun, Patriarca Temprano | 3 |
| | | medium | | | | Cafona, Canino, Harcot, Paz | 5 |
| | | large | | | | Ceglédi bíbor, Moniquí, Portici | 7 |
| | | very large | | | | Ceglédi óriás, Hargrand, Palsteyn, Pisana | 9 |
| **30.** | **(*)** | **PQ VG** | **(+) (d)** | **d** | | | |
| | | **Fruit: shape in lateral view** | | | | | |
| | | triangular | | | | Luizet | 1 |
| | | ovate | | | | Bergeron, Calirose, Pisana | 2 |
| | | oblate | | | | Korai zamatos, Nugget, Patriarca Temprano | 3 |
| | | circular | | | | Earle Orange, Grandir, Ninfa, Ouardi, Polonais | 4 |
| | | oblong | | | | Blenheim, Portici, Sundrop | 5 |
| | | elliptic | | | | Précoce d'Imola, Wenatchee, Yerevani | 6 |
| | | obovate | | | | Harcot, Harmat, Trevatt | 7 |
| | | oblique rhombic | | | | Banga, Bulida, Canino, Vulcan | 8 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **31.** | **(*)** | **PQ VG** | **(+) (d)** | **d** | | | |
| | | **Fruit: shape in ventral view** | | | | | |
| | | triangular | | | | Luizet, Mandulakajszi, Reale d'Imola | 1 |
| | | ovate | | | | Bergeron, Calirose, Canino, Fracasso | 2 |
| | | oblate | | | | Nugget | 3 |
| | | circular | | | | Polonais, Rouge du Roussillon, San Castrese, Sant' Ambrogio, Supergold, Viceroy | 4 |
| | | oblong | | | | Baracca, Hargrand, Hâtif Colomer, Veecot | 5 |
| | | elliptic | | | | Bella d'Imola, Flaming Gold, Sant' Ambrogio, Yerevani | 6 |
| | | obovate | | | | Harcot, Harmat, Ladisun, Portici | 7 |
| **32.** | | **QN MS/VG** | **(d)** | **d** | | | |
| | | **Fruit: height** | | | | | |
| | | short | | | | Patriarca Temprano, Samarkandskij rannij, Sayeb, Supergold | 3 |
| | | medium | | | | Bergeron, Canino, Cape Bebeco, Polonais | 5 |
| | | tall | | | | Calirose, Goldrich, Mandulakajszi, Vitillo | 7 |
| **33.** | | **QN MS/VG** | **(d)** | **d** | | | |
| | | **Fruit: lateral width** | | | | | |
| | | narrow | | | | Cerasiello, Harmat, Manicot, Samarkandskij rannij, Supergold | 3 |
| | | medium | | | | Bergeron, Bhart, Cafona, Paz | 5 |
| | | broad | | | | Hargrand, Moniquí, Roxanne, Vitillo | 7 |
| **34.** | | **QN MS/VG** | **(d)** | **d** | | | |
| | | **Fruit: ventral width** | | | | | |
| | | narrow | | | | Cerasiello, Harlayne, Hâtif Colomer, Tri Gems | 3 |
| | | medium | | | | Bhart, Cape Bebeco, Palummella | 5 |
| | | broad | | | | Ceglédi arany, Goldrich, Moniquí, Roxanne | 7 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **35.** | | **QN MG/VG** | **(d)** | **d** | | | |
| | | **Fruit: ratio height /ventral width** | | | | | |
| | | small | | | | Korai zamatos, Monaco Bello, Patriarca Temprano, Peeka | 3 |
| | | medium | | | | Cafona, Canino, Magyar kajszi, Rouge du Roussillon, Solitaire | 5 |
| | | large | | | | Bergeron, Hâtif Colomer, Tri Gems, Vitillo | 7 |
| **36.** | **(*)** | **QN MG/VG** | **(d)** | **d** | | | |
| | | **Fruit: ratio lateral width/ventral width** | | | | | |
| | | very small | | | | Monaco Bello | 1 |
| | | small | | | | Mandorlon, Maria Ferez, Rustic, Vesna | 3 |
| | | medium | | | | Bergeron, Luizet, Pisana, Rouge du Roussillon | 5 |
| | | large | | | | Borsi rózsa, Calicot, Henderson, IP 660 | 7 |
| **37.** | **(*)** | **QN VG** | **(d)** | **d** | | | |
| | | **Fruit: symmetry in ventral view** | | | | | |
