CPVO-TP/070/2 Final
English
Date: 13/03/2008

**EUROPEAN UNION**

**COMMUNITY PLANT VARIETY OFFICE**

# PROTOCOL FOR DISTINCTNESS, UNIFORMITY AND STABILITY TESTS

***Prunus armeniaca* L., *Armeniaca vulgaris* Lam.**

## APRICOT

UPOV Code: PRUNU_ARM

**Adopted on 13/03/2008**

# I SUBJECT OF THE PROTOCOL

The protocol describes the technical procedures to be followed in order to meet the Council Regulation 2100/94 on Community Plant Variety Rights. The technical procedures have been agreed by the Administrative Council and are based on general UPOV Document TG/1/3 and UPOV Guideline TG/70/4 Rev. dated 28/03/2007 for the conduct of tests for Distinctness, Uniformity and Stability. This protocol applies for all varieties of *Prunus armeniaca* L.

# II SUBMISSION OF SEED AND OTHER PLANT MATERIAL

1. The Community Plant Variety Office (CPVO) is responsible for informing the applicant of

- the closing date for the receipt of plant material;
- the minimum amount and quality of plant material required;
- the examination office to which material is to be sent.

A sub-sample of the material submitted for test will be held in the variety collection as the definitive sample of the candidate variety.

The applicant is responsible for ensuring compliance with any customs and plant health requirements.

2. Final dates for receipt of documentation and material by the Examination Office

The final dates for receipt of requests, technical questionnaires and the final date or submission period for plant material will be decided by the CPVO and each Examination Office chosen.

The Examination Office is responsible for immediately acknowledging the receipt of requests for testing, and technical questionnaires. Immediately after the closing date for the receipt of plant material the Examination Office should inform the CPVO whether acceptable plant material has been received or not. However if unsatisfactory plant material is submitted the CPVO should be informed as soon as possible.

3. Plant material requirements

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

| | |
|---|---|
| Quality of plants: | Should not be less than the standards laid down in Council Directive 2000/29/EC and its amendments concerning quarantine organisms, and Council Directive 92/34/EEC and Commission Directive 93/48/EEC and their amendments concerning organisms impairing quality, at the date of adoption of this protocol; please refer to "Eur-Lex" for the full text and in case of any subsequent amendments to the three aforesaid Directives.<br><br>**Healthy plant material of the candidate variety should be delivered to the test station in accordance with the requirements outlined in the instructions sent by the CPVO for the submission of plant material, and which can also be consulted in the relevant entries for apricot within the S2 Gazette and the CPVO website. In particular with respect to the phytosanitary requirements, the plant material must be accompanied by a valid certificate from a recognised authority attesting to the fact that the plant material sent for the DUS technical examination has shown negative laboratory test results for the list of pests and pathogens outlined in the pertinent entry of the examination office in the S2 Gazette/CPVO website, where the candidate apricot variety is to undergo its DUS technical examination.** |
| Chemical treatment: | The plant material must not have undergone any treatment unless the CPVO and the examination office allow or request such treatment. If it has been treated, full details of the treatment must be given. |
| Labelling of individual plants in sample: | - Species<br>- File number of the application allocated by the CPVO<br>- Breeder's reference<br>- Examination office's reference (if known)<br>- Name of applicant<br>- The phrase "On request of the CPVO" |

## III CONDUCT OF TESTS

1. Variety collection

A variety collection will be maintained for the purpose of establishing distinctness of the candidate varieties in test. A variety collection may contain both living material and descriptive information. A variety will be included in a variety collection only if plant material is available to make a technical examination.

Pursuant to Article 7 of Council Regulation No. 2100/94, the basis for a collection should be the following:

- varieties listed or protected at the EU level or at least in one of the EEA Member States;
- varieties protected in other UPOV Member States;
- any other variety in common knowledge.

The composition of the variety collection in each Examination Office depends on the environmental conditions in which the Examination Office is located.

Variety collections will be held under conditions which ensure the long term maintenance of each accession. It is the responsibility of Examination Offices to replace reference material which has deteriorated or become depleted. Replacement material can only be introduced if appropriate tests confirm conformity with the existing reference material. If any difficulties arise for the replacement of reference material, Examination Offices must inform the CPVO. If authentic plant material of a variety cannot be supplied to an Examination Office the variety will be removed from the variety collection.

## 2. Material to be examined

Candidate varieties will be directly compared with other candidates for Community plant variety rights tested at the same Examination Office, and with appropriate varieties in the variety collection. When necessary an Examination Office may also include other candidates and varieties. Examination Offices should therefore make efforts to co-ordinate the work with other Offices involved in DUS testing of apricot. There should be at least an exchange of technical questionnaires for each candidate variety, and during the test period, Examination Offices should notify each other and the CPVO of candidate varieties which are likely to present problems in establishing distinctness. In order to solve particular problems Examination Offices may exchange plant material.

## 3. Characteristics to be used

The characteristics to be used in DUS tests and preparation of descriptions shall be those referred to in the Annex 1. All the characteristics shall be used, providing that observation of a characteristic is not rendered impossible by the expression of any other characteristic, or the expression of a characteristic is prevented by the environmental conditions under which the test is conducted. In the latter case, the CPVO should be informed. In addition the existence of some other regulation e.g. plant health, may make the observation of the characteristic impossible.

The Administrative Council empowers the President, in accordance with Article 23 of Commission Regulation N° 1239/95, to insert additional characteristics and their expression in respect of a variety.

## 4. Grouping of varieties

The varieties and candidates to be compared will be divided into groups to facilitate the assessment of distinctness. Characteristics which are suitable for grouping purposes are those which are known from experience not to vary, or to vary only slightly, within a variety and which in their various states of expression are fairly evenly distributed throughout the collection. In the case of continuous grouping characteristics overlapping states of expression between adjacent groups is required to reduce the risks of incorrect allocation of candidates to groups. The characters used for grouping could be the following:

a) Fruit : size (characteristic 28)

b) Fruit : ground colour (characteristic 44)

c) Fruit: relative area of over colour (characteristic 45)

d) Fruit: colour of flesh (characteristic 49)

e) Time of beginning of flowering (characteristic 56)

f) Time of beginning of fruit ripening (characteristic 57)

## 5. Trial designs and growing conditions

The minimum duration of tests (independent growing cycles) will normally include at least two satisfactory crops of fruit. Tests will be carried out under conditions ensuring normal growth. The size of the plots will be such that plants or parts of plants may be removed for measuring and counting without prejudice to the observations which must be made up to the end of the growing period.

The test design is as follows

Each test should include 5 plants.

Unless otherwise indicated, all observations should be made on 5 plants or parts taken from each of 5 plants. In the case of parts of plants, the number to be taken from each of the plants should be 3. In particular, in the case of fruit and stone characteristics, observations should be made on 25 fruits, five taken from each of five trees.