| | | symmetric | | | | Canino, Hâtif Colomer, Magyar kajszi, Paz, Polonais, Portici | 1 |
| | | slightly asymmetric | | | | Boccuccia, Calirose, Ceglédi óriás, Royal | 2 |
| | | clearly asymmetric | | | | Borsi rózsa, Grandir, Reale d'Imola | 3 |
| **38.** | **(*)** | **PQ VG** | **(d)** | **d** | | | |
| | | **Fruit: suture** | | | | | |
| | | raised | | | | Priboto | 1 |
| | | slightly sunken | | | | Calirose, Magyar kajszi, Ninfa, Rouge du Roussillon | 2 |
| | | moderately sunken | | | | Bergeron, Ladisun, Monaco Bello, Pineapple | 3 |
| | | deeply sunken | | | | Cape Bebeco, Dima, Henderson, Kech-pshar, Portici | 4 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **39.** | | **QN VG** | **(d)** | **d** | | | |
| | | **Fruit: depth of stalk cavity** | | | | | |
| | | shallow | | | | Harlayne, Peeka, Rouge du Roussillon, San Castrese | 3 |
| | | medium | | | | Blenheim, Grandir, Magyar kajszi, Vitillo | 5 |
| | | deep | | | | Canino, Ceglédi óriás, Hâtif Colomer, Kayzee, Palsteyn | 7 |
| **40.** | **(*)** | **PQ VG** | **(+) (d)** | **d** | | | |
| | | **Fruit: shape of apex** | | | | | |
| | | acute | | | | Hula Blush, Mandulakajszi, Reale d'Imola | 1 |
| | | rounded | | | | Bergeron, Calirose, Goldrich, Luizet, Portici | 2 |
| | | truncate | | | | Bella d'Imola, Hargrand, Hâtif Colomer, Royal | 3 |
| **41.** | | **PQ VG** | **(d)** | **d** | | | |
| | | **Fruit: shape of tip (excluding mucron tip)** | | | | | |
| | | pointed | | | | Mediabel | 1 |
| | | flat | | | | Farbaly | 2 |
| | | weakly depressed | | | | Suapriseven | 3 |
| | | strongly depressed | | | | Primaya | 4 |
| **42.** | **(*)** | **QL VG** | **(d)** | **d** | | | |
| | | **Fruit: presence of mucron** | | | | | |
| | | absent | | | | Blenheim, Bulida, Canino, San Castrese | 1 |
| | | present | | | | Bhart, Pisana | 9 |
| **43.** | | **QN VG** | **(d)** | **d** | | | |
| | | **Fruit: surface** | | | | | |
| | | smooth | | | | Bergeron, Palsteyn, Portici, Rouge du Roussillon | 1 |
| | | slightly bumpy | | | | Cape Bebeco, Supergold | 2 |
| | | moderately bumpy | | | | Canino, Ceglédi óriás, Faralia, Nonno | 3 |
| | | very bumpy | | | | Rosa | 4 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **44.** | **(*)** | **QL VG** | **(d)** | **d** | | | |
| | | **Fruit: pubescence** | | | | | |
| | | absent | | | | Badami, Glattschalige Frühmarille | 1 |
| | | present | | | | Bergeron, Bulida, Canino, Magyar kajszi | 9 |
| **45.** | | **QN VG** | **(d)** | **d** | | | |
| | | **Only varieties with pubescence absent: Fruit: glossiness** | | | | | |
| | | absent or weak | | | | Rouge du Roussillon | 1 |
| | | medium | | | | Harcot | 2 |
| | | strong | | | | Maravilla, Sun Glo | 3 |
| **46.** | **(*)** | **PQ VG** | **(d)** | **d** | | | |
| | | **Fruit: ground color of skin** | | | | | |
| | | not visible | | | | A3759, A3844 | 1 |
| | | white | | | | San Nicola, Shirazskij belyj | 2 |
| | | yellowish | | | | Piet Cillié, Soldonné, Vitillo, Yerevani | 3 |
| | | yellow green | | | | Grüne Spätmarille, Kaisi Ashtarak, Roxy, Sateni Karmir | 4 |
| | | light orange | | | | Canino, Goldcot, Hargrand, Portici, Rouge du Roussillon, Roxanne | 5 |
| | | medium orange | | | | Calirose, Hâtif Colomer, Luizet, Pisana, Veecot | 6 |
| | | dark orange | | | | Bhart, Harcot, Harogem | 7 |