## 6. Special tests

In accordance with Article 83(3) of Council Regulation No. 2100/94 an applicant may claim either in the Technical Questionnaire or during the test that a candidate has a characteristic which would be helpful in establishing distinctness. If such a claim is made and is supported by reliable technical data, a special test may be undertaken providing that a technically acceptable test procedure can be devised.

Special tests will be undertaken, with the agreement of the President of CPVO, where distinctness is unlikely to be shown using the characters listed in the protocol.

7. Standards for decisions

a) **Distinctness**

A candidate variety will be considered to be distinct if it meets the requirements of Article 7 of Council Regulation No. 2100/94.

b) **Uniformity**

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

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

| Number of plants | off-types allowed |
|---|---|
| ≤ 5 | 0 |

c) **Stability**

A candidate will be considered to be sufficiently stable when there is no evidence to indicate that it lacks uniformity.

## IV REPORTING OF RESULTS

After each recording season the results will be summarised and reported to the CPVO in the form of a UPOV model interim report in which any problems will be indicated under the headings distinctness, uniformity and stability. Candidates may meet the DUS standards after two fruiting periods but in some cases three fruiting periods may be required. When tests are completed the results will be sent by the Examination Office to the CPVO in the form of a UPOV model final report.

If it is considered that the candidate complies with the DUS standards, the final report will be accompanied by a variety description in the format recommended by UPOV. If not, the reasons for failure and a summary of the test results will be included with the final report. The variety description should be supplemented by:

(i) a colour photograph of 2 typical leaves
(ii) a colour photograph of 5 typical longitudinally sliced fruits

The CPVO must receive interim reports and final reports by the date agreed between the CPVO and the examination office.

Interim reports and final examination reports shall be signed by the responsible member of the staff of the Examination Office and shall expressly acknowledge the exclusive rights of disposal of CPVO.

## V LIAISON WITH THE APPLICANT

If problems arise during the course of the test the CPVO should be informed immediately so that the information can be passed on to the applicant. Subject to prior agreement, the applicant may be directly informed at the same time as the CPVO particularly if a visit to the trial is advisable.

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

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# ANNEXES TO FOLLOW

## ANNEX I

PAGE



Legend:

(+) See explanations on the Table of characteristics
(a)-(d) See Explanations on the Table of Characteristics

Types of expression of characteristics:

QL – Qualitative characteristic
QN – Quantitative characteristic
PQ – Pseudo-qualitative characteristic



## ANNEX II

# ANNEX I

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

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **1.** | **1.** | | **Tree: vigour** | | |
| **(+)** | **(+)** | **(a)** | very weak | Sub-zero | 1 |
| **QN** | **QN** | | weak | Ninfa, Polonais | 3 |
| | | | medium | Bergeron, Canino, Peeka, Rouge du Roussillon | 5 |
| | | | strong | Earle Orange, Magyar Kajszi, Palsteyn, Pisana, Portici | 7 |
| | | | very strong | Ceglédi Bíbor, Monaco Bello, Moniquí, Viceroy | 9 |
| **2.** | **2.** | | **Tree: habit** | | |
| **(+)** | **(+)** | **(a)** | fastigiate | Japan's Early | 1 |
| **PQ** | **PQ** | | upright | Harcot, Reale d'Imola | 2 |
| | | | upright to spreading | Ceglédi Óriás, Proimo Tyrinthos, Veecot | 3 |
| | | | spreading | Blenheim, Canino, Hargrand, Magyar Kajszi | 4 |
| | | | drooping | Palsteyn, Pisana, Polonais, Vesna | 5 |
| | | | weeping | | 6 |
| **3.** | **3.** | | **Tree: degree of branching** | | |
| **(+)** | **(+)** | **(a)** | weak | Earle Orange, Roxana | 3 |
| **QN** | **QN** | | medium | Bergeron, Magyar Kajszi, San Castrese | 5 |
| | | | strong | Harlayne, Prevete, Veecot | 7 |
| **4.** | **4.** | | **Tree: distribution of flower buds** | | |
| **PQ** | **PQ** | **(a)** | predominantly on spurs | Earle Orange, Nugget, Sun Glo | 1 |
| | | | equally on spurs and on one-year-old shoots | Bergeron, Canino, San Castrese, Veecot | 2 |
| | | | predominantly on one-year-old shoots | Amal, Ouardi, Roxana | 3 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **5.** | **5.** | | **Young shoot: anthocyanin coloration of apex (during rapid growth)** | | |
| **QN** | **QN** | | weak | Blenheim, Hargrand, Perla, Samarkandskij Rannij | 3 |
| | | | medium | Polonais, San Castrese, Sun Glo | 5 |
| | | | strong | Ceglédi Bíbor, Harcot, Ohaicos, Roxana | 7 |
| **6.** | **6.** | | **One-year-old shoot: colour on sunny side** | | |
| **(+)** | **(+)** | **(a)** | yellow brown | Bebeco, Grandir | 1 |
| **PQ** | **PQ** | | red brown | Palsteyn, Polonais, Veecot | 2 |
| | | | purple brown | Blenheim, Harcot | 3 |
| **7.** | **7.** | | **One-year-old shoot: size of bud support** | | |
| **QN** | **QN** | **(a)** | small | Canino, Harcot, Vitillo | 3 |
| | | | medium | Hargrand, Magyar Kajszi, Palsteyn, Portici | 5 |
| | | | large | Ceglédi Arany, Hamidi, Roxana | 7 |
| **8.** | **8.** | | **Leaf blade: length** | | |
| **QN** | **QN** | **(b)** | short | Early Biady, Perla, Samarkandskij Rannij | 3 |
| | | | medium | Canino, Portici, Rouge du Roussillon, Veecot | 5 |
| | | | long | A. Vecchioni, Ceglédi Arany, Moniquí, Roxana | 7 |
| **9.** | **9.** | | **Leaf blade: width** | | |
| **QN** | **QN** | **(b)** | narrow | Ceglédi Bíbor, Monaco Bello, Rouget de Sernhac, Veecot | 3 |
| | | | medium | Canino, Harcot, Vitillo | 5 |
| | | | broad | Ceglédi Piroska, Moniquí, Pisana | 7 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **10.** | **10.** | | **Leaf blade: ratio length/width** | | |
| **QN** | **QN** | **(b)** | very small | Canino, Portici | 1 |
| | | | small | Cafona, Hargrand | 3 |
| | | | medium | Harcot, San Castrese | 5 |
| | | | large | A. Vecchioni, Ceglédi Bíbor, Rouget de Sernhac | 7 |
| | | | very large | Colorado Temprano, Noemi | 9 |
| **11.** | **11.** | | **Leaf blade: intensity of green colour of upper side** | | |
| **QN** | **QN** | **(b)** | light | San Castrese, Veecot, Velasquez | 3 |
| | | | medium | Canino, Ceglédi Óriás, Flaming Gold, Harcot | 5 |
| | | | dark | A. Vecchioni, Earle Orange, Moniquí | 7 |
| **12.** | **12.** | | **Leaf blade: shape of base** | | |
| **(+)** | **(+)** | | acute | Ceglédi Bíbor, Rouget de Sernhac, San Francesco | 1 |
| **PQ** | **PQ** | **(b)** | obtuse | Bhart, Magyar kajszi, Portici | 2 |
| | | | truncate | Bergeron, Blenheim, Canino, Perla | 3 |
| | | | cordate | Moniquí | 4 |
| **13.** | **13.** | | **Leaf blade: angle of apex (excluding tip)** | | |
| **(+)** | **(+)** | | acute | San Castrese | 1 |
| **PQ** | **PQ** | **(b)** | right-angled | Canino, Ceglédi Óriás | 2 |
| | | | moderately obtuse | Bergeron, Polonais, Portici | 3 |
| | | | strongly obtuse | Hargrand, Moniquí | 4 |
| **14.** | **14.** | | **Leaf blade: length of tip** | | |
| **QN** | **QN** | **(b)** | absent or very short | Alpha | 1 |
| | | | short | Bhart, Harmat, Moniquí | 3 |
| | | | medium | Magyar Kajszi | 5 |
| | | | long | Ivonne Liverani, Roxana | 7 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **15.** | **15.** | | **Leaf blade: incisions of margin** | | |
| **(+)** | **(+)** | | crenate | Canino, San Castrese, Verdun | 1 |
| **PQ** | **PQ** | **(b)** | bicrenate | Bhart, Ninfa | 2 |
| | | | serrate | Vitillo | 3 |
| | | | biserrate | Hamidi, Rakovszky, San Francesco | 4 |
| **16.** | **16.** | | **Leaf blade: undulation of margin** | | |
| **QN** | **QN** | **(b)** | weak | Harcot, Palsteyn, Portici | 3 |
| | | | medium | Blenheim, Nonno, Roxana | 5 |
| | | | strong | Piet Cillié, Polonais, San Francesco | 7 |
| **17.** | **17.** | | **Leaf blade: profile in cross section** | | |
| **(+)** | **(+)** | | straight or weakly concave | Bergeron, Earle Orange, Rouget de Sernhac, San Castrese | 1 |
| **QN** | **QN** | **(b)** | moderately concave | Dulcinea, Moniquí | 2 |
| | | | strongly concave | Polonais | 3 |
| **18.** | **18.** | | **Petiole: length** | | |
| | **(*)** | | short | Moniquí, Ninfa, Veecot | 3 |
| **QN** | **QN** | **(b)** | medium | Bergeron, Cafona, Canino, Hargrand | 5 |
| | | | long | Reale d'Imola, Skopska Krupna | 7 |
| **19.** | **19.** | | **Leaf: ratio length of blade/length of petiole** | | |
| **QN** | **QN** | **(b)** | small | Earle Orange, Harcot, Pisana, Rouget de Sernhac | 3 |
| | | | medium | Bergeron, Hâtif Colomer, Portici, Rouge du Roussillon | 5 |
| | | | large | Bebeco, Flaming Gold, Monaco Bello, Moniquí | 7 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **20.** | **20.** | | **Petiole: thickness** | | |
| **QN** | **QN** | **(b)** | thin | San Castrese, Flaming Gold, Veecot | 3 |
| | | | medium | Harcot, Portici | 5 |
| | | | thick | Ceglédi Arany Moniquí, Reale d'Imola | 7 |
| **21.** | **21.** | | **Petiole: anthocyanin coloration of upper side** | | |
| **QN** | **QN** | **(b)** | weak | Cibo del Paradiso | 3 |
| | | | medium | Bebeco, Bhart, San Castrese | 5 |
| | | | strong | Canino, Ceglédi Bíbor, Early Biady, Harogem | 7 |
| **22.** | **22.** | | **Petiole: predominant number of nectaries** | | |
| | **(*)** | | none or one | Mandulakajszi, Rouget de Sernhac, Sant'Ambrogio | 1 |
| **QN** | **QN** | **(b)** | two or three | Cafona, Magyar kajszi, Veecot | 2 |
| | | | more than three | Canino, Moniquí, Pisana | 3 |
| **23.** | **23.** | | **Petiole: size of nectaries** | | |
| **QN** | **QN** | **(b)** | small | Alpha, San Francesco, Yerevani | 3 |
| | | | medium | Ceglédi Óriás, San Castrese, Tilton | 5 |
| | | | large | Canino, Early Biady, Harmat, Pisana | 7 |
| **24.** | **24.** | | **Flower: diameter** | | |
| **(+)** | **(+)** | | small | Borsi Rózsa, Hâtif Colomer, Portici | 3 |
| | **(*)** | | medium | Magyar Kajszi, Polonais, Reale d'Imola | 5 |
| **QN** | **QN** | **(c)** | large | Hargrand, Harmat, San Castrese | 7 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **25.** | **25.** | | **Flower: position of stigma relative to anthers** | | |
| **QN** | **QN** | **(c)** | below | Cannetta, Harmat | 1 |
| | | | same level | Hargrand, Portici | 2 |
| | | | above | Canino, Pisana, Polonais | 3 |
| **26.** | **26.** | | **Petal: shape (excluding claw)** | | |
| **(+)** | **(+)** | | broad elliptic | Sant' Ambrogio | 1 |
| **PQ** | **PQ** | **(c)** | circular | Harcot, Luizet | 2 |
| | | | oblate | Canino, Polonais, Vitillo | 3 |
| **27.** | **27.** | | **Petal: colour on lower side** | | |
| **(+)** | **(+)** | | white | Cafona, Polonais | 1 |
| **PQ** | **PQ** | **(c)** | light pink | Magyar Kajszi, San Castrese | 2 |
| | | | dark pink | Harcot | 3 |
| **28.** | **28.** | | **Fruit: size** | | |
| | **(*)** | | very small | Haggith, Menace, Zard | 1 |
| **QN** | **QN** | **(d)** | small | Borsi Rózsa, Hâtif Colomer, Patriarca Temprano | 3 |
| | | | medium | Cafona, Canino, Harcot | 5 |
| | | | large | Ceglédi Bíbor, Moniquí, Portici | 7 |