| **47.** | **(*)** | **QN VG** | **(d)** | **d** | | | |
| | | **Fruit: relative area of over color** | | | | | |
| | | absent or very small | | | | Charisma, Maria Matilde, Moniquí, Yerevani | 1 |
| | | small | | | | Cafona, Canino, Cape Bebeco, Goldrich | 3 |
| | | medium | | | | Hâtif Colomer, Magyar kajszi, Palsteyn, Portici, Roxy | 5 |
| | | large | | | | Bergeron, Bhart, Golden Blush, Pisana | 7 |
| | | very large | | | | A3759, A3844 | 9 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **48.** | **(*)** | **PQ VG** | **(d)** | **d** | | | |
| | | **Fruit: hue of over color** | | | | | |
| | | orange red | | | | | 1 |
| | | red | | | | Bhart | 2 |
| | | pink | | | | | 3 |
| | | purple | | | | | 4 |
| **49.** | | **QN VG** | **(d)** | **d** | | | |
| | | **Fruit: intensity of over color** | | | | | |
| | | light | | | | Big Cot | 3 |
| | | medium | | | | Calirose | 5 |
| | | dark | | | | Primarina | 7 |
| **50.** | **(*)** | **PQ VG** | **(d)** | **d** | | | |
| | | **Fruit: pattern of over color** | | | | | |
| | | isolated flecks (spots) | | | | Big Cot, Rouge du Roussillon | 1 |
| | | solid flush | | | | Bergeron, Cape Bebeco | 2 |
| | | covered all over with very small dots | | | | Grandir, Moniquí | 3 |
| **51.** | **(*)** | **PQ VG** | **(d)** | **d** | | | |
| | | **Fruit: color of flesh** | | | | | |
| | | whitish green | | | | Amban | 1 |
| | | white | | | | Cibo del Paradiso, Mouchbah Mourry, Spitak | 2 |
| | | cream | | | | Barese, Malatya, Moniquí, Patriarca Temprano | 3 |
| | | light orange | | | | Canino, Cape Bebeco, Harmat, San Castrese, Yerevani | 4 |
| | | medium orange | | | | Grandir, Harglow, Pisana, Rouge du Roussillon, Screara | 5 |
| | | dark orange | | | | Bhart, Francese, Harcot, Hâtif Colomer, Palsteyn | 6 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **52.** | | **QN VG** | **(d)** | **d** | | | |
| | | **Fruit: texture of flesh** | | | | | |
| | | fine | | | | Fracasso, Harlayne, Peeka | 1 |
| | | medium | | | | Canino, Cape Bebeco, Magyar kajszi, Piet Cillié | 2 |
| | | coarse | | | | Bergeron, Précoce d'Imola | 3 |
| **53.** | | **QN VG** | **(d)** | **d** | | | |
| | | **Fruit: firmness of flesh** | | | | | |
| | | very soft | | | | Sant' Ambrogio, Viceroy | 1 |
| | | soft | | | | Alessandrino, Goldcot, Grandir | 3 |
| | | medium | | | | Cape Bebeco, Magyar kajszi, Piet Cillié, Rouge du Roussillon, San Castrese | 5 |
| | | firm | | | | Bella d'Imola, Bergeron, Palsteyn, Suapriseven | 7 |
| | | very firm | | | | Boccuccia Liscia, Borsi rózsa, Cacansko zlato, Harogem | 9 |
| **54.** | | **QN MG** | **(d)** | **d** | | | |
| | | **Fruit: ratio weight of fruit/weight of stone** | | | | | |
| | | small | | | | Borsi rózsa, Reale d'Imola | 3 |
| | | medium | | | | Blenheim, Hâtif Colomer, Portici, Primaya | 5 |
| | | large | | | | Badami, Bergeron, Hula Blush, San Castrese | 7 |
| **55.** | **(*)** | **QN VG** | **(d)** | **d** | | | |
| | | **Fruit: adherence of stone to flesh** | | | | | |
| | | absent or very weak | | | | Bergeron, Hargrand, Ninfa, Peeka | 1 |
| | | weak | | | | Canino, Nonno, Paz, Rouge du Roussillon, Sirena | 3 |
| | | medium | | | | Tardif de Bordaneil | 5 |
| | | strong | | | | Comandor, Precoce di Toscana | 7 |

| | | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|---|
| **56.** | **(*)** | **PQ VG** | **(+) (d)** | **d** | | | |
| | | **Stone: shape in lateral view** | | | | | |
| | | ovate | | | | Goldcot, Grandir, Magyar kajszi, Portici | 1 |
| | | circular | | | | Canino, Eten Bey, Hargrand, Monaco Bello, Suaprieight | 2 |
| | | elliptic | | | | Bergeron, Roxanne, Vitillo | 3 |
| | | oblong | | | | Bella d'Imola, Calirose, Palsteyn, Rouge du Roussillon | 4 |
| | | obovate | | | | Harcot, Harmat | 5 |
| **57.** | | **QN VG** | **(d)** | **d** | | | |
| | | **Kernel: bitterness** | | | | | |
| | | absent or weak | | | | Bergeron, Harcot, Magyar kajszi, Moniquí, Reale d'Imola | 1 |
| | | medium | | | | Bella d'Imola, Harlayne, Palsteyn, Suaprieight | 2 |
| | | strong | | | | Borsi rózsa, Canino, Manicot, Prevete, Supergold | 3 |
| **58.** | **(*)** | **QN MG/VG** | **(+)** | | | | |
| | | **Time of beginning of flowering** | | | | | |
| | | very early | | | | Bakour, Currots, Harmat, Ninfa, Solitaire | 1 |
| | | early | | | | Canino, Harcot, Hâtif Colomer, Roxanne, San Castrese | 3 |
| | | medium | | | | Bhart, Magyar kajszi, Moniquí, Portici, San Francesco, Supergold | 5 |
| | | late | | | | Bergeron, Boccuccia Liscia, Farius, Harlayne, Ladisun, Polonais | 7 |
| | | very late | | | | Badami, Harglow, Skromnyj, Stella, Zard | 9 |