| **G** | | | very large | Ceglédi Óriàs, Hargrand, Palsteyn, Pisana | 9 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **29.** | **29.** | | **Fruit: shape in lateral view** | | |
| **(+)** | **(+)** | | triangular | Luizet | 1 |
| **PQ** | **PQ** | **(d)** | ovate | Bergeron, Pisana | 2 |
| | | | oblong | Blenheim, Portici, Sundrop | 3 |
| | | | elliptic | Precoce d'Imola, Wenatchee, Yerevani | 4 |
| | | | circular | Earle Orange, Ninfa, Ouardi, Polonais | 5 |
| | | | oblate | Korai Zamatos, Nugget, Patriarca, Temprano | 6 |
| | | | obovate | Harcot, Harmat, Trevatt | 7 |
| | | | oblique rhombic | Canino, Vulcan | 8 |
| **30.** | **30.** | | **Fruit: shape in ventral view** | | |
| **(+)** | **(+)** | | triangular | Luizet, Mandulakajszi, Reale d'Imola | 1 |
| **PQ** | **PQ** | **(d)** | ovate | Bergeron, Canino, Fracasso | 2 |
| | | | oblong | Baracca, Hargrand, Hâtif Colomer, Veecot | 3 |
| | | | elliptic | Bella d'Imola, Flaming Gold, Sant' Ambrogio, Yerevani | 4 |
| | | | circular | Rouge du Roussillon, Polonais, San Castrese, Viceroy | 5 |
| | | | oblate | Nugget | 6 |
| | | | obovate | Harcot, Harmat, Portici | 7 |
| **31.** | **31.** | | **Fruit: height** | | |
| **(+)** | **(+)** | | short | Patriarca Temprano, Sayeb, Samarkandskij Rannij | 3 |
| **QN** | **QN** | **(d)** | medium | Bebeco, Bergeron, Canino, Polonais | 5 |
| | | | tall | Goldrich, Mandulakajszi, Vitillo | 7 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **32.** | **32.** | | **Fruit: lateral width** | | |
| **(+)** | **(+)** | | narrow | Cerasiello, Harmat, Samarkandskij Rannij | 3 |
| **QN** | **QN** | **(d)** | medium | Bergeron, Bhart, Cafona | 5 |
| | | | broad | Hargrand, Moniquí, Vitillo | 7 |
| **33.** | **33.** | | **Fruit: ventral width** | | |
| **(+)** | **(+)** | | narrow | Cerasiello, Harlayne, Hâtif Colomer | 3 |
| **QN** | **QN** | **(d)** | medium | Bebeco, Bhart, Palummella | 5 |
| | | | broad | Ceglédi Arany, Goldrich, Moniquí | 7 |
| **34.** | **34.** | | **Fruit: ratio height/ventral width** | | |
| **(+)** | **(+)** | | small | Korai Zamatos, Monaco Bello, Patriarca Temprano | 3 |
| **QN** | **QN** | **(d)** | medium | Cafona, Canino, Magyar Kajszi, Rouge du Roussillon | 5 |
| | | | large | Bergeron, Hâtif Colomer, Vitillo | 7 |
| **35.** | **35.** | | **Fruit: ratio lateral width/ventral width** | | |
| **(+)** | **(+)** | | small | Mandorlon, Maria Ferez, Vesna | 3 |
| **QN** | **QN** | **(d)** | medium | Bergeron, Luizet, Pisana, Rouge du Roussillon | 5 |
| | | | large | Borsi Rózsa, Henderson | 7 |
| **36.** | **36.** | | **Fruit: symmetry in ventral view** | | |
| **PQ** | **PQ** | **(d)** | symmetric | Canino, Hâtif Colomer, Magyar Kajszi, Polonais, Portici | 1 |
| | | | slightly asymmetric | Boccucia, Ceglédi Órias, Royal | 2 |
| | | | clearly asymmetric | Borsi Rózsa, Reale d'Imola | 3 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **37.** | **37.** | | **Fruit: suture** | | |
| **PQ** | **PQ** | **(d)** | raised | Priboto | 1 |
| | | | slightly sunken | Magyar Kajszi, Ninfa, Rouge du Roussillon | 2 |
| | | | moderately sunken | Bergeron, Monaco Bello, Pineapple | 3 |
| | | | deeply sunken | Dima, Henderson, Kechpshar, Portici | 4 |
| **38.** | **38.** | | **Fruit: depth of stalk cavity** | | |
| **QN** | **QN** | **(d)** | shallow | Harlayne, Rouge du Roussillon, San Castrese | 3 |
| | | | medium | Blenheim, Magyar Kajszi, Vitillo | 5 |
| | | | deep | Canino, Ceglédi Óriás, Hâtif Colomer, Palsteyn | 7 |
| **39.** | **39.** | | **Fruit: shape of apex** | | |
| **(+)** | **(+)** | | acute | Mandulakajszi, Reale d'Imola | 1 |
| **PQ** | **PQ** | **(d)** | rounded | Bergeron, Goldrich, Luizet, Portici | 2 |
| | | | truncate | Bella d'Imola, Hargrand, Hâtif Colomer | 3 |
| | | | retuse | Early Ril, Perfection, San Castrese | 4 |
| **40.** | **40.** | | **Fruit: presence of mucron** | | |
| **(+)** | **(+)** | | absent | Blenheim, Canino, San Castrese | 1 |
| **QL** | | **(d)** | present | Bhart, Pisana | 9 |
| **41.** | **41.** | | **Fruit: surface** | | |
| **QL** | **QL** | **(d)** | smooth | Bergeron, Palsteyn, Portici, Rouge du Roussillon | 1 |
| | | | bumpy | Canino, Ceglédi Órias, Nonno | 2 |
| **42.** | **42.** | | **Fruit: skin pubescence** | | |
| **QL** | **QL** | **(d)** | absent | Glattschalige Frühmarille | 1 |
| | | | present | Bergeron, Canino, Magyar Kajszi | 9 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **43.** | **43.** | | **<u>Only varieties without pubescence:</u>**<br>**Fruit: glossiness of skin** | | |
| **QN** | | **(d)** | absent or weak | Moorpark | 1 |
| | | | medium | Harcot | 2 |
| | | | strong | Cluthagold, Sun Glo | 3 |
| **44.** | **44.** | | **Fruit: ground colour of skin** | | |
| | **(*)** | | not visible | A3759, A3844 | 1 |
| **PQ** | **PQ** | **(d)** | white | San Nicola, Shirazskij Belyj | 2 |
| | | | yellowish | Moniquí,Piet Cillié, Vitillo, Yerevani | 3 |
| | | | yellow green | Grüne Spätmarille, Kaisi Ashtarak, Sateni Karmir | 4 |
| | | | light orange | Canino, Goldcot, Hargrand, Portici, Rouge du Roussillon | 5 |
| | | | medium orange | Hâtif Colomer, Luizet, Pisana, Veecot | 6 |
| **G** | | | dark orange | Bhart, Harcot, Harogem | 7 |
| **45.** | **45.** | | **Fruit: relative area of over colour** | | |
| | **(*)** | | absent or very small | Maria Matilde, Moniquí, Yerevani | 1 |
| **QN** | **QN** | **(d)** | small | Cafona, Canino, Goldrich | 3 |
| | | | medium | Hâtif Colomer, Magyar Kajszi, Palsteyn, Portici | 5 |
| | | | large | Bergeron, Bhart, Pisana | 7 |
| **G** | | | very large | A3759, A3844 | 9 |
| **46.** | **46.** | | **Fruit: hue of over colour** | | |
| **PQ** | **PQ** | **(d)** | orange red | | 1 |
| | | | red | | 2 |
| | | | pink | | 3 |
| | | | purple | | 4 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **47.** | **47.** | | **Fruit: intensity of over colour** | | |
| **QN** | **QN** | **(d)** | light | | 3 |
| | | | medium | | 5 |
| | | | dark | | 7 |
| **48.** | **48** | | **Fruit: pattern of over colour** | | |
| **PQ** | **PQ** | **(d)** | isolated flecks (spots) | Rouge du Roussillon | 1 |
| | | | solid flush | Bergeron | 2 |
| | | | covered all over with very small dots | Moniquí | 3 |
| **49.** | **49.** | | **Fruit: colour of flesh** | | |
| | **(*)** | | whitish green | Amban | 1 |
| **PQ** | **PQ** | **(d)** | white | Cibo del Paradiso, Mouchbah Mourry, Spitak | 2 |
| | | | cream | Barese, Malatya, Moniquí, Patriarca Temprano | 3 |
| | | | light orange | Canino, Harmat, San Castrese, Yerevani | 4 |
| | | | medium orange | Harglow, Pisana, Rouge du Roussillon, Screara | 5 |
| **G** | | | dark orange | Francese, Harcot, Hâtif Colomer, Palsteyn | 6 |
| **50.** | **50.** | | **Fruit: texture of flesh** | | |
| **QN** | **QN** | **(d)** | fine | Fracasso, Harlayne, Peeka | 1 |
| | | | medium | Canino, Magyar Kajszi, Piet Cillié | 2 |
| | | | coarse | Bergeron, Precoce d'Imola | 3 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **51.** | **51.** | | **Fruit: firmness of flesh** | | |
| **QN** | **QN** | **(d)** | very soft | Sant' Ambrogio, Viceroy | 1 |
| | | | soft | Alessandrino, Goldcot | 3 |
| | | | medium | Magyar Kajszi, Piet Cillié, Rouge du Roussillon, San Castrese | 5 |
| | | | firm | Bella d'Imola, Bergeron, Palsteyn | 7 |
| | | | very firm | Boccuccia Liscia, Borsi Rózsa, Čačansko Zlato, Harogem | 9 |
| **52.** | **52.** | | **Fruit: ratio weight of fruit/weight of stone** | | |
| **QN** | **QN** | **(d)** | small | Borsi Rózsa, Reale d'Imola | 3 |
| | | | medium | Blenheim, Hâtif Colomer, Portici | 5 |
| | | | large | Badami, San Castrese | 7 |
| **53.** | **53.** | | **Fruit: adherence of stone to flesh** | | |
| | **(*)** | | absent or very weak | Bergeron, Hargrand, Ninfa, Peeka | 1 |
| **QN** | **QN** | **(d)** | weak | Canino, Nonno, Rouge du Roussillon, Sirena | 3 |
| | | | medium | Cafona, Tardif de Bordaneil | 5 |
| | | | strong | Commandor, Precoce di Toscana | 7 |
| **54.** | **54.** | | **Stone: shape in lateral view** | | |
| **(+)** | **(+)** | | ovate | Goldcot, Magyar Kajszi, Portici | 1 |
| | **(*)** | | oblong | Bella d'Imola, Palsteyn, Rouge du Roussillon | 2 |
| **PQ** | **PQ** | **(d)** | elliptic | Bergeron, Vitillo | 3 |
| | | | circular | Canino, Eten Bey, Hargrand, Monaco Bello | 4 |
| | | | obovate | Harcot, Harmat | 5 |

| CPVO N° | UPOV N° | Stage, method | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **55.** | **55.** | | **Kernel: bitterness** | | |
| **QN** | **QN** | **(d)** | absent or weak | Bergeron, Harcot, Magyar Kajszi, Moniquí, Reale d'Imola | 1 |
| | | | medium | Bella d'Imola, Harlayne, Palsteyn | 2 |
| | | | strong | Borsi Rózsa Canino, Prevete, Viceroy | 3 |
| **56.** | **56.** | | **Time of beginning of flowering** | | |
| **(+)** | **(+)** | | very early | Bakour, Currots, Harmat, Ninfa | 1 |
| | **(*)** | | early | Canino, Harcot, Hâtif Colomer, San Castrese | 3 |
| **QN** | **QN** | | medium | Magyar Kajszi, Moniquí, Portici, San Francesco | 5 |
| | | | late | Bergeron,Boccuccia Liscia, Harlayne, Polonais | 7 |
| **G** | | | very late | Harglow, Skromnyj, Zard | 9 |
| **57.** | **57.** | | **Time of beginning of fruit ripening** | | |
| **(+)** | **(+)** | | very early | Bakour, Ninfa, Patriarca Temprano, Rutbhart, Samarkandskij Rannij | 1 |
| | **(*)** | | early | Bhart, Hâtif Colomer, Monaco Bello, Rouget de Sernhac | 3 |
| **QN** | **QN** | | medium | Bergeron, Harlayne, Pisana, Polonais | 5 |
| | | | late | Borsi Rózsa, Larquen, Revlar | 7 |
| **G** | | | very late | Boutard, Lartago | 9 |