| | English | français | deutsch | español | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|---|---|---|---|
| **59. (*)** | **QN MG/VG** | **(+)** | | | | |
| | **Time of beginning of fruit ripening** | | | | | |
| | very early | | | | Bakour, Ninfa, Patriarca Temprano, Rutbhart, Samarkandskij rannij | 1 |
| | very early-early | | | | Monabri, Tsunami | 2 |
| | early | | | | Bhart, Hâtif Colomer, Ladisun, Monaco Bello, Rouget de Sernhac, Tomcot | 3 |
| | early-medium | | | | Goldrich, Hargrand | 4 |
| | medium | | | | Amber Gold, Bergeron, Harlayne, Pisana, Polonais | 5 |
| | medium-late | | | | Anegat | 6 |
| | late | | | | Faralia, Larquen | 7 |
| | late-very late | | | | Fartoli | 8 |
| | very late | | | | Farclo, Lartago | 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 fully developed leaves from the middle third of a well developed current season's shoot.

(c) Flower: Unless otherwise stated, all observations on the flower should be made on fully developed flowers at the beginning of dehiscence.

(d) Fruit/Stone: All observations on the fruit and stone should be made on 25 fruits, five from each of five trees.

### *8.2 Explanations for individual characteristics*

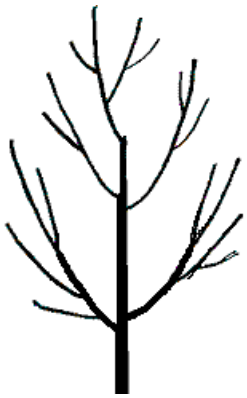
Ad. 1: Tree: vigor

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

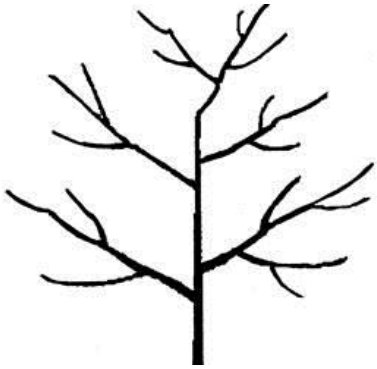
Ad. 2: Tree: habit

1
fastigiate

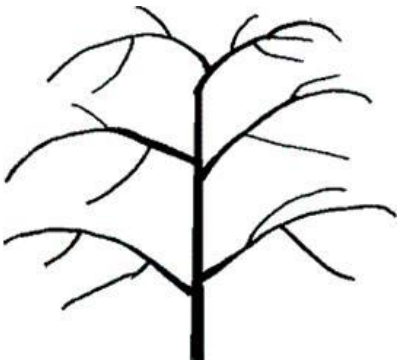
2
upright



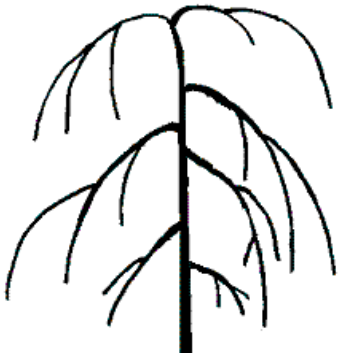
3
upright-spreading



4
spreading



5
drooping



6
weeping

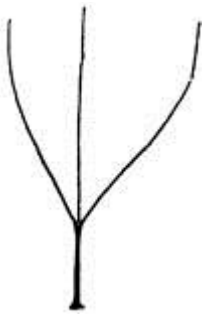
Ad. 3: Tree: degree of branching

Observations should relate to the number of branches with the degree of branching being indicated by the density of lateral branches and shoots, excluding fruiting shoots.

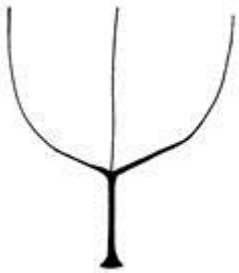
Ad. 6: One-year-old shoot: color on sunny side

Observations should be carried out in the middle of one-year-old primary shoots.

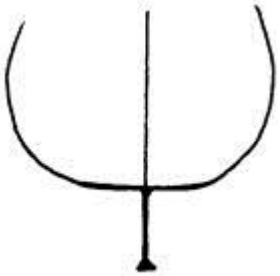
Ad. 12: Leaf blade: shape of base



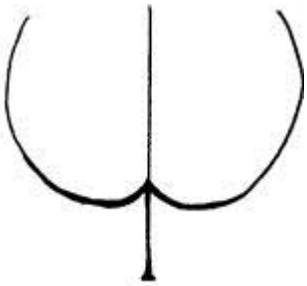
1
acute



2
obtuse

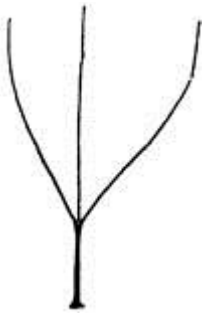


3
truncate

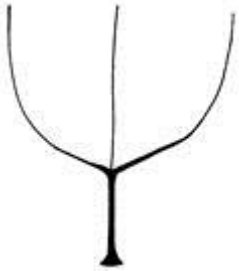


4
cordate

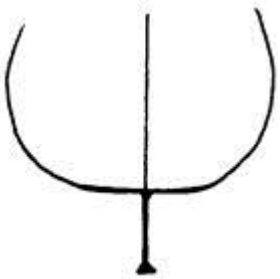
Ad. 13: Leaf blade: angle of apex (excluding tip)



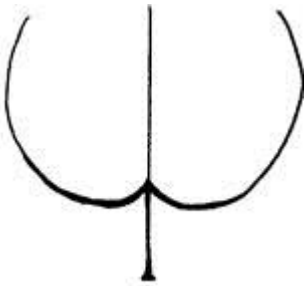
1
acute



2
obtuse



3
truncate

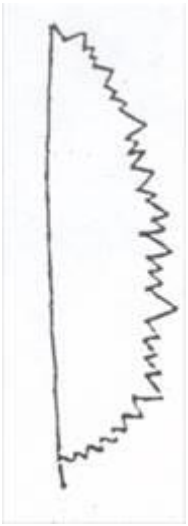


4
cordate

Ad. 15: Leaf blade: incisions of margin

1
crenate

2
bicrenate



3
bidentate

4
serrate

5
biserrate

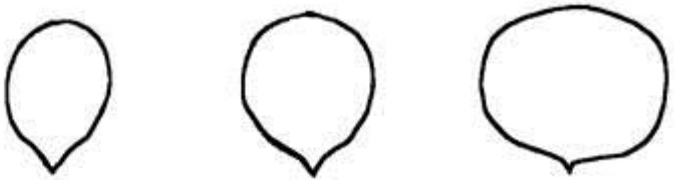
Ad. 17: Leaf blade: profile in cross section

Leaves observed should be on spurs or at base of flowering shoots.