# EXPLANATIONS AND METHODS

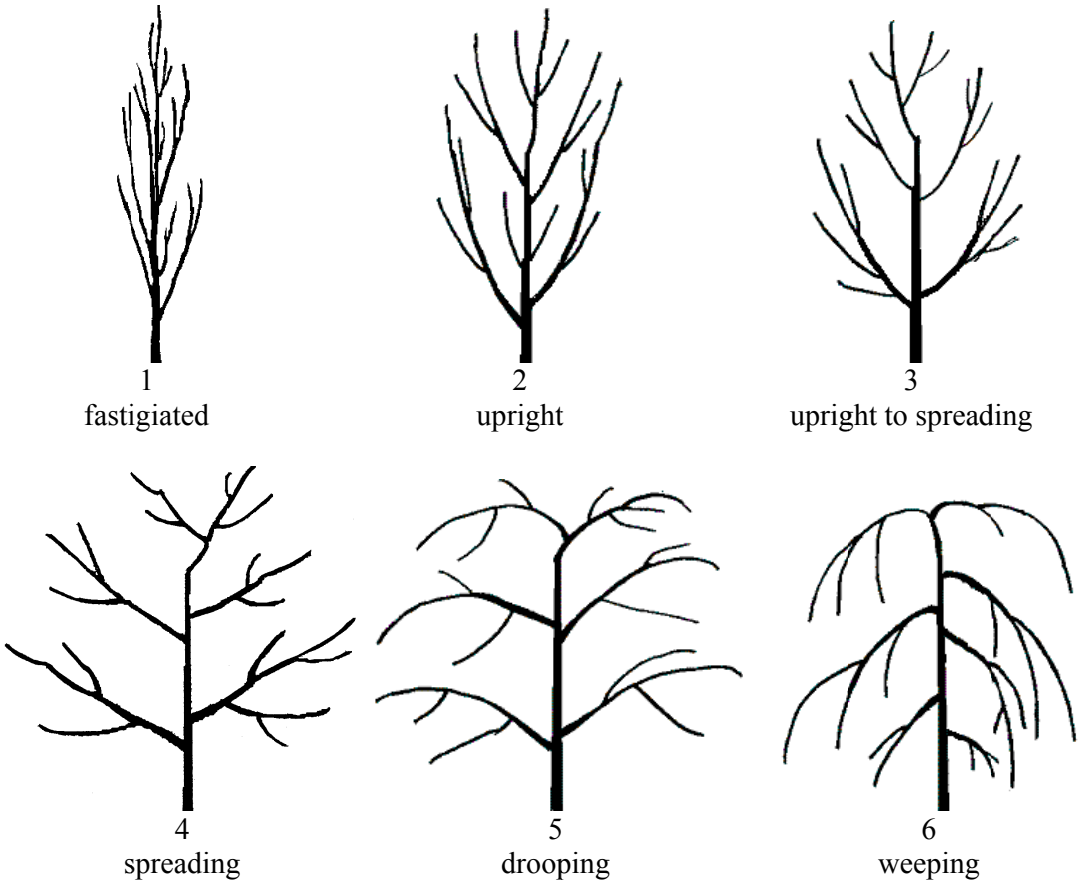
Characteristics containing the following key in the third column of the Table of Characteristics should be examined as indicated below:

(a) Tree/One-year-old shoot: 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: 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: Observations on the flower should be made on fully developed flowers at the beginning of anther dehiscence.
(d) Fruit/Stone: Observations on the fruit and stone should be made on 25 fruits, five from each of five trees.

Ad. 1: Tree: vigour

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

Ad. 2: Tree: habit



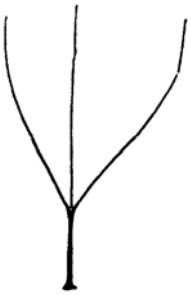
Ad. 3: Tree: degree of branching

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.

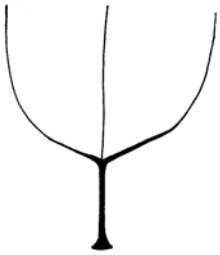
Ad. 6: One-year-old shoot: colour on sunny side

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

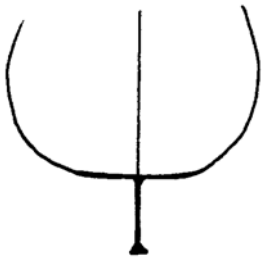
Ad. 12: Leaf blade: shape of base



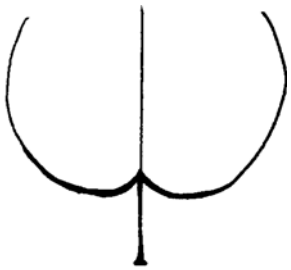
1
acute



2
obtuse

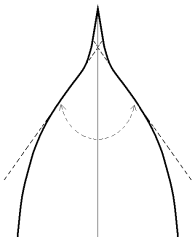


3
truncate

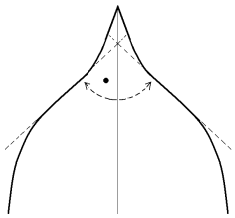


4
cordate

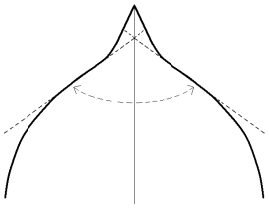
Ad. 13: Leaf blade: angle of apex (excluding tip)



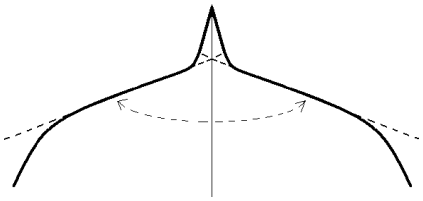
1
acute



2
right-angled



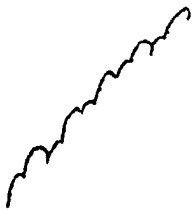
3
moderately obtuse



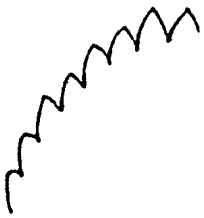
4
strongly obtuse

Ad. 15: Leaf blade: incisions of margin

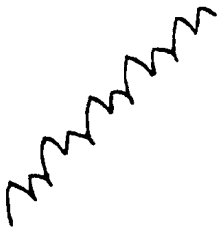
1
crenate



2
bicrenate



3
serrate



4
biserrate

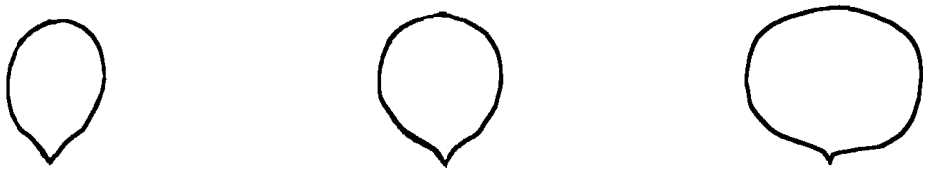
Ad. 17: Leaf blade: profile in cross section

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

Ad. 24. Flower: diameter

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

Ad. 26: Petal: shape (excluding claw)



1
broad elliptic

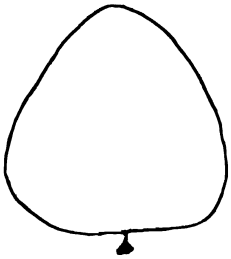
2
circular

3
oblate

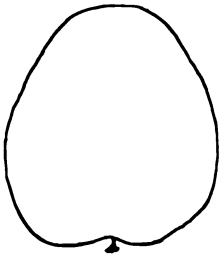
Ad. 27: Petal: colour on lower side

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

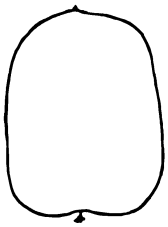
Ad. 29: Fruit: shape in lateral view
Ad. 30: Fruit: shape in ventral view