Ad. 24: Flower: diameter

Observations or measurements should be carried out on fully opened flowers.

Ad. 26: Petal: shape (excluding claw)

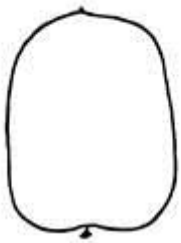
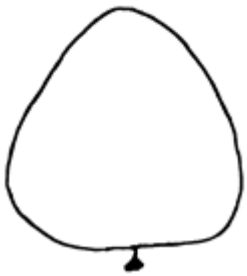
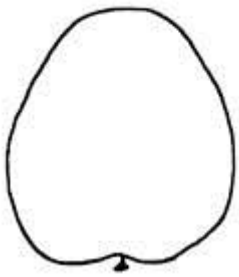
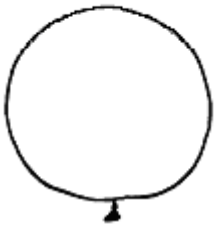
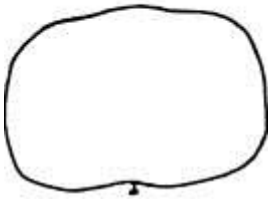
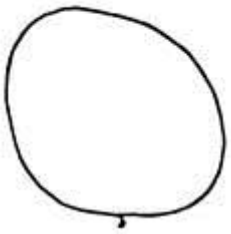


| 1 | 2 | 3 |
|---|---|---|
| broad elliptic | circular | oblate |

Ad. 27: Petal: color on lower side

Observations should be carried out just after opening of sepals on the lower side.

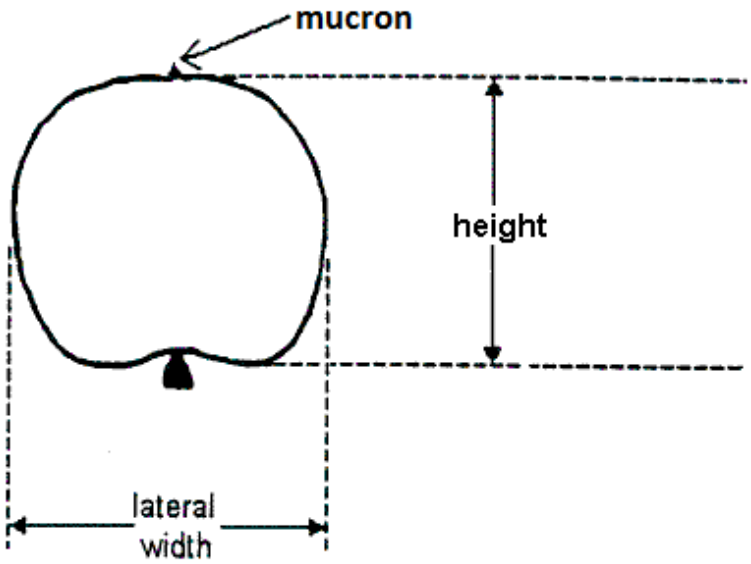
Ad. 30: Fruit: shape in lateral view
Ad. 31: Fuit shape in ventral view

| | | ←broadest part → | | | |
|---|---|---|---|---|---|
| | | below middle | | at middle | above middle |
| width (ratio length/ width) | | | | | |
| narrow (high) | | | |  6 elliptic | |
| medium (medium) | | | |  5 oblong | |
| | |  1 triangular |  2 ovate |  4 circular |  8 obovate |
| broad (low) | | | |  3 oblate |  7 oblique rhombic (not applicable for char. 30) |