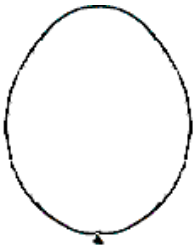
1
triangular



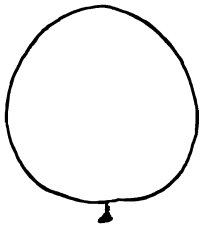
2
ovate



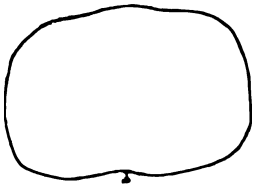
3
oblong



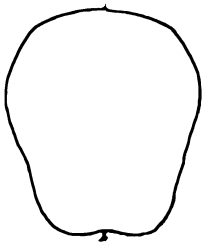
4
elliptic



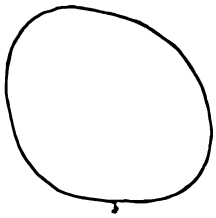
5
circular



6
oblate



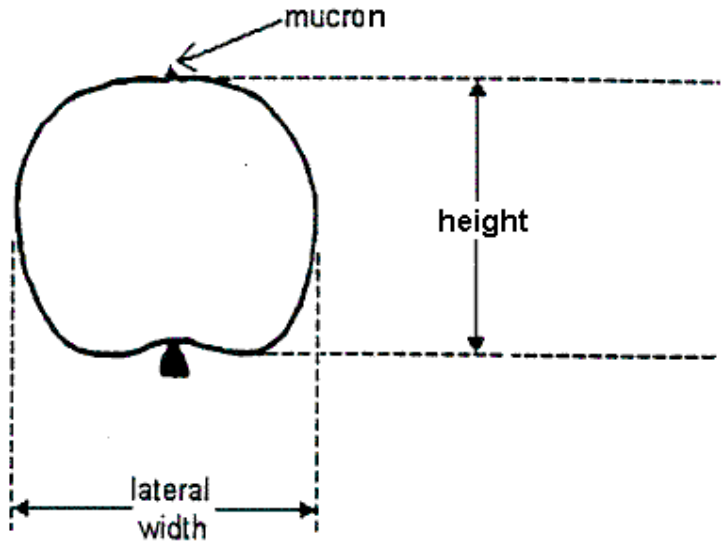
7
obovate



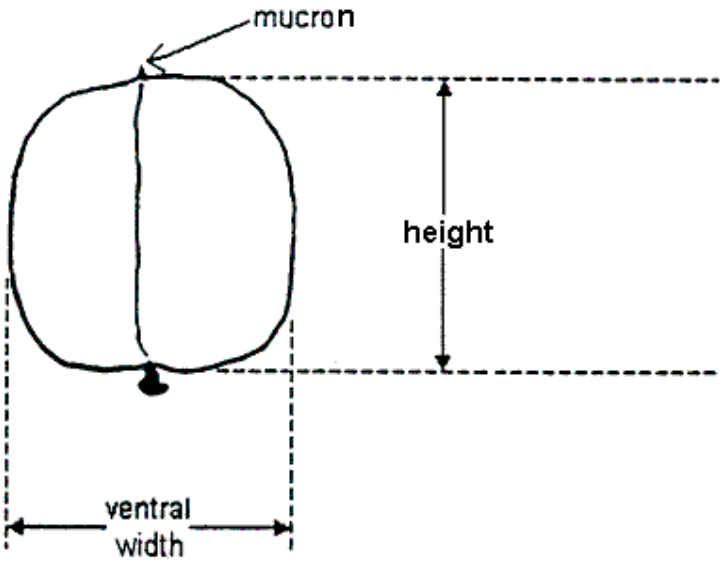
8
oblique rhombic
(not applicable for characteristic 30)

Ad. 31: Fruit: height
Ad. 32: Fruit: lateral width
Ad. 33: Fruit: ventral width
Ad. 34: Fruit: ratio height/ventral width
Ad. 35: Fruit: ratio lateral width/ventral width
Ad. 40. Fruit: presence of mucron

Lateral view

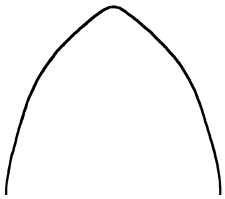



Ventral view

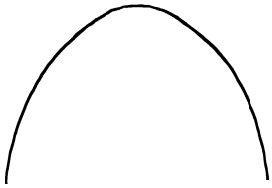


Ad. 39: Fruit: shape of apex

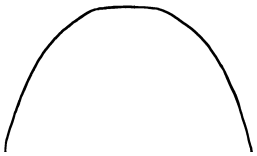
Observations should be carried out on fruits in lateral cross-section.



1
acute



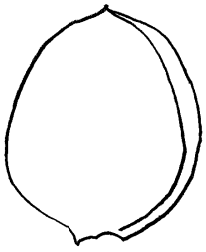
2
rounded



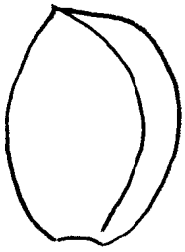
3
truncate

4
retuse

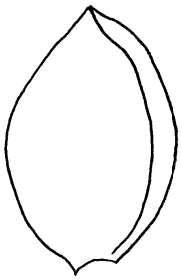
Ad. 54: Stone: shape in lateral view



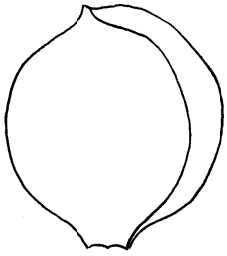
1
ovate



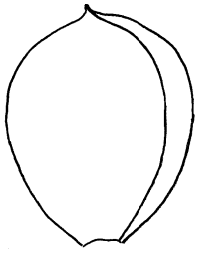
2
oblong



3
elliptic



4
circular



5
obovate

Ad. 56: Time of beginning of flowering

When 5-10% open flowers can be observed.

Ad. 57: 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.

Synonym(s) of Example Varieties

| Example Varieties | Synonym(s) |
|---|---|
| Borsi Rózsa | Kecskemeter Rose, Ružova Neskora, Trandafirii Tirzi |
| Čačansko zlato | Čačak's Gold |
| Earle Orange | Stark Earli Orange, Early Orange, Erle Orange |
| Magyar Kajszi | Cea mai bună de Ungaria, Hungarian Best, Klosterneuburger Aprikose Krasnoshchokij, Mađarska Najbolja, Madárská Najlepsi, Meilleur d'Hongrie, Ungarische Beste, Węgierska Wczesna |
| Pineapple | Abricot d'Ananas, Ananas-Marille, Ananasnyj |
| Proimo Tyrinthos | Précoce de Tyrinthe |
| Sant' Ambrogio | Ambrojza, Ambrosia, Saint Ambroise |
| Sateni Karmir | Tabarza |
| Yerevani | Shalakh |

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# ANNEX II

European Union
**Community Plant Variety Office**

## TECHNICAL QUESTIONNAIRE

to be completed in connection with an application for Community Plant Variety Rights
Please answer all questions. A question without any answer will lead to a non-attribution of an application date. In cases where a field / question is not applicable, please state so.

**1.** **Botanical taxon:** Name of the genus, species or sub-species to which the variety belongs and common name

***Prunus armeniaca* L.**

APRICOT

**2.** **Applicant(s):** Name(s) and address(es), phone and fax number(s), Email address, and where appropriate name and address of the procedural representative

**3.** **Variety denomination**

a) Where appropriate proposal for a variety denomination:

b) Provisional designation (breeder's reference):

**4. Information on origin, maintenance and reproduction of the variety**

**4.1 Breeding, maintenance and reproduction of the variety**
Please indicate breeding scheme, parents and other relevant information

(a) Seedling of unknown parentage ..... [ ]

(b) Produced by controlled pollination (indicate parent varieties) ..... [ ]

(i) Seed bearing parent ..... [ ]

(ii) Pollen parent ..... [ ]

(c) Produced by open pollination of (indicate seed bearing parent only) ..... [ ]

(d) Mutation or sport from (indicate parent variety) ..... [ ]

(e) Discovery (indicate where and when) ..... [ ]

**4.2 Method of propagation**

(a) Cuttings ..... [ ]

(b) *In vitro* propagation ..... [ ]

(c) Seed ..... [ ]

(d) Other (please specify): ..... [ ]

**4.3 Pollinator**

Good pollinators are the following varieties :

**4.4 Virus status**

(a) The variety is free from all known viruses as follows
(indicate from which viruses) ..... [ ]

(b) The plant material is virus tested
(indicate against which viruses)..... [ ]

(c) The virus status is unknown ..... [ ]

**4.5 Other information on genetic origin and breeding method:**

**4.6 Geographical origin of the variety:** the region and the country in which the variety was bred or discovered and developed

**5. Characteristics of the variety to be indicated** (the number in brackets refers to the corresponding characteristic in the CPVO Protocol; please mark the state of expression which best corresponds).

| | Characteristics | Example varieties | Note |
|---|---|---|---|
| **5.1 (28)** | **Fruit: size** | | |
| | very small | Haggit, Menace, Zard | 1 [ ] |
| | small | Borsi rózsa, Hâtif Colomer, Patriarca Temprano | 3 [ ] |
| | medium | Cafona, Canino, Harcot | 5 [ ] |
| | large | Ceglédi bíbor, Moniquí, Portici | 7 [ ] |
| | very large | Ceglédi óriás, Hargrand, Palsteyn, Pisana | 9 [ ] |
| **5.2 (44)** | **Fruit: ground colour of skin** | | |
| | not visible | A 3759, A 3844 | 1 [ ] |
| | white | San Nicola, Shirazskij belyj | 2 [ ] |
| | yellowish | Moniquí, Piet Cillié, Vitillo, Yerevani | 3 [ ] |
| | yellow green | Grüne Spätmarille, Kaisi Ashtarak, Sateni Karmir | 4 [ ] |
| | light orange | Canino, Goldcot, Hargrand, Portici, Rouge du Roussillon | 5 [ ] |
| | medium orange | Hâtif Colomer, Luizet, Pisana, Veecot | 6 [ ] |
| | dark orange | Bhart, Harcot, Harogem | 7 [ ] |
| **5.3 (45)** | **Fruit: amount of over colour** | | |
| | absent or very low | Maria Matilde, Moniquí, Yerevani | 1 [ ] |
| | low | Cafona, Canino, Goldrich | 3 [ ] |
| | medium | Hâtif Colomer, Magyar kajszi, Palsteyn, Portici | 5 [ ] |
| | large | Bergeron, Bhart, Pisana | 7 [ ] |
| | very large | A 3759, A 3844 | 9 [ ] |

| | Characteristics | Example varieties | Note |
|---|---|---|---|
| **5.4 (49)** | **Fruit: colour of flesh** | | |
| | whitish green | Amban | 1 [ ] |
| | white | Cibo del Paradiso, Mouchbah Mourry, Spitak | 2 [ ] |
| | cream | Barese, Malatya, Moniquí, Patriarca Temprano | 3 [ ] |
| | light orange | Canino, Harmat, San Castrese, Yerevani | 4 [ ] |
| | medium orange | Harglow, Pisana, Rouge du Roussillon, Screara | 5 [ ] |
| | dark orange | Francese, Harcot, Hâtif Colomer, Palsteyn | 6 [ ] |
| **5.5 (56)** | **Time of beginning of flowering** | | |
| | very early | Bakour, Currots, Harmat, Ninfa | 1 [ ] |
| | early | Canino, Harcot, Hâtif Colomer, San Castrese | 3 [ ] |
| | medium | Magyar kajszi, Moniquí, Portici, San Francesco | 5 [ ] |
| | late | Bergeron, Boccuccia Liscia, Harlayne, Polonais | 7 [ ] |
| | very late | Harglow, Skromnyj, Zard | 9 [ ] |
| **5.6 (57)** | **Time of beginning of fruit ripening** | | |
| | very early | Barkour, Ninfa, Patriarca Temprano, Rutbhart, Samarkandskij rannij | 1 [ ] |
| | early | Bhart, Hâtif Colomer, Monaco Bello, Rouget de Sernhac | 3 [ ] |
| | medium | Bergeron, Harlayne, Pisana, Polonais | 5 [ ] |
| | late | Borsi rózsa, Larqueen, Revlar | 7 [ ] |
| | very late | Boutard, Lartago | 9 [ ] |

**6. Similar varieties and differences from these varieties:**

| Denomination of similar variety | Characteristic in which the similar variety is different[1)] | State of expression of similar variety | State of expression of candidate variety |
|---|---|---|---|
| | | | |

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

**7. Additional information which may help to distinguish the variety**

**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, please specify

[ ] NO

**7.2 Special conditions for the examination of the variety**

7.2.1 Please specify any frost requirements or chilling hour requirements for the correct development of plant material of the candidate variety in the DUS trial field:

7.2.2 Are there any other special conditions for growing the variety or conducting the examination?

[ ] YES, please specify

[ ] NO

**7.3 Other information**

A representative colour photograph of the variety should accompany the Technical Questionnaire.

**8. GMO-information required**

The variety represents a Genetically Modified Organism within the meaning of Article 2(2) of Council Directive EC/2001/18 of 12/03/2001.

[ ] YES [ ] NO

If yes, please add a copy of the written attestation of the responsible authorities stating that a technical examination of the variety under Articles 55 and 56 of the Basic Regulation does not pose risks to the environment according to the norms of the above-mentioned Directive.

I/we hereby declare that to the best of my/our knowledge the information given in this form is complete and correct.

Date Signature Name

[End of document]