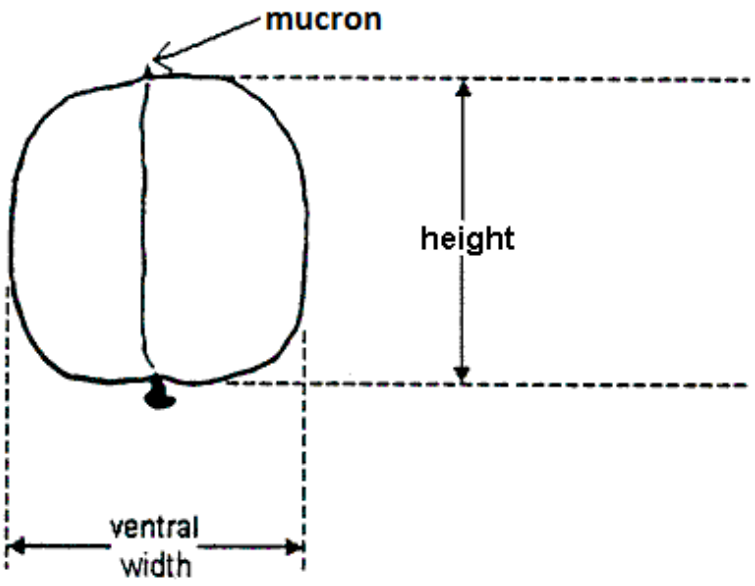
Ad. 31: Fruit: shape in ventral view



Lateral view




Ventral view



Ad. 40: Fruit: shape of apex

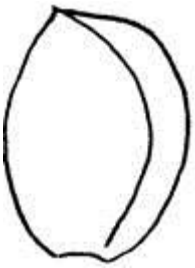
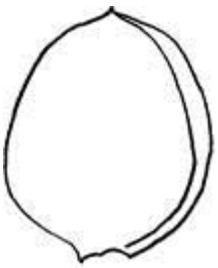
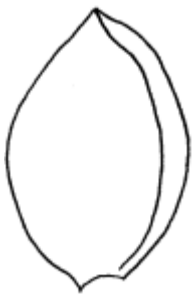
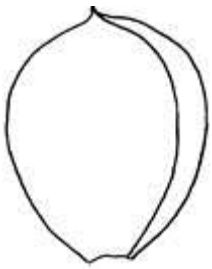
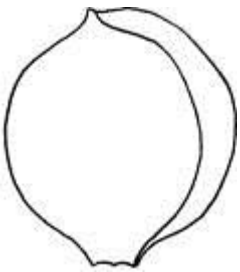
Observations should be carried out on fruits in lateral view.

1
acute

2
rounded

3
truncate

Ad. 56: Stone: shape in lateral view

| | | ←broadest part → | | |
|---|---|---|---|---|
| | | below middle | at middle | above middle |
| width (ratio length/width) | | | | |
| narrow (high) | | |  4 oblong | |
| medium (medium) | |  1 ovate |  3 elliptic |  5 obovate |
| broad (low) | | |  2 circular | |

Ad. 58: Time of beginning of flowering

When 5-10% open flowers can be observed.

Ad. 59: 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 is most easily removed.

8.3

| Example Varieties | Synonym(s) |
|---|---|
| Sant' Ambrogio | Ambrosia, Saint Ambroise |
| Bhart | NJA 32 |
| Borsi rózsa | Kecskemeter rose, Ružova neskora, Trandafirii tirzi |
| Čačacansko zlato | Čačak's Gold |
| Earle Orange | Erle Orange, Stark Earli Orange, Early Orange |
| Goldrich | Sungiant |
| Magyar kajszi | Cea mai bună de Ungaria, Hungarian Best, Klosterneuburger Aprikose, Krasnoshchokij, Mađarska najbolja, Meilleur d'Hongrie, Ungarische Beste, Velkopavlovická |
| Pineapple | Abricot d'Ananas, Ananas-Marille, Ananasnyj |
| Proimo Tyrinthos | Précoce de Tyrinthe |
| Rutbhart | Early Blush® |
| Sateni Karmir | Tabarza |
| Yerevani | Shalakh |

9. Literature

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10. Technical Questionnaire

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

| | Application date:<br>(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 | *Prunus armeniaca* L. |
| 1.2 Common name | Apricot |

2. Applicant

| | |
|---|---|
| Name | |
| Address | |
| Telephone No. | |
| Fax No. | |
| E-mail address | |
| Breeder (if different from applicant) | |

3. Proposed denomination and breeder's reference

| | |
|---|---|
| Proposed denomination (if available) | |
| Breeder's reference | |

| 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 [ ]

(please state parent varieties)

(……..……..…) x (……..……..…)

female parent male parent

(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) Cuttings [ ]
(b) *In vitro* propagation [ ]
(c) Other (state method) [ ]

4.2.2 Other [ ]
(Please provide details)

| 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 (29)** | **Fruit: size** | | |
| | very small | Haggith, Menace, Supergold, Zard | 1 [ ] |
| | small | Borsi rózsa, Hâtif Colomer, Ladisun, Patriarca Temprano | 3 [ ] |
| | medium | Cafona, Canino, Harcot, Paz | 5 [ ] |
| | large | Ceglédi bíbor, Moniquí, Portici | 7 [ ] |
| | very large | Ceglédi óriás, Hargrand, Palsteyn, Pisana | 9 [ ] |
| **5.2 (46)** | **Fruit: ground color of skin** | | |
| | not visible | A3759, A3844 | 1 [ ] |
| | white | San Nicola, Shirazskij belyj | 2 [ ] |
| | yellowish | Piet Cillié, Soldonné, Vitillo, Yerevani | 3 [ ] |
| | yellow green | Grüne Spätmarille, Kaisi Ashtarak, Roxy, Sateni Karmir | 4 [ ] |
| | light orange | Canino, Goldcot, Hargrand, Portici, Rouge du Roussillon, Roxanne | 5 [ ] |
| | medium orange | Calirose, Hâtif Colomer, Luizet, Pisana, Veecot | 6 [ ] |
| | dark orange | Bhart, Harcot, Harogem | 7 [ ] |
| **5.3 (47)** | **Fruit: relative area of over color** | | |
| | absent or very small | Charisma, Maria Matilde, Moniquí, Yerevani | 1 [ ] |
| | small | Cafona, Canino, Cape Bebeco, Goldrich | 3 [ ] |
| | medium | Hâtif Colomer, Magyar kajszi, Palsteyn, Portici, Roxy | 5 [ ] |
| | large | Bergeron, Bhart, Golden Blush, Pisana | 7 [ ] |
| | very large | A3759, A3844 | 9 [ ] |
| **5.4 (51)** | **Fruit: color of flesh** | | |
| | whitish green | Amban | 1 [ ] |
| | white | Cibo del Paradiso, Mouchbah Mourry, Spitak | 2 [ ] |
| | cream | Barese, Malatya, Moniquí, Patriarca Temprano | 3 [ ] |
| | light orange | Canino, Cape Bebeco, Harmat, San Castrese, Yerevani | 4 [ ] |
| | medium orange | Grandir, Harglow, Pisana, Rouge du Roussillon, Screara | 5 [ ] |
| | dark orange | Bhart, Francese, Harcot, Hâtif Colomer, Palsteyn | 6 [ ] |

| | Characteristics | Example Varieties | Note |
|---|---|---|---|
| **5.5 (58)** | **Time of beginning of flowering** | | |
| | very early | Bakour, Currots, Harmat, Ninfa, Solitaire | 1 [ ] |
| | early | Canino, Harcot, Hâtif Colomer, Roxanne, San Castrese | 3 [ ] |
| | medium | Bhart, Magyar kajszi, Moniquí, Portici, San Francesco, Supergold | 5 [ ] |
| | late | Bergeron, Boccuccia Liscia, Farius, Harlayne, Ladisun, Polonais | 7 [ ] |
| | very late | Badami, Harglow, Skromnyj, Stella, Zard | 9 [ ] |
| **5.6 (59)** | **Time of beginning of fruit ripening** | | |
| | very early | Bakour, Ninfa, Patriarca Temprano, Rutbhart, Samarkandskij rannij | 1 [ ] |
| | very early-early | Monabri, Tsunami | 2 [ ] |
| | early | Bhart, Hâtif Colomer, Ladisun, Monaco Bello, Rouget de Sernhac, Tomcot | 3 [ ] |
| | early-medium | Goldrich, Hargrand | 4 [ ] |
| | medium | Amber Gold, Bergeron, Harlayne, Pisana, Polonais | 5 [ ] |
| | medium-late | Anegat | 6 [ ] |
| | late | Faralia, Larquen | 7 [ ] |
| | late-very late | Fartoli | 8 [ ] |
| | very late | Farclo, Lartago | 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 **similar** variety(ies) | Describe the expression of the characteristic(s) for **your** candidate variety |
|---|---|---|---|
| *Example* | *Fruit ground color of skin* | *light orange* | *dark orange* |
| | | | |
| | | | |
| | | | |

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.]

# 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: |
|---|---|---|

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”.

.....

9.3 Has the plant material to be examined been tested for the presence of virus or other pathogens?

Yes [ ]

(please provide details as specified by the Authority)

No [ ]

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